

2012 **LG CHEM**
SUSTAINABILITY REPORT



ABOUT THIS REPORT		01
CEO MESSAGE		02
ABOUT LG CHEM		04
Business Domain		04
Company Profile		08
LG Way		10
LG Chem's Vision and Core Values		11
Corporate Governance		12
STAKEHOLDER COMMUNICATION		14
MATERIALITY TEST		16
SUSTAINABILITY MANAGEMENT SYSTEM		20
Sustainability Management: Principle		20
Sustainability Management: Vision & Strategy		21
Jeong-Do Management		22
Green Management		23
Risk Management		24
SUSTAINABILITY MANAGEMENT ACTIVITIES & PERFORMANCE		28
Business Strategy and Performance		28
Customer Value Improvement		33
Product Stewardship		36
Climate Change & Energy		40
Environment, Safety & Health		44
Talent Development and Respect for Human Rights		48
Fair Trade		56
Partnerships with Suppliers		57
Social Partnership		59
APPENDIX		64
Performance Data		64
Membership of Organizations and Associations		72
Awards Received		73
Independent Assurance Statement		74
GRI G3.1 Index		76
ISO 26000 Core Subjects		80
EICC Checklist		82
Glossary		84
The 10 Years of Publication of the Sustainability Report		86
Participant Information		88

ABOUT THIS REPORT

2012 Sustainability Report is the seventh sustainability report published by LG Chem. It has been prepared based on the results of the materiality test as a significant communication channel for communication with stakeholders in accordance with the Global Reporting Initiative (GRI) guidelines. This report summarizes the efforts and results that LG Chem was awarded for carrying out sustainability management in the economic, environmental and social sectors during the year 2012. LG Chem will continue to provide stakeholders with information in a transparent and meaningful manner so as to become a company that grows together with its stakeholders.

Reporting Period and Boundary

This report mainly covers the period from January 1, 2012 to December 31, 2012. However, we also included performance afterwards for some important matters and used four years of data starting from 2009 to elicit the trends in quantitative performance. In terms of boundary, the report focuses on sustainability management performances of LG Chem in Korea, including our head office in Seoul, Research Park in Daejeon and ten manufacturing sites (Yeosu, Cheongju, Ochang 1, Ochang 2, Ulsan, Gimcheon, Naju, Iksan, Daesan and Paju). Major achievements made by LGCCI, a regional holding company in China and 8 manufacturing subsidiaries (Nanjing, Dagu, Tainjin, Beijing, Guangzhou, Bohai, Botian, Yongxing) in China are also addressed in this report.

Reporting Criteria and Verification

This report is aligned with the G3.1 guidelines of the Global Reporting Initiative (GRI) and economic performance data complies with K-IFRS (Korean-International Financial Reporting Standard). It also reflects ISO 26000 Core Subjects, DJSI and EICC Checklists. The third-party verification was conducted by Korea Productivity Center, an assurance provider licensed by AccountAbility, the author of AA1000 standards. The independent verification has helped improve the reliability of reporting contents so that stakeholders are able to understand LG Chem's sustainability management more accurately. The details of the verification can be found in the section entitled INDEPENDENT ASSURANCE STATEMENT (pages 74-75).

Recent Publication

LG Chem has been issuing a sustainability report every year since 2007. Given the diverse stakeholders, this report, available in Korean, English and Chinese, can also be viewed from our website at <http://lgchem.com>. The prior report (the 2011 Sustainability Report) was published in April of 2012.

Key Features

2012 Sustainability Report has made meaningful progress in terms of structure and contents compared to the previous report. An advisory meeting was held to collect expert opinions on the process and result of the materiality which were incorporated in this report. We composed the report according to the strategic structure of sustainability management at LG Chem to make the report more reliable and easier to understand. Also, while the 2011 version only covered 5 major subsidiaries in China, the 2012 version covers all the subsidiaries in China, making it more inclusive. Finally, we worked hard to maintain consistency across all the quantitative data in terms of reporting standard.

Inquiry on Report

For any inquiries or information concerning this report, please contact LG Chem through one of the contact points indicated below.

- CSR Secretariat, LG Chem, Ltd. LG Twin Towers, 20 Yeouido-dong, Yeongdeungpo-gu, Seoul, Korea
- Telephone: +82-2-3773-0705 • Fax: +82-2-3773-7933 • E - mail: greener@lgchem.com

CEO MESSAGE



Dear stakeholders,

Last year, LG Chem achieved KRW 23.263 trillion of sales and KRW 1.910 trillion of operating income on a consolidated basis. Although sales increased 3% compared to 2011, operating income reflected itself in overall slow business performance stemming from the lack of demand because of the global economic recession and the decline in product prices. Although business performance was weak, all our executives and employees strengthened core capabilities of the key businesses and proceeded to make future preparations based on our management system which assigns more responsibilities to the management of each business unit.

In the area of petrochemicals, we concentrated on nurturing high value-added technology-based key businesses like SSBR, SAP and metallocene PE to respond to decreasing revenues due to the deteriorating market situation, and implemented global expansion of key business like the complex project in Kazakhstan. In the IT & electronic materials sector, we maintained global No.1 status in the polarizer business and enhanced profitability by expanding our share of high value-added businesses like 3D Film Patterned Retarder (FPR). In addition, the company made new business investments in LCD glass substrates, touch panels and ITO films and put plants in operation. As for the battery business area, we reinforced our business competitiveness by pursuing low-priced material development, high-performance and differentiated product development, and established a basis for creating future revenue by winning additional orders from major automotive companies. We have been also working on making preparations for the future with our successful entrance into the Energy Storage System (ESS) battery market.

At LG Chem, we acknowledge that we should pay attention not only to economic performance but also to environmental and social performance in order to achieve

LG Chem will stay committed to growing into a global chemical company that plays the role of 'Solution Partner' by contributing to enrichment of human life and helping our customers create successful outcomes.

sustainable and sound growth. Environmental issues, such as eco-friendly products, harmful chemical substances, climate change, energy, resources and environment pollution, and social issues, such as safety, human rights protection and human resources development, anti-corruption, fair trade and shared growth and social contribution actually have a great impact on the current business activities of LG Chem. Our strategic and systematic approach to the various issues surrounding sustainability involves exploring the principles of sustainable management and the strategic direction to follow as well as the selection of implementation plans that allow us to deal with these issues in a stepwise fashion. In particular, we are working on integrating social responsibility into all levels of management to meet the social expectations and needs of stakeholders, based on strategies of strengthening CSR that has been implemented at the group level.

Our key performances of sustainability management in 2012 include completing pilot construction for pioneering the eco-friendly plastics market; constantly being engaged in R&D and producing good results in a variety of areas like rechargeable battery materials, which is based on platform technologies like precision coating technology, touch panel materials and solar cell materials; researching and investing in organic solar cells; launching high value-added products like 3D FPR; continuously investing in LCD glass substrates and battery materials; and discovering new items in the green energy sector like solar cell materials and OLED lighting.

Moreover, the company has seen good results in terms of the environment and society, such as doing a comprehensive checkup and improvement of our company-wide environment & safety management system, supplementing and expanding our chemical management system, establishing an IT-based energy consumption and greenhouse gas emission management system suitable for both Korea and China, reducing our greenhouse gas production by 240 thousand tons, expanding global human resources recruitment, and

reinforcing LG Chem's capacity-based social contribution activities, especially in the area of youth education.

This report includes our activities and outcomes over the last year in an attempt to share with stakeholders how LG Chem grows and contributes to development of the economy, environment and society. In particular, this report covers manufacturing sites, not only those in Korea but also those in China, thereby enhancing the integrity of information that the sustainability management reporting of LG Chem should be able to produce. In addition, we hope that this report raises the understanding of information presented here by connecting the overall strategic system of sustainability management of LG Chem with the organization of the report.

This year, the business environment is again expected to be very difficult. However, LG Chem will continuously strive to create outstanding economic performance and lead the market by dealing with environmental changes more swiftly and providing differentiated customer value faster than our competitors. Also, we will stay committed to enriching human life and taking responsibility as the best 'Solution Partner' which helps customers to bring about good outcomes, and grow as a trusty and respected global chemical company by taking and practicing our social responsibility. I would like to ask for your continuous support and encouragement.

Thank you.

April 2013

Jin Soo Park
President & CEO

Business Domain



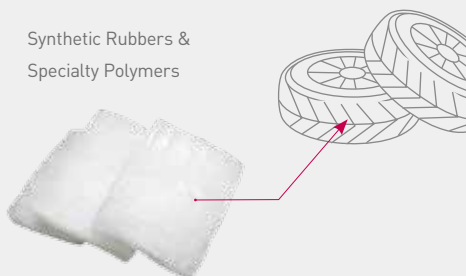
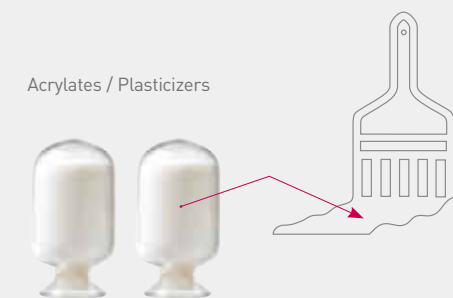
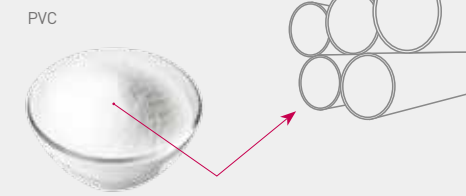
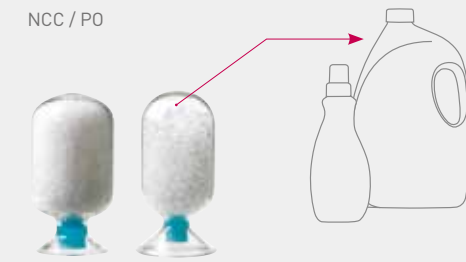
LG Chem gives excellent support to the success of our customers by delivering a stable supply of our high quality petrochemical products spanning from basic petrochemicals to specialty materials. IT & electronic materials that use integrated state-of-the-art technology open up the future for our customers. Our proactive development of next-generation batteries such as automotive batteries enables LG Chem to take the lead in revolutionizing the eco-friendly energy industry and upgrading the status of our company in the global market.

We can find petrochemical products everywhere in our daily lives. Furthermore, petrochemicals are key materials that lay the foundation for all industries. Since being founded in 1947, LG Chem has developed itself as a petrochemical company with a diversified portfolio including petrochemical materials, forming the very basics of our lives, as well as high value-added products.

The petrochemical industry, which used to be regarded simply as a basic chemical industry, has advanced gradually alongside its convergence with high-tech high-functional industries such as IT and nano technology. With these changes, LG Chem is recording stable revenue and profits based on our global leading competitiveness thanks to our long experience and technological know-how in the petrochemical business.

Going beyond the petrochemicals, LG Chem started to intensively invest in IT & electronic materials by making continuous investments and developing our core technologies based on our petrochemical business. Like petrochemicals, the major products in the IT & electronic materials area are not directly visible when looking at the finished product. However, the materials, such as displays, rechargeable batteries, solar cells and films are extremely significant because they play a key role in the final product.

LG Chem is unique in the battery field because it is the only chemical based company amid lithium battery suppliers. The differentiated material technology of LG Chem facilitates the leading position both inside and outside of Korea in terms of new product development and continuity of supply. The mobile / IT sector of LG Chem is securing the leading profitability, and LG Chem will also pave the way to an eco-friendly energy world by widening its business scope with an absolute advantage in R&D capability of automotive and ESS battery.



| PETROCHEMICALS |

You can meet LG Chem everywhere in your daily lives.

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 SAP business in 2008. Such structure has enabled us to generate great synergies between businesses and provide petrochemical materials from the basic to special ones at home and abroad in a more stable way. We are also strengthening our competitiveness by increasing the proportion of premium products in downstream process built upon our great cost competitiveness of basic petrochemicals.

LG Chem is blazing a trail in new areas of petrochemical industry, such as high-performance / eco-friendly material business, with our differentiated processes, market-leading products and new material development based on our long experience and advanced technology. We will continue to build stable foundation for further growth by effectively responding to the ever-changing market environment with our sophisticated business structure and global expansion of our core business.

NCC / PO We produce basic petrochemical feedstock such as ethylene, propylene, BD and benzene through naphtha thermal cracking and supply them for use in a variety of chemical products at home and abroad. The excellent quality of our premium PE / PP products which accommodate the diverse needs of customers is well acknowledged in the market.

PVC PVC is a general-purpose plastic product that is widely used in construction materials and materials used in everyday life, such as chasses, pipes and flooring. LG Chem is recognized as a PVC maker with world-class quality and production capability (No.1 in Korea, No. 6 in the world) thanks to its steady product development and accumulation of technology.

ABS LG Chem produces and supplies a wide range of high-functional ABS, which is widely used in electrical / electronic and automotive parts, industrial materials and daily necessities. LG Chem is leading local and foreign markets and is the world No.1 in the ABS market.

EP LG Chem produces high-functional engineering plastic materials that are used in electrical / electronic and automotive parts and IT & electronic parts. LG Chem is constantly increasing the revenue of differentiated, market-leading, high value-added products.

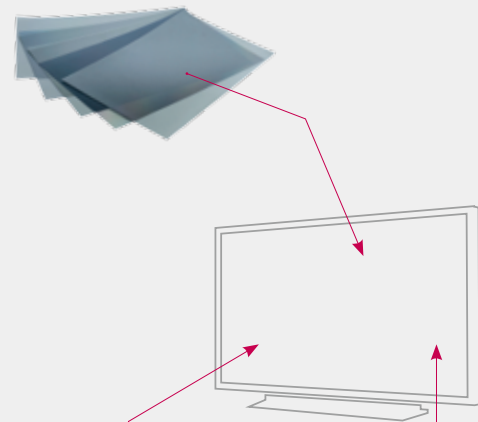
Acrylates / Plasticizers LG Chem produces and supplies acrylates that are used as raw materials for various kinds of products such as SAP (Super Absorbent Polymers), paints and adhesives, as well as eco-friendly plasticizers including general / specialty plasticizers. Since entering into the SAP business in 2008, LG Chem has consistently expanded this technology-based, high value-added business.

Synthetic Rubbers & Specialty Polymers LG Chem produces and supplies rubbers and specialty polymers that have a wide variety of uses, including synthetic rubbers for tires whose main raw material is BD, MBS which is an impact modifier, SBS for asphalt and plastics, latex for paper and gloves, and BPA which is feedstock for PC and epoxy.

| IT & ELECTRONIC MATERIALS |

LG Chem is opening up new possibilities and creating new values with our future growth engine.

Optical Materials



Electronic Materials

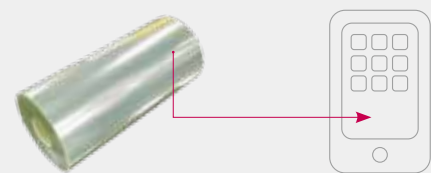
LCD Glass Substrate



In 2000, LG Chem was the first in Korea to successfully commercialize LCD polarizers. This led to the growth of LCD materials such as polarizers, photoresists and BEFs (Brightness Enhancement Film) as well as IT materials such as battery materials, circuit materials and toner. In particular, the polarizer business enjoyed splendid achievements and was ranked first in global market share in 2009, which was 10 years after entering into the business that had been dominated by Japanese companies.

Major products in this segment do not attract much attention because they are not externally visible. However, these parts and materials play important roles in LCDs, rechargeable batteries and solar cells and so are gaining in importance. In the midst of this ever-changing environment, we strive to solidify our position as a global leader and pursue continuous growth on the back of differentiated technology.

IT Films



Optical Materials LG Chem produces key materials of display products such as polarizers and 3D FPR (Film Patterned Retarder). Since 2009, we have retained the No.1 position in the global polarizer market, and built upon excellent product development and mass production technology, we successfully commercialized 3D FPR in 2010 for the first time in the world, contributing to expanding the 3D TV market.

Electronic Materials We provide innovative solutions such as display materials (photoresist, LCD stripper, OLED material), rechargeable battery materials (cathode material, electrolyte) and circuit board materials. In particular, LG Chem is ranked No. 2 in the global photoresist market due to excellent performance, and positioned as a top player in the next generational display, OLED materials business.

LCD Glass Substrates We produce glass substrates for LCDs, which are a key LCD component, requiring high quality.

IT Films We focus on high-performance films such as LCD BLU (back light unit) films as well as touch panel film and solar cell back sheet which are expected to grow fast.

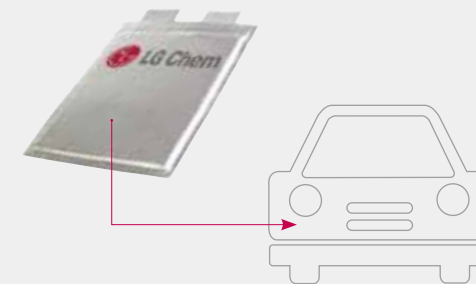
| ENERGY SOLUTIONS |

LG Chem is creating an eco-friendly society with our world-leading technology.

Mobile / IT Batteries



Automotive Batteries



Energy Storage System Batteries



LG Chem kicked off its research in 1995 and in 1999 was the first in Korea to make lithium-ion batteries commercially available. Ever since, we have been providing market-leading eco-friendly energy solutions. Our small batteries have solidified their foothold in the IT segment from laptops to cellphones to tablets as well as grabbing more sales in various new areas such as power tools and power drives. Automobile batteries with the cream-of-the-crop technical prowess of LG Chem have brought us additional sales orders and led to establishing our customer base, making us a solid No.1. Power storage batteries have gained a foothold via pilot projects from Korea and the U.S.A where we have expanded into power generation and grid areas, preparing ourselves to become a top player.

LG Chem's battery segment will continue to serve as market leader because of our differentiated product development and top-of-the-line manufacturing capacity.

Mobile / IT Batteries Mobile / IT batteries are widely used for portable media devices such as laptop, mobile phone and tablet. LG Chem accounts for approximately 20% of global market share because of its outstanding productivity and technological superiority. To align our productivity with the rapid growth of smartphone, ultrabook and tablet, LG Chem is assembling more production lines for lithium-ion polymer batteries. We are also providing differentiated solutions including stepped batteries based on our unique stack & folding technology. Moreover, our growth is accelerating in non-IT sectors, such as power tools and e-bikes.

Automotive Batteries LG Chem's automotive batteries are sustaining the undisputed No.1 position in the world based on more than 10 years of R&D capability. LG Chem is equipped with solutions for all types of electrical cars (Hybrid EV, Plugged-in EV, Battery EV) based on strong product development capability and manufacturing competitiveness via mass production experience. This enables LG Chem to supply battery cell, pack and BMS (Battery Management System) to global carmakers such as GM, Ford, Renault, Hyundai-Kia and Volvo. LG Chem expects the increased revenue from its automotive battery business by being awarded next-generation projects from existing customers while strengthening strategic partnerships, and securing new customers. Additionally, LG Chem plans to launch new products to meet customer needs in new applications such as SLI and garden tools.

Energy Storage System Batteries Based on technological advancement and capability to mass produce battery cell, pack and BMS, LG Chem is attracting new customers in diverse ESS areas such as power grid, UPS and residential / industrial application.

Company Profile

LG Chem is a global 'Solution Partner' providing differentiated value to customers with our innovative materials and solutions.

LG Chem plays the role of a global solution partner that supports the success of its customers by providing high quality petrochemical materials, cutting edge IT & electronic materials and batteries. As of the end of 2012, LG Chem, which started as Lucky Chemical Industrial Corporation in 1947, has grown into a global chemical company that operates businesses in 16 countries (Korea, China, Hong Kong, Taiwan, India, Vietnam, Thailand, Indonesia, Singapore, Japan, USA, Brazil, Germany, Poland, Turkey and Russia). Headquartered in Korea, we operate 24 production plants, 6 marketing subsidiaries, 7 representative offices and 3 R&D centers in total.

Company Overview

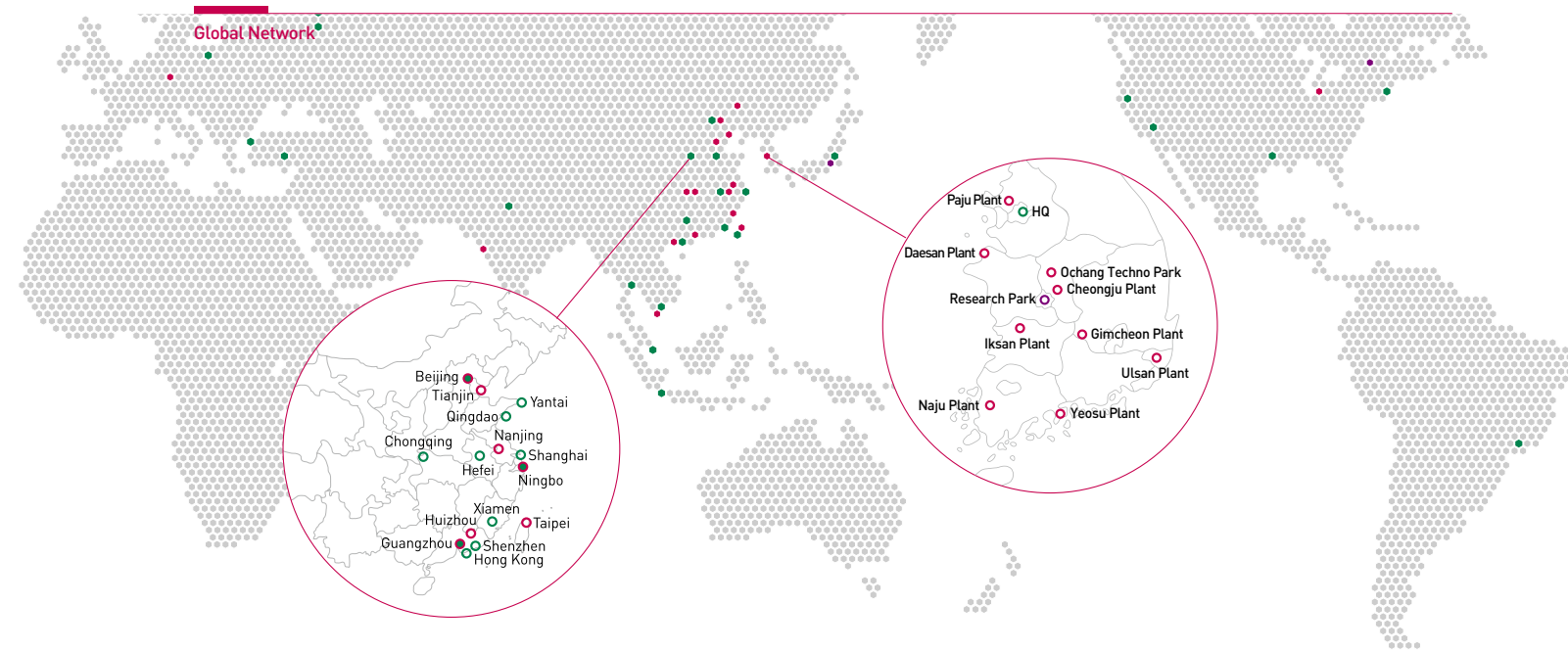
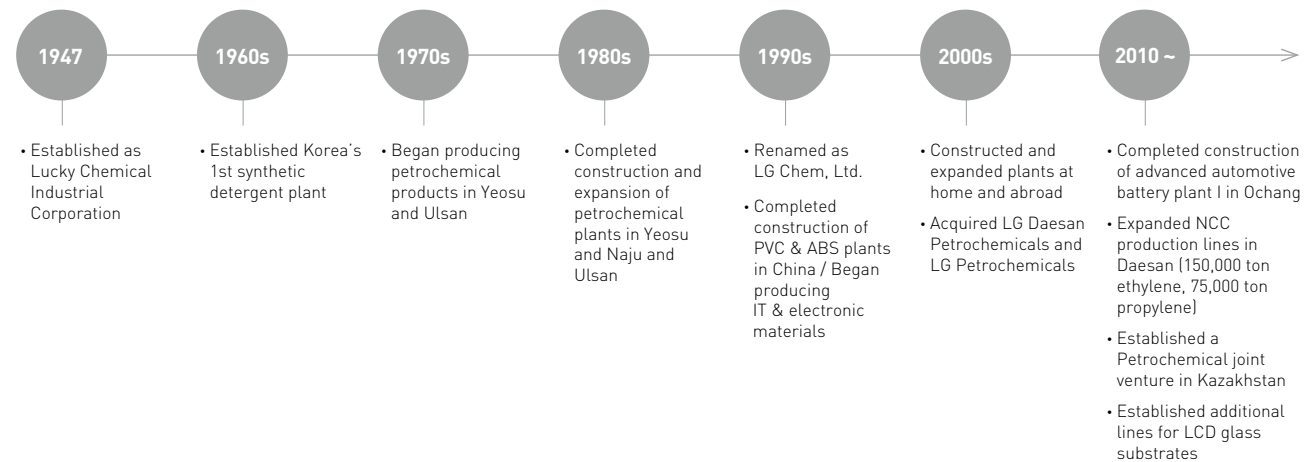
Name	LG Chem, Ltd.
Headquarters	LG Twin Towers, 20 Yeouido-dong, Yeongdeungpo-gu, Seoul, South Korea
Foundation	January, 1947
Employees	20,661 persons (11,737 in Korea, 8,924 overseas)

Financial Snapshot

Total Assets	KRW 16,581 billion
Total Liabilities	KRW 5,816 billion
Total Shareholders' Equity	KRW 10,765 billion
Sales	KRW 23,263 billion
Operating Income	KRW 1,910 billion
Net Income	KRW 1,506 billion

LG Chem's innovative technology, depth of experience and unique know-how were not accumulated overnight. Since the 1970s, we have produced and supplied materials and solutions that are essential for daily life conveniences and industrial development in the areas of premium petrochemicals, advanced IT & electronic materials and batteries. We will continue to pursue sustainable growth, making great achievements in the environmental and social areas.

Company History



OFFICES

	Name	Location	
HQ	LG Chem, Ltd.	Korea	Seoul
Marketing Subsidiary	LG Chem China Investment Co., Ltd.	China	Beijing*
			Shanghai
			Guangzhou
			Ningbo
			Chongqing
			Qingdao
			Shenzhen
			Hefei
			Xiamen
			Yantai
	LG Chem Hong Kong Ltd.	Hong Kong	Hong Kong
	LG Chem America, Inc.	U.S.A	New York Houston Los Angeles San Jose
	LG Chem Brasil, Ltd.	Brazil	Sao Paulo
LG Chem Europe GmbH	Germany	Frankfurt	
LG Chemical India Private Ltd.	India	New Delhi	
Representative Office	LG Chem, Ltd. Moscow Office	Russia	Moscow
	LG Chem, Ltd. Turkey (Istanbul) Liaison Office	Turkey	Istanbul
	LG Chem, Ltd. Hochiminh Office	Vietnam	Hochiminh
	LG Chem, Ltd. Bangkok Representative Office	Thailand	Bangkok
	LG Chem, Ltd. Jakarta Office	Indonesia	Jakarta
	LG Chem, Ltd. Singapore Office	Singapore	Singapore
	LG International Japan Ltd.	Japan	Tokyo

* Regional holding company

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

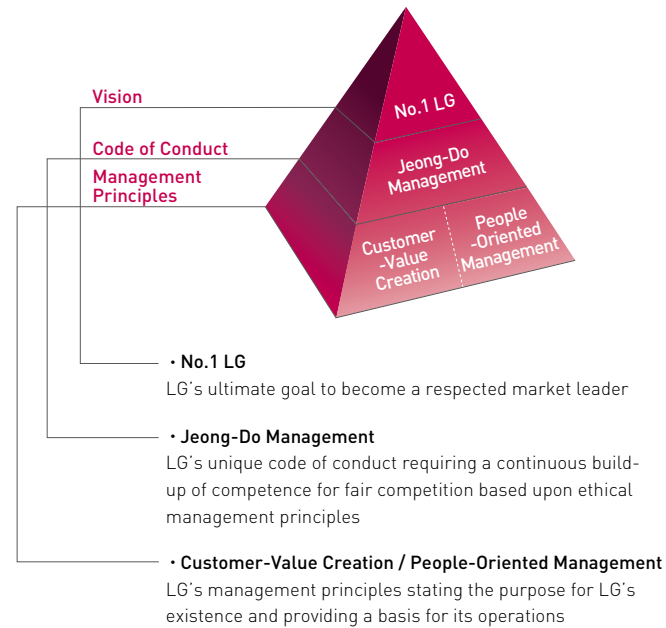
MANUFACTURING SUBSIDIARIES

Name	Location		Major Products
Yeosu Plant	Yeosu	Korea	NCC, SM, LDPE, HDPE, PVC, VCM, ABS, SAN, EPS, Acrylates, OXO-alcohol, NPG, SBS, MBS, SB Latex, BPA
Cheongju Plant	Cheongju	Korea	Electrolytes, Anode 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 Plant	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
Tianjin LG DAGU Chemical Co., Ltd.	Tianjin		China
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-LCDs	
CNOOC & LG Petrochemicals Co., Ltd.	Huizhou	ABS	
LG Chem (Taiwan), Ltd.	Taipei	Taiwan	Polarizers
LG Chem Michigan Inc.	Holland	U.S.A	Lithium-ion batteries, Battery packs
LG Chem, Poland Sp. z o.o.	Wroclaw	Poland	Polarizers
LG Polymers India Private Ltd.	Mumbai	India	PS / EPS
LG VINA Chemical Company Ltd.	Hochiminh	Vietnam	DOP

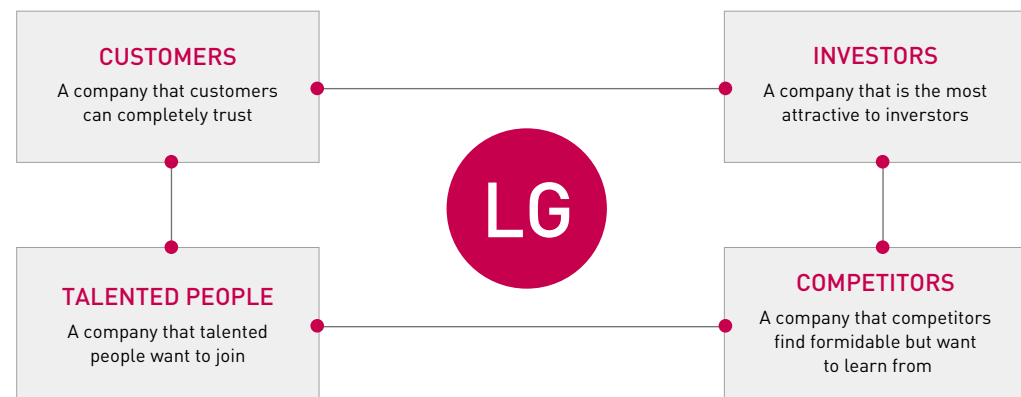
LG Way

LG Chem is practicing Jeong-Do Management based on the management principles of Customer-Value Creation and People-Oriented Management in order to become 'No.1 LG'.

The LG Way is a unique management philosophy which 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' means becoming a respected market leader that is trusted by customers, most attractive to investors, preferred by the talented, and considered formidable yet respected as a benchmark by competitors.



No.1 LG



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

LG Chem's Vision and Core Values

We aim to be a global leader growing with customers by providing innovative materials and solutions.

LG Chem, which actively participates in internalizing and practicing LG Way in order to achieve the vision of 'No.1 LG', aims to be a global leader, growing with customers by providing innovative materials and solutions. This vision shows that achieving a 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. In order to achieve the vision, employees of LG Chem base their thinking and behavior on core values which are 'Customer Value Creation,' 'Execution,' and 'Mutual Respect.'

LG Chem's Vision

To be a global leader - growing with customers by providing innovative materials and solutions

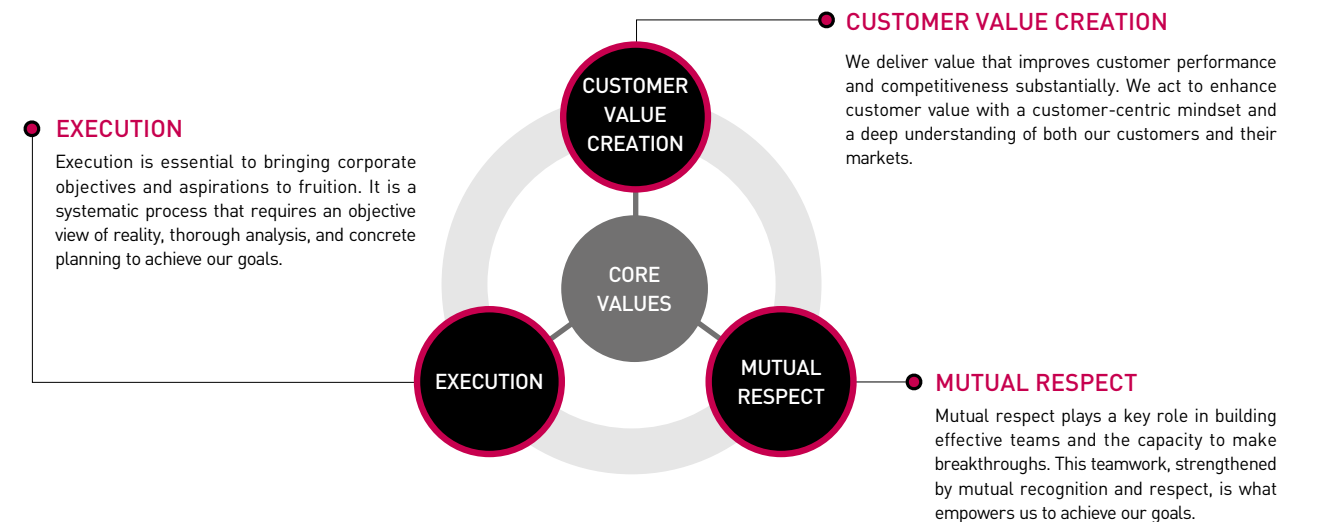
GLOBAL LEADER We strive to be a company that is trusted and admired by our customers, the most attractive investment to investors, the workplace of choice for the best and the brightest, and feared and emulated by our competitors.

GROWING WITH CUSTOMERS We grow with our valuable customers by delivering innovative value that helps them thrive and prosper.

INNOVATIVE MATERIALS We deliver the best materials to ensure the success of our customers. These innovative materials are superior in both price and performance to the competition, enhancing the performance of every product our customers make.

INNOVATIVE SOLUTIONS We solve customer problems and improve their performance by providing innovative solutions encompassing products, services, and expertise tailored to match their specific needs.

Core Values



Corporate Governance

LG Chem's corporate governance stays transparent thanks to the management led by professionals and the Board of Directors and an independently run Audit Committee.

Ownership Structure

The total number of shares in LG Chem (including preferential shares) is 73,900,021 as of the end of 2012. The largest shareholder is LG Corp., possessing 33.53% of total shares. Every year, the CEO makes a presentation on business status at the general shareholder meeting, collecting 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' interest are disclosed via DART (Data Analysis, Retrieval and Transfer System) of Financial Supervisory Service or on the websites of KRX (Korea Exchange) and LG Chem.

Board of Directors

There are total 11 directors presently sitting on the board at LG Chem, with 6 outside directors representing more than the majority. Such composition, by design, prohibits an agenda item from being approved if and when all 6 outside directors voice opposition to that item. Outside directors come from various fields of expertise and experience, such as law, chemistry, batteries and finance. They monitor and check the management on key issues of corporate operation and take on a vital role in decision-making by presenting impartial views. 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.

To support the Board in undertaking their role as the highest decision-making body, we have placed the board secretariat directly under the legal team to improve operating efficiency of the BOD. The secretariat reports and informs the outside directors on mid-to long-term management and current business issues on a frequent basis. Prior to a board meeting, the secretariat and concerned teams brief the outside directors on key management issues and meeting agenda so that the directors can make fully informed, detailed yet comprehensive analysis and review beforehand. In addition, outside directors are provided with as much information as possible to ensure the maximum level of work efficiency.

LG Chem appoints outside directors through the Outside Director Nomination Committee to guarantee their independence and autonomy. The committee, which is composed of one inside director or a non-executive director and two outside directors, recommends qualified candidates with expertise and impartiality after a thorough review of potential candidates. Outside directors get formally appointed with an approval from the general meeting of the shareholders. In order to secure the expertise of outside directors, we select six outside directors in total, each of whom is specialized in a different area, such as finance & accounting, special business areas or management. We also consider their independence from the internal management, proven capability and global competence.

It is stipulated in our articles of incorporation and board regulations that any director who has special interest in a specific agenda is not allowed to vote on the agenda. Quarterly board meeting schedules for the following year are set at the end of each year and are announced to the Board after considering individual schedule needs. Additionally ad-hoc meetings are convened to respond to any urgent management issues when the need arises.

Major Shareholders

Shareholder Name	Number of Stocks	Share Percent	Relation with LG Chem
LG Corp.	22,219,326	33.53%	The largest shareholder
Shinhan Bank (National Pension Service)	2,966,451	4.47%	None
The Government of Singapore	1,226,222	1.85%	None
Saudi Arabian Monetary Agency	1,211,375	1.82%	None
Vanguard Emerging Markets Stock Index Fund	886,323	1.33%	None

Meetings of the BOD and Audit Committee of 2012

Category	BOD	Audit Committee
Meetings	8	5
Items	27 approved, 10 reported	3 approved, 11 reported
Key Items	<ul style="list-style-type: none"> Approval for business plan Reporting of earnings performance and financial statement Approval of investment plans 	

2012 Audit Commissioned

Category	Description	Service charge	Note
Audit Service	<ul style="list-style-type: none"> Audit and review of 2012 separate and consolidated financial statements 	KRW 774 million	9,100 hours
Consulting Commissioned	<ul style="list-style-type: none"> Consultation regarding additional FTA deals Consultation regarding China's anti-dumping Review of technical royalty fee statements Consultation regarding transfer price taxation with guarantee fees 	KRW 123 million	-

The Board members pay a visit to our plants at Yeosu, Chengju, and Ochang in Korea as well as in China to gain a hands-on perspective into company operations, and newly-appointed directors are given chances to attend professional external training and seminars on corporate governance and the status of major business projects in order to help them get settled in their position at the earliest date possible.

Audit Committee

The Audit Committee is a decision-making body that independently plans, conducts and evaluates internal audits. It is composed of legal, financial and accounting experts and specialists in specific areas. With a view to secure transparency and independence from major shareholders and the management, all three of the committee seats are filled by outside directors, so as to ensure that audits are conducted thoroughly throughout management. Apart from quarterly committee meetings, the Audit Committee deliberates on important issues in real time when they arise. Especially, the committee is briefed on quarterly earnings performance and internal audit plans beforehand and deliberates on significant points of contention, faithfully fulfilling its role as a supervisory and monitoring mechanism on the management. In addition, the committee receives a statement of accounts regularly or irregularly from external auditors, who function as independent advisors to the committee on internal monitoring. External auditors are appointed after comprehensively evaluating their expertise, impartiality and social reputation.

Board of Directors

(As of Apr. 2013)

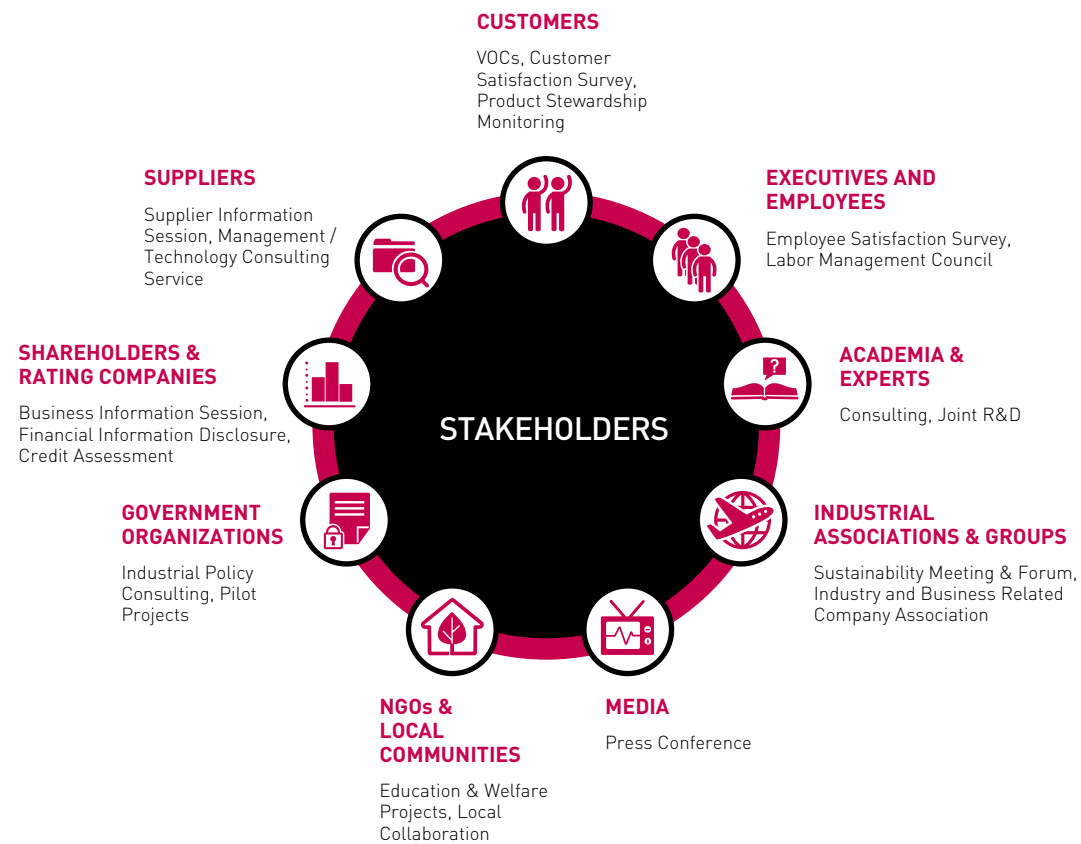
Category	Name	Date of Birth	Major Career Highlights and Concurrent Posts	Remarks
Inside Directors	Peter Bahnsuk Kim	1949	<ul style="list-style-type: none"> Former President of LG Petrochemicals Vice Chairman of LG Chem 	Chairman of BOD
	Jin Soo Park	1952	<ul style="list-style-type: none"> Former President of Hyundai Petrochemicals and LG Petrochemicals President & CEO of LG Chem / Concurrent post: LG MMA Co., Inc. 	President
	Young Ki Park	1955	<ul style="list-style-type: none"> Former Leader of IT&E Materials R&D and Optical Materials Division of LG Chem President of IT&E Materials Company of LG Chem 	President
	Young Su Kwon	1957	<ul style="list-style-type: none"> Former CFO of LG Electronics and President of LG Display President of Energy Solutions Company of LG Chem 	President
Non-Executive Director	Juno Cho	1959	<ul style="list-style-type: none"> 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, V-ENS 	
Outside Directors	Il-Jin Park	1947	<ul style="list-style-type: none"> Former Director of LG Dow Polycarbonate President of IJ International 	
	Jang-Joo Kim	1955	<ul style="list-style-type: none"> Former member of Electronics and Telecommunications Research Institute Professor of Materials Engineering at Seoul National University 	
	Jin-Kon Kim	1957	<ul style="list-style-type: none"> Full member of the Korean Academy of Science Technology Professor of Chemical Engineering at Pohang University of Science and Technology 	
	Seung-Mo Oh	1954	<ul style="list-style-type: none"> Former Head of Growth Engine Project for Next Generational Battery Professor of the School of Chemical and Biological Engineering at Seoul National University 	Member of the Audit Committee
	Se-Jin Kim	1956	<ul style="list-style-type: none"> Former member of Subcommittee on National Competitiveness President of KBP Fund Ratings 	Member of the Audit Committee
	Ki-Myung Nam	1952	<ul style="list-style-type: none"> Former Minister of Government Legislation Chair Professor of Law School at Chungnam University 	Chairperson of the Audit Committee

Stakeholder Communication

LG Chem operates multiple communication channels to stay in touch with various stakeholders and share its sustainability management value with them.

Stakeholders are individuals or groups who have an interest in the business activities of a company and/or those who can affect or be affected by them. LG Chem identifies an entity as a stakeholder after taking into consideration mutual impact between the company and the stakeholder, proximity to our plants, and their direct and indirect accountability for our business activities. In addition, stakeholders are grouped based on stakeholder communication activities conducted by working-level teams. Taken all together, LG Chem has defined stakeholder groups to be customers, suppliers, shareholders and rating companies, government organizations, NGOs and local communities, the media, industrial associations & groups, and academia & experts.

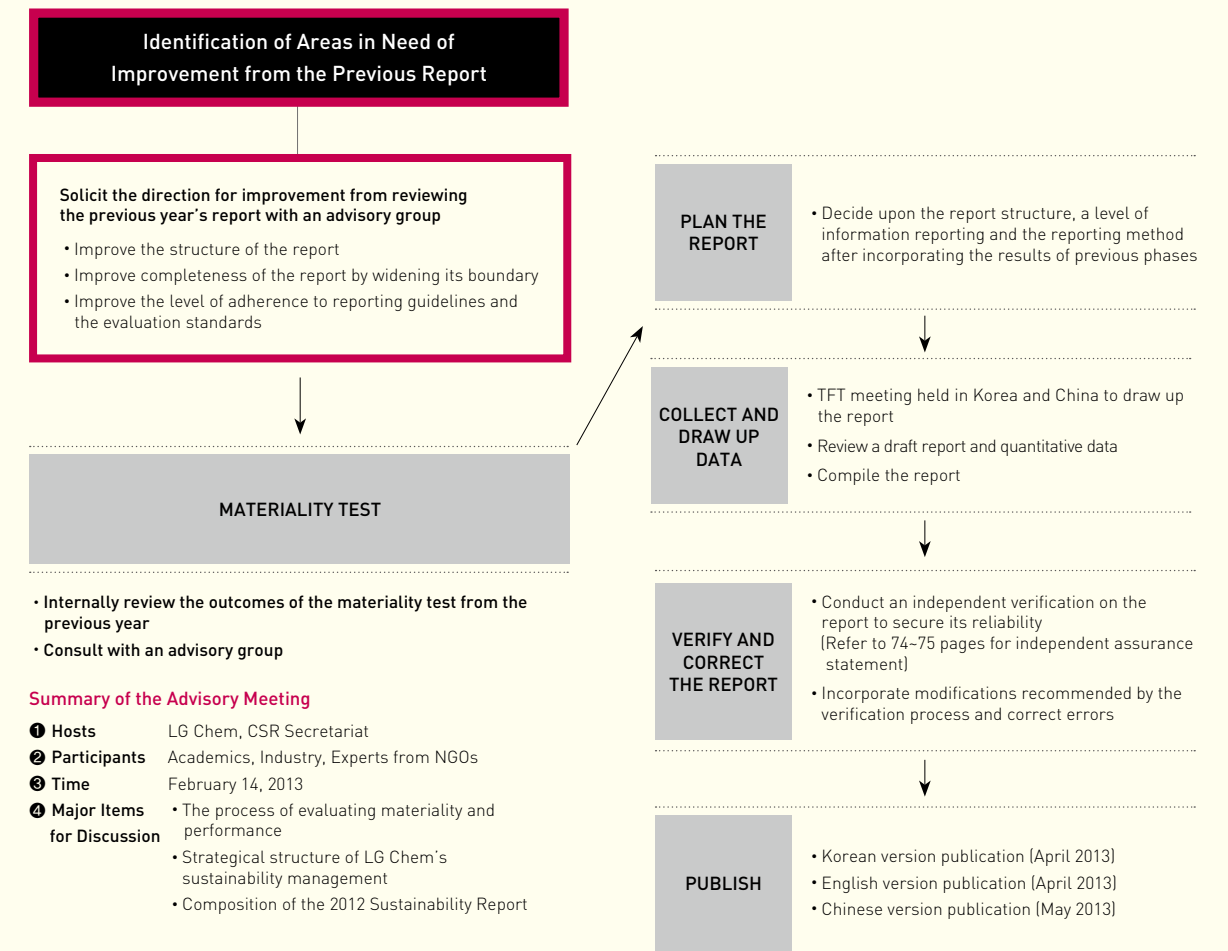
Stakeholder communication activities are very conducive to LG Chem's sustainability management. A diversity of stakeholder communication channels exist, so that LG Chem can identify issues significant to stakeholders and better understand how the company can affect and be affected by stakeholders with respect to issues. In addition, while identifying significant stakeholders and communicating with them about sustainability management strategy, framework and performance, LG Chem is further improving its sustainability management.



THE PROCESS OF PUBLISHING SUSTAINABILITY REPORT AND IMPROVEMENTS MADE

LG Chem established a publication plan for the 2012 Sustainability Report in December of 2012 and set up a task force team in January 2013, which triggered the process of compiling the report. A large effort was made to improve the framework and completeness of the report and the level of adherence to reporting guidelines and evaluation standards. An advisory meeting was held with experts to collect their opinions about LG Chem's sustainability management and the direction of the report. The process of evaluating materiality and the performance of LG Chem were also discussed and incorporated into the report. As a way of improving the quality of report, sustainability activities and the performance of all locations of operation in China were included, so that the report would reflect the heightened status of LG Chem as a global player.

The report framework was modified this year so that the structure of the report is in line with that of our sustainability management strategy. This was to improve the consistency between our strategy and the report, which is a major communication channel with stakeholders, making our sustainability management activities and performance more easily understandable.



Materiality Test

LG Chem endeavors to accommodate the diverse opinions of management and stakeholders in our report and construct the contents in a systematic way to address critical issues.

Principles of the Materiality Test

A materiality test is a continual process that is required not only for deciding which contents to include in the sustainability report, but also for identifying the demands and expectations of stakeholders to be reflected in our management decision making. LG Chem took into consideration the principles presented in the GRI (Global Reporting Initiative) during the process of preparing the sustainability report - completeness, sustainability context, materiality and stakeholder inclusiveness. The principle of stakeholder inclusiveness has especially heavy weight in every step of way of the materiality test at LG Chem.

What are the Significant Issues?

It is fair to say that sustainability management is a stakeholder centered management. Significant issues for sustainability management are what are significant for management goals, strategies, the policies of LG Chem, and finally what stakeholders are interested in or give weight to when making decisions. Therefore, in order to identify significant issues, we assess the significance of issues from the perspective of LG Chem management as well as from the perspective of stakeholders.

Materiality Test Process

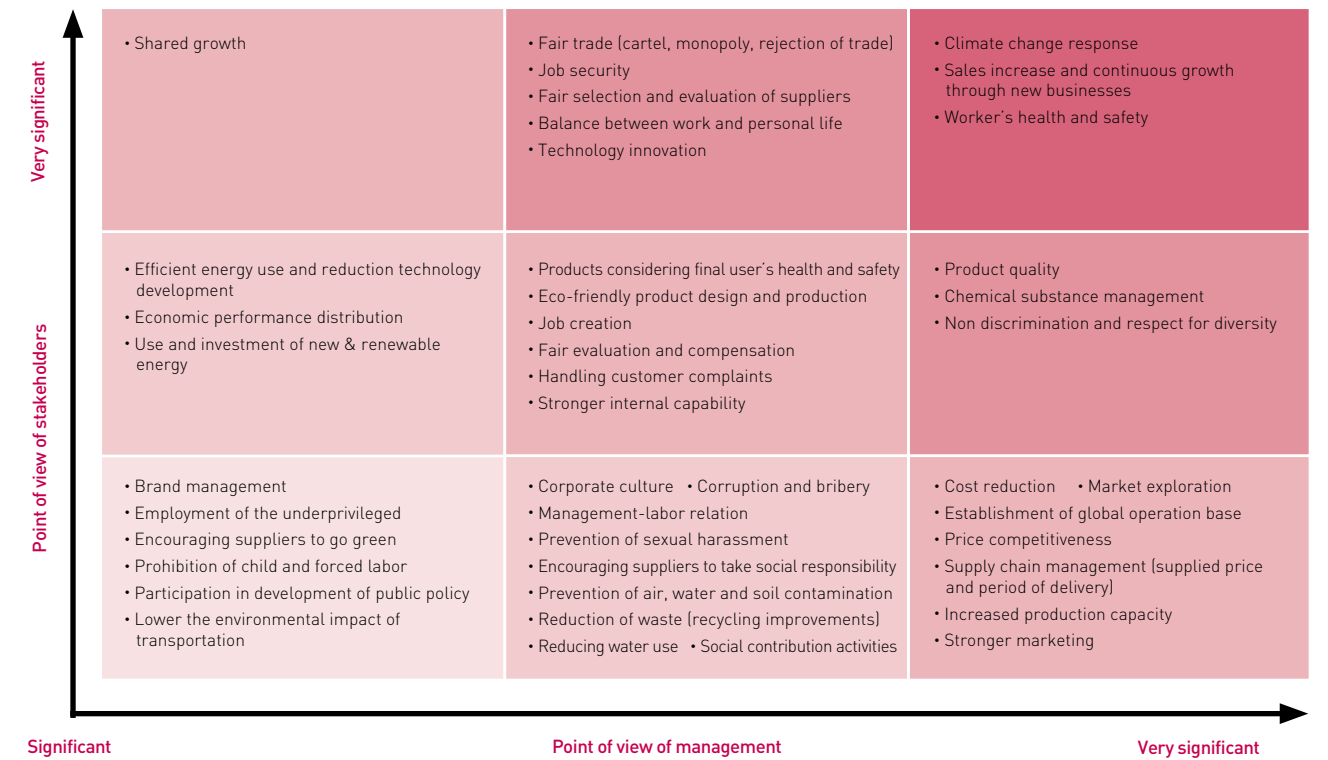
This evaluation was built on outcomes of the materiality test conducted in early 2012. For a materiality test, issues that are relevant to sustainability need to be identified first. To this end, LG Chem conducts a review of internal guidelines such as management strategy, code of conduct, fair trade guideline, ESH policy, environment certification guideline as well as external guidelines such as GRI guideline, ISO 26000, and EICC. In addition, a check against media references, benchmarking results and stakeholder interviews is conducted. As a result, 59 issues in seven categories were identified. The identified issues were put through a significance test to evaluate them according to the perspectives of both stakeholders and management. Lastly, the final result took into consideration reliability of the investigation and the level of importance to each stakeholder.

The initial results of the 2012 materiality test were revisited so as to trim the number of issues from 59 down to 43. This was done by looking at the issues themselves and their maturity, the degree of relevance between the issue and LG Chem, and their relationships with the management activities of the firm. Then, the importance of the issues to stakeholders and management were plotted separately. Next, an outside experts' advisory meeting was held and their opinions were collected in early 2013 to validate the effectiveness of and establish the reliability of the testing process and our previous results. The advisory meeting engaged academics, industry, experts from NGOs and an entity which consulted on sustainability management issues so as to accommodate their ideas. The meeting concluded (1) that questionnaires need to be customized according to the characteristics of each business domain to generate results with good reliability, and (2) that the number of the stakeholders commenting on each group should be increased. The conclusions of the meeting were incorporated into the process by which we lay out our sustainability strategy.

Materiality Test Results

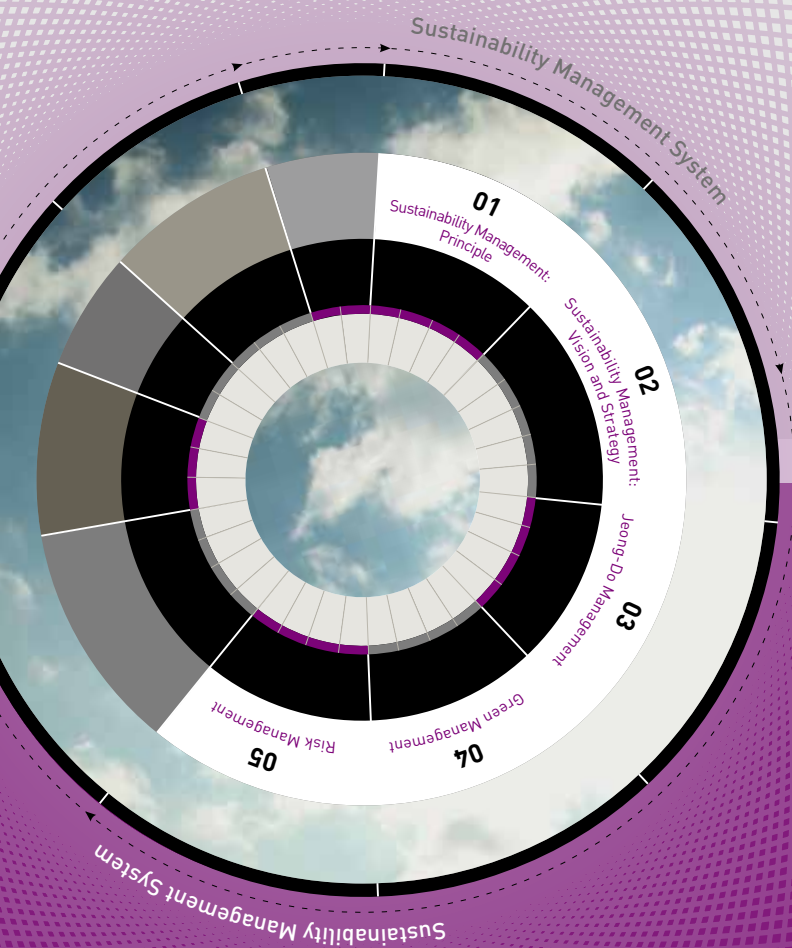
As mentioned before, a total of 43 issues were evaluated from the points of view of both stakeholders and management. The results showed that the most significant issues for both stakeholders and management are responding to climate change, increasing sales, worker's health and safety, and achieving continuous growth through new businesses. Surely,

other issues are also important. However, based on the relative importance level, the main focus should be on issues located at the upper right of the materiality test matrix. Additionally, attention should be paid to those issues in which there is a big gap between the stakeholder and management opinions about strategy.



No.	Issue	Page
1	Climate change response	40-43, 67
2	Sales increase and continuous growth through new businesses	28-29
3	Worker's health and safety	44-47
4	Fair trade (cartel, monopoly, rejection of trade)	56
5	Job security	48, 52-53, 71
6	Fair selection and evaluation of suppliers	58
7	Balance between work and personal life	54, 71
8	Technology innovation	32
9	Product quality	32-35
10	Chemical substance management	38-39
11	Non discrimination and respect for diversity	48-50, 71
12	Products considering final user's health and safety	36-39
13	Eco-friendly product design and production	36-39
14	Job creation	48-49, 71
15	Fair evaluation and compensation	50
16	Handling customer complaints	35
17	Stronger internal capability	51
18	Shared growth	57
19	Cost reduction	32
20	Market exploration	28-29, 32
21	Establishment of global operation base	29
22	Price competitiveness	31-32

No.	Issue	Page
23	Supply chain management (supplied price and period of delivery)	57-58
24	Increased production capacity	31
25	Stronger marketing	33-35
26	Efficient energy use and reduction technology development	40-43
27	Economic performance distribution	65
28	Use and investment of new & renewable energy	42
29	Corporate culture	55
30	Corruption and bribery	22
31	Management-labor relation	52-53
32	Encouraging suppliers to take social responsibility	37, 57
33	Prevention of sexual harassment	50
34	Prevention of air, water and soil contamination	44-46, 68
35	Reduction of waste (recycling improvements)	44-46, 69
36	Reducing water use	44-46, 66, 68
37	Social contribution activities	59-62, 71
38	Brand management	33-35
39	Employment of the underprivileged	48, 71
40	Encouraging suppliers to go green	58
41	Prohibition of child and forced labor	50
42	Participation in development of public policy	41, 56, 74
43	Lower the environmental impact of transportation	46



SUSTAINABILITY MANAGEMENT SYSTEM



In the spirit of Jeong-Do Management, the CEO and the Board of Directors of LG Chem are at the helm as it conducts its business so that its management is both strategic and systematically sustainable. Furthermore, the firm always considers the economy, environment, human rights and ethics when making its decisions, so as to fulfill its social responsibilities, reflecting its nature as a respected top-notch global player.

Sustainability Management: Principle

LG Chem strives to create sustainable future value in the community by implementing principle of sustainability management based on customer-value creation and people-oriented management.

Since the adoption of Jeong-Do management in 1995, LG Chem has conducted all business in a management style using the principle of ethical management. Sustainability management was the result of Jeong-Do management which creates measurable results armed with top-of-the-line capabilities based on ethical management. Additionally, it is in line with value creation for customers and management valuing human respect, the principles of Jeong-Do management. The principle of sustainability management captures the spirit of Jeong-Do management. All employees from the top to the bottom will spare no efforts in embracing it into their daily business activities.

PRINCIPLE OF SUSTAINABILITY MANAGEMENT

LG Chem will abide by the principles of sustainability management so as to respect people and create a sustainable future.

- We will provide differentiated eco-friendly materials and solutions.
- We will comply with corporate ethics as a responsible corporate citizen.
- We will manufacture products and run operational facilities in a sustainable manner.
- We will use all our resources to create a better world.

The core feature of LG Chem's sustainability management lies in the fact that the principle of sustainability management is rooted in Jeong-Do management. As a member of the global community, LG Chem is set on complying with corporate ethics and contributing to the progress of community. To achieve this, the firm will continue to cooperate with all of their stakeholders and do its best to act as a leader.

Secondly, its sustainability management is intertwined with the vision which is the reason for its existence and the source of its energy. This means that sustainability management is not separate from LG Chem's growth strategy, rather, it shows how the firm will aggressively utilize newly arising sustainability issues as a business opportunity. At the same time, it indicates that sustainability should be fully integrated into the operational method of the LG Chem workplace.

Lastly, the method used to promote sustainability management should coincide with its unique identity. To put it another way, the way LG Chem meets the expectations of society and contributes to sustainability development of the community should be connected to its capacity as a chemical company. The reason for this is that a customized approach is most effective when it contributes to community development and resolve spending items on the agenda. A customized approach is also a prerequisite for LG Chem to continue to be profitable and continue to grow.

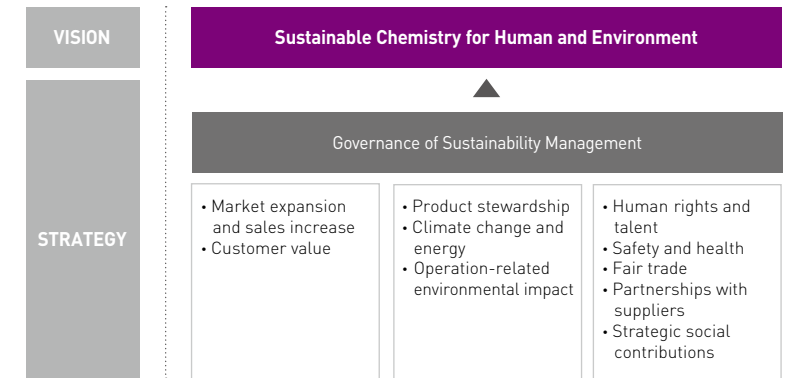
Sustainability Management: Vision & Strategy

LG Chem will fulfill its social responsibility to seek harmony between the lives of every stakeholder and the community by virtue of its realization of human respect and harmony with environment.

The vision of LG Chem's management is to create a Sustainable Chemistry for Human and Environment. LG Chem expresses its obligations and ambitions through its chemical business in the relationship between society and its stakeholders. LG Chem aims to realize a respect for all people and create a harmony with the environment with its sustainability management vision.

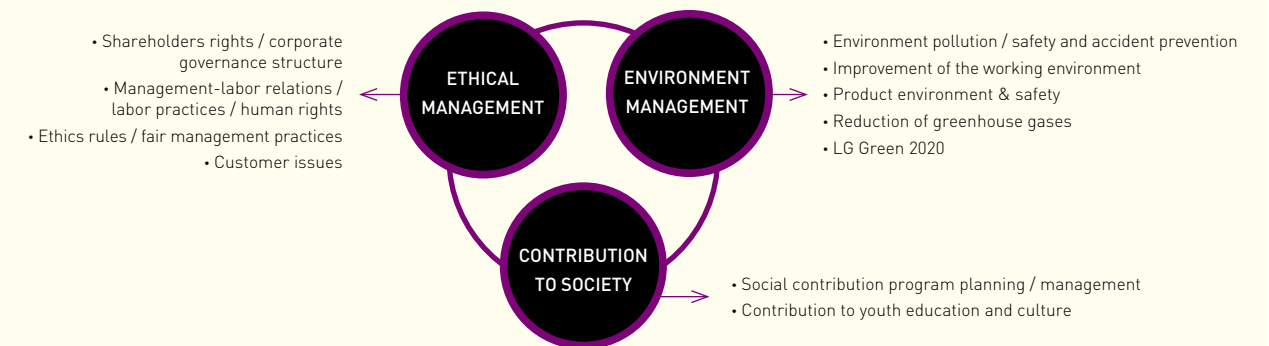
LG Chem's sustainability strategy has been implemented using 10 strategy goals. This strategy ensures that LG Chem's goals are formulated and implemented at every level of business activity under the governance of sustainability management. The goal of these strategies is that every stakeholder including our silent partners will make sure that their growth strategy and the environment is in harmony with the community.

Vision of Sustainability Management



CSR SECRETARIAT

Beginning in 2013, LG Chem has established a CSR Secretariat under the stewardship of Corporate Communications Department Leader, directly governed by the CEO, in the headquarters so that sustainable management is enacted in an integrated and systematic way. The office establishes company wide sustainability strategies and monitors relevant activities via the close cooperation of each department in a systematic way. In doing so, LG Chem integrates sustainability management framework, stakeholder engagement and the performance publishes the results in a report of sustainability management, which serves as a means of communication with external stakeholders.



Jeong-Do Management

Jeong-Do Management is the way LG operates based on which LG conducts ethical management and builds up capacity so as to play fair and win in the competition.



History

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, continuing to implement Jeong-Do Management.

LG Code of Ethics

LG Chem respect the economic order of free market practices and seeks the common interest of all stakeholders so as to grow into a global No.1 company. To this end, LG Chem is actively encouraging all employees to practice the LG Code of Ethics which is the guiding principles that all employees must use to guide 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 to Jeong-Do Management: Improve yourself and play fair in order to overcome the difficulties of any business environment and to build up your competitiveness. To this end, the leading code of conduct is to set an example by sticking to the basics, abiding by the rules and fulfilling your social responsibilities. The basis of Jeong-Do Management is to ensure a clean conscience.

Driving Organizations

LG Chem has put an internal audit department with an ethics bureau directly under the CEO in order to realize Jeong-Do Management in a systematic and unified way, working closely with regional ethics bureaus to enhance efficiency.

Internal Audit Department	<ul style="list-style-type: none"> • Check the implementation and the compliance of corporate policy, directives, regulations or management instructions • Maintain a systematic management structure across the organization and promote management rationalization • Contribute to developing business transparency and a viable corporate culture • Perform regular audits at every location of operation at home and abroad in accordance with a yearly plan
Internal Audit Council	<ul style="list-style-type: none"> • Independent deliberative body • Guarantee the fairness of internal audit and the results • Composed of leaders of legal, HR (or employee relations) and internal audit departments

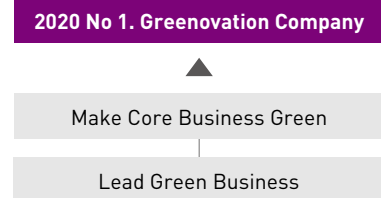
Action Program

Ethics Hotline	Gift / Money Receipt Reporting System		Jeong-Do Management Pledge	Jeong-Do Management Survey
A reporting system for violations of the Jeong-Do Management principles	Employees voluntarily report the cases to the internal audit department.	Received gifts are put up for internal auction whose proceeds are donated to social welfare organizations.	Depending on the type of the goods, in-kind donations are made under the name of the company.	Everyone at LG Chem and suppliers sign up to the Jeong-Do Management Pledge every year online, to pledge their commitment to complying with the LG Code of Ethics and Jeong-Do Management principles
				Conduct surveys of all employees and suppliers to assess their awareness about Jeong-Do Management, and to identify areas in need of improvement

Green Management

LG Chem minimizes environmental impact by means of a diversity of innovative activities, technical development and changes in the portfolio, playing a key role in realizing 'LG Green 2020'.

LG Green Management



Five Action Plans

- STRENGTHEN R&D AND CAPITAL INVESTMENT**
Develop technologies for efficient plant operation, pollutant reduction and water recycling and to make actual investment for their application at facilities
- CONSTANTLY IMPROVE PORTFOLIO**
Minimize environmental risks by fully reviewing environmental factors such as greenhouse gas emissions, waste water, and water consumption when building or expanding plants
- AGGRESSIVELY DEVELOP GREEN PRODUCTS**
Enhance energy efficiency for products, minimize resource consumption, and expand products that improve quality of life
- EXPAND INVESTMENT IN GREEN BUSINESS**
Expand investment in three areas: automotive, energy, and living & eco solutions
- REINFORCE GREEN PARTNERSHIP**
Expand green management to include suppliers, and help suppliers improve their own green competitiveness, give a purchasing priority to green products, and establish strategic relationships with the government and leaders within the community

Environmental Philosophy

LG Chem's environmental philosophy originated from the LG Charter of Management and LG Code of Ethics. The Charter emphasizes how environmental protection is a priority and a significant obligation, and that our corporate responsibility regarding the environment should begin from self-realization. LG Code of Ethics expresses our willingness to execute and also serves as guidelines for the direction of green management that is pursued by LG Chem.

ARTICLE 1 SECTION 4 - LG CHARTER OF MANAGEMENT

LG strives to maintain and advance the free market economy, make a contribution to local communities, and preserve the environment through performing business activities with a strong sense of responsibility and self-awareness as a corporate citizen.

ARTICLE 6 SECTION 4 - LG CODE OF ETHICS

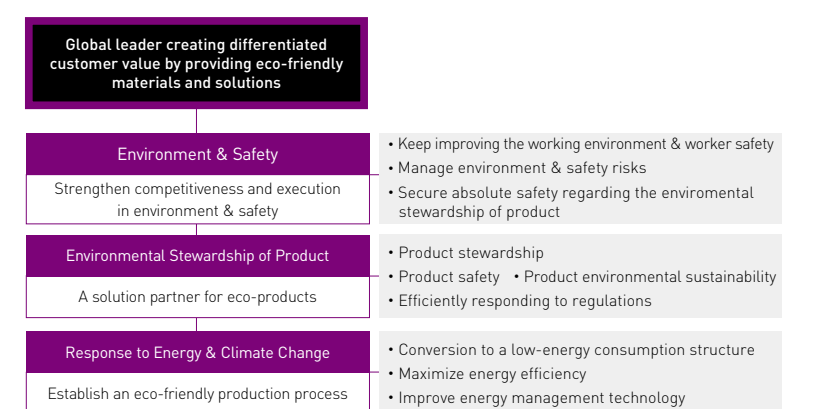
LG strives to prevent environmental pollution and protect the nature in order to preserve the clean environment.

Green Management

LG Chem is striving to implement green management to minimize the environmental impact of all our business activities. We are expanding our lines of eco-friendly products and building up new green industries, in order to create new value for our customers and at the same time contribute to a sustainable society. We refer to these ideas as 'Green Management'. Using more energy, worsening climate change and the shortage of freshwater are not only critical environmental issues that humankind is faced with, but are also key risk factors for our business. Nowadays, these issues have become so influential that a company's response to them will determine the fate of that corporation. So, it is fair to say that green management is the prerequisite to reaching 'No.1 LG' in the long-term perspective.

In 2010, the 'LG Green 2020' Strategy was announced at the LG Group level in consideration of the growing interest and needs of stakeholders regarding the environment and energy. 'LG Green 2020' presents a roadmap for Corporate Social Responsibility (CSR). The strategy reflects LG's strong determination to proactively respond to climate change and achieve green growth. LG Chem will minimize its environmental impact while making a diverse number of innovative efforts, developing technology and adjusting the product portfolio, which are pivotal in our reaching the goals of 'LG Green 2020.'

LG Chem's Green Management Framework



- Environment & Safety**
 - Keep improving the working environment & worker safety
 - Manage environment & safety risks
- Strengthen competitiveness and execution in environment & safety**
 - Secure absolute safety regarding the environmental stewardship of product
- Environmental Stewardship of Product**
 - Product stewardship
 - Product safety
 - Product environmental sustainability
- A solution partner for eco-products**
 - Efficiently responding to regulations
- Response to Energy & Climate Change**
 - Conversion to a low-energy consumption structure
 - Maximize energy efficiency
- Establish an eco-friendly production process**
 - Improve energy management technology

Risk Management

LG Chem is managing risk systematically through routine management by the risk owners, integrated management by the risk-managing organization, and supervision of the Board of Directors.

Risk Management System

Our risk management system has three tiers - routine management by the risk owners (1st tier); integrated management by the risk-managing organization (2nd tier); and the supervisory function of the Board of Directors (3rd tier).

Integrated risk management has been changed to risk management by business unit, that is Petrochemicals, IT&E Materials and Energy Solutions, to adapt to the change in management system by assigning more responsibility to the management of each of them. Accordingly, we transferred part of the headquarters' functions of procurement, strategy development, innovation and developing new business to organizations under each business unit to make an risk management system suitable for each business unit. Dedicated risk management teams provide the necessary guidelines and report forms for each risk, consolidate the results and report to the Risk Management Committee (RMC). For those risks that are likely to affect our business, the teams analyze the risks in terms of size, duration and contingency scenarios as the need arises. Our internet portal called Elian provides up-to-date information and data for our employees and executives. For example, daily business performance (e.g., sales, production, working capital) is offered to the senior management through the Executive Information System (EIS) and market trends and reports through Global Market Intelligence (GMI) to ensure a prompt response to predicted risks.

Follow-Up Risk Management Activities

When the need arises, we conduct a prompt internal audit and take bold follow-up actions to prevent recurrence of similar risks in the future. For major projects involving investments completed within the last 3 years, we check whether they are on track in terms of sales, income and capital expenditure (CAPEX) targets and capture any deviating factors to ultimately enhance the effectiveness of future investments. Any project whose sales, operating income, investment cost and duration come below 80% of the original plan is deemed to be off track.

RM (Risk Management)

To reduce total cost for risk management, LG Chem has strengthened RM activities at every work location since 2009 when a cross-functional team, which involves the RM Team and the Environment & Safety Team at the head office and Marsh Risk Consulting, was formed. RM activities have been implemented based on a three-level road map including basic, enhanced and high-class levels.

The foundation for RM was laid at the basic level through the review of insurance policies, estimation of maximum loss and the analysis of business interruptions. At the enhanced level, we developed and applied our own risk management guideline based on global standard codes for the purpose of preventing accidents and minimizing risk. As of 2012, RM activities in the high-class level are under way from the perspective of enterprise risk management. As part of RM activities, we are also carrying out diverse programs such as holding LG Chem RM conference, attending RIMS conference and conducting overseas benchmarking to nurture globally competitive risk managers.

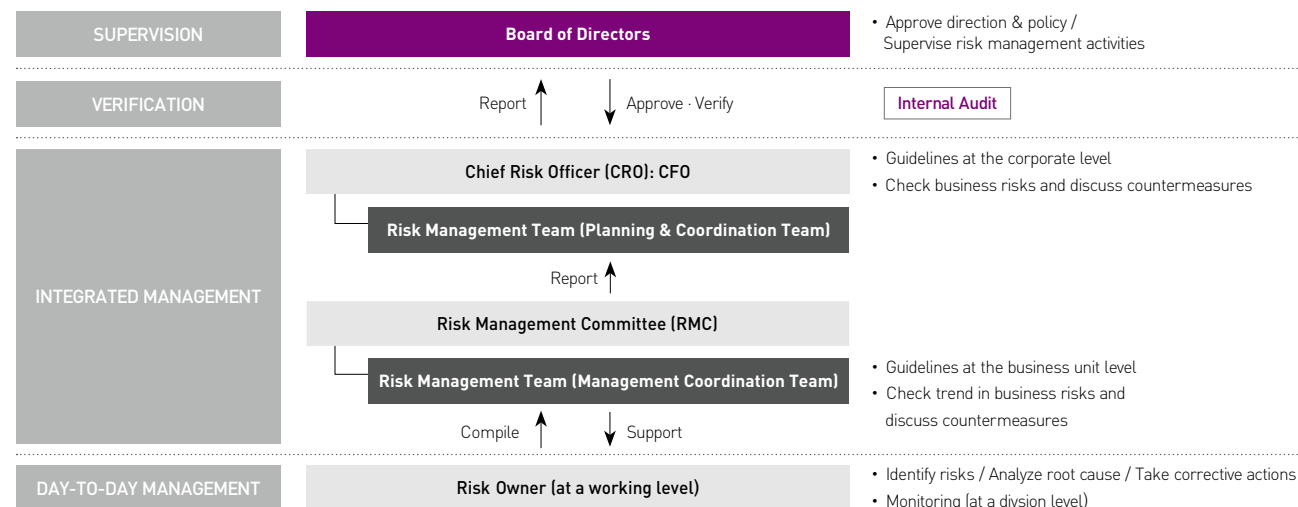
In 2013, we plan to continuously carry out RM activities in new or expanded plants, develop a risk management guideline for overseas plants and expand the implementation of enterprise risk management which involves analyzing environmental pollution risks, performing supply chain risk management, and preparing business continuity plans.

Internal Control System

The internal control system refers to a series of activities led by the Board of Directors, top management and concerned employees to assure reasonable reliability in its operation, financial reporting and legal compliance. The goal of this system is to elevate management accountability and earn investors' confidence in the company and its financial statements. LG Chem is operating an internal control system based on the IACS standard, so as to secure the reliability of financial information, the efficiency and effectiveness of corporate management, and to ensure compliance with related laws and policies.

LG Chem has been operating the CEO / CFO certification project and internal control system since 2004 and constantly providing employee education and training, which enable us to raise the reliability of our financial reporting and capture opportunities for improvement in work processes. In line with the application of IFRS, we are strengthening LG Chem's internal control activities of overseas subsidiaries. As part of this effort, we have made an internal control system available in both English and Chinese to help local employees become actively involved in internal control activities. Additionally, we are in the process of developing control statements for overseas subsidiaries to match up with those of the headquarters and expand their implementation to strengthen internal control activities. Executive-level management can check whether the internal control system is properly designed and run through the evaluation process. Evaluation results are then reported to the Board of Directors and the Audit Committee, and get reviewed and certified by the Audit Committee as well as the designated external auditors.

Risk Management System



MAJOR RISK MANAGEMENT ISSUES IN 2012

Business Risk

Sales & production risks

ISSUE Global economic downturn

- Analyze changes in business landscape and prepare action plans when establishing mid-to long-term strategies (H1) and business plans (H2); discuss countermeasures; and develop contingency plans per scenario

- Monitor short-term business environment and risk factors of HQ and overseas subsidiaries on a monthly basis when making reports about estimated P&L and closing accounts

- Discuss various issues in depth [e.g. Working capital meetings]

Investment Risk

Changes in the business climate for target investments and cash flow risks

ISSUE Worsened business environment in large-scale new business (automotive battery)

- Minimize investment risks through CAPEX committees for each business unit and review of investment at the corporate level if necessary

- Check on the investment progress once every 6 months and classify key investments into grades (Green / Yellow / Red) after making an evaluation based on investment costs and Key Risk Indicators (KRI), and use the result as an input for interim decision making

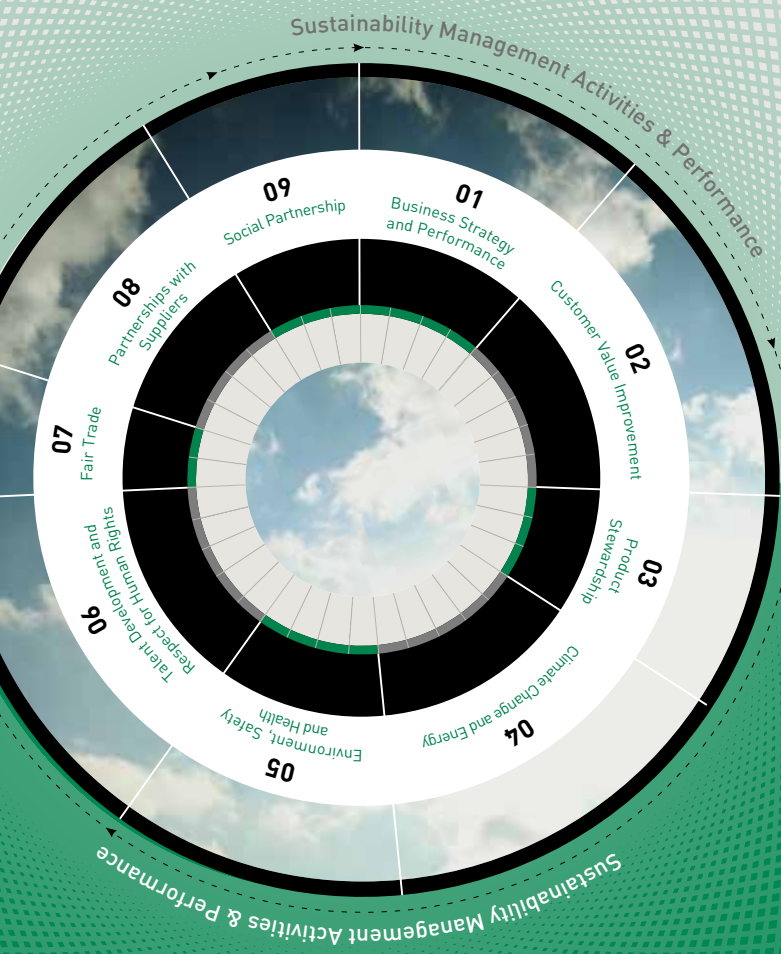
Indirect Risks

Risks that need to be controlled at the staff level, such as legal systems, accounting & finance and HR

ISSUE Adjustment of supporting functions according to the change in management system -more responsibility assigned to management of each business unit

- Hold monthly corporate staff meetings and gatherings among executives and team leaders under CFO (CRO) to check the indirect risks and discuss countermeasures

- Hold monthly management council meetings chaired by the CFO to discuss the main issues of each business unit and review the supporting plan at the corporate level



SUSTAINABILITY MANAGEMENT ACTIVITIES & PERFORMANCE



Our sustainable management practice is important as we try to create a better tomorrow. The sustainable management activities that we are engaged in includes expanding our business portfolio through technology innovation, proactively responding to climate change seeking synergistic growth with our suppliers, the fair evaluation and remuneration of our global talent, and participating in social contribution activities that represent creative capitalism. The outcomes of all these activities are shared with our stakeholders in a transparent manner so that we can receive their feedback; actively incorporating their opinions into our behavior helps us become the growing global company we aspire to be.

01 Business Strategy and Performance

Business Strategy | Economic Performance | Technology Innovation Performance

BUSINESS STRATEGY

Petrochemicals

Building upon a vertically integrated and diversified product portfolio, we will continue to achieve profitable growth in the petrochemical business. To achieve a competitive scale of business, we will nurture technology-based core businesses more intensively and remain committed to expanding global operations in China, India, South East Asia and Europe. At the same time, we will produce competitive basic petrochemical materials from low-cost raw materials, such as natural gas and shale gas and assign increased weight to premium products so as to bolster the quality and cost competitiveness of our products and bring them up to the highest global standard. In order to secure future growth engines, we will increase our R&D capacity. Furthermore, we will create new businesses, such as the high-performance / eco-friendly materials business, so as to ensure that our business portfolio will remain viable in the future. We will also secure source technology by developing new catalysts and new processes, which, we believe, will help us increase our fundamental competitiveness.

IT & Electronic Materials

In order to establish a future-oriented portfolio which guarantees high profits and constant growth, LG Chem is seeking to become the global No.1 in our core business areas, and expanding our platform technology for next-generation displays and green energy as future growth engines. Also, we are planning to continuously take the lead and improve profitability in the market for polarizers and photoresists where we have maintained the global No.1 position by launching high value-added products such as 3D FPR. Additional investments in LCD glass substrates and battery materials will be made to enlarge the scale of business. At the same time, we will develop new business items related to green energy, such as solar cell materials and OLED lighting, to expand our business portfolio, and secure platform technology in preparation of the advent of flexible devices so that we can more proactively respond to future changes.

Energy Solutions

We will further improve profitability of mobile/IT battery sector and expand automotive/ESS battery sector to strengthen global No.1 position in battery business. The mobile/IT battery sector will achieve the top-notch profitability in the industry; and the automotive/ESS battery sector will expand with advanced development of next-generation cells made possible by our R&D capability. In order to keep up with the latest market trend, LG Chem has improved and expanded facilities to produce lithium-ion polymer battery that are used in the cutting-edge, super-slim IT devices. As our future growth engine, we are solidifying the strategic partnerships with existing

customers while diversifying our customer base to enhance the competitiveness in automotive battery business. In the days to come, LG Chem will continue to lead the battery market by making consistent investments and developing innovative products.

Business Strategies of Chinese Subsidiaries :: Economic Outlook

China is going through a very important transitional period in terms of its economy, society and the environment in the year 2013. Although the rate of growth of the economy is steady, internal and external risks and uncertainties still exist and inflation and the environmental issues in China are becoming more serious. On top of that, regulations on real estate investment in China are expected to continue becoming stricter. Against this backdrop, industrial demand is growing slowly and the export market outlook is still unclear. Nevertheless, the corporate business environment of China is gradually improving. China's market economy is accelerating and the Chinese government is pushing for urbanization policies, all of which are supporting the stable growth of domestic demand. The new "green industry," which has embraced electricity vehicles and photovoltaics, is growing in size and the consumer demand for

certain products such as 3DTV and smart phones is rapidly increasing in China. This means China is still home to many great business opportunities. LG Chem will strive to create a win-win situation with our customers by enhancing price competitiveness, providing quality materials and solutions, and actively utilize new opportunities to expand our business by focusing more of our R&D capacity on next-generation, high-performance / eco-friendly materials.

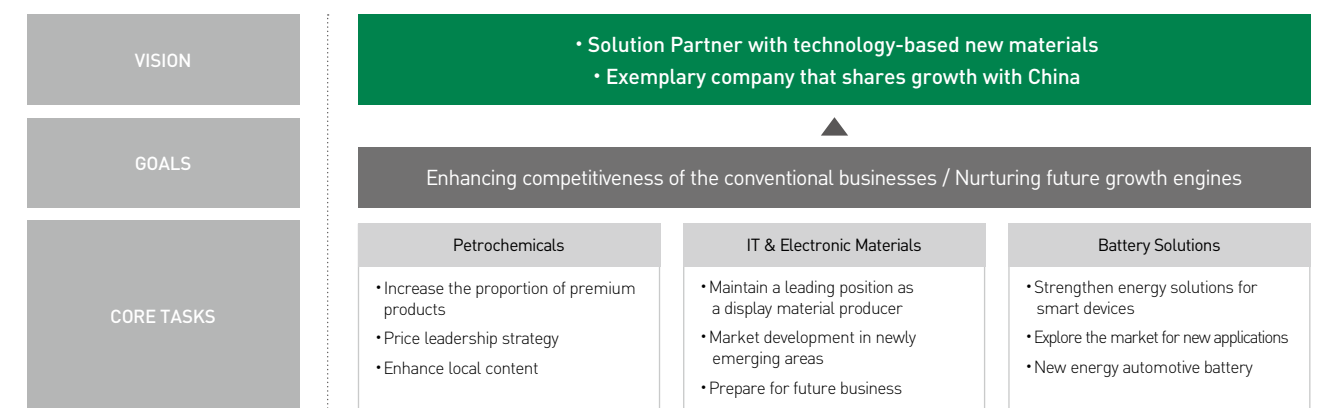
:: The Direction of our Mid-to Long-Term Strategy

In the mid-to long-term perspective, China's growth has gradually been slowing yet China still remains the largest source of new demand in the world. We expect that China's current way of growing its economy will strengthen such demand even more. LG Chem is well aware of the strategic importance of the Chinese market. For this reason, we will work harder to increase customer satisfaction by providing raw material solutions to our existing customers, developing technology used in conventional businesses and enhancing price competitiveness. At the same time, we will continue to explore new business areas and search for future growth engines.

Mid-to Long-Term Strategic Direction



The Strategic Direction of Chinese Subsidiaries



OVERVIEW OF CHINESE SUBSIDIARIES

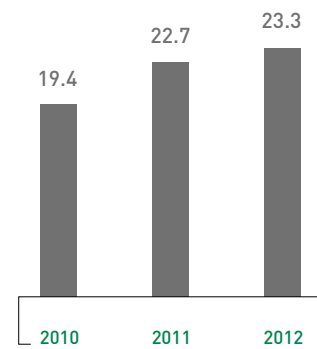
LG Chem first made inroads into China in 1995. Thereafter, to strengthen our localization strategy, we established 10 production subsidiaries in Taiwan and cities including Beijing, Tianjin, Nanjing, Ningbo, Guangzhou, and opened six branch offices in Shanghai, Guangzhou, Qingdao, Yantai, Ningbo and Shenzhen along with three liaison offices in Hefei, Chongqing and Xiamen and one sales subsidiary in Hong Kong. In 2004, we established LG Chem China Investment Co., Ltd. as regional HQs to ensure the fast growth of our business in China. These are responsible for drawing up the business strategy for China, conducting sales and marketing, and providing comprehensive support for all the plants and subsidiaries in China. LG Chem's subsidiaries in China are intent on strengthening the competitiveness of our conventional businesses while seeking new growth opportunities. Through a thorough localization strategy, LG Chem hopes to become a company sharing growth with China as well as an exemplary company leading the Chinese market.

ECONOMIC PERFORMANCE

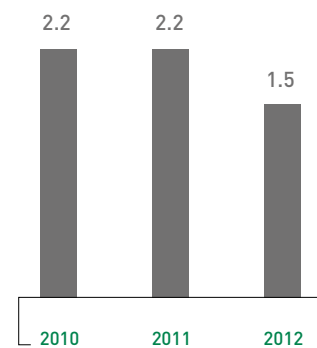
Although the business environment in 2012 was one dominated by uncertainty, we achieved reliable results based on our differentiated competitiveness and succeeded in laying a firm foundation on which to become a global leading company.

We strengthened our existing core businesses. Our Petrochemicals business has remained highly profitable thanks to our diversified product portfolio and globally renowned facility management capacity. IT & Electronic Materials business stayed the leader in terms of global market share. At the same time, we expanded our market dominance in the automotive battery business which we consider to be one of our future growth engines. As such, we are striving to become a comprehensive chemical company with global competitiveness.

Sales (Unit: KRW trillion)



Net Income (Unit: KRW trillion)



Management Performance in 2012

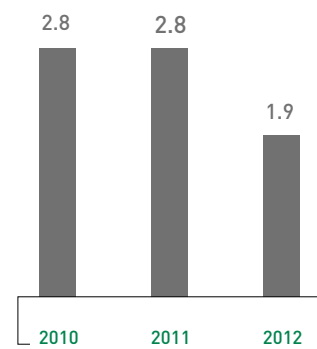
We recorded KRW 23.3 trillion sales, a 2.6% increase over the previous year, as well as KRW 1.9 trillion in operating income (a 32.2% decrease compared to 2011). Our net income decreased 30.6% compared to the previous year and came in at KRW 1.5 trillion. The figures shown here are derived entirely from the 2012 IFRS consolidated financial statement.

Performance by Business

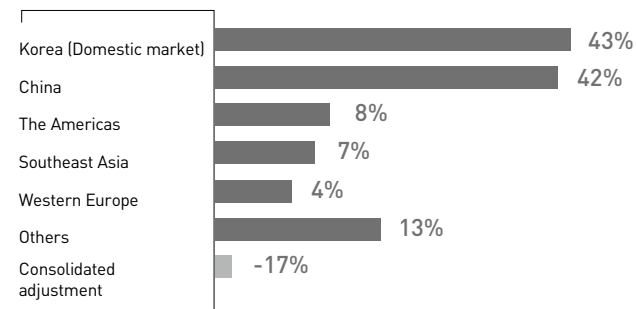
:: Petrochemicals

Despite a challenging business environment such as the delayed economic recovery of Europe and a slowdown in global demand due to the economic recession in developed countries such as the U.S. and Japan, we achieved relatively stable, compared to our Asian competitors, results thanks to our diversified product portfolio, the expansion of technology-

Operating Income (Unit: KRW trillion)



Sales by Country



based businesses, such as synthetic rubber and super absorbent polymer (SAP), and innovative activities, such as shifting sales outlets to high-end markets.

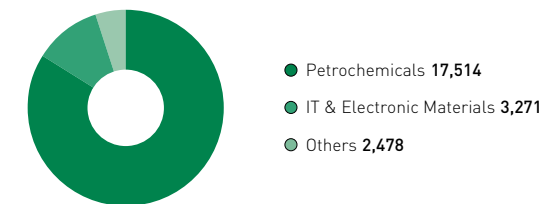
Our NCC/PO business secured cost competitiveness by proactively predicting the selling price and purchasing naphtha at lower prices, and our PVC business achieved record profits by introducing large reactors and using differentiated reactor technology. Our acrylics business has proactively completed the expansion of facilities for acrylic acid and SAP and secured global top customers, thereby establishing a foundation for sustainable growth. The Kazakhstan Project (an ethane cracker construction project) is underway and will take our core business to the global level. Also, we are thoroughly examining other potential business opportunities such as expanding shale gas-based crackers and embarking on relevant downstream businesses.

In the year 2013, we will continue to grow and show great profitability by further supporting our technology-based core businesses, such as SAP and synthetic rubber, and will lead the market by gaining an early foothold in high-performance / eco-friendly material businesses such as CNT (carbon nanotubes).

:: IT & Electronic Materials

The continued weak demand in the IT market forced LCD panel customers to lower their factory operation rate. Nonetheless, our IT & electronic materials business remained relatively strong and profitable due to cost leadership supported by the launching of 3D FPR, the operation of a super wide line for polarizers, and the in-house production of raw materials.

Sales by Division (Unit: KRW billion)



In 2013, we will concentrate on strengthening our dominance of the conventional market and commercializing new materials such as film for touch panels and OLED materials. We activated commercial operation of LCD glass line 1 in the second half of 2012 for the first time, and we are planning to make additional investments in line 2 and 3 in 2013 so that we can deliver tangible results as early as possible.

:: Energy Solutions

We have been incessantly enhancing our market presence in mobile/IT batteries by increasing market share from top global customers and sales in new application area. To cope with the rapid growth of super-slim IT devices such as smartphone, ultrabook and tablet, we will further strengthen our competency by expanding production capacity of lithium-ion polymer batteries. As for automotive batteries, responding proactively to the market change have made us a supplier of globally renowned automobile companies such as GM, Renault, Ford and Volvo. We are also selected to supply next-generation projects from existing customers and completed contracts with new customers. Automotive batteries will manifest tangible growth as the new products launch from our valued customers.

New Investment Projects and Financing in 2012

Unit: KRW million	
Item	Amount
Building Expansion in Ochang	31,469
Advanced Automotive Battery Plant Expansion in Ochang	195,215
New Investment in LCD Substrates	47,889
Plant Expansion for Optical Materials	64,319
Plant Expansion for Electronic Materials	54,088
Plant Expansion for Synthetic Rubber in Daesan	16,385
Plant Expansion for BPA in Daesan	274,560
NCC Process Improvement	125,725
Plant Expansion of SAP in Yeosu	81,002
Other Construction and Expansion	224,242
Total	1,114,894

TECHNOLOGY INNOVATION PERFORMANCE

Technology innovation activities involve the continuous development and improvement of differentiated materials. This innovation will create sustainable engines for future growth as well as a firm foundation for LG Chem to stand tall as a global company.

Development of High-Performance / Eco-Friendly Materials and New Processes / New Catalysts

We are concentrating our R&D capacity and accumulated expertise on developing source technology such as new catalysts / new processes and developing high-performance / eco-friendly materials and applications to secure future growth engines and the competitiveness of our core businesses. In 2012, we obtained a denaturant technology for producing cutting edge products such as SSBR, and acquired the catalyst / process related source technology needed for CNT (Carbon Nano Tube) development, as well as the technology required to run a pilot plant without downtime. Furthermore, we successfully completed the development of highly active catalysts for eco-friendly plastics using CO₂ and constructed a pilot plant to make a way into the new market. LG Chem's petrochemical research center is preparing us to be the market leader by securing competitiveness based on our differentiated processes and exploring new uses for existing products.

LCD Glass Substrates

LCD glass substrates are examples of state-of-the-art products that require high technical prowess because they must have excellent surface quality with ultra-high flatness and high heat resistance in order to stand up to thin film processing. LG Chem embarked on the LCD glass substrate business in 2009 and started test runs in 2011. We began selling LCD glass substrates to global customers in 2012.

OLED Technology

In preparation for the post-LCD era, LG Chem is continuously working in new business areas such as OLEDs and solar cells. We plan to expand our OLED display business to include OLED materials, OLED polarizers, and materials for flexible devices.

New opportunities still exist in the lighting industry. We have, therefore, completed pilot plant investments in the area and produced prototypes and are preparing for their commercialization in earnest. In the years to come, we plan to continuously improve our OLED technology and focus on how to breathe life into the benefits that only OLED lighting can provide, as we have done with flexible devices.

3D FPR Commercialization and Advanced Material Development

Our IT & Electronic Materials unit wants to strengthen the fundamental competitiveness of our ongoing businesses, such as polarizers and photoresists, and enter into new business areas in order to secure growth engines. In 2010, we were the first in the world to commercialize 3D Film Patterned Retarder (FPR) technology. This technology delivers flicker-free images, as well as lively 3D visuals compared to our competitors. Our team is working hard to achieve great results in such diverse areas as the rechargeable battery, the touch panel and solar cells through non-stop R&D activities that build upon precise coating technology. In the solar cell business, we are developing an organic solar cell and technologies using materials other than those used in existing solar cell back sheets, with the goal of thereby discovering new business opportunities. Going forward, we will strive to deliver new customer value by improving our existing fundamental technology as well as developing technology for new platforms.

Battery Technology

Among worldwide lithium battery manufacturers, LG Chem is the only chemical based company. We are often the first to develop new products based on our differentiated material technology and also are a pioneer in new markets. Our battery business has been continuously working on developing cathode materials for high capacity, LTO anode material for express charge and next generation Si anode material. This technology has helped us to provide innovative products with our differentiated materials to various customers. Currently, our batteries are applied in a wide range of products from laptops, mobile phones, tablet PCs, electric vehicles to smart grids.

Technology Innovation to Secure Competitiveness of Conventional Businesses
<ul style="list-style-type: none"> Continue to develop premium products Enhance quality and competitiveness
Development of Source Technology to Secure Future Growth Engines
<ul style="list-style-type: none"> Accelerate development of high-performance / eco-friendly materials Continue to search growth engines such as new processes / new catalysts Develop material for high efficiency energy product

Items	Core Development Areas
Mobile / IT batteries	Development of market leading products [Stepped batteries]
Automobile batteries	HEV High output / Long life cells
	PHEV, BEV High energy density cells
ESS batteries	Standardization of modules
Additional technology development	Next generation electrode materials and new innovative batteries

02 Customer Value Improvement

Customer Value Activities |
Customer Needs Response System |
Customer Information Protection

CUSTOMER VALUE ACTIVITIES

LG Chem is providing differentiated materials and solutions to our customers and becoming a global company that grows with its customers.

Market & Customer Oriented Business Methods

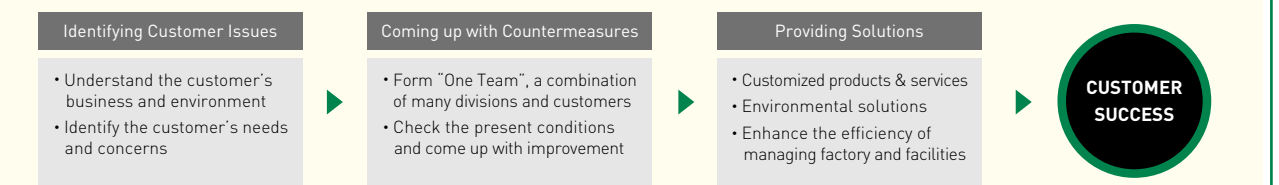
We are striving to implant a market-and customer-oriented mindset in our company and our employees to affect how we think and act. We have always wanted to deeply understand our customers' needs and concerns, and come up with measures to create new value for them in a more efficient and swifter way. To do this, we form huge teams combining many departments such as Sales, R&D, Production and Tech Services, which carry out a variety of pertinent activities.

Differentiated Value Proposition

The best way to enhance value for our customers is to thoroughly understand their situation, the problems they find difficult to address, and the values they require, and to then develop and provide our differentiated materials and solutions. This not only helps our customers succeed in their business, but also leads to gaining their confidence in the values we offer. We provide a wide variety of services and troubleshooting solutions to our customers to help them address their concerns. Many of our divisions visit our customers in person to find out their requirements and potential needs.

SOLUTION PARTNER

'Solution Partner' refers to the role we play of a companion helping customers address their problems and bring about better results. The idea of Solution Partner combines products, knowledge and services to provide more differentiated value, or solutions, to customers, which expresses LG Chem's unique definition of customer value. By providing solutions based on insights about the market and the customer, we help our customers lead their markets. In this way, we strengthen customer trust and build long-term partnerships with our customers.



YOUR SOLUTION PARTNER: LG CHEM TECH CENTER

The LG Chem Tech Center is an organization that not only provides the products that customers want but also resolves technical difficulties for customers while at the same time providing comprehensive solutions that improve the technological capacity of our customers, thereby realizing LG Chem's differentiated customer value at the point where we come into closest contact with our customers.

The Tech Center is composed of PVC, PO, ABS / EP, Rubber / Specialty Polymers and SAP divisions which are further specialized by product. There is also an applied technology division that ties product design together between the individual divisions and develops processing technology. There are about 300 executives and employees working in the Center from all over the world like Korea, the Americas, Europe and China who are working hard to promptly provide solutions that surpass customers' expectations.

In the area of material development, the Tech Center suggests highly-functional eco-friendly products that lead the market, secures the best quality through continuous product upgrades, and develops and provides LG Chem's differentiated products by developing customer-tailored products in a timely manner through co-development with customers. In the application area, the Tech Center is a repository of optimized injection and extrusion molding technical capabilities based on various technologies, know-how and product design capabilities pertaining to the technology of plastic parts. Because the Center obtained an internationally accredited testing laboratory qualification / license, the results of its physical property tests can be taken as reliable. Like such detailed technological power, it provides specialized technical services on a per-customer basis. Also, it analyzes the customers' production process on site, and performs technical support activities to solve problems and help them bring down cost, increase productivity, improve quality and stabilize their facilities.

The Tech Center also provides technical training for customers that covers the entire process cycle from material production to product development and mass production. It also attempts to grow together with customers by sharing trends and cases over different channels such as technology exchange meetings, seminars and newsletters and conducting supporting analysis work using various analysis and facilities like extruders and injectors.

2012 SOLUTION ACTIVITIES

A total of 36 solution activities were conducted in the Tech Center in 2012 of which 26 cases were completed in 2012.

Entering a new market and improving profitability by securing the production capacity of high quality medical glove manufacture

LG Chem understood the needs of a Chinese customer when they experienced difficulty with line operations because of a lack of technological capability in the course of making a business transition into high-profit medical gloves. Accordingly, we used our technical power and know-how to stabilize the double dipping line and provided solutions to produce high quality medical gloves with the best yield. As a result, our customer improved their profitability significantly and secured competitiveness in the high-end market, and our company made an opportunity to expand high quality new products into the Chinese and South East Asian markets.

Pioneering the new automobile market in Iran by providing an integrated parts-development solution

An Iranian customer (an automobile parts supplier) needed unified development support in many areas including from material selection to production stabilization in order for it to successfully develop modules that they received orders for by the deadline. LG Chem set up a development strategy, the 'integrated parts-development solution,' in which we broke away from the traditional development of single products. Based on our accumulated application technology, we provided integrated solutions that covered all of material selection, mold design support, reliability assessment and production stabilization. Thanks to the work, the customer continued to grow as a major part supplier with a 33% of growth rate and our company improved EP sales revenue from automobiles and built a basis for expanding the automobile market in the Middle East.

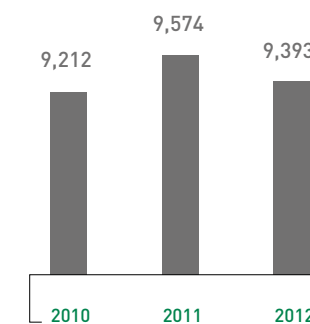
CUSTOMER RESPONSE SYSTEM

We use a standardized system to listen to and address our customers' requirements. The system is not only for our customers but also for our suppliers and the general public. Whenever they have questions or feedback, they can access the system via our official contact number or our website. All the requirements and opinions collected are then integrated into the system and systematically managed. The accumulated data is utilized as an important information source to help our customers succeed in their business.

Customer Requirement Care System

Our Customer Requirement Care System refers to a process whereby customer requirements are swiftly transferred to the teams associated therewith, and the timeline and direction taken by a response are shared with the customer. In particular, some concerns that are valid and call for improvement are analyzed to determine the causes of the problem. According to the analysis, we come up with an action plan and then evaluate the effects after the measures have been taken. As such, the Customer Requirement Care System is a meticulous system. It is a standardized system that helps us deal with issues in a more prompt and consistent manner. The system is always on standby companywide as it has been added to the company's work manual. Listening to the voices of our customers and meeting their requirements plays a very important role in building customer trust and living up to the expectations they have about LG Chem being a properly run chemical company.

VOC (Voice of Customers) Data (Unit: Case)



CUSTOMER INFORMATION PROTECTION

We provide educational programs to the Information Protection Consultative Committee and our executives and employees on a regular basis to protect our customers and ourselves from the unauthorized disclosure of important information.

Information Protection and Software Compliance

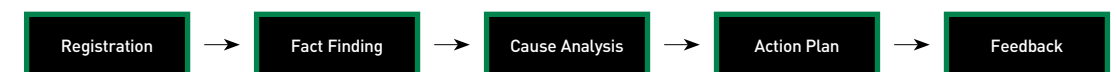
We have built a system that puts us in better compliance with information protection laws and regulations. Using the system, we have been continuously monitoring relevant laws. In 2012, we updated the information protection regulations we revised in 2010 so that they could incorporate the latest official requirements. We also set up a companywide information protection organization to inform employees of the company policy on privacy protection. The purposes of the organization are to abide by information protection laws and incorporate company policy into the daily workplace routine. Furthermore, we launched a committee (Information Protection Consultative Committee). Aside from these activities, we are strengthening the security at entrances and exits to major plants to prevent the information theft that may occur when people, vehicles and goods enter and leave the premises.

Moreover, we installed DB encoding and DB access control into the customer information protection system to eliminate the possibility of the piracy of customer information which is an emerging social issue. There has not been any case of the piracy of customer information to date so far.

Information Security Training

Type	Subject	Description	Frequency
Online	All employees	Information security policy, control scope, incidents	Annually
Offline	New employees	Information security policy, system, scope of control	As needed
Offline	Key system operators	Weakness analysis & countermeasures	Biannually
Offline	Employees at each plant	Information security issues & incidents	Annually

Requirement Handling Process



03 Product Stewardship

Vision for Eco-Product | Eco-Product Development | Environmental Assessment of Products | Chemical Management System

LG Chem operates a system to minimize the impact our products have on the environment and the health over their entire life cycle from production to disposal, thereby enhancing their eco-friendliness.

VISION FOR ECO-PRODUCT

Applying sustainability management over the entire life cycle of a product from development to disposal is not done simply to manage the environmental risks that the product may pose; it is a strategic approach that creates new business opportunities. In other words, making products greener is another way of helping customers succeed. By providing more eco-friendly and competitive materials and solutions, LG Chem wants to contribute to the success of our customers as well as create a sustainable future.

ECO-PRODUCT DEVELOPMENT

What is an eco-product?

As a company that produces and supplies the entire world with materials and products that are necessary for modern industries to develop and people's convenience, we have a great responsibility for the impact that our products have on the environment and the health. Therefore, we are always thinking about how to reduce the negative impact when it does exist. As a preliminary step, we focus on reducing or removing the harmful substances included in our products. We are now managing the percent content of such substances to keep these below the permitted level as set by Korea and other countries in order to minimize the products' negative impact on the environment and the health. On top of that, we are working hard to increase the proportion of eco-products in our product portfolio (e.g. green energy and next-generation cutting edge materials) by developing new future-oriented technologies.

Eco-Product Design

The eco-product development process developed by LG Chem is helping us to reduce our use of harmful substances and secure eco-friendliness from the product design stage and the supply chain management stage. We consider the tightened regulations on chemical substances to be a business opportunity to enhance our competitiveness rather than as a barrier that must be worked around. With this approach in mind, we are controlling the harmful effects that chemicals may have on the environment and the health in accordance with our Internal Regulation on Development of Eco-Products.

In 2012, we added minerals extracted from conflict areas to the list of banned substances included in the internal regulations governing the development of eco-products. This action was taken to conform to the efforts of the international community, which is trying to establish peace in conflict areas such as the Central African Republic, Sudan, Uganda, Rwanda, Burundi, Tanzania, Zambia, Angola and Congo by suspending the direct and indirect purchasing of minerals harvested there and thus keep the mineral money from being used to fuel the conflicts. Doing so was part of our social contribution activities, and at the same time, was a strategy allowing us to support our customers because some of our customers, particularly those who purchase electronic and electricity products in the U.S., are sensitive to using minerals produced in conflict areas.

Furthermore, in our internal regulations pertaining to the development of eco-products, we designated p-octyl phenol and dimethylace tamide, which are used in many additives to manufacture polymers and rubber, as substances whose use must be reduced. According to research, exposing an organism or an environment to these two substances can have a negative impact because they are endocrine disruptors that can accumulate within an organism and disrupt reproduction and the growth of aquatic organisms. As such, we are striving to increase the safety of our products by proactively identifying such harmful substances and reducing their use, and simultaneously working hard to meet our customers' needs to avoid potential harm before it happens. Our constant effort to remove harmful substances has helped us continue to carry out business in a consistent and reliable manner in developed countries, which are pushing for the early elimination of harmful substances, and has also contributed to the transition of our management of harmful substances in the domestic market to the same high standards.



* Eco-product Solution Partner [Eco=Ecology+Economy]: This term refers to providing business divisions and stakeholders with solutions which are effective and valuable in terms of the environment and the economy over the entire product life cycle from R&D to disposal.

HIGH ENERGY LITHIUM BATTERY FOR HYBRID ELECTRIC VEHICLES

LG Chem was awarded the Top 10 Green Energy Technology for 2012 for its lithium polymer battery and pack system for hard type HEVs. This technology enables low speed driving using just the electricity in the battery pack without the help of a gasoline engine. Its other great features include high energy efficiency, high output and durability. The system was recognized as a technology that significantly improves battery life and output.

Awarded the 'Top 10 Green Energy Technology of 2012'

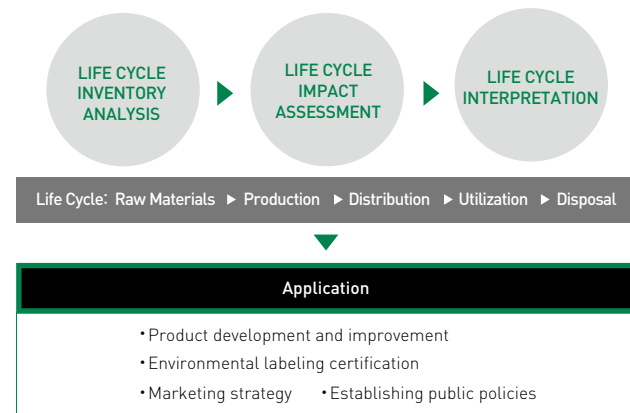


ENVIRONMENTAL ASSESSMENT OF PRODUCTS

Life Cycle Assessment (LCA)

Using our Life Cycle Assessment tool, we can quantify the amount of resources and energy used and pollutants generated over the entire life cycle of a product, and analyze and evaluate a product's environmental impact. This is part of our effort to improve the environmental impact of our products.

Life Cycle Assessment



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.

Analysis of Eco-friendliness

Category	Description
Operation of an ISO 17025 Authorized Testing Laboratory	<ul style="list-style-type: none"> • Analysis on six hazardous RoHS substances (Cd, Pb, Hg, Cr (VI), PBBs, PBDEs) • Analysis of halogen free (Br, Cl, F) • HBCDD, 9 types phthalates (DMP, DEP, DIBP, DNBP, BBP, DEHP, DNOP, DINP, DIDP) • Number of report cards issued in 2012: 918
TVOC Assessment	<ul style="list-style-type: none"> • Assessment of TVOC and FA in materials, processes and products • Individual VOC study (IP&T, headspace, TD)-Green product / material assessment: IT&E materials / automobiles
Accreditation as an Authorized Testing Body	<ul style="list-style-type: none"> • Apr. 2007 TÜV RoHS lab certification of six hazardous RoHS substances (self-analysis method) • May 2008 TÜV scope extension-halogen free (Br, Cl: self-analysis method) • Sept. 2008 KOLAS scope extension - six hazardous RoHS substances (self-analysis method) • Jun. 2009 TÜV scope extension - six hazardous RoHS substances (IEC62321:2008), HBCDD, 3 types of phthalates (DBP / BBP / DEHP) • Jun. 2010 KOLAS scope extension - six hazardous RoHS substances (IEC62312: 2008) • Aug. 2011 KOLAS scope extension - halogen free (Br, Cl, F)-(KS M0180: 2009) • Feb. 2012 TÜV scope extension - 9 types of phthalates (DMP, DEP, DIBP, DNBP, BBP, DEHP, DNOP, DINP, DIDP)-halogen free (Br, Cl, F)-(KS M0180: 2009)

CHEMICAL MANAGEMENT SYSTEM

Real-time Chemical Information Management System along with Open Procurement System

Since 2008, we have been trying to create our own computerized database that covers materials from the moment of their being purchased. In 2010, we conducted a chemical composition survey on all the materials we purchase, and created a comprehensive system which can identify and manage ingredients and the amounts of all chemical substances that enter our company. This is a leading chemical management system that befits our position as one of the largest companies in Korea. We incorporated the ERP-based chemical management process into all procurement and use activities. As a result, not only people from the Environment & Safety Department, but all employees throughout the company began to recognize safe chemical management as a basis for all business activities.

In 2012, we further strengthened the procedure of verifying the composition of materials and introduced a chemical composition survey module into the 'Open Procurement System', which is directly accessible to our suppliers. By using this web-based system, the process of feeding complex component data into the system has been made much simpler and more user-friendly with greatly improved accessibility.

Through these changes, which made it easier for our partners within the supply chain to better understand the newly introduced system, we were able to expand the scope of practical chemical management system so that it covers the entire supply chain.

Our chemical management system in the past was applied to substances handled within the company and used to improve our awareness of the environment, safety and health issues. The currently used system, which verifies the components of materials in cooperation with our suppliers through the 'Open Procurement System', however, goes beyond that and assumes an important role of introducing and spreading the high-level system and standards applicable to the management of chemical substances throughout our supply chain.

The latest information on laws, regulations and standards regarding the management of harmful or risky chemical substances is included in our newly introduced web-based material composition survey system. This allows our suppliers to immediately identify whether their products are subject to the various laws, regulations and standards and whether they are within the bounds of what is permissible. Furthermore, the system is linked to our 'Eco-friendly Supply Chain Management Guideline', which allows our partners to learn about the environmental guideline of LG Chem targeting global markets as a reference.

Comprehensive Improvements in Managing Chemicals

In 2012, we expanded the scope of materials managed by the ERP and web-based chemical management system with the addition of expendables and other general chemicals to the originally designated scope which only included raw materials and sub-materials. We also provided customized training for not only those in charge of chemical management but also for

those in other areas such as planning, marketing and R&D in order to deal with the expanded scope of chemical management and to enhance awareness throughout the company.

In addition, we automated and computerized much of the work by complementing and expanding the existing automation system, which is called CHARMS (Chemical Assurance and Regulation Management System). The supply chain dealing with imported materials requires a more immediate response when a problem occurs, so we are striving to build a system that can compile data on imported materials every 24 hours so that chemicals can be managed more thoroughly and safely.

In order to run the strengthened supply chain chemical management system, we reinforced the internal electronic approval system related to substance management and incorporated it into the web-based chemical composition survey system. This allowed all our employees to look at the information our company has compiled about chemical management and also put all the data online, which means that all the information about chemical substances that was provided by our material suppliers can be referenced and accessed in real time.

As such, the system built a foundation for analyzing the impact that our chemicals have on the environment and the health as a result of our business activities, and allows us to anticipate potential dangers. With the help of the system, all of the people working with our supply chain can fulfill their responsibility to safely manage chemicals and think about environment & safety on their own as they carry out all their tasks.

Efforts to Manage Harmful Substances

- For all our products, we use our strict internal regulations to manage the substances subject to control starting at the raw materials stage. Depending on the severity of the risk, we divide all the harmful substances into three categories. We have tweaked the system so that no material can be purchased until after it has gone through this management verification process.
- Using our system, all verification tasks pertaining to materials suspected of being highly dangerous and the EU REACH processing specifications are done electronically so that after they have been reviewed, the results can be checked online and a compliance certificate following a set legal format can be immediately received by our client.
- Since 2010, information on the composition of products has been integrated into the ERP's BOS (Bill of Substance) module. Thus, the presence or amount of harmful substances in the products manufactured and/or sold can be monitored in real time and checked at the request of customers.
- The receipts of an MSDS for all materials purchased from suppliers are checked, and exceptional cases are also recorded in detail via the electronic approval system. Therefore, it is possible to collect and store the MSDS for all materials electronically, which enables to identify the hazards and risks of each material.

04 Climate Change & Energy

Vision | Strategies and Goals | Risks and Opportunities | Organizational Structure | GHG and Energy Management | GHG Reduction Project and Performance

VISION

LG Chem is striving to strengthen our competitiveness in relation to energy and greenhouse gases (GHG) by responding quickly to internal and external regulations on GHG and energy, and supporting our green business. Through such efforts, we will move forward as an innovative green company.

Our goals are to actively respond to the related regulations and construct environmentally friendly processes, which we believe will make a great contribution to our sustainable growth. To achieve that goal in a more direct way, we are improving the energy efficiency of processes as well as preparing and executing a mid-to long-term GHG reduction plan. Indirectly, we are restructuring our production to focus on high value-added and low energy consumption products in an effort to reduce emissions.

STRATEGIES AND GOALS

Our goal is to reduce GHG by 23% against BAU level by 2020. In the year 2013, our overseas subsidiaries will establish a system for managing GHG and energy, and our Chinese subsidiaries will draw up mid-to long-term reduction plans.

Reduction of 23% against BAU level by 2020

In order to better respond to domestic (target management and emissions trading) and overseas regulations on energy and GHG and build a green management system, we set our GHG reduction goal as 23% against BAU level by 2020. We will monitor our GHG emissions every year until 2020.

GHG reduction goal

- Reduction of 23% against BAU level by 2020

Action plans

- Monitoring emissions relative to the goal every year until 2020
- Analyzing potential reductions by each business unit and developing new green technology

Establishment of GHG and Energy Management System for Overseas Subsidiaries by 2013

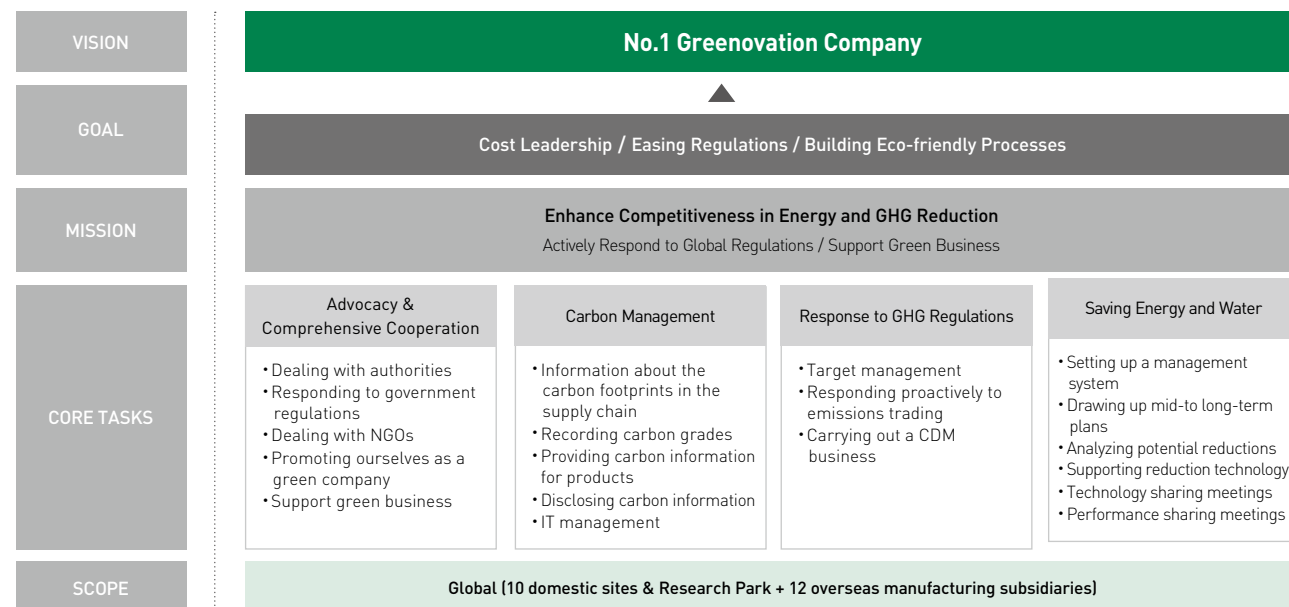
We are planning to have our overseas subsidiaries establish a GHG and energy management system so that we can properly respond to the related regulations established by foreign governments and also meet our GHG reduction goal.

Once such a system has been set up, we will be able to monitor energy consumption and GHG emissions at our overseas subsidiaries including those in China and update the relevant data on a yearly basis quickly and accurately. The overseas system will be incorporated into our domestic system, which will facilitate communication between our head office and overseas subsidiaries, and which, in turn, will be tremendously helpful to our strategic decision-making and performance management.

Mid-to Long-term GHG and Energy Reduction Plan for Chinese Subsidiaries by 2013

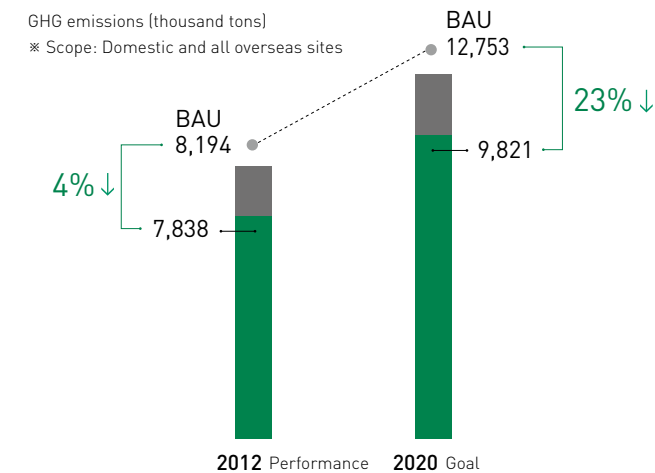
The Chinese government is planning to introduce emissions trading by the year 2015 and each province and city of China is following the trend and tightening regulations on energy consumption. In response to this trend, our Chinese subsidiaries are expected to draw up mid-to long-term plans to reduce energy consumption and GHG emissions. These plans will help us to predict future energy consumption and GHG emissions and therefore manage the related risks. In this manner, we are planning to establish a system to effectively respond to regulations on GHG and energy introduced by the Chinese government.

Vision for GHG Reduction



Greenovation: It is a newly coined term to combine green and innovation by LG Chem, a testament to its strong determination to grow into one of the most innovative green companies in the world.

GHG Reduction Goals and Performance



RISKS AND OPPORTUNITIES

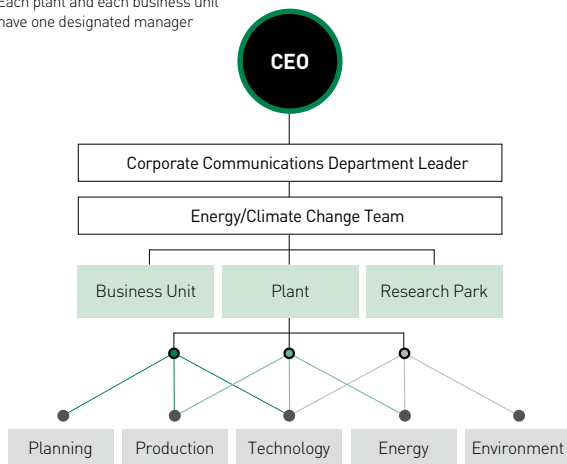
The increasing number of regulations pertaining to global climate change and Korea's GHG Energy Target Management System are posing both risks and opportunities for us to address. These risks can be broken down into three categories: regulatory risks such as emissions trading and the carbon tax, financial risks such as purchasing carbon credits and investing in GHG reduction businesses, and environmental risks such as rainstorms, heavy snowfall and strong winds. The opportunities we are being presented with include the chance to enter into new business areas such as high-efficiency energy products (for example, rechargeable batteries) and the field of new renewable energy, and securing carbon credits by launching GHG reduction projects. Such opportunities are becoming the driving force behind the development of GHG reduction technology.

ORGANIZATIONAL STRUCTURE

The Energy / Climate Change Team directly reporting to the CEO at the head office was put in place to cope with climate change in a systematic manner. The Energy / Climate Change Team is responsible for formulating a strategy to respond to regulations at home and abroad, preparing a mid-to long-term plan for GHG and energy reduction, and analyzing the risks and opportunities inherent in climate change. Each plant has a designated climate change manager, put in charge of monitoring all the information related to emission activities as well as planning and running GHG reduction projects. Besides developing new GHG reduction technology, our R&D center, Research Park, is conducting carbon-LCA (Life Cycle Assessment), which is analyzing GHG emissions over the entire life cycle of a product from its production to its disposal.

Climate Change Organization

※ Each plant and each business unit have one designated manager



GHG AND ENERGY MANAGEMENT

At LG Chem, we have established an IT-based GEMS (GHG and Energy Management System) to be used by domestic plants and five Chinese subsidiaries to manage energy consumption and GHG emissions. The purpose of the system is to construct energy efficient processes in all of our locations at home and abroad and actively respond to emission regulations. The system is composed of the three modules of an Internal Energy Management Module (EMM), a Target Management Module (TMM), and a Reduction Project Management Module (RPMM). The EMM interfaces with ERP and tallies energy consumption, and the TMM is used to draw up and print all the documents submitted to the government such as inventories, action plans and performance reports. Finally, the RPMM manages the progress and outcomes of emission reduction projects being run by our plants. In 2012, we established a function in GEMS to output government reports (GHG and energy report, reduction plan report, reduction performance report) for domestic plants, and also opened a Chinese version of GEMS for our Chinese subsidiaries.

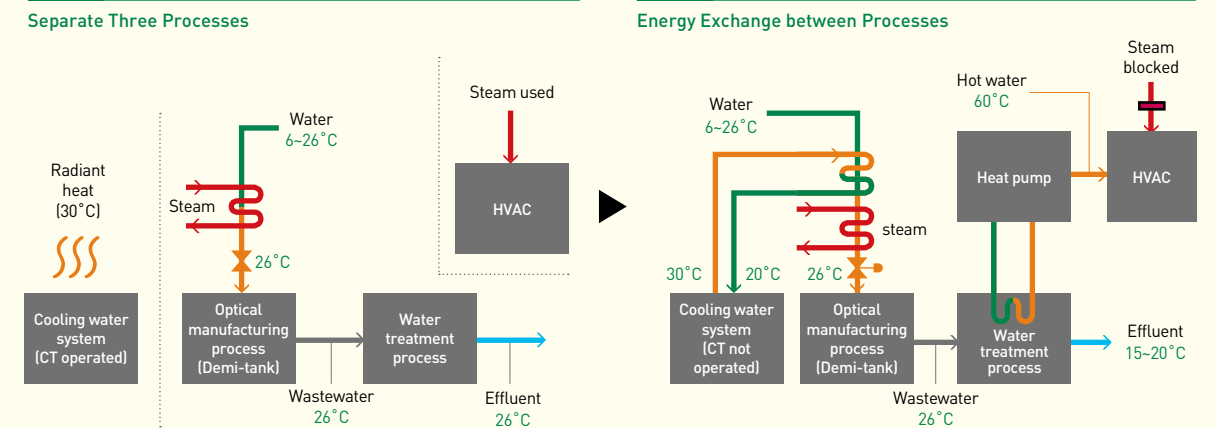
GHG REDUCTION PROJECTS AND PERFORMANCE

We have set the mid-to long-term reduction targets to be reached by 2020 and have been monitoring reduction performance every year. In order to achieve these reduction targets, each plant is actively engaging in process innovation activities, and each business division is also working hard to make the transition to a low energy consumption business structure. All these efforts helped us in 2012 to save an amount of energy equivalent to more than KRW 70 billion. The reductions made by our GHG reduction projects were registered with the National Center for Greenhouse Gas Inventory and Research to receive certification thereof from the government. In 2012, we achieved a total of 240 thousand tons of certified emission reductions.

GHG REDUCTION PROJECTS

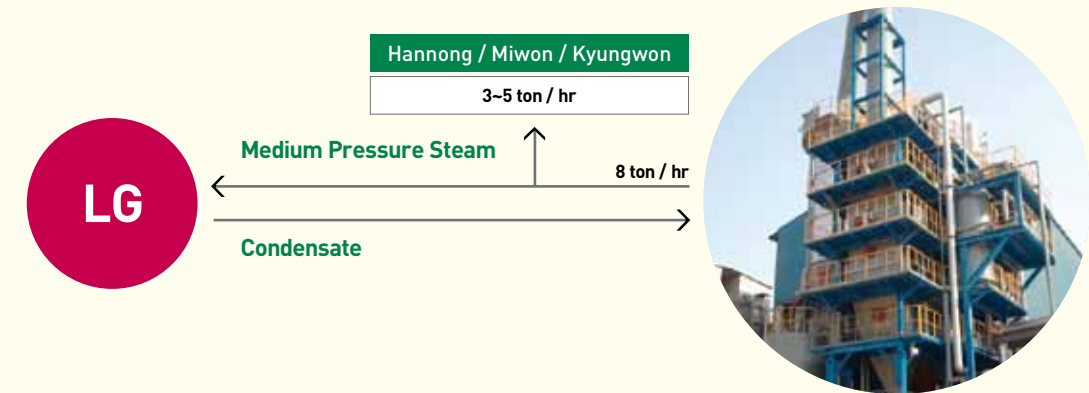
01 Ochang Plant 1 Circulating Energy between Processes by Recovering Low Temperature Wastewater

The Ochang Plant 1 built an energy circulation system to collect low temperature wastewater from the fan of a cooling tower and low temperature water wasted from the optical manufacturing process. The system helped the plant to save energy and reduce GHG emissions. It kept the steam from going into the optical manufacturing process and HVAC (Heating, Ventilation and Air Conditioning), which enabled the plant to save KRW 850 million worth of energy.



02 Daesan Plant Use of Steam Produced from Waste

The Daesan Plant succeeded in cutting costs and reducing emissions by using steam produced from the waste heat of incinerators. Producing steam from waste is the production of a renewable energy recognized for not emitting GHG. This steam, therefore, contributes to reducing emissions. By utilizing the steam, Daesan plant saved KRW 3.2 billion and reduced GHG production by 10 thousand tons.



AWARDED AS COMPANY OF CLIMATE CHANGE COMPETITIVENESS

LG Chem was selected as the Best Company to Respond to Climate Change in the Climate Change Competitiveness Index Assessment carried out by the Ministry of Knowledge and Economy in June 2012. The award recognized LG Chem's efforts to actively respond to regulations pertaining to GHG emissions, which are becoming more stringent due to climate change. The Climate Change Competitiveness Index is a barometer for measuring how well companies respond to climate change and turn the impact of climate change into an opportunity to enhance their competitiveness. LG Chem ranked above all other companies in the petrochemical industry.



05 Environment, Safety & Health

ESH Vision | Activities to Improve ESH Performance

ESH VISION

LG Chem has consistently pursued its goal of becoming a company contributing to people and society by creating a world where present generation and future generations can live a more harmonious and prosperous life in a cleaner environment.

Vision

At LG Chem, we consider environment, safety and health (ESH) as one of our top management priorities. We selected and executed several important tasks in order to enhance our competitiveness and power of execution in the areas of ESH. In this way, we want to continuously seek a balance between business activities and ESH issues.

VISION	Balance between Business Activities and ESH		
MISSION	Enhancing Competitiveness and Implementation of ESH		
CORE TASKS	Continue to improve the environment	Secure absolute safety	Promote the health in a preventative manner
	<ul style="list-style-type: none"> • Preemptive response to internal / external regulations & issues • Reducing pollutants • Efficient use of resources 	<ul style="list-style-type: none"> • Strengthening safety awareness among employees • Securing process safety • Reinforcing fire / explosion prevention system 	<ul style="list-style-type: none"> • Improving the work environment • Managing employees with health issues • Health promotion activities

ESH Management System

Each and every plant of LG Chem at home and abroad has set up detailed ESH policies and implemented strategic tasks and targets based on the corporate management principles and company-wide ESH policies. All the policies, as well as the strategic tasks and targets, were decided upon and implemented according to such standardized ESH management systems as ISO 14001, OHSAS 18001 and KOSHA 18001. We have our ESH management system certified by a third party and make continuous improvements through audits and review. In order to achieve improvements in a more efficient and persistent way, we have integrated and reorganized various systems based on Responsible Care, which is a global, voluntary initiative developed autonomously by the chemical industry.

ESH Committee

LG Chem runs 'Environment, Safety and Health Committee' to manage and improve our ESH management system. The companywide committee brings together heads of all ESH

departments more than twice a year. The gathering allows them to share internal and external issues and best practices regarding ESH and discuss ways to enhance capabilities and draw up pertinent plans. This consultative body serves a venue to pick each other's brains so as to manage the management system in a systematic and effective way.

ESH Training

A yearly training plan for executives, employees and suppliers is prepared and implemented at LG Chem. We provide an Introductory Course, a Basic Course and an Expert Course, depending on the job title and tasks of the employee. Managers and supervisors must go through a 16-hour course every year,

and other employees must go through 24 hours of training courses each year. Some education and training programs target certain subjects such as new recruits, employees assigned with new tasks and employees in charge of special jobs. There is also an emergency drill that should be practiced by every team. Our suppliers and subcontractors accessing our plants receive training on the safety management regulations, emergency evacuation procedures and safety measures required by each job as well, either on their first visit or on a regular basis. The Yeosu Plant, for example, is doing its utmost to prevent safety-related accidents by introducing LG Chem Suppliers Safety Management Certification Program.

EFFORTS TO CHECK AND IMPROVE THE COMPANYWIDE ESH SYSTEM

In August 2012, the OLED material facility within the Chungju Plant suffered the explosion of a dioxide drum barrel. With a strong determination expressed by LG Chem's CEO to put top priority on the environment & safety in all business activities, we are committing ourselves to checking and improving our environment & safety system throughout the company and make our 'safety comes first' culture become more established.

First of all, we enhanced the roles and responsibilities of environment & safety departments by restructuring the environment & safety team in the head office and having the heads of major plants directly manage environment & safety of their plants. Secondly, the companywide environment & safety diagnostic system has been put in place to conduct checkups on a regular basis so that we can identify risks in advance and take proper actions to deal with them. In 2013, LG Chem plans to operate a task force team for reestablishing environment & safety management system. This will entail checking up on environment & safety system across all local and overseas workplaces, developing companywide standard guidelines, and instituting training to improve the self-diagnostic skillsets of those in charge of the environment & safety issues.

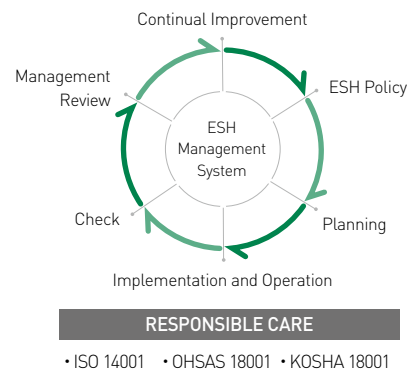
LG Chem runs an Environment & Safety Review Committee on which experts in research, facility technology, production and environment & safety serve. Also, all employees including those in office work are subject to mandatory environment & safety training customized for each rank (new hires, second-year managers, senior manager promotion and new and existing team leaders). From the design phase, the technical standards for each area and facility were established to create greener and safer conditions. At the same time, loss control guidelines are being incorporated step by step into workplaces to minimize or remove any risk factors in advance.

Environment & safety is always on top of our business priority _ In the CEO's message

Please keep the following five principles in mind and practice them to create an LG Chem culture that reflects the importance of environment & safety.

- Environment & safety is always on top of our business priority.
- Environment & safety is all about execution.
- Environment & safety accident equals to an overall failure.
- We should no longer think that an environment & safety accident is inevitable.
- Our efforts to ensure environment & safety must start from details.

ESH Management System Flow



Responsible Care



- Community awareness and emergency response
- Process safety
- Safety and health of employees
- Environment protection
- Delivery safety
- Product stewardship

ACTIVITIES TO IMPROVE ESH PERFORMANCE

Each plant of LG Chem conducts a variety of activities including minimizing the generation of pollutants, improving safety and health, and preventing environment and safety accidents.

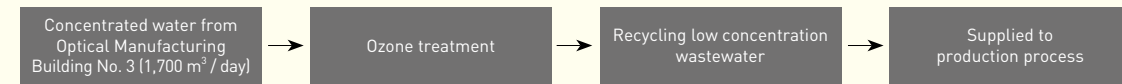
01 Ochang Plant 1 Constructing a Concentrated Water Recycling System

We reduced industrial water usage and therefore expenses by recycling concentrated water by improving our concentrated water treatment method.

Activities Concentrated water generated by Optical Manufacturing Building No. 3 that was normally discharged through a rainwater conduit (1,700 m³ / day) was processed in the same way as general wastewater and went through the existing recycling process.

Outcomes The concentrated water that went through ozone treatment was recycled in the production process, which in turn, reduced industrial water consumption.

Concentrated Water Recycling Process

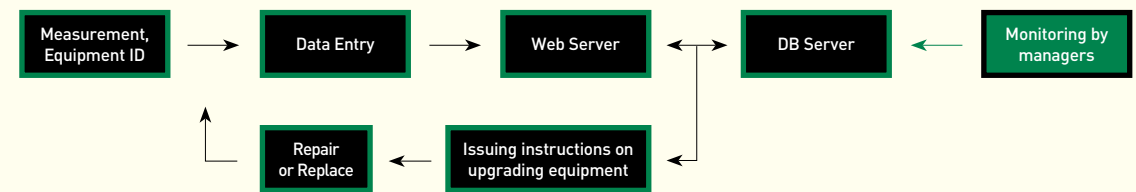


02 Yeosu Plant Toxic substance (hydrocarbon) management program—LDAR (Leak Detection And Repair)

The Yeosu Plant is managing the sources of toxic substances in an immediate and efficient way through constant monitoring.

Activities Preliminary investigation and compiling an inventory (mainly about carcinogens) / Educating about inventory and monitoring, verifying inventory data / Repairing leakage sensors / Re-monitoring / Allocating roles and educating the users

Outcomes 74% emissions reduction / Active response to external policies such as the Smart Program and regulations on the management of HAPs by facility



03 Cheongju Plant Activities to reduce risks inherent to the process of delivering raw materials and products

The Cheongju Plant is persistently striving to reduce the risk of environmental accidents that may occur during the handling of raw materials and products.

Activities Produce a safety guidance book for drivers who deliver raw materials and products / Distribute the guidance book and educate the people involved

Major contents of the guidance book

- ① Safety rules governing shipping and receiving goods
- ② How to drive safely when delivering goods
- ③ How to deal with accidents as a driver
- ④ The dangers of chemicals
- ⑤ Emergency contact numbers

Outcomes Enhanced drivers' awareness about the environment and safety and also their ability to deal with emergencies



04 Yeosu Plant Activities to improve PSM (Process Safety Management) by the TFT

In order to reduce the risk of a major industrial accident, we are continuously strengthening safety at our plants by identifying and eliminating potential risk factors.

Activities We are applying PSM throughout the entire production process and produced a manual on the process as a solution to acquiring and maintaining a P grade.

Outcomes 7 out of the 8 unit plants subject to PSM maintained the P grade (the highest).

Establishment of a PSM Culture



05 Chinese Manufacturing Subsidiaries Implementation of PSM training

Safety training has been conducted to improve PSM in Chinese manufacturing subsidiaries.

Activities Training regarding HAZOP (hazard and operability study), an element of PSM, was conducted toward manufacturing subsidiaries in Ningbo and Tianjin of China in November, 2012.



Overview of Training Curriculum

- Goal: Stronger competency to manage processes safely
- Host: Environment & Safety Team and Accounting Management Team
- Trainees: Managers in production, factory affairs and safety
- Curriculum: Module 1 (theory) and Module 2 (practice)
- ※ Since 2010, PSM training has been provided to overseas manufacturing subsidiaries at the enterprise level to enhance safety awareness.

Outcomes • Improved competency to identify and evaluate risk factors regarding new or modified processes as well as set up countermeasures to handle
• Proactive response to legalization of PSM in China

06 Research Park Installment of additional inflammable and toxic gas detectors, and setting up a monitoring system

We are continuously improving related facilities to better prepare for possible safety-related accidents in the lab.

Activities Installed detectors for inflammable and toxic gases in the research center and pilot complexes / The real-time monitoring of gas leaks at the disaster prevention center

Outcomes Strengthened real-time monitoring by installing 52 inflammable and toxic gas sensors



06 Talent Development and Respect for Human Rights

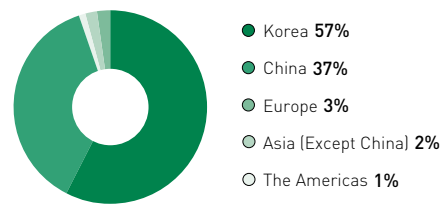
Employee Status | Securing Global Talent | Talent Management | Labor-Management Collaboration | Welfare | Corporate Culture |

Total Number of Employees

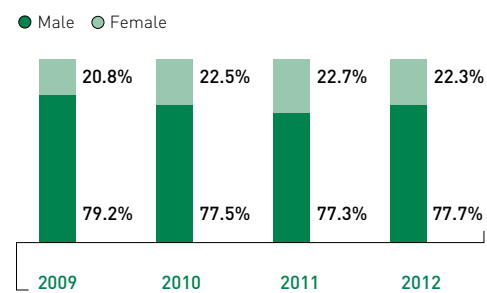
20,661

* From all workplaces at home and overseas

Employees by Region



Gender Ratio in Major Regions (Korea, China)



EMPLOYEE STATUS

The number of executives and employees working for LG Chem has increased continuously and reached 20,661 as of the end of 2012. Of these people, 11,737 are working in Korea and 8,924 abroad. 98% of overseas employees (8,728) are local people. The proportion of male employees in the major locations of Korea and China is 77.7% compared to 22.3% of female employees.

As for Korea, there are 10,662 male employees (90.8%) and 1,075 female employees (9.2%) and out of those in office work, 4,871 are male (83.7%) and 948 are female (16.3%). The number of female employees at the manager level or higher is 214, representing about 8% of the total of 2,766 managers. The female proportion is constantly increasing every year. In 2012, LG Chem hired 1,303 recruits. 87% of them were males and 13% were females. In the same year, 341 people retired, and the retirement rate at yearend was 2.9%. Since 2008, the employment rate has gradually increased while the retirement rate has generally gone down. This is thanks to our efforts to increase the retention rate with the introduction of the HR Index Program.

85% of overseas employees or 7,632 people are working in China, with male and female employees representing 56.1% and 43.9% respectively. The ratio of local people working for our Chinese subsidiaries has increased steadily since 2005, and reached 98% in 2012 with 7,493 Chinese people working there. In the same year, the proportion of Chinese people out of the total upper management in China came in at 46%. This was a result of our localization strategy.

Ratio of Local Employees at Overseas Subsidiaries



Percentage of Upper Management (Team leaders and above)



SECURING GLOBAL TALENT

Recruiting Global Talent

We are working intensively on securing and cultivating local talent in an attempt to accelerate the localization of our overseas activities. Mainly in China, we are seeking the localization of our overseas subsidiaries by having local employees lead the management. As for the recruitment in China, each subsidiary is securing recruits actively by conducting campus recruitment at major universities throughout the region, and hiring highly capable people required to do business locally. Additionally, we occasionally recruit experienced workers as needed for us to conduct local business. For a manager-level or higher position in the American and European region, we rely on local recruiting firms to bring in highly qualified human resources.

Recruiting Global R&D Talent

We are conducting diverse activities to recruit highly qualified R&D people who can work in the development of next generation products and to recruit the production / process engineers required to stay ahead of future growth. We carried out the 'BC Tour & Tech Fair' for the 7th consecutive year. This event is normally put on by the CEO and executives. Furthermore, we have held the 'LG Techno Conference,' which was co-organized by LG affiliates for the sake of recruiting overseas R&D talent, which has helped us to upgrade our reputation as a recruiter of global talent.

We also operate various proactive recruitment programs such as the R&D Industrial Scholarship and the Customized Engineer Training Program to actively secure talent. On top of that, we offer pre-employment on-the-job training to nurture and verify talent by teaching real business practices. In 2013, we will expand these proactive programs to secure more talent who can help us lead the market.

BC TOUR & TECH FAIR, LG TECHNO CONFERENCE

The BC Tour (Business & Campus Tour) is a recruitment method combined with an overseas business trip. When a business leader visits a foreign country on a business trip, he or she interviews the local people to select qualified individuals. The Tech Fair is a recruitment method in the guise of an academic seminar, and is mainly used by R&D or consulting companies. The LG Techno Conference refers to a conference co-organized by LG affiliates to recruit overseas R&D talent, and introduces LG's R&D status and vision.

2012 BC Tour (Tokyo, Japan)



Major Proactive Recruitment Programs

Proactive Recruitment Programs	Description
R&D Industrial Scholarship Program	A scholarship given to R&D masters and doctors at home and abroad. Employment guaranteed after graduation.
Industry-Academia Collaboration Program	Customized training and industrial scholarships provided to masters, doctors and specialists from universities who have signed an MOU with the company.
Customized Engineer Training Program	Provided to students majoring in chemical engineering, mechanics, and electricity in the second semester of their 3rd year to nurture specialized engineers in new business areas including rechargeable batteries via certain for credit curricula or a pre-employment training program.
On-the-job Engineer Training and Internship Program	Designed for undergraduates in the 1st semester of the 4th year. They receive on-the-job training in the division in which they want to continue working after graduation. This nurtures and double checks potential on-the-job engineers.
Global Marketing Internship (expected in 2013)	For undergraduates at home and overseas, including those studying science and engineering. Internships in the sales and marketing division help nurture global marketing talent.
Industry-Academia Collaboration Internship (expected in 2013)	A long-term internship [3 months] for undergraduates that awards school credits. Employment guaranteed after graduation.

TALENT MANAGEMENT

LG Chem's Ideal Employee

LG Chem defines the ideal employee as 'an individual who is committed to the LG Way and has the capability to get things done', based on which we employ and cultivate human resources.

Employees who trust in and can actually implement the LG Way

- 1 People who accept the challenge to be the world's best with dreams and passion
- 2 People who give first priority to customers and are always being innovative
- 3 People who value teamwork and work creatively and autonomously
- 4 People who play fair through constant development of capability

Human Resources Principle

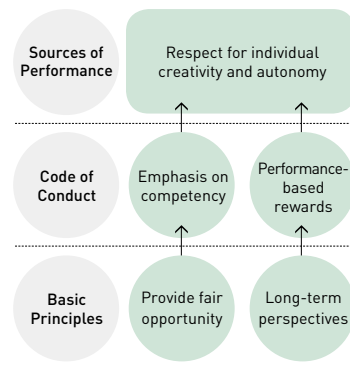
To realize management that respects people (one of the management philosophies of LG Way), we have set up human resources principle that guides us to respect diversity of employees, value creativity and autonomy based on individual strengths, and encourages individuals to develop their potential and bring their maximum performance to bear. We employ talent around the world regardless of race, nationality and

gender, and offer fair opportunities regardless of religion, disability, geography and connections. The highest amount of compensation is provided to the highest performer through fair evaluation. As for the compensation, we do not discriminate based on gender, and guarantee competitive remunerations which are above the legal minimum wage. In compliance with the Labor Standards Law, we abide by the ban on child labor, prohibiting children under the age of 15 from working, and enforce the ban on forced labor that forbids the employer from forcing workers to work against their free will.

Performance-Based Rewards

LG Chem guarantees fair opportunities to our employees so that they can generate performance based on their individual creativity and autonomy, and also provides competitive pay and benefits according to our performance-based pay scheme. In addition, in the performance review, we evaluate the quality of performance as well as the process itself to deliver the performance. By doing so, we promote teamwork and long-term performance as well.

HR Principle



Highest Capability, Highest Performance, Highest Compensation

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"> Recruit people with creativity and unique individuality Job placement with consideration for individual preference and aptitude Offer incentives to core talent, based on their market value and business impact 	<p>We present top talent with challenging tasks and broader training opportunities to develop them into core human resources, based on fair and objective evaluation.</p> <ul style="list-style-type: none"> Objective and impartial 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, geography and association.</p> <ul style="list-style-type: none"> Annual salary system linked to individual skills and performance Substantial rewards on performance (e.g., profit sharing) Fast track promotion system

Performance-Based HR Management



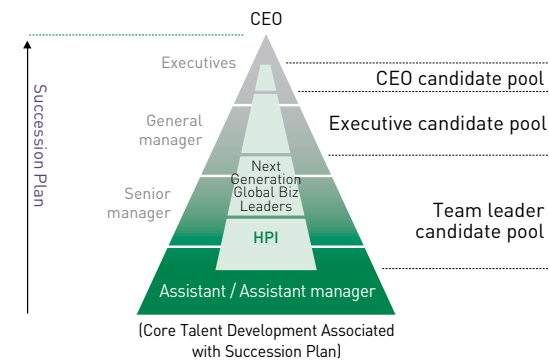
The HR Development Program

Based on the belief that talented employees are the key source of achieving differentiated competitiveness, LG Chem has established systematic HR management strategies which are organically related to our business goals and strategies, and is directing efforts to nurturing talent. To develop employee competency to the fullest, we run a variety of training programs in a systematic way with a focus on nurturing core talents for leading the market, developing job-specific competency for securing the best quality competitiveness and strengthening global competency for carrying out a successful global business.

Core Talent Development for Market Leadership

It is very important to discover individuals who exhibit business prowess and leadership capacity as early as possible and nurture them into core human talents in order to maintain the position of a market leader. Bearing that in mind, LG Chem established a core talent development system in connection with a Succession Plan and a customized program for our potential leaders and core talent to support them in various areas such as management, strategy, leadership and foreign languages. In addition, we operate two separate HR pools: one trains the candidates for executives, and the other fosters high potential individuals (HPI) and the next generation global business leaders. In 2012, we started running a task force team to systematically develop core talents. The team assumes the role of coach and mentor to improve the business capability and leadership capacity of an individual.

Core Talent Development



LG Way-based Leadership Programs

We offer leadership programs that is based in our core values, the LG way, not only to potential leaders and core talent but to all employees. These programs are intended to develop leadership capacity, with each designed to target different employee levels.

Expert Development

A job-specific competency development program is in place for each business area to enable employees to grow into experts in their own area by providing appropriate training in a systematic way. Currently, we operate the Petrochemical Engineer Program, IT & Electronic Engineer Academy and Battery Academy, and have internal experts from each business area develop educational programs and give lectures as well. Our training programs allow our people to learn the knowledge and skills accumulated over the years and enhance their special capabilities, which in turn lead to stronger core competencies required for business achievements.

Global Competency Development

We are constantly strengthening our global competency to make our overseas business operations successful and reliably consistent. Since 2012, we have been providing training to the candidates to be dispatched as a leader to overseas subsidiaries or branch offices in an effort to build up their leadership and management skills and communication competency before they are actually dispatched. Additionally, we run foreign language programs in English, Chinese and Japanese for all our members to help them increase their language capabilities.

Global Competency Training Structure



Job Competency Training Structure

Production Quality			R&D	Sales / Marketing	Support
Petrochemicals	IT & Electronic Materials	Energy Solutions			
• Petrochemical Engineer Program (39 courses)	• IT & E Engineer Program (21 courses)	• Battery Academy (57 courses)	• R&D special skills • R&D management skill (31 courses)	• Sales / marketing skills (24 courses)	• Expert training in legal affairs / procurement / finances / IT / HR

LABOR-MANAGEMENT COLLABORATION

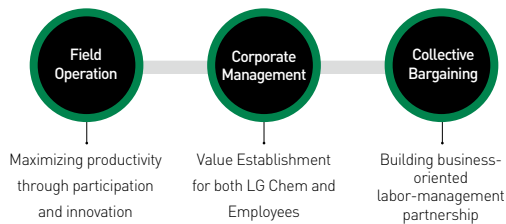
We believe in a horizontal relation between labor and management in lieu of the vertical structure and promote a collaborative labor-management culture wherein the union and management respect each other on equal footing and actively support one another.

Vision for Collaborative Labor-Management Relations

Embracing our management principles of 'Customer-Value Creation' and 'People-Oriented Management', LG Chem envisions a labor-management partnership for participation and cooperation. We aspire to materialize community-type labor-management relations that help build global competitiveness in our business, enrich the lives of our employees and contribute to social development through sustainable performance.

Three-Dimensional Model for Labor-Management Collaboration

LG Chem aims to build community-type labor-management collaboration. We have, therefore, put in place a unique model for collaboration that facilitates interactive participation and cooperation in three different dimensions interlinked with labor-management collaboration, namely, corporate management, field operation and collective bargaining.



The direction of cooperation between labor and management is defined as follows; to enhance the value of the company and the employees through transparent and open management in the corporate management dimension; to maximize productivity through strong teamwork and innovation in the field operation dimension; and to establish a business-oriented labor-management collaboration on the basis of rational industrial practices and a productive negotiation culture in the collective bargaining dimension. In addition, the collective bargaining agreement signed between the union and the management applies to all our employees as per relevant labor laws. The agreement was conducive to further solidifying the platform for collaboration, by specifically mandating the management to hold consultation with the union in advance and in good faith to implement major changes in business.

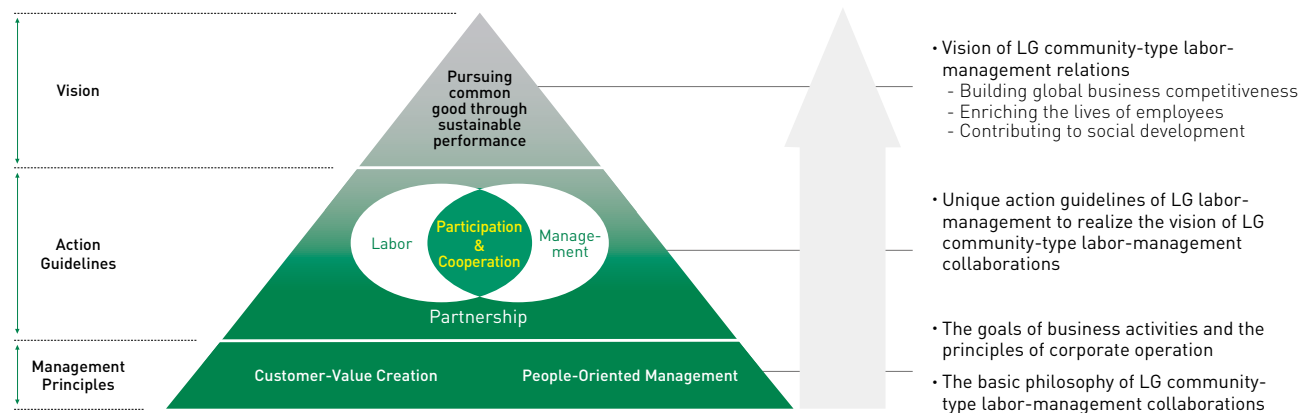
Labor Union Membership in Korea (as of Dec. 2012)

5,535 persons

※ LG Chem guarantees employees' freedom of association and three basic labor rights.

The labor environment in China is going through drastic change due to minimum wage hikes and the changing role of the unions which is affecting both unions and the management. Against this backdrop, stable labor-management relations have become an urgent issue that needs to be resolved to respond to challenging business environment and labor issues. To meet this need, LG Chem selected 10 labor-management tasks for China in the first half of 2012 and held a workshop in Nanjing to share the 10 tasks and their importance and to discuss ways to improve labor-management relations in the second half. The 10 tasks include vitalizing communications, promoting labor experts, and establishing a complaint handling process. Action items for each of the 10 tasks are being formulated and implemented by each subsidiary.

Vision for Labor-Management Collaboration



MAJOR INITIATIVES OF LABOR-MANAGEMENT COLLABORATION

Corporate Management

LG Chem strengthens field management of top managers through the CEO's 'Dialogues with Employees' and the CHO's 'HR sharing meetings'. We also facilitate effective communication with the management team based on 13 Junior Boards from each business division. In addition, we measure how much trust our employees have in management activities and identify any opportunities for improvement through annual surveys.

Field Operation

We run a wide range of team building programs and empower line managers in handling complaints and grievances to ensure field-driven personnel management. We are dedicated to promoting a more decent workplace through operating a joint labor-management committee on occupational safety and health. We also provide our employees with overseas industrial training opportunities to broaden their horizons on the global market and competitive landscape.

Collective Bargaining

Business performance is shared and key pertinent agendas are discussed through a labor-management council held on a quarterly basis. We run a joint labor-management task force when there is a need to improve our HR/welfare system. In addition, we discuss ways to seek mutual growth between labor and management through joint workshops prior to annual collective wage bargaining negotiations, and form a working-level committee during such negotiations to promote a productive culture for negotiation.

Occupational Safety & Health Committee Activities



Labor-Management Joint Workshop



Tangible Outcomes from Labor-Management Collaboration

:: Stronger Business Competitiveness and Higher Employee Satisfaction

LG Chem has successfully carried out collective wage bargaining negotiations in the last nine years without a single labor dispute to date, by capitalizing on our 'three-dimensional model for labor-management cooperation' built on a spirit of engagement and collaboration. These accomplishments have not only become the source of competitiveness for the company, but also helped provide a best-in-class working environment and welfare benefits for our employees. LG Chem, as a result, has earned recognition for its significant contribution to stable labor-management collaboration and the realization of industrial peace in Korea.

:: Safe Workplace through a Joint Labor-Management Effort

Prior to execution of workplace innovation programs, we discuss a program operation plan with the labor union via

Labor Management Committee in an effort to maximize voluntary participation of employees. We also continue to share performance of the innovation programs with the labor union and the labor union leadership attends the Best Practice Contest for innovation activities in the capacity of judge. A joint labor-management inspection on work practices and environment is conducted every quarter to identify areas for improvement with an intention to improve work efficiency and reduce cost as well as promote safety and health of employees.

:: Our Commitment to Social Responsibility through the Mutual Effort of Labor-Management

To fulfill our corporate social responsibilities and to contribute to the social development of our communities, LG Chem has been consolidating labor-management cooperation around shared mutual interest. Part of this effort to consolidate is our engagement in various activities, such as supporting social welfare facilities, helping low-income families, loving multi-cultural families and delivering the 'Briquette of Love' for heating in the winter.

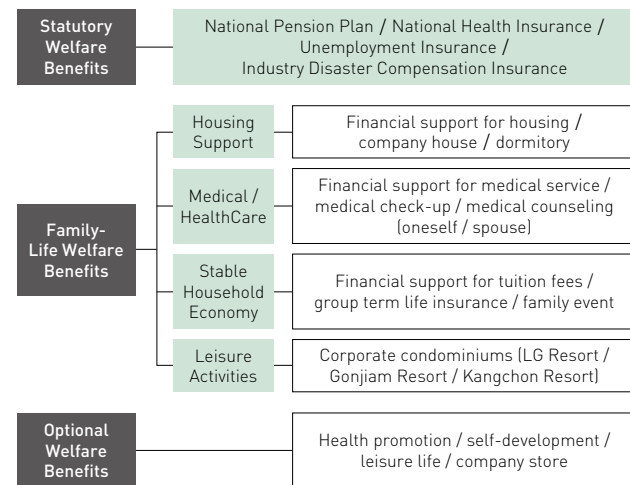
WELFARE

Welfare System

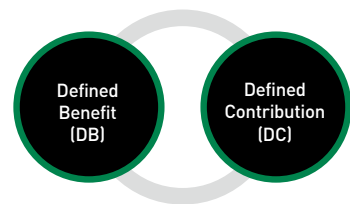
We provide diverse welfare benefits for employees to have more stable and healthy life so as to get more engaged in the company by instilling a stronger sense of pride in our employees and creating a good work atmosphere.

Our welfare system is composed of statutory welfare benefits (four types of insurance); family-life welfare benefits designed to ensure the stable life of employees such as supports for housing, medical / healthcare, stable household economy and leisure activities; and optional welfare benefits that employees are offered to select benefits based on individual's preference and life style. Optional welfare benefits were introduced in 2006 to promote the work & life balance (WLB) of employees. Employees are free to select benefits to enjoy leisure activities and do self-development.

The LG Chem Welfare System



Retirement Pension Plan



- Pension Plan designed to guarantee after-retirement income and manage retirement pay stably.
- Basically a defined benefit plan is offered, however, a defined contribution plan is optional.

Every year, we publish a Welfare Guidebook and collect feedback from employees on a regular basis to improve our welfare system and raise employee satisfaction. Maternity leave (pre-natal or post-natal leave) and child-care leave are also provided to protect maternity and to strike a balance between personal and work life.

Health Promotion Activities

LG Chem has in place various health care programs such as on-site medical visits to prevent general and occupational illnesses; delivery of health information; physical therapies to prevent musculoskeletal diseases; and preventive activities jointly organized with external expert groups targeted at noise induced deafness. Every year, medical check-up is provided to promote the health of employees and the check-up results are used for medical counseling. We run a health promotion program in connection with hospitals to provide healthcare solutions customized to individual employees. Additionally, a health promotion center equipped with a blood pressure monitor and a body fat analyzer is in operation at each location of operation for employees to check regularly and manage health condition on their own.

We operate a psychological counseling center to help employees maintain a sound mind. The center offers a variety of psychological tests that help people identify their individual personalities and aptitudes for various duties, along with online and offline customized counseling for their personal lives. Also, 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 variety of troubles that arise in their daily lives, allowing employees to benefit from professional help.

Regular Check-up for All Employees



CORPORATE CULTURE

Direction for Corporate Culture Innovation

LG Way is a collection of principles on which LG employees base their thinking and behavior. LG Chem encourages its employees to build a creative and autonomous corporate culture using the LG Way to guide them on their path. Such a work environment helps the employees at LG Chem to strengthen global organizational capacity and engender excellent performance.

In order for us to exhibit good performance in this globally competitive environment, LG Chem needs to be a company that leads the market by delivering differentiated values for customers. LG Chem helps its employees to do so by giving them ownership in what they do, motivating them in their business execution.

Corporate Culture Innovation Activities

LG Chem is engaged in various activities that will help it lay a foundation for nurturing talented people who will implement LG Way and establish a good corporate culture. Training in the LG Way is provided in the form of leadership courses where new recruits, experienced employees and team leaders partake in LG's core values. In addition, we have been continuously taking on individuals with good performance from overseas offices and subsidiaries to reinforce our capacity as a global organization and increase job competency. Another part of this effort is distributing the LG Way Guidebook to all employees to create a corporate culture that can express our core values.

Since 2006, we have promoted a revolutionary campaign for the 'Reporting / Meeting / Clocking Out Culture' to allow people to focus on their jobs. Thanks to this campaign, we are setting up ways of performing the work at LG Chem where employees can concentrate on their core business which is related to leading the market and customer value.

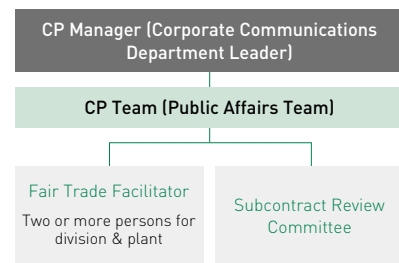
It is important that leaders play a leading role in innovating work methods using communication. To meet this goal, we have been providing leader coaching programs to boost leadership skills in running the organization, executing tasks and fostering staff performance. At the team level, organizational development programs further increase the power of execution in order to change people's behavior and raise the bar of performance. Along with these programs, we are offering customized organizational development programs that support overseas offices and subsidiaries as they customize the corporate culture to suit the local environment.

We will continue to devote our resources to essential core businesses and create customer value to become a pioneer in the market.

07 Fair Trade

[Compliance Program for Fair Trade | Organization](#) | [Performance of the Compliance Program](#)

Fair Trade Compliance Organization



Performance in Compliance Program

Year	Description
2007 (10 times)	<ul style="list-style-type: none"> Focused on audits and trainings on the prevention of cartel
2008 (13 times)	<ul style="list-style-type: none"> Audits of overseas sales team and trainings given at Chinese and Japanese locations of operation with the focus on the prevention of international cartel Signed a fair subcontracting agreement with 280 SMEs
2009 (7 times)	<ul style="list-style-type: none"> Designated fair trade manager at each division or plant Checked the compliance of Fair Subcontract Agreement
2010 (10 times)	<ul style="list-style-type: none"> Trainings on the prevention of international cartel Laid the foundation for win-win and shared growth with SMEs Classroom education for fair trade facilitators
2011 (9 times)	<ul style="list-style-type: none"> Higher quality education for cartel prevention Dissemination of obligations & prohibitions following the revised Fair Subcontract Act
2012 (10 times)	<ul style="list-style-type: none"> Training about and auditing cartel prevention Training on the prevention of international cartels, two times (Germany, USA) Training on the prevention of violations of the Fair Subcontract Transactions Act

COMPLIANCE PROGRAM FOR FAIR TRADE

LG Chem has been running its own compliance program since 1995, and after entrenching all 7 elements of the compliance program recommended by the Fair Trade Commission, we became formally registered with the Korea Fair Competition Federation in 2002 as a company that operates a compliance program. Additionally, we have established a system to prevent any legal violations with the declaration of 'Fair Competition Practical Guideline' in 2006 for the first time in Korea and made specific behavioral guidelines to abide by fair trade laws and regulations. LG Chem has been carrying out audits in connection with the alleged cartels and holding training sessions to spread the fair trade culture, and we plan to extend similar activities to our overseas subsidiaries.

ORGANIZATION

To operate the Compliance Program effectively, we have placed a compliance team under an executive-level CP Manager to take on the responsibility of planning and implementing the program and reporting to the BOD. Moreover, to promote fairness in the handling of the sub-contractors of our small-and mid-sized affiliates, we run the Internal Subcontract Review Committee every month to preliminarily screen any subcontract transaction over a certain amount (KRW 3 billion) to check for legitimacy. In addition, the LG Chem Internal Transaction Committee meets every quarter to examine the activities of compliance programs and to seek out better ways of making improvements. The Committee is chaired by the CFO, and consists of eight executive members who are responsible for internal transactions as well as one lawyer from outside the company.

PERFORMANCE OF THE COMPLIANCE PROGRAM

In 2012, internal audits and training pertaining to the Fair Trade Act and the Fair Subcontract Act were carried out across nine business divisions of three business units. Preventing cartels (collusion) in the sales field was especially focused on. On the purchasing front, checks and training were conducted to identify any violation of the Fair Subcontract Act, such as 'setting unreasonable subcontracting prices,' and four guidelines and The Fair Subcontract Agreement, which were established to promote fair trade practices by Korea Fair Trade Commission, have been introduced and followed. In addition, fair trade facilitators are designated for each business division and each plant to promote a fair trade culture and to ensure early detection and self-correction of unfair trading behaviors.

08 Partnerships with Suppliers

[Shared Growth with Suppliers | Fair Selection and Evaluation of Suppliers | Promotion of Environmental Management in Supply Chain](#)

Five Tasks for Shared Growth

Acts of Determination for Shared Growth

- Composition of the Shared Growth Initiative Committee in LG Chem
- Incorporation of a goal for shared growth into evaluation of executives

Expansion of Financial Support and Improvement of Payment Term

- Creation of KRW 30 billion of LG Win-Win Fund
- 100% cash payment to subcontractors and logistics suppliers
- Improvement of payment term for non-subcontract SMEs: Payment within 60 days
- Encouragement of primary suppliers to apply same payment term to secondary suppliers

Technical Support for Strengthening Technology

- Suppliers' involvement in green projects
- Support to suppliers for problem resolution
- Technology & quality improvement activities and free support for analysis and test

Training Support in Cultivating Human Resources

- Support to suppliers for technical training including operation of Polymer Processing School
- Competency-building training and HR support for suppliers

Establishment of Partnership for Shared Growth

- Expansion of localization of part materials & equipment, joint advance into overseas markets
- Prior notification of raw materials price to plastic suppliers
- Compliance with subcontracting laws: prohibition of unfair discounting and verbal PO, stricter procedures to request technical documents including cost calculation sheet and unilateral on-site audit
- Regular meeting with or between suppliers

SHARED GROWTH WITH SUPPLIERS

The origin of LG Chem's policy of shared growth with suppliers lies in the fair trade culture established under its Jeong-Do Management philosophy. LG Chem has provided long-term and substantial support to suppliers to grow their business, not just one-time or temporary support. The policy of shared growth with suppliers is basically designed to sharpen their competitive power, which is done by helping build up systems of fair trade and competition and by providing various forms of support. In other words, it is basic for LG Chem to make a continuous efforts to comply with laws and regulations when making subcontracts with small-and mid-sized suppliers and when making transactions that involve raw materials, parts, and products. Also, LG Chem has declared its commitment to shared growth with its small-and mid-sized suppliers by signing shared growth agreements with 50 suppliers in January 2012.

The Shared Growth Initiative Committee

LG Chem recognizes that it takes leadership from the top management for the policy of shared growth with suppliers to reap tangible results. To facilitate this leadership, we have a Shared Growth Initiative Committee in place to help us in our pursuit of shared growth with suppliers in an effective and substantial manner and to show our long-term commitment to shared growth. The Committee is chaired by the CFO and is composed of 10 executives. The Committee selects LG Chem's five major tasks for shared growth that will personally involve the top management in the shared growth effort with suppliers in every aspect of our operations. In 2012, the Committee convened twice to monitor achievements and to share future action plans to make the shared growth initiative more effective.

Main Agendas and Outcomes about Shared Growth

LG Chem embarked on the pursuit of its shared growth policy in November 2008 when it became the first chemical company to sign onto the Agreement on Shared Growth and Fair Trade with suppliers. We signed the shared growth agreement again in January 2012 with 50 primary suppliers. We think that exercising leadership in order to spread the culture of shared growth throughout the supply chain is an important social responsibility. To this end, we encourage primary suppliers to sign agreements on shared growth with secondary suppliers.

These agreements include various forms of support that we provide to suppliers such as comprehensive assistance and methods of cooperation in areas such as finance, technology, training, market development and communications.

More specifically, we offer programs such as financial (fund) assistance, better payment conditions for subcontractors, technology (development) assistance / quality control / technology protection, education / training support, supplier information system, teams dedicated to a supplier, supplier ombudsman, ethical management system, raw material supply support, direct / indirect management support, sales promotion for suppliers and support for secondary suppliers.

LG Chem recognizes that, for stronger competitiveness and continuous growth, it is essential that our relationship with suppliers be a stable and long-term cooperative relationship. With this in mind, we are working together with suppliers on behalf of shared growth and are firmly committed to pursuing it in the future.

FAIR SELECTION AND EVALUATION OF SUPPLIERS

LG Chem selects suppliers on a transparent manner and conducts a fair evaluation of suppliers by using our own procurement system, called OPEN, and a credit rating system.

The Transparent Selection of New Suppliers

To open up our transactions with all suppliers, LG Chem has operated the Open Purchasing Electronic Network or OPEN (<http://open.lgchem.com>). Any supplier who wants to start doing business with LG Chem may apply for registration by visiting the OPEN website. A decision to accept or reject the application for new registration is made based on the results of a self-evaluation by the applicants themselves as well as our selection criteria for new suppliers. This is enhancing convenience and fairness for our suppliers.

Management of Suppliers with the Fair Evaluation System

LG Chem periodically conducts evaluations about its management of suppliers. On top of technical and financial status, suppliers are evaluated in terms of compliance with environmental regulations, shared growth (improvements of payment conditions for secondary suppliers), and labor and human rights laws and regulations (identifying unfair labor practices and internal strikes) according to evaluation criteria and are then provided with feedback.

Selected Good Suppliers

Year	2010	2011	2012	Incentive Offered
No. of Good Suppliers	14	28	13	Improved payment condition (Cash)

Suppliers with good evaluation scores are offered incentives while those with poor results that fall below the standard are required to submit action plans about making improvements. These evaluations are designed to promote partnerships with suppliers by increasing shared growth while proactively managing the relevant risks.

Support for Standardization of the Process in Overseas Subsidiaries

LG Chem has helped standardize business process in the Chinese subsidiaries by reflecting upon local characteristics. Our goal here is to improve purchasing power and business efficiency internally and to secure fairness externally. We have a long-term plan for process standardization in the areas of purchasing rules / know-how / guidelines and purchasing work on raw material / equipment / construction that take Chinese regulations and infrastructure into consideration. Accordingly, we provide training to and hold regular business exchange sessions with subsidiaries to strengthen the competency of the purchasing managers. In addition, we have plans to extend the Open Purchasing Electronic Network to include coverage of subsidiaries in China not only regarding purchasing work but also regarding the selection and evaluation of new suppliers so that a purchasing portal system can be established in China to enhance business efficiency and fairness.

PROMOTION OF ENVIRONMENTAL MANAGEMENT IN SUPPLY CHAIN

In order for LG Chem to make its products more eco-friendly in every aspect and to cope with global environmental regulations, we need to respond more actively to environmental issues that the supply chain is responsible for. We are carrying out various activities to fulfill this purpose. In particular, we are cooperating with suppliers given that forming partnerships with suppliers is necessary to proactively cope with global environmental regulations, such as REACH in Europe. As part of this effort, we checked for REACH-relevant substances contained in materials that we purchase from suppliers in 2010. Furthermore, we conducted a survey on the chemical compositions of purchased materials using CHARMs and obtained the basic information necessary for dealing with environmental regulations, making it possible to respond to the environmental requirements of customers more systematically. Along with these activities, we provided training and education to suppliers on a regular basis to identify risks and to increase the competency of our suppliers.

09 Social Partnership

Corporate Citizenship | Directions for Social Contribution | Youth Education | Youth Welfare Projects | Local Community | Social Contribution Activities by Chinese Subsidiaries

Social Contribution

KRW **24.7** billion
 ※Scope: Korea & China

Citizen Partner



CORPORATE CITIZENSHIP

As a leading chemical company, we have been contributing to the development of national economy. Now, we are also committed to becoming socially responsible to improve the lives of our socially vulnerable neighbors.

DIRECTIONS FOR SOCIAL CONTRIBUTION

Social contribution activities are systematically carried out in four major selected areas: youth education, youth welfare, local community support, and overseas social contribution. In the education area, we leverage our expertise as a chemical company to raise the interest of youth in science and technology and contribute to nurturing young talent. At the same time, we implement welfare projects for the economically marginalized as one of the four major social contribution areas to help ease an ever-deepening income gap and to grant equal opportunities to the youth.

With a strong belief that LG Chem grows sustainably with local communities, we carry out diverse social contribution activities in connection with local communities. In addition, we look for a way to contribute to the development of host countries where our subsidiaries are operating by selecting overseas social contribution as one of four major areas while shedding away from the outdated thought that they are simply a production or sales base.

YOUTH EDUCATION

Chemistry Frontier Festival

LG Chem organizes 'Chemistry Frontier Festival' in Korea every year - a chemistry contest targeted at high school students to cultivate future talent of 21st century in science and technology and raise their interest in chemistry. This program is jointly sponsored by six petrochemical companies including LG Chem and is organized by Korea Petrochemical Industry Association. A total of 6,811 teams so far have participated in this program over the past 9 years starting with the first contest in 2004, and in 2012, 829 teams took part in the festival. Indeed, the festival now takes hold as the best and biggest contest for the high school students in Korea. The winners in the top rank are given various benefits including a chance to get overseas training as well as special employment privileges if they join one of the co-hosting companies.

Fascinating Chemistry! LG Chem Chemistry Camp

Our annual chemistry camps are targeted at middle school students to increase relevance and familiarity of chemistry through various chemistry experiments and camp activities during school vacations. 'Fascinating Chemistry! LG Chem Chemistry Camp' was first introduced in 2005 as one of our outreach programs. The camps are held four to five times a year, attended by some 500 middle school students. This 3-day event is fun and educational at the same time. There are exciting chemistry experiments and spectacular magic shows for educational purposes as well as personality education programs which help youth grow to become a healthy social member of the community. This camp was held 31 times and was participated in by around 5,000 middle school students. It is one of the leading social contribution activities that reflect our identity as a chemical company.

LG Chem Chemistry Camp



Junior Science Class

The 'Junior Science Class' is a program launched in 2004 for elementary schools and childcare centers in the Daejeon area to help the students experience what science is really like through experiments and practice sessions, capitalizing on scientific knowledge of our researchers at Daejeon Research Park. We have been offering over 20 classes every year specifically targeting elementary school students and students from community welfare centers who have limited access to various learning opportunities. The science class was held during the celebration of Children's Day in the city of Daejeon. Children taking part in the science class discovered the fun in science and got experience running experiments. The program, planned and run by our researchers on a voluntary basis, is being increasingly perceived as a professional social contribution activity as it draws on the expertise and competence of our highly qualified researchers.

YOUTH WELFARE

Build a Library of Hope

LG Chem has implemented the project 'Build a Library of Hope' since 2007. The goal of the project is to instill a reading culture in the youth who will play a leading role in the future, and provide a cultural venue to local residents who have been culturally marginalized. With a total budget of KRW 300 million a year, we are opening libraries at the steady pace of 2 to 3 libraries per year. As of 2012, we have opened a total of 17 libraries. We designed the libraries with a focus on making children and local residents feel comfortable when in the library. Additionally, we used eco-friendly finishing materials for the health of students visiting the library. Furthermore, we support these libraries in efforts to provide various outreach programs, such as reading education and 'Meet the Author' sessions.

Build a Library of Hope



Create a Classroom of Hope

The idea for 'Create a Classroom of Hope' comes from the fact that social protection arrangements for the youth, who are socially marginalized, are relatively inferior to those set up for the elderly or the disabled. Since 2008, this activity has been improving and renovating youth facilities so that the youth can get educated in a more pleasant environment. This 'Create a Classroom of Hope' is carried out by volunteer members of LG Chem who get a great amount of satisfaction from their volunteer work. The volunteers run various services depending on what is suitable for each youth facility, including drawing wall paintings, making bread and delivering lunch boxes. This community service was started at a social welfare center in Yeongdeung-po, Seoul in 2008, and was carried out at Lifeline National Office in 2012 for its 8th time. Currently, we pick two community welfare centers every year from applicants to continue with the spirit of this project.

Create a Classroom of Hope



Musical Holiday and Mécénat Programs

Since 2007, LG Chem has been engaged in a variety of mécénat programs to broaden the access to high arts and culture for the underprivileged. Through the 'Musical Holiday' programs, we reach out to military servicemen as they are often overlooked in social contribution activities. Since 2012, considering the age of military servicemen, the creative musical 'Bachelor's Vegetable Store' which depicts the lives of young men who are trying to make their dreams come true, has been being presented to soldiers in the military. This programs target local residents and soldiers who have limited access to cultural events in places like Uleung-do, Baekryung-do and Gangwon Province. There are 6-7 performances every year. So far, about 25,000 people have benefited from these programs. Our devoted endeavor towards promoting cultural enrichment of our communities has given the company an honor of winning the 'Cultural Management Award' at Mécénat Awards 2009, despite a short history of only 4 years.

LOCAL COMMUNITY

Social Contribution by Operation Site

LG Chem is carrying out site-specific activities in 10 operation sites across the nation to make social contribution in each community. In 2012, we held various programs for multi-cultural families such as 'Multi-cultural Family Event', 'Shopping at Traditional Markets with Multi-cultural Family'. In addition, we provided comprehensive services for the villages on islands including home improvement, disease surveillance and quarantine activities through events like 'Volunteer Day on Islands' and 'Delivery of Briquette of Love'. With a heightened sense of participation by employees in social contribution, a total amount of time spent on volunteer work activities reached 27,000 hours and over KRW 300 million was raised for funds.

Hobby Clubs' Community Service

LG Chem is encouraging employee hobby clubs to participate in community service activities as part of efforts to promote talent donation of employees. Since LG Chem began to support employee hobby clubs from 2009, their community service has grown to the extent that hobby clubs in 10 locations of operation across the country voluntarily carried out 147 community service activities in 2012. Out of these activities, 40 services were talent donation which was provided reflecting the characteristics of hobby clubs. For example, a skin scuba club carried out beach clean-up activities and a traditional percussion instrument club and a music club made a free performance in the socially marginalized areas or at community welfare centers. LG Chem will keep encouraging employee hobby clubs to carry out community service activities contributing to local community.

One Plant-One Military Unit Sisterhood Relation

LG Chem has built a sisterhood relation with a military unit located close to Paju plant in a bid to promote the morale of military servicemen and to support their life in the military. Every winter from 2009, we provided soldiers with daily necessities. Then in 2011, we reached a sisterhood relation to support the welfare and cultural life of soldiers systematically. Going forward, we will not only give exemplary soldiers a musical ticket, but also make a cultural performance for soldiers in the military. In return for cultural performances such as musicals, the military unit invites our employees and families to crucial security sites to promote exchange activities.

SOCIAL CONTRIBUTION ACTIVITIES BY CHINESE SUBSIDIARIES

Direction for Social Contribution Activities in Chinese Subsidiaries

LG Chem has been promoting various social contribution activities in major operation sites in China that are consistent with the direction set out by the head office. Based on the image of 'LG cares about youth', activities are tailored to specific conditions of the region in which the subsidiary operates. The direction for social contribution was determined by Talent Management Committee in the second half of 2010. The direction settled upon includes affection for youth, support for social welfare, and local community support. A series of social contribution activities are being carried out by the Chinese subsidiaries of LG Chem in line with this direction and these activities were even featured in the Chinese media.

Direction for Social Contribution in Chinese Subsidiaries

Affection for Youth	Activities to instill dreams and hopes Poverty-stricken student support, school facility improvement, education and cultural event support, scholarships
Social welfare	Aixin She activities for underprivileged neighbors in the community Visits to elderly, handicapped and low-income families
Local community support	Local community development / Protection activities Environmental campaigns (tree-planting), improving the community infrastructure

* Aixin She (Loving Heart Society): all the volunteer groups at Chinese subsidiaries are working very actively under the name of this singular organization.

Main Social Contribution Activities by Chinese Subsidiaries

:: Sanitation and Environmental Improvement Project

The regional holding company in China is carrying out activities to improve the sanitary conditions of toilets and the environment in elementary schools located in impoverished regions. In China, there is a huge gap between urban living and rural living

'LG Chem's Toilet of Hope' project for schools in underprivileged areas



and in case of impoverished regions there is a high chance of contracting a disease due to sub-standard sanitation.

To resolve this issue, LG Chem has taken on projects called 'LG Chem's Toilet of Hope' to enhance school conditions in poor areas. This project started in September 2010 and has resulted in the completion of three 'LG Chem's Toilet of Hope' and one drinking water improvement project as of January 2013.

:: Establishment of a Children's Fund

The Yongxing Plant donated RMB 300 thousand to form the Philanthropic Angel's Fund in 2010 to help those children who are suffering from disease. It entrusted management of this fund to the Zhenhai District Red Cross in Ningbo. This fund is mainly used to support children with congenital heart disease and 7 children have benefited so far from this fund.

:: The Disabled Children Welfare Fund

Under the slogan of Overcome Obstacles Jointly and Enjoy Happiness Together, The Tianjin Plant has been donating RMB 200 thousand every May since 2009 to a welfare fund for disabled children in Tianjin. This fund is contributed to by four subsidiaries in Tianjin and disburses walking sticks or prosthetic legs to children with disabilities.

:: Environmental Campaign for Local Residents

The Dagu Plant held an environmental campaign called 'Increasing Awareness on Environmental Protection for the Community' commemorating World Environment Day 2012 in order to enhance local residents' awareness about the environment and to encourage environmental preservation in their daily lives. 40 volunteers from the plant participated in the campaign and demonstrated the importance of environmental protection and introduced successful cases of environmental restoration and the use of renewable energy in LG Chem. This event will be held every year for local residents.

:: The 'Attractive Chemistry' Class for Elementary School Students

The Yongxing Plant opened its 'Attractive Chemistry' class for students in local elementary schools in Zhaobaoshan and has provided lessons four times a year. This class which was offered based on the expertise of employees aims to foster knowledge and understanding about science among children in the community. 'Attractive Chemistry' offers magic performances and storytelling to increase the children's interest in science. This unique camp is a successful case of how social contribution can earn a good reputation among the local residents.

APPENDIX

Performance Data

Data Standards

- 1) Economic performance data complies with K-IFRS (the international accounting standards adopted by Korea)
- 2) Environmental and social performance data covers Korea and China. If there are particular details about the scope and calculation standards, a note will be appended to the data.

Economic Performance

Stability Indicators

Unit: %

Category	2010	2011	2012
Current Ratio	147.0	153.6	171.8
Debt-to-Equity Ratio	61.6	57.5	54.0
Dependency on Borrowings	26.8	26.0	27.4

Profitability Indicators

Unit: %

Category	2010	2011	2012
Operating Income Margin	14.5	12.5	8.2
Net Income Margin	11.3	9.6	6.5
ROA	19.0	15.5	9.5
ROE	31.9	24.7	14.7

Growth Indicators

Unit: %

Category	2010	2011	2012
Sales Growth	25.5	16.5	2.6
Operating Income Growth	34.5	-0.1	-32.2
Net Income Growth	42.9	-1.4	30.6
Total Assets Growth	20.3	20.6	8.5

Economic Performance by Business

Sales by Business Division

Unit: KRW billion

Category	2010	2011	2012
Petrochemicals	14,526	17,265	17,514
IT & E Materials	4,903	3,142	3,271
Energy Solutions	-	2,269	2,478
Others	43	-	-
Total	19,472	22,676	23,263

Operating Income by Business

Unit: KRW billion

Category	2010	2011	2012
Petrochemicals	2,279	2,329	1,436
IT & E Materials	600	374	436
Energy Solutions	-	118	39
Others	-58	-2	-0.3
Total	2,821	2,819	1,910

Distribution of Economic Value

Corporate Tax

Unit: KRW billion

Category	2010	2011	2012
Income tax expenses from continuing operations	619	627	374

Procurement Status (2012)

Unit: KRW billion

Business	Amount	Type	Items	Usage	Supplier
Petrochemicals	11,826	Raw Materials	Naphtha, EDC	PE / PVC	GS Caltex, OXY Chem. etc.
IT & E Materials	2,022	Raw Materials	TAC Film, Cobalt	Polarizer Raw Material	Fuji. etc.
Energy Solutions	1,078	Raw Materials	Cathode Material, Anode Material, Membrane	Battery Raw Material	Hitachi, Mitsubishi
Total	14,926				

※ In 2012, the total procurements for China amounted to RMB 21 billion and local procurement size was RMB 10.7 billion, accounting for 50.8% of the total.

Labor Cost

Unit: KRW billion, KRW million / person

Category	2010	2011	2012
Total Annual Payroll	572	677	727
Total Payroll per Capita	62	63	62

※ Salaries for women and men are equal amounts and are awarded without discrimination and salaries of top management are excluded.

※ Total payroll excludes welfare benefits and retired DB (direct benefit) or DC (direct compensation). This is only for local workplaces (foreign entities excluded)

Dividends

Category	2010	2011	2012
Net Income (KRW billion)	2,200	2,170	1,506
Primary & Diluted Earnings per Share (KRW)	29,345	29,069	20,318
Dividend Ratio (Par value, %)	80	80	80
Total Dividend (KRW billion)	295	295	295
Dividend Payout (%)	13.4	13.6	19.6
Dividend Yield (%)	1.00	1.26	1.21

R&D Manpower and Investment

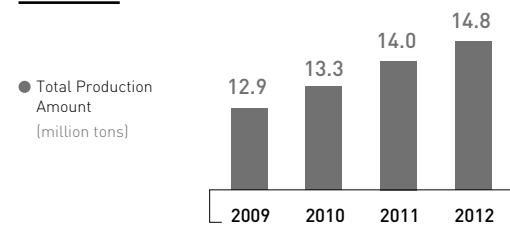
Unit: person, KRW billion

Category	2010	2011	2012
Manpower	1,507	1,737	1,944
R&D Investment Amount	249	299	321

※ Since 2012, guidelines about LG holding company have applied new criteria [except for R&D in the manufacturing division]. Data from before 2012 was modified using the new criteria and then reported.

Environment and Safety Performance

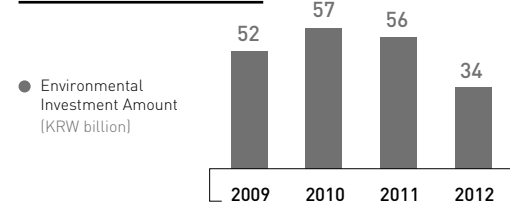
Production



Unit: ton

Category	2009	2010	2011	2012
Korea	11,472,189	11,647,146	12,401,297	13,090,003
China	1,470,850	1,609,089	1,628,383	1,708,174

Environmental Investment

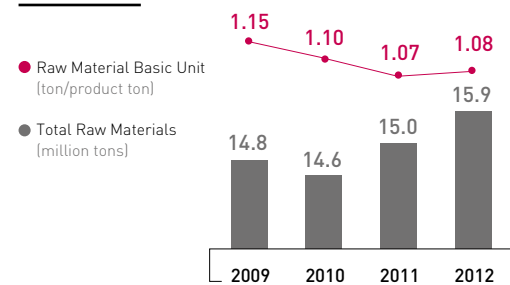


Unit: KRW billion, RMB million

Category	2009	2010	2011	2012
Korea	42	46	38	28
China	55	66	99	38

※ This data was applied to the term-end foreign exchange rate for the year in question.

Raw Material

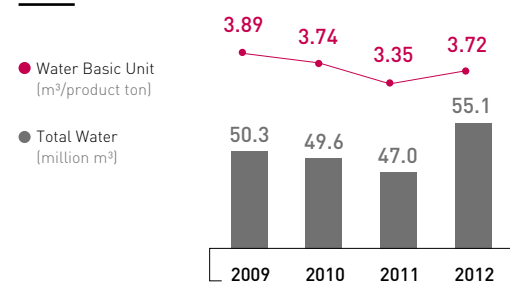


Unit: ton, ton / product ton

Category	2009	2010	2011	2012
Korea	Usage Amount	13,453,619	13,042,494	13,374,592
	Basic Unit	1.17	1.12	1.08
China	Usage Amount	1,368,899	1,552,349	1,662,835
	Basic Unit	0.93	0.96	1.02

※ Total amount of raw materials recycled at local workplaces in 2012 was 38,933 tons.

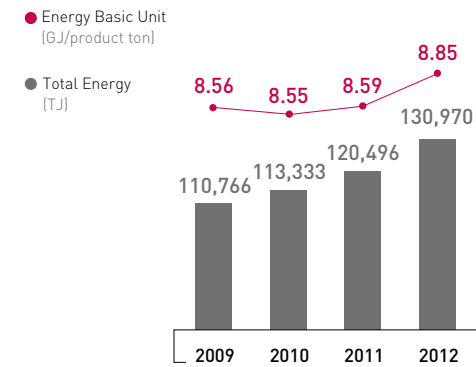
Water



Unit: m³, m³ / product ton

Category	2009	2010	2011	2012
Korea	Usage Amount	44,498,331	43,725,913	41,273,364
	Basic Unit	3.88	3.75	3.33
China	Usage Amount	5,806,647	5,894,665	5,743,645
	Basic Unit	3.95	3.66	3.53

Energy

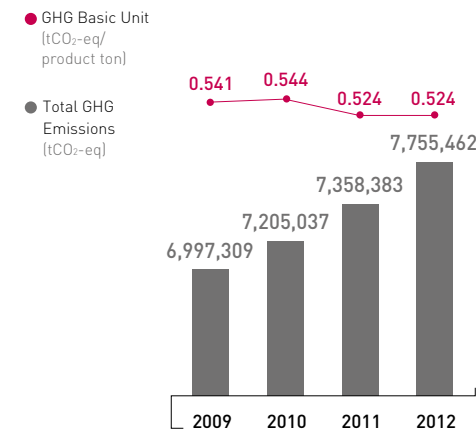


Unit: TJ, GJ / product ton

Category	2009	2010	2011	2012
Korea	Direct Energy	75,360	76,278	80,468
	Indirect Energy	28,617	29,796	32,111
	Subtotal	103,977	106,074	112,579
China	Basic Unit	9.06	9.11	9.08
	Direct Energy	1,508	1,436	1,460
	Indirect Energy	5,281	5,822	6,456
	Subtotal	6,789	7,259	7,917
Basic Unit	4.62	4.51	4.86	

※ For Korea, the data before 2012 was modified to abide by statement rules of Government.

GHG



Scope 1 and Scope 2

Unit: tCO₂-eq, tCO₂-eq / product ton

Category	2009	2010	2011	2012
Korea	Direct Emission Amount	4,025,161	4,138,003	4,132,748
	Indirect Emission Amount	1,568,880	1,583,525	1,697,467
	Subtotal	5,594,041	5,721,528	5,830,215
China	Basic Unit	0.488	0.491	0.470
	Direct Emission Amount	124,851	118,102	172,786
	Indirect Emission Amount	1,278,417	1,365,407	1,355,382
	Subtotal	1,403,268	1,483,509	1,528,168
Basic Unit	0.954	0.922	0.938	

※ For Korea, the data before 2012 was modified to abide by statement rules of Government.

Scope 3

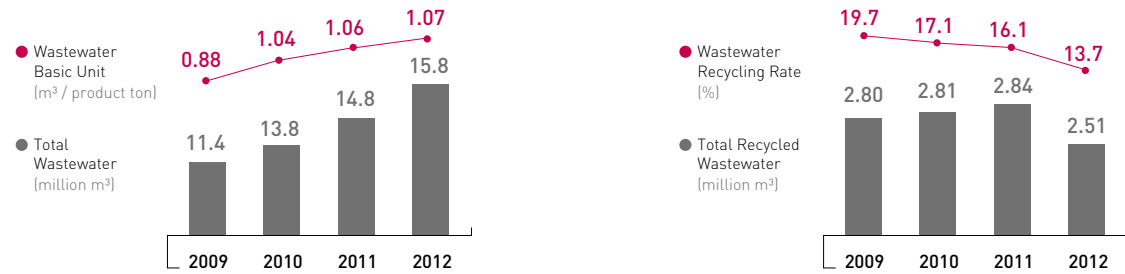
Unit: tCO₂-eq

Category	2009	2010	2011	2012
Power	26,621	30,277	33,141	29,360

※ Scope 3 emission amount data is collected only from Korean operation.

※ The WRI GHG protocol dictates that this belongs to "power purchased for resale to end customers".

Wastewater



Category		2009	2010	2011	2012
Korea	Emission Amount	8,220,158	10,271,949	11,508,574	12,286,422
	Emission Amount Basic unit	0.72	0.88	0.93	0.94
	Recycling Amount	1,713,391	1,651,870	1,504,299	1,069,140
	Recycling Rate	17.2	14.0	11.6	8.0
China	Emission Amount	3,174,017	3,513,434	3,324,691	3,505,509
	Emission Amount Basic Unit	2.16	2.18	2.04	2.05
	Recycling Amount	1,090,008	1,156,082	1,332,919	1,441,138
	Recycling Rate	25.6	24.8	28.6	29.1

Unit: m³, m³ / product ton, %

Water Pollutant

Category	2009		2010		2011		2012		
	Emission Amount	Basic Unit	Emission Amount	Basic Unit	Emission Amount	Basic Unit	Emission Amount	Basic Unit	
Korea	COD	476	0.041	512	0.044	563	0.045	565	0.043
	T-N	145	0.013	186	0.016	174	0.014	238	0.018
China	COD	200	0.136	168	0.105	202	0.124	219	0.128
	NH ₃ -N	61	0.042	39	0.024	28	0.017	13	0.008

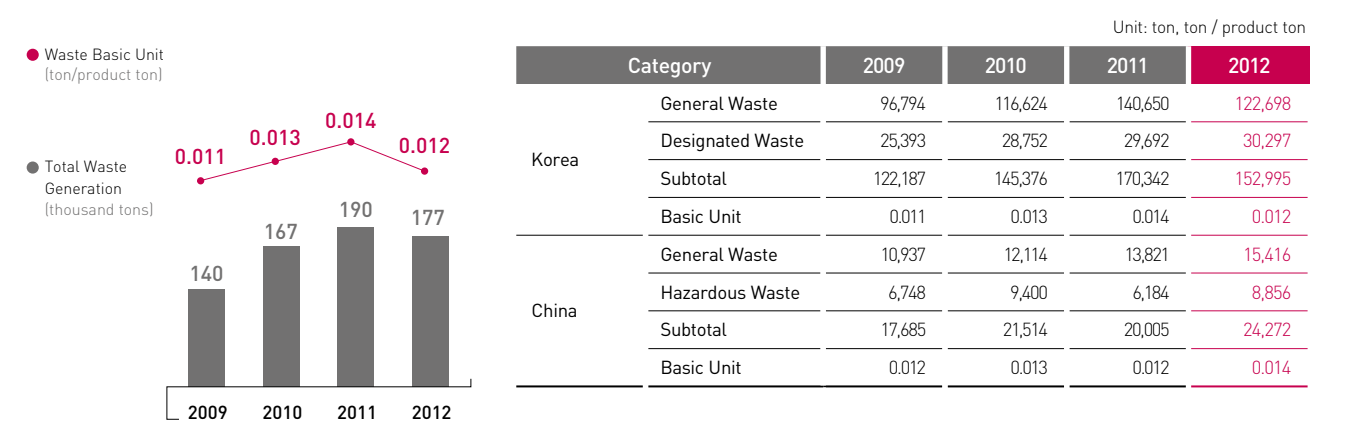
Unit: ton, kg / product ton

Air Pollutant

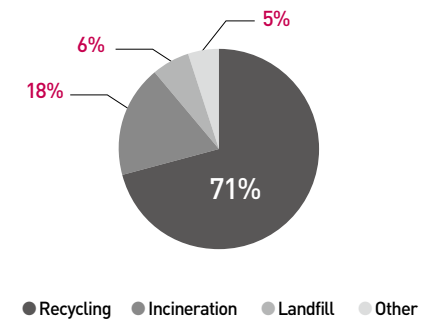
Category	2009		2010		2011		2012		
	Emission Amount	Basic Unit	Emission Amount	Basic Unit	Emission Amount	Basic Unit	Emission Amount	Basic Unit	
Korea	Dust	161	0.014	171	0.015	158	0.013	162	0.012
	NO _x	1,302	0.113	984	0.084	974	0.079	1,099	0.084
	SO _x	672	0.059	802	0.069	624	0.050	505	0.039
China	Dust	58	0.039	82	0.051	75	0.046	85	0.050
	NO _x	5	0.003	17	0.010	15	0.009	18	0.011
	SO _x	39	0.027	32	0.020	57	0.035	54	0.031

Unit: ton, kg / product ton

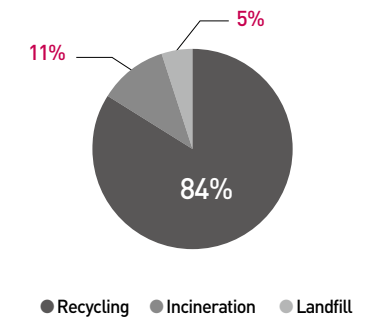
Waste



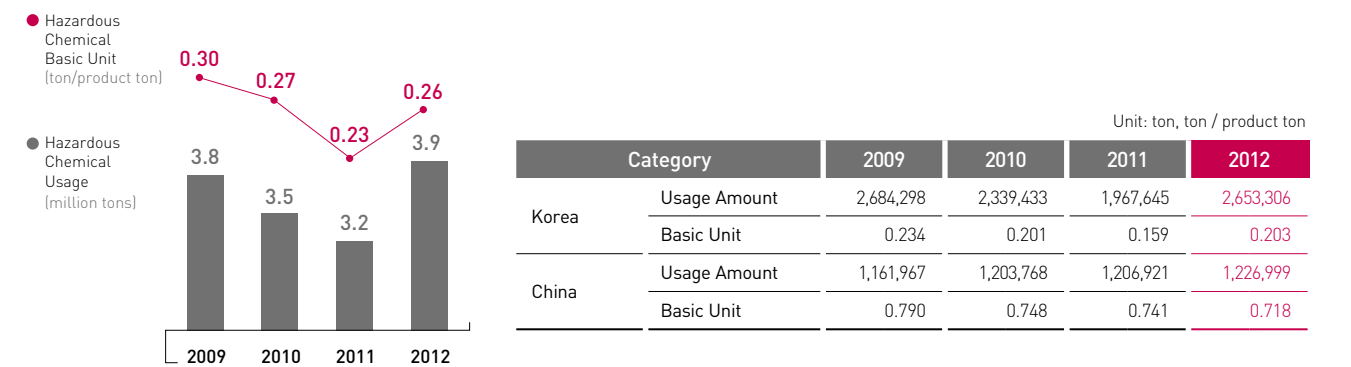
Waste Disposal in 2012 (Korea)



Waste Disposal in 2012 (China)

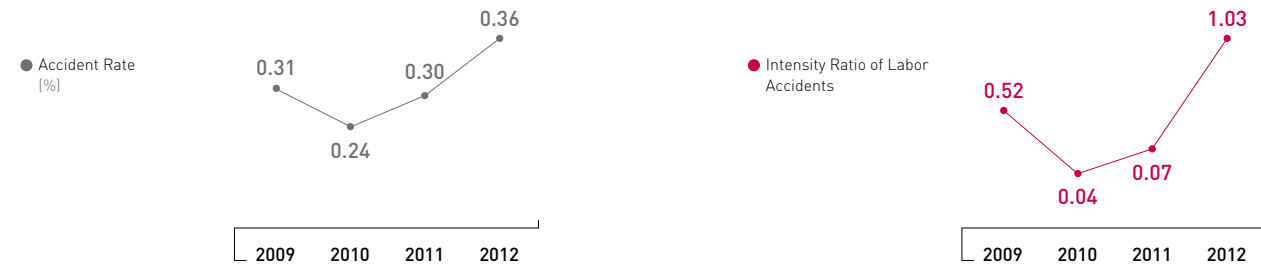


Hazardous Chemical



Safety

Accident Rate and Intensity Ratio of Labor Accidents



Category	2009	2010	2011	2012	
Korea	Accident Rate (%)	0.32	0.18	0.19	0.34
	Intensity Ratio of Labor Accidents	0.75	0.04	0.05	1.63
China	Accident Rate (%)	0.28	0.35	0.50	0.37
	Intensity Ratio of Labor Accidents	0.05	0.05	0.11	0.07

* Intensity ratio of labor accidents = lost labor days / total labor hours x 1000

Employment

Employment by Age and Sex

Unit: person

Category	2009		2010		2011		2012		
	Male	Female	Male	Female	Male	Female	Male	Female	
Korea	50 and older	763	3	926	4	1,084	2	1,300	2
	40 - 49	2,539	15	2,647	19	2,798	26	2,900	33
	30 - 39	3,395	287	3,429	337	3,532	413	3,738	483
	Younger than 30	900	435	1,507	504	2,387	533	2,724	557
China	50 and older	15	1	14	1	18	1	21	1
	40 - 49	103	19	132	25	157	20	178	22
	30 - 39	522	162	629	323	779	516	839	543
	Younger than 30	1,909	1,748	2,209	2,130	2,430	2,358	2,958	2,565

New Employment and Retirement

Unit: person

Category	2009		2010		2011		2012		
	Male	Female	Male	Female	Male	Female	Male	Female	
Korea	New Hire	526	65	1,162	169	1,559	163	1,136	167
	Retired	142	35	250	45	266	54	275	66
China	New Hire	814	823	1,347	1,558	1,827	2,475	2,171	2,049
	Retired	512	438	911	999	1,439	2,047	1,553	1,818

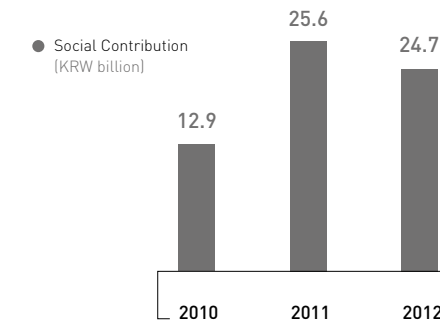
Maternity Leave

Unit: person

Category	2009	2010	2011	2012
Korea	86	114	132	146
China	198	215	228	317

* In 2012, the number of people whose maternity leave was finished is 47 and 43 persons returned to work. (Korean case)

Social Contribution



Social Contribution

Unit: KRW billion, RMB million

Category	2010	2011	2012
Korea	12.2	25.2	24.5
China	3.9	2.0	1.2

* This data was applied to the term-end foreign exchange rate for the year in question.

Membership of Organizations and Associations

<p>Korea Business Council for Sustainable Development (KBCSD)</p>	<ul style="list-style-type: none"> • Drive sustainable development at a global level • Build partnership with WBCSD
<p>Business Ethics and Sustainability Management for Top Performance</p>	<ul style="list-style-type: none"> • A multilateral forum for disseminating ethical management practices and corporate culture • Launched by the Institute for Policy Studies (IPS) • Exchange of ethical management practices and information
<p>Korea Association of Green Companies</p>	<ul style="list-style-type: none"> • A group of companies designated as Green Company • Promote environmental management through seminars and workshops • Yeosu, Cheongju, Ochang, Ulsan, Naju and Iksan plants
<p>Other Industry Associations</p>	<ul style="list-style-type: none"> • Korea Petrochemical Industry Association, Korea Chemical Industry Council, Korea Chemicals Management Association, Korea Vinyl Environment Council, Korea Smart Grid Association, International Federation of Automotive Engineering Societies, Fair Competition Federation, Korea Industrial Technology Association

Awards Received

<p>Enlisted in DJSI Asia-Pacific and DJSI Korea for the 4th consecutive year</p>	<p>Selected as The Best Company in the Domestic Chemical Industry by DJSI for the 2nd consecutive year</p>
<p>Recognized as The 100 Best Workplaces in Korea for the 5th consecutive year</p>	<p>Recognized as A Great Place to Work in Poland, the first for a Korean company</p>
<p>Bestowed The HRD Management Award and Best CHO Award from the Korea HRD Association and the Human Resources Development Service of Korea</p>	<p>Recognized as The number one company for the petrochemical industry at the 2012 Sustainability Contest in Korea organized by the Korean Standards Association</p>
<p>Bestowed with a Recognition Plaque for being The Best Company to Respond to Climate Change from the Ministry of Knowledge and Economy</p>	<p>Awarded the Greenest Company Award for Best Chemical Manufacturer</p>
<p>CFO Sukjeh Cho, awarded The Best CFO Award in the individual category at the first IFRS Financial Information Awards</p>	<p>Executive Vice President and Research Park Leader, Jin-Nyoung Yoo, awarded with the honor of Gold Tower Order Industrial Service Merit in the 47th Anniversary of Inventors' Day</p>
<p>Executive Vice President and Research Park Leader, Jin-Nyoung Yoo, recognized as The 2012 Technology Manager by Korea Industrial Technology Association</p>	<p>Awarded The IR52 Jang Young-sil Award by Industrial Technology Association</p>
<p>FPR for 3D TV, recognized as The Display Component of the Year by US SID</p>	<p>Lithium Polymer Battery and Pack Technology for Hard Type HEVs, recognized as The Top 10 Green Energy Technology of 2012</p>

Independent Assurance Statement

To the Stakeholders of LG Chem

The Korea Productivity Center ("KPC") was requested and has been engaged by LG Chem to verify the content in this 2012 Sustainability Report (hereafter 'the Report') and we hereby present our assurance statement as follows:

Responsibility and Independence

The Report was prepared by LG Chem, who entitles full responsibility for the information, opinions and content. KPC holds responsibility which lies solely in providing a third party verification of the content in the Report. As an independent verifier, KPC was neither involved in the process of preparing the Report, nor in any conflicts of interest that may undermine our independence.

Verification Standards

The independent verification process was planned and performed in accordance with the AA1000 Assurance Standard 2008 (AA 1000AS 2008) according to type 1 and a moderate verification level. Inclusivity, materiality and responsiveness were checked in compliance with AA1000APS (2008). KPC also performed an independent verification of the process of preparing the Report in accordance with the Global Reporting Initiative (GRI) G3.1 guidelines.

Limitations

The assurance scope covered sustainability performance information during the period from January 1, 2012, to December 31, 2012, however, the scope of our procedures did not include providing verification and conclusions in relation to financial performance, certain environmental information (e.g. greenhouse gas emissions), and information linked with LG Chem's website. In addition, on-site verification was limited and conducted at the head office in Seoul, Republic of Korea. Therefore, KPC clearly states that any additional verification conducted in the future may issue varied results.

Methodology

We have carried out the following verification for the Report by:

1. Reviewing the reporting coverage and description on each GRI G3.1 index, verifying the requirements for the GRI Application Level A are met.
2. Verifying the compliance of the principles for the reporting content and quality in accordance with GRI G3.1 guidelines.
3. Implementing media research and benchmarking analysis to check the appropriateness of issue identification and description.
4. Comparing and analyzing the reporting content against other sources to check the suitability and errors in expression.
5. Conducting on-site verification at the head office in Seoul, Republic of Korea, to verify the source of major data and information through the internal process and system.

Findings and Conclusions

It is found that the Report reflects LG Chem's sustainability management activities and performance in a faithful and fair manner. It is also concluded that the Report's self-declared requirements for the GRI Application Level A have been met.

Inclusivity: Stakeholder Participation

LG Chem classifies stakeholders into 9 categories in terms of mutual influence and proximity: customers, employees, suppliers, NGOs, local communities, etc. Their input was accommodated through various communication channels. Checks are in place to guarantee that communication is enhanced among employees at multiple levels from discussions with the rank-and-file, on-site and at the labor bargaining table. The meetings are held to further advance mutual cooperation to ensure clear communication with customers via so-called solution partner activities which resolves customer issues; and, that a complaint system has been established to manage customer demands. Especially, it is worth pointing out that LG Chem invites additional stakeholders to comment on business activities and puts forth greater effort in paying attention to their ideas. The recommendation indicates that as the reporting coverage widens; the firm diversifies stakeholder representation and enhances pools to gather opinions from overseas subsidiaries by establishing regular communication channels so that opinions and management are integrated.

Materiality: Significant Issue Identification and Reporting

LG Chem identifies and reports on issues that are relevant to sustainability management by means of internal strategy, global initiatives, media research, and stakeholder dialogue. A materiality test was conducted in order to identify and prioritize 43 issues from two different perspectives of the viewpoint of the management and the stakeholders. Priorities were classified in order from 'Response to Climate Change', 'Sales Increase and Continuous Growth through New Business', and 'Health and Safety of Workers'. All issues are reflected equally on each page. Advisory meetings were held for the sole purpose of reviewing the 2012 materiality test and the meetings were a vital part of the process of writing the report. It is recommended that these activities are made regular and that they are expanded and improved so that materiality test results are organically linked with LG Chem's sustainability vision and strategy.

Responsiveness: Organizational Response to Issues

LG Chem draws and implements its sustainability principles, vision and strategy from LG Group's sustainability vision and value. The 2012 report subject matter consists of activities and achievements around 10 implementation strategies based on principles. In 2013, the CSR Secretariat was established directly under the stewardship of the CEO in the head office to manage all economic, environmental and societal issues comprehensively. These efforts reflect a strong determination to conduct exemplary sustainability management as a global player. It is recommended that key performance indicators (KPI) are set to monitor and diagnose sustainability management. We further recommend the CSR Secretariat will be tightly interlinked with ethical management, environment management and making social contributions along with alternative entities in order to provide an integrated sustainability system.

Recommendations

KPC highly values LG Chem's efforts and performance to improve sustainability. To ensure that LG Chem continues to improve publication of the Report and sustainability management, we have provided the following recommendations:

1. To systematically manage and enhance communication channels so that stakeholder opinions can be well incorporated, due to the growth of overseas businesses and naturally widen the scope of coverage in the report.
2. To manage diverse KPIs for sustainability management and incorporate them into the report. In particular, training time per capita, social contribution time per capita, green purchase, and similar indicators with those of competitors for comparison should be managed systematically.
3. To set up mid-long-term plans and goals based on the sustainability vision and strategy, and describe ways to improve issues that have fallen behind the targets and goals, with the end result of contributing to better sustainability management.



April, 2013
Hong Jin, Chairman
Korea Productivity Center

Dongsoo Kim
Head of Center

Kihwan Lee
Team Leader

Beomtaek Oh
Researcher

The Sustainable Management Center of the Korea Productivity Center is a verifier certified by AccountAbility, an institution that establishes global international standards, AA 1000, for stakeholder participation and verification, and qualified to conduct verification on an independent basis. In addition, the Verifying Committee consists of experts who have accumulated experience in consulting and verification on sustainable management and have completed specialized training.

GRI G3.1 Index

● Fully ◐ Partially ○ Not reported

Profile	Description	Reported	Page References
Strategy and Analysis			
1.1	Statement from CEO	●	2-3
1.2	Description of opportunities and challenges.	●	2-3
Organizational Profile			
2.1	Name of the organization.	●	8
2.2	Primary brands, products.	●	4-7
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	●	9
2.4	Location of organization's headquarters.	●	9
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	●	9
2.6	Nature of ownership and legal form.	●	12
2.7	Markets served.	●	4-7, 9
2.8	Scale of the reporting organization.	●	8
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	●	1, 12
2.10	Awards received in the reporting period.	●	73
Report Parameters			
3.1	Reporting period (e.g., fiscal / calendar year) for information provided.	●	1
3.2	Date of most recent previous report (if any).	●	1
3.3	Reporting cycle (annual, biennial, etc.)	●	1
3.4	Contact point for questions regarding the report or its contents.	●	1
3.5	Process for defining report content.	●	15-17
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers).	●	1
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope).	●	1
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and / or between organizations.	●	1
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report.	●	Refer to the pertinent information
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement.	●	Refer to the pertinent information
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	●	1
3.12	Table identifying the location of the Standard Disclosures in the report.	●	76-79
3.13	Policy and current practice with regard to seeking external assurance for the report.	●	1, 74-75
Governance, Commitments & Engagement			
4.1	Governance structure of the organization, including committees under the highest governance body.	●	12-13
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	●	12
4.3	For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and / or non-executive members.	●	12
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	●	12, 14, 54, Mechanism for reporting to the BOD will be developed in 2013
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives and the organization's performance.	●	Refer to Business Reports
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	●	12
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity.	●	12
4.8	Management principles	●	20, 22-23
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	●	12-13
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	●	12-13
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	●	20-21, 24-25
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	●	14, 72
4.13	Memberships in associations (such as industry associations) and / or national / international advocacy organizations in which the organization	●	72
4.14	List of stakeholder groups engaged by the organization.	●	14-15
4.15	Basis for identification and selection of stakeholders with whom to engage.	●	14
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	◐	14-15
4.17	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.	●	14-17

● Fully ◐ Partially ○ Not reported

DMA	Description	Reported	Page References
DMA EC	Economic performance	●	28-29
DMA EN	Environmental performance	●	23, 33, 36, 44-45
DMA LA	Labor practices and decent work performance	●	50-54
DMA HR	Human rights performance	●	50, 58
DMA SO	Society performance	●	59, 62
DMA PR	Product responsibility performance	●	36

● Fully ◐ Partially ○ Not reported

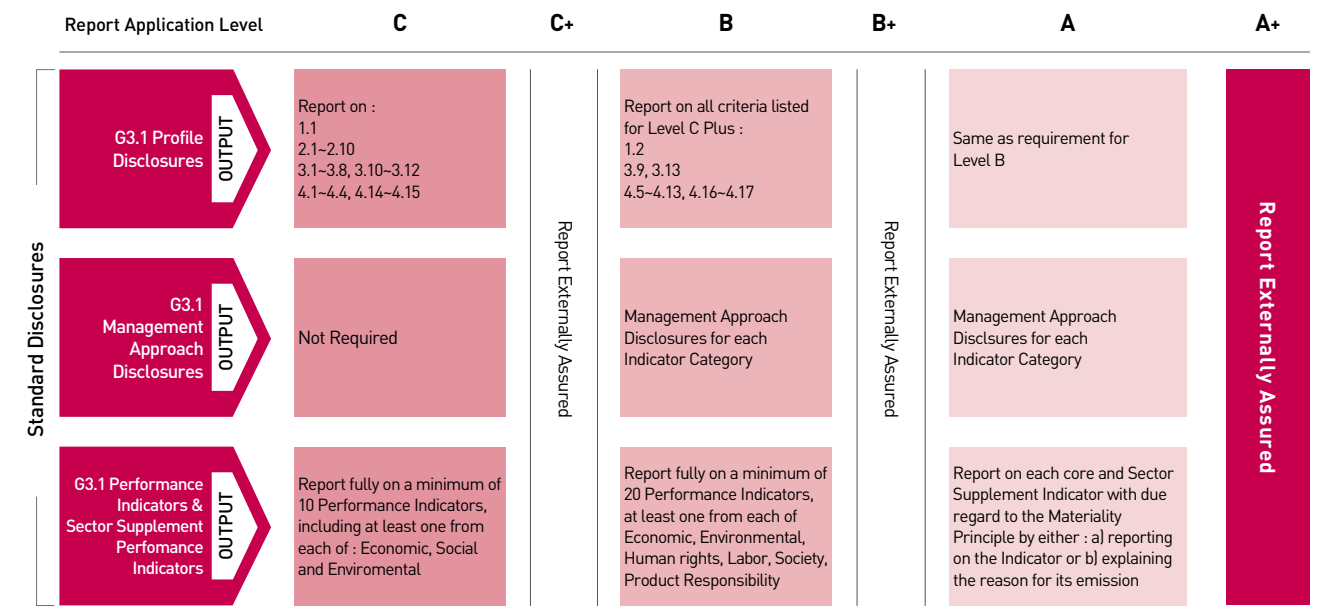
PI	Description	Reported	Page References
Economic Performance Indicators			
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	●	31, 65
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	●	41
EC3	Coverage of the organization's defined benefit plan obligations.	●	54
EC4	Significant financial assistance received from government.	●	31
EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.	●	50
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	●	65
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	●	48-49, 71
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	●	60-62
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	●	60-62
Environmental Performance Indicators			
EN1	Materials used by weight or volume.	●	66
EN2	Percentage of materials used that are recycled input materials.	●	66
EN3	Direct energy consumption by primary energy source.	●	67
EN4	Indirect energy consumption by primary source.	●	67
EN5	Energy saved due to conservation and efficiency improvements.	●	42-43
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	◐	4-7
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	◐	Refer to 57 page of the 2011 report
EN8	Total water withdrawal by source.	●	66
EN9	Water sources significantly affected by withdrawal of water.	●	There is no local source of water affected by water intake.
EN10	Percentage and total volume of water recycled and reused.	●	68
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	●	There is no workplace in a highly bio-diverse area.
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	○	This index is not important or relevant given the product features and locations of workplaces.
EN13	Habitats protected or restored.	●	No such case
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	●	Biodiversity is taken into consideration when making eco-friendly product designs.
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	○	
EN16	Total direct and indirect greenhouse gas emissions by weight.	●	67
EN17	Other relevant indirect greenhouse gas emissions by weight.	●	67
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	●	42-43
EN19	Emissions of ozone-depleting substances by weight.	○	This indicator is not important given the business characteristics.
EN20	NOx, SOx, and other significant air emissions by type and weight.	●	68
EN21	Total water discharge by quality and destination.	●	68
EN22	Total weight of waste by type and disposal method.	●	69
EN23	Total number and volume of significant spills.	●	No such case
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	●	N / A

● Fully ● Partially ○ Not reported

PI	Description	Reported	Page References
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	●	There is no water or habitat deeply affected by waste water.
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	●	36-39
EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	●	Wrapping materials generated are all recycled by recycling companies.
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	●	No such case
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	●	46-47
EN30	Total environmental protection expenditures and investments by type.	●	66
Labor Practices and Decent Work Performance Indicators			
LA1	Workforce status by employment type, employment contract and region.	●	48, 71
LA2	Employee hires and the rate by age, gender, and region.	●	71
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	●	54
LA4	Percentage of employees covered by collective bargaining agreements.	●	52
LA5	Minimum notice period (s) regarding significant operational changes, including whether it is specified in collective agreements.	●	52
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.	●	44, 53
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.	●	44
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	●	45-47, 54
LA9	Health and safety topics covered in formal agreements with trade unions.	●	53
LA10	Average hours of training per year per employee by employee category	●	51
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	●	51
LA12	Percentage of employees receiving regular performance and career development reviews.	●	50
LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	●	12, 48, 71
LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation.	●	50
LA15	Return to work and retention rates after parental leave, by gender	●	71
Human Rights Performance Indicators			
HR1	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.	●	22
HR2	Percentage of significant suppliers and contractors that have undergone human rights screening and actions taken.	●	58
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	●	For Korea, Jeong-do management related training time was 0.77 hours per person and 64% of all employees completed the course in 2012.
HR4	Total number of incidents of discrimination and actions taken.	●	No such case
HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights.	●	52, 58
HR6	Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.	●	50, 58
HR7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.	●	50, 58
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	○	
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	●	No such case
HR10	Percentage and total number of operations that have been subject to human rights reviews and / or impact assessments.	●	22, 44, 46-47, 52-53
HR11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms.	●	There was no complaint regarding human rights.
Society Performance Indicators			
S01	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.	●	59-62
S02	Percentage and total number of business units analyzed for risks related to corruption.	●	22
S03	Percentage of employees trained in organization's anti-corruption policies and procedures.	●	For Korea, Jeong-do management related training time was 0.77 hour per person and 64% of all employees completed the course in 2012.
S04	Actions taken in response to incidents of corruption.	●	No such case

● Fully ● Partially ○ Not reported

PI	Description	Reported	Page References
S05	Public policy positions and participation in public policy development and lobbying.	●	56
S06	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	●	No such case
S07	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	●	56, There was one violation of fair trade legislation
S08	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	●	There were 10 violations of industrial safety and health legislation.
S09	Operations with significant potential or actual negative impacts on local communities.	●	9, 71
S010	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.	●	25, 44-47
Product Responsibility Performance Indicators			
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	●	38
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	●	No such case
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	●	38-39
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	●	No such case
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	●	33,35
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	●	33,35
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	●	No such case
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	●	No such case
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	●	No such case



Declaration of GRI G3.1 Guideline Application Level

This report has been prepared in accordance with the GRI G3.1 Guideline and verified by a third-party institute to meet the level of 'A' in terms of its application of the guideline. LG Chem, therefore, declares that this report conforms to the 'A+' level of the GRI G3.1 Guideline application levels.

ISO 26000 Core Subjects

Core Subject	Issue	Description	Page
Organizational Governance	Decision-making processes and structures	An organization's decision-making processes and structures should enable it to keep track of the implementation of decisions to ensure that these decisions are followed in a socially responsible way and to determine accountability for the results of the organization's decisions and activities	20-25
		Create and nurture an environment and culture in which the principles of social responsibility are practised	20-25
		Use financial, natural and human resources efficiently	31, 48-51, 66-69
		Balance the level of authority, responsibility and capacity of people who make decisions on behalf of the organization	12-13
		Keep track of the implementation of decisions	12-13
Human Rights	Due diligence	Exercise due diligence to identify, prevent and address actual or potential human rights impacts resulting from their activities or the activities of those with which they have relationships	22
	Human rights risk situations	Organizations should take particular care when dealing with situations characterized above. These situations may require an enhanced process of due diligence to ensure respect for human rights	22
	Avoidance of complicity	Verify that its security arrangements respect human rights and are consistent with international norms and standards for law enforcement	not material
		Security personnel should be adequately trained, including in adherence to standards of human rights	not material
	Resolving grievances	Not enter into a formal or informal partnership or contractual relationship with a partner that commits human rights abuses	58
		Establish, or otherwise ensure the availability of, remedy mechanisms	54
	Discrimination and vulnerable groups	Ensure that it does not discriminate against anyone else with whom it has any contact or on whom it can have an impact	50
		Consider facilitating the raising of awareness of their rights among members of vulnerable groups	50
	Civil & political rights	Respect all individual civil and political rights	48-55
	Economic, social & cultural rights	Respect these rights of stakeholders	48-55
	Fundamental principles and rights at work	Ensure that it addresses freedom of association and collective bargaining, forced labour, and child labour	50
		Ensure equal opportunities and non-discrimination	48-51, 54
	Employment and employment relationships	Ensure equal opportunities for all workers and not discriminate either directly or indirectly in any labour practice	50
Conditions of work and social protection	Provide wages and other forms of remuneration in accordance with national laws, regulations or collective agreements	50, 52-53	
	Provide decent conditions of work with regard to wages, hours of work, weekly rest, holidays, health and safety, maternity protection and ability to combine work with family responsibilities	54	
Social dialogue	Recognize the importance for organizations of social dialogue institutions, including at the international level, and applicable collective bargaining structures	52-53	
	Develop, implement and maintain an occupational health and safety policy	44	
	Analyse and control the health and safety risks involved in its activities	24-25	
	Communicate the requirement that workers should follow all safe practices and ensure that workers follow the proper procedures	45	
	Provide the safety equipment needed, for the prevention of occupational injuries, diseases and accidents, as well as for dealing with emergencies	45	
Health and safety at work	Record and investigate all health and safety incidents and problems	44-45	
	Provide adequate training to all personnel on all relevant matters	45	
	Human development and training in the workplace	Provide all workers with access to skills development, training and apprenticeships, and opportunities for career advancement, on an equal and non-discriminatory basis	51
The environment	Prevention of pollution	Identify the aspects and impacts of its decisions and activities on the surrounding environment	44
		Identify the sources of pollution and waste related to its activities	44, 68-69
		Measure, record and report on its significant sources of pollution and reduction of pollution, water consumption, waste generation and energy consumption	66-69
		Implement measures aimed at preventing pollution and waste, using the waste management hierarchy, and ensuring proper management of unavoidable pollution and waste	44, 46
		Disclose the amounts and types of relevant and significant toxic and hazardous materials used and released, including the known human health and environmental risks of these materials for normal operations as well as accidental releases	69
		Identify and avoid the use of banned chemicals defined by national law or of unwanted chemicals listed in international conventions	38-39
		Implement an environmental accident prevention and preparedness programme and prepare an emergency plan covering accidents and incidents both on- and off-site and involving workers, partners, authorities, local communities and other relevant stakeholders	25, 45

Core Subject	Issue	Description	Page
The environment	Sustainable resource use	Identify the sources of energy, water and other resources used, and measure, record and report on its significant uses of energy, water and other resources	66
		Implement resource efficiency measures to reduce its use of energy, water and other resources	40-43, 46
		Reuse water as much as possible, manage water resources to ensure fair access for all users within a watershed	68
	Climate change mitigation and adaptation	Identify the sources of direct and indirect accumulated GHG emissions and measure, record and report on its significant GHG emissions	67
		Implement optimized measures to progressively reduce and minimize the direct and indirect GHG emissions	40-43
		Review the quantity and type of significant fuels usage within the organization and implement programmes to improve efficiency and effectiveness	40-43
		Consider future global and local climate projections to identify risks and integrate climate change adaptation into its decision making	40-43
	Protection of the environment, biodiversity and restoration of natural habitats	Identify potential adverse impacts on biodiversity and ecosystem services and take measures to eliminate or minimize these impacts	Low relevance
		Consider that wild animals and their habitats are part of our natural ecosystems and should therefore be valued and protected and their welfare taken into account	Low relevance
	Fair operating practices	Anti-corruption	Identify the risks of corruption and implement and maintain policies and practices that counter corruption and extortion
Ensure its leadership sets an example for anti-corruption and provides commitment, encouragement and oversight for implementation of the anti-corruption policies			22
Raise the awareness of its employees, representatives, contractors and suppliers about corruption and how to counter		22, 58	
Encourage its employees, partners, representatives and suppliers to report violations of the organization's policies and unethical and unfair treatment by adopting mechanisms that enable reporting		22	
Responsible political involvement		Organizations can support public political processes and encourage the development of public policy that benefits society at large	not material
Fair competition	Conduct its activities in a manner consistent with competition laws and regulations	56	
	Establish procedures and other safeguards to prevent engaging in or being complicit in anti-competitive behavior	56	
Promoting social responsibility in the value chain	Promote employee awareness of the importance of compliance with competition legislation and fair competition	56	
	Carry out appropriate due diligence and monitoring of the organizations with which it has relationships, with a view to preventing compromise of the organization's commitments to social responsibility	37, 57-58	
Respect for property rights	Consider providing support to SMOs, including awareness raising on issues of social responsibility and best practice and additional assistance	58	
	Not engage in activities that violate property rights, including misuse of a dominant position, counterfeiting and piracy	35	
Consumer issues	Fair marketing, factual and unbiased information and fair contractual	Openly disclose total prices and taxes, terms and conditions of the products and services	33, 56
		Take actions to provide products and services that are safe and convey vital safety information	36-39
	Protecting consumers' health and safety	Minimize risks in the design of products	37-38
		Adopt measures that prevent products from becoming unsafe through improper handling or storage while in the care of consumers	Low relevance
	Sustainable consumption	Offer consumers socially and environmentally beneficial products and services considering the full life cycle	38
		Review complaints and improve practices in response to complaints	35
	Consumer service, support, and complaint and dispute resolution	Make it a rule to respond to complaints as soon as possible	35
		Get product-liability insurance to effectively respond to customers in case of loss	35
	Consumer data protection and privacy	Protect personal data by adequate security safeguards	Low relevance
	Access to essential services	Essential services should not disconnect essential services for non-payment without providing the consumer or group of consumers with the opportunity to seek reasonable time to make the payment	Low relevance
Education and awareness	In educating consumers, an organization, when appropriate, should address health and safety, including product hazards, and product and service labelling and information provided in manuals and instructions	33-34	
Community involvement and development	Community involvement	Encourage and support people to be volunteers for community service	59-62
	Education and culture	Promote learning opportunities for vulnerable or discriminated groups	60-62
	Employment creation and skills	Analyse the impact of its investment decisions on employment creation and, where economically viable, make direct investments that alleviate poverty through employment creation	48, 71
	Technology development and access	Consider engaging in partnerships with organizations, such as universities or research laboratories, to enhance scientific and technological development	32
	Wealth and income creation	Consider the economic and social impact of entering or leaving a community	25, 44-47
Social investment	Fulfill its tax responsibilities	65	
	Health	Seek to eliminate negative health impacts of any production process, product or service provided by the organization	36-39
	Social investment	Consider partnering with other organizations, including government, business or NGOs to maximize synergies and make use of complementary resources, knowledge and skills	58, 74

EICC Checklist

Category	Description	Page	
CB-Basic Company	CB1-Customer Designation	Information on whether a company manufactures products or produces consumer goods	4-7
	CB2-Company Contact Information	Company name, mailing address and contact name	1
	CB3-Supplier Company Principal business type 1 Characteristics	Principal business type	4-7
		Company ownership structure	12
		Total number of employees	48
		Annual sales revenue	30
	Countries where the company has operating and manufacturing facilities	9	
CL-Labor Management and Ethical Conduct	CL1-Management Accountability for Labor & Ethics	Management representative	12, 22, 52
		Relevant awards received	75
		Membership in relevant organizations	74
	CL2-Labor and Ethics Policy & Procedures	Establishment and application of labor policy / ethics policy, sharing of the policy within organization, the scope of the policy, application of the policy to the suppliers	22, 50
		A management systems approach for labor	48-55
		A management systems approach for ethics	22, 25
		Labor and ethics management certification	44
	CL3-Labor / Ethics Management System Status	Freely chosen employment, child labor avoidance, working hours, wages and benefits, humane treatment, non-discrimination, freedom of association	50, 52
		Business integrity, no improper advantage, transparent disclosure of information, fair business practices, protection of identity	22
		Establishment of a system to ensure continuous improvement in labor and ethics management	48-55
CL4-Labor / Ethics Management System Elements	A tracking system for monitoring relevant practices	25, 44, 56	
	Performance objectives for labor / ethics issues, internal audits and assessments, preventive measures and stakeholder communication	22, 25, 44-47, 52-53, 56	
CH-Health, Safety and Environmental Management	CH1-Management Accountability and History for HS&E	Management representative	44
		Relevant awards received	75
		Relevant incidents occurred	70, 77-78
	CH2-Health, Safety and Environmental (HS&E) Policy and Procedures	Establishment and application of a HS&E policy, sharing of the policy within organization, the scope of the policy, application of the policy to the suppliers	36, 44
		HS&E management system certification	44
	CH3-HS&E Management System Status	A management system approach for HS&E	36-39, 44-45
		The scope and the level of application of HS&E management	44-45
		A tracking system for monitoring relevant regulations	38-39, 44-45
	CH4-HS&E Management System Elements	Performance objectives for HS&E issues, internal audits and assessments, preventive actions and stakeholder communication	25, 45-47
FB-Basic Facility Information	FB1-Customer Designation	Equivalent to CB1-CB3	1, 4-7, 9, 12, 30, 48
	FB2-Supplier Facility Contact Information	Equivalent to CB 3	4-7, 9, 12, 30, 48
	FB3-Supplier Facility Characteristics	Equivalent to CB3	4-7, 9, 12, 30, 48
FL-Labor Management and Ethical Conduct	FL1-Facility Contact Information for Labor and Ethics	Equivalent to CB2	1
	FL2-Management Accountability and History	Management representative	2-3
		Violations and corrective actions taken	79
		Relevant policies and their scope	22, 50
	FL3-Labor and Ethics Policy & Procedures	Employment of temporary contract workers	Not material
		Application to suppliers	58
Community assistance programs, supporting education		59-62	
FL4-Freely Chosen Employment	Systematic procedures for foreign workers and retirement	48-49	

Category	Description	Page		
FL-Labor Management and Ethical Conduct	FL5-Child Labor Avoidance	Regulations, procedures and information management regarding child labor avoidance	50	
	FL6-Working Hours	Compliance with a legal limit on working hours	50	
	FL7-Wages and Benefits	An appropriate level of wage payment and welfare benefits	50, 54	
	FL8-Humane Treatment	Prevention of harassment, coercion, threatening behavior and abuse against workers	50	
	FL9-Non-Discrimination	Ensuring and applying anti-discrimination 60	50	
	FL10-Freedom of Association	Ensuring workers to create or join labor organizations	50, 52-53	
	FL11-Ethical Business Practices	Ensuring prevention of bribery / corruption, promoting fair trade	22, 56	
	FL12-Facility Labor / Ethics Management System Status	Relevant certification and continuous improvement procedures	22, 52	
	FL13-Labor / Ethics Management System Elements	Equivalent to CL4	22, 25, 44-47, 52-53, 56	
	FH-Health, Safety and Environmental Management	FH1-Facility Contact Information for HS&E	Equivalent to CB1-CB3	1, 4-7, 9, 12, 30, 48
		FH2-Management Accountability and History for HS&E	Equivalent to CH1	44, 70, 75, 77-78
		FH3-Health, Safety and Environmental (HS&E) Policy & Procedures	Equivalent to CH2	36, 44
FH4-Occupational Safety and Machine Safeguarding		Preventive measures to prepare for possible safety hazards in the production process	46-47	
FH5-Emergency Preparedness		Prevention and response programs for emergency situations	25, 44-47	
FH6-Occupational Injury / Illness and Physically Demanding Work		Assistance for preventing occupational injuries and illnesses, including insurance coverage	44, 54	
FH7-Industrial Hygiene		Chemical materials management and worker safety	25, 44-45, 47	
FH8-Living Conditions		Welfare benefits and supportive facilities for workers	54	
FH9-Environmental Permits		Responding to government requirements for environmental permits	44-47	
FH10-Pollution Prevention		Pollution and waste management and reduction efforts, energy management	44, 68-69	
FH11-Hazardous Substances		Safety management when handling hazardous substances	25, 44-45, 47	
FH12-Wastewater & Solid Waste		Wastewater management and waste treatment	44, 68-69	
FH13-Airborne Emissions		Programs for managing airborne emissions and reducing greenhouse gases	40-43, 44, 68	
FH14-Product Content		Effort for improving environmental performance of products and eliminating hazardous materials from products	36-39	
FH15-Facility HS&E Management System Status		Equivalent to CH2	36, 44	
FH16- HS&E Management System Elements	Equivalent to CH4	25, 38-39, 44-47		

※ Electronic Industry Code of Conduct (EICC): A code of conduct applied to the electronics industry, with an aim to build a safer workplace, promote dignity of the workers and induce environmentally sustainable business practices across the supply chain. An identical set of checklists are applied to not only the electronics industry, but also upstream chemical and materials companies to demand soundness in labor, ethics and environmental practices of the businesses.

※ C: Company level, F: Facility level

Glossary

Term	Description
CP (Compliance Program)	LG Chem's internal system to ensure organizational compliance with fair trade laws. The program takes a proactive approach to prevent legal violation by administering employee training on conduct guidelines and relevant laws and regulations, while detecting and redressing problems early on with periodic internal audits
Basic petrochemicals	Chemicals, such as ethylene, propylene, benzene and toluene, derived from petroleum or natural gas and used to produce synthetic resin, synthetic fiber and synthetic rubber
Greenhouse Gas · Energy Target Management System	An agreement in which organizations are set targets for reducing energy consumption by the government
Cartel	An agreement amongst competing firms where a business operator, resorting to contract, agreement, resolution or any other methods, consents with other operators to conduct an unfair act that limits competition, or referring to an act of forcing other business operators to engage in unfair practices to limit competition
ABS	Thermoplastic resins formed from three types of monomers-Acrylonitrile, Butadiene, and Styrene
BD (Butadiene)	A raw material for synthetic rubber
CDM (Clean Development Mechanism)	One of the flexibility mechanisms defined in the Kyoto Protocol that allows industrialized countries to meet part of their caps using certified emission reductions from CDM emission reduction projects in developing countries
CHARMs (Chemical Assurance and Regulation Management System)	Chemical assurance and regulation management system in LG Chem, which is based on ERP
CNT (Carbon Nanotube)	Carbon Nanotubes in the shape of a tube with 6 carbon hexagons. A new material that can be used in memory devices, hydrogen storage, hydrogen battery electrodes
COD (Chemical Oxygen Demand)	In environmental chemistry, the chemical oxygen demand (COD) test is commonly used to indirectly measure the amount of organic compounds in water
DJSI (Dow Jones Sustainability Index)	Index for sustainability on companies at the top capitalization list, developed by Dow Jones and SAM
ERP (Enterprise Resource Planning)	A total information system, designed to ensure efficient management of all human and physical resources in the enterprise used for business activities, with an aim to reinforce business competitiveness
GMI (Global Market Intelligence)	An in-house system that displays information and relevant reports regarding overseas markets, with an aim to support decision making of the management through delivering market / customer information in a timely manner
Golden Collar Incentive	Incentives paid to core talents considering their market value
HEV (Hybrid Electric Vehicle)	A type of hybrid vehicle and electric vehicle which combines a conventional internal combustion engine (ICE) propulsion system with an electric propulsion system
HPI (High Potential Individual)	HPI refers to a system for identifying and nurturing individuals with potential to grow as next generation business leaders. The top 5% of desk job workers are selected, trained, and given reached goal as well as managed for their career growth. As a key talent development system, HPI is linked to succession plans and utilized as a pool for key successor candidates
IFRS (International Financial Reporting Standards)	International Financial Reporting Standards
ISO 14001	International standards for environmental management system, developed by International Organization for Standardization (ISO)
ISO 26000	Guidelines on CSR for institutions including corporations, established by the ISO
KOSHA 18001	These are the rules for certification for safety and health management system. KOSHA 18001 was developed by the Korea Occupational Safety and Health Agency (KOSHA), building on UK's BS8800 for safety and health management system and Europe's OHSAS 18001 for occupational safety and health management certification as a foundation
KRI (Key Risk Indicator)	An indicator showing probability and exposure level to a risk

Term	Description
LCA (Life Cycle Assessment)	A technique for assessing environmental performance of a product-by quantifying the amount of energy and materials consumed and emitted from the lifecycle of a product (including the raw material, manufacture, use and disposal phases) to evaluate their impact on the environment and seek ways to improve the environment
LDAR (Leak Detection and Repair)	A program for improving the working environment of every process and for effectively reducing source of hazardous chemical materials by regularly monitoring all sources of arsenic acid such as pipes and valves with a monitoring system and detecting and repairing inventory in need of repair
LTO (Lithium Titanate Oxide)	Lithium titanate oxide negative electrodes replace those secondary batteries which use a negative electrode made of graphite to lengthen the use period
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 impact
NCC (Naphtha Cracking Center)	Naphtha Cracking Center is the plant with facilities for pyrolyzing naphtha to produce petrochemical feedstocks like ethylene and propylene
OHSAS 18001	A set of standards established for systematically introducing workplace safety and a health management system, comprising relevant audit standards and guidelines
OLED (Organic Light Emitting Diodes)	A light-emitting diode (LED) in which the emissive electroluminescent layer is a film of organic compounds which emit light in response to an electric current
On-Spot Incentive	Incentives given on-spot when individuals achieve their performance targets, in the range of 50-500% of their base pay
PSM (Process Safety Management)	A process is any activity or combination of activities to prevent serious industrial accident caused by the use, storage, manufacturing, handling or the on-site movement of highly hazardous chemicals such as leakage, fire and explosion which likely do damage to workers or neighboring communities.
PVC (Polyvinyl Chloride)	Polyvinyl chloride is a polymer created from the alkene monomer vinyl chloride (CH ₂ =CHCl)
RC (Responsible Care)	The attitude of shouldering corporate responsibility for concerns of the local community. Proactive activities that improve the environment, health and safety.
REACH (Registration, Evaluation, Authorization and Restriction of Chemicals)	A new system for gathering information, assessing the risks of chemicals to human health and the environment, and authorizes or restricts the marketing and use of chemicals produced or supplied in the EU Member States
RoHS (Restriction of Hazardous Substances Directive)	A set of criteria formulated by the European Union (EU) to regulate the use of toxic materials in electrical and electronic devices, systems, and toys
SAP (Super Absorbent Polymer)	A super Absorbent Polymer high molecule material which absorbs an amount of pure water that is a few hundred times heavier than its own weight
SSBR (Solution Styrene Butadiene Rubber)	Next generation solid rubber for eco-friendly tires
Stack & Folding Technology	LG Chem's patented battery technology which aligns and stacks Bi-Cells made with severed parts of LFP, membrane and negative electrodes according to product design
Stepped Battery	Stepped battery consisting of differently sized Bi-Cells to maximize the use of inner space within smart devices
TFT-LCD (thin film transistor liquid crystal display)	A variant of liquid crystal display (LCD) which uses thin-film transistor (TFT) technology to improve image quality. TFT LCDs are used in television sets, computer monitors, mobile phones, handheld video game systems, personal digital assistants, navigation systems, projectors, etc.
WLB (Work & Life Balance)	Reference to a balance between work and life. A brand new welfare strategy that improves the quality of employees' lives by enhancing family friendly factors, diversifying the various methods of carrying out work, and supporting the self-development of employees
3D FPR (Film Patterned Retarder)	A technology in which a polarized film is placed on the 3D television screen that, along with the 3D glasses, separates the left and right images before they are delivered to the brain

The 10 Years of Publication of the Sustainability Report

Starting with the 2002 Environment Report, LG Chem has published a total of 4 environment reports and 7 sustainability reports. These reports serve as a solid testament to LG Chem's continuous efforts on behalf of sustainability management. We will not loosen our reins for a transparent disclosure of efforts and achievements regarding sustainability to stakeholders.

Environment Report

2002~2005



Sustainability Report

2006

LG Chem's first sustainability report classified report contents by each stakeholder and focused on reporting on their overall business activities and their results in connection with sustainability management.



2007

There were few differences in reporting coverage and contents between the 2006 and 2007 versions. However, the top-priority activities and achievements of LG Chem were highlighted and inputs of internal stakeholders (employees) were incorporated to complement the 2006 contents.



2008

To clarify success differently in the context of the economy, the environment and society, we decided that the table of contents and the structure of the content should use a TBL (Triple Bottom Line) framework. Also, a materiality test was conducted to incorporate the perspectives and opinions of stakeholders as much as possible. A summary version was published that only contained the core activities and performances.



2009

The report included information that outside institutions requested from LG Chem, such as DISI checklists, EICC checklists, SRI checklists of KRX and an ecological performance evaluation item of financial institution.



2010

The report incorporated and reviewed ISO 26000, which was established in November, 2010. Next-generation growth engines of LG Chem were emphasized and the reporting coverage was broadened to additionally cover the Chinese subsidiaries (Nanjing, Yongxing and Dagū).



2011

Materiality tests identified critical issues thanks to the collection of ideas of more stakeholders. The report coverage was expanded to include Guangzhou and Bohai plants in addition to Nanjing, Yongxing and Dagū in the case of Chinese subsidiaries.



2012

The report was prepared according to LG Chem sustainability management strategy, boosting reliability and ease of understanding. Also, all Chinese subsidiaries were included in the reporting coverage, improving the thoroughness of the report. The process and result of the materiality test were subject to review by an advisory group and incorporated in the report.



Participant Information

Generals	Environment & Safety Team	In Park
	Environment & Safety Team	Jin HyeongCheol
	Environment & Safety Team	Jina Lee
Sustainability Management System	Ethics Office (Planning P)	Jong-pyo Kim
	Energy/Climate Change Team	BoyeonHur
	Planning & Coordination Team	Yong Jae Kim
	Accounting Management Team	Sungjoon Hwang
Sustainability Management Activities & Performance	Investor Relations Team	Yeon S Yang
	Legal Team (Overseas P)	Jung Ho Hyun
	Public Affairs Team	Yoojin Kim
	IT Planning Team (Information Security P)	JaeikBaek
	HR Planning Team	Moon Jong Min
	Global HR Team	Kwansu Kim
	Corporate Culture Team	JeongseokJi
	HR Development Team	Park Sung In
	HR Service Team	YooSoo Jang
	Employee Relations Team	Lee WoulSoung
	General Affairs Team	Chang Young Choi
	Planning Team. Petrochemicals	So Yeon Lee
	Strategic Planning Team. IT & E Materials	MyeongGeunKo
	Strategic Planning Team. Energy Solutions	Sun Lee
	Procurement Strategy Team (Planning P)	Jooyoung Park
	Public Affairs Team	Young Joon Lee
	Planning Team. Tech Center	Sally(Kyounga) Hur
	Strategic Planning Team	Sehyun Shin
	Environment & Safety Innovation P. Yeosu	Hun Chae
	Safety & Health Team. Cheongju	Kwanseob Yun
	Environment & Energy Team. Cheongju	KD Park
	Safety & Health Team. Ochang 1	Jinkyu Lee
	Environment & Energy Team. Ochang 1	Dongchang Woo
	Process Safety TFT. Ochang 1	Jeongsoo Lee
	Environment, Safety & Energy Team. Ochang 2	Junseop Park
	ESH Team(Environment & Safety P). Naju	KwangSeok Chung
	ESH P. EP. Iksan	KyongChul Kim
	Safety & Health Team. Daesan	Chungsik Kim
	Environment Team. Petrochemicals. Daesan	Young Sik Yun
	Maintenance/Environment & Safety P. Gimcheon	NamdooAhn
	Plasticizers Team. Acrylates/Plasticizers. Ulsan	Dongyeol Kwon
	Administration Team (ESH P).LCD Glass Substrate	Jang Hyuk Su
	Environment & Safety P. Research Park	Chang Seok Park
	Activities and Performances in Chinese subsidiaries	LGCCI. Staff Division. Business Coordination Department. Business Planning Team
LGCCI. Staff Division. Business Coordination Department. Business Planning Team		ErmanXu
LGCCI. Staff Division. Business Coordination Department. Business Planning Team		Lei Liu
LGCCI. Staff Division. Business Coordination Department. Business Planning Team		Shi Feng
LGCCI. Staff Division. Business Coordination Department. HR Team. Employee Relations		Zhenai Zhang
LGCCI. Staff Division. Business Coordination Department. HR Team. HR Management Part		Ye Zhou
LGCCI. Staff Division. Business Coordination Department. HR Development Team		Ying Duan
LGCCI. Staff Division. Business Coordination Department. HR Development Team		Hui Liu
LGCCI. Staff Division. Business Coordination Department		Jing Zhang
LG BOTIAN. Production Team. E&S Part		Sun Kun
LGCC GZ. Quality Management & Innovation Team. QI Part		Weitanlin
LGCC TJ. Production Team. Public Affair Part		Haipeng Liu
LGCE BJ. GA & ES Part		Xin Wei
LG DAGU. Plant. Production Team. Utility Part		Xili Yuan
LG BOHAI. Plant. Environment Part		Xingle Zhan
LG YX. Palnt. Environment & Safety Team. Environment Part		Jie Ying
LGCE NJ. Equipment & Environment Team. Environment Part		Xingxing Wang

This completes the 7th Sustainability Report of LG Chem. The 2012 Report focuses on capturing the sincerity of LG Chem's efforts to contribute to economic, environmental and social development and to grow alongside its stakeholders. So that the Report can perform its purpose, all workplaces in Korea and China are included in the reporting boundary. We have also handled the many levels of channels we use to communicate with stakeholders, to share the value of sustainability with our stakeholders. We have spared no efforts to actively seek out communication with our stakeholders and to incorporate their expectations and demands regarding their overall business activities into this sustainability report.



Eco-friendly papers and soy ink, certified by Forest Stewardship Council (FSC), were used to print this report.



LG Twin Towers, 20 Yeouido-dong, Yeongdeungpo-gu, Seoul, Korea
Tel: +82-2-3773-0705 Fax: +82-2-3773-7933
greener@lgchem.com