Being with nature

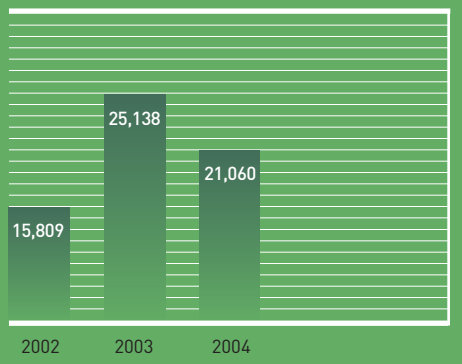
2005 RC REPORT

Environmental Report

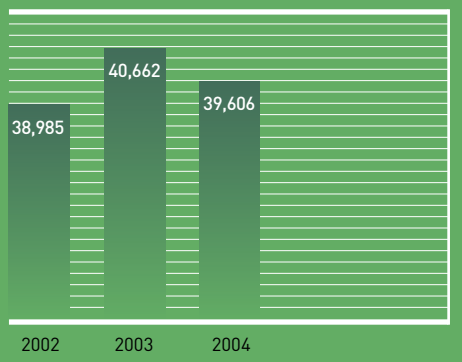
LG Chem

KEY DATA

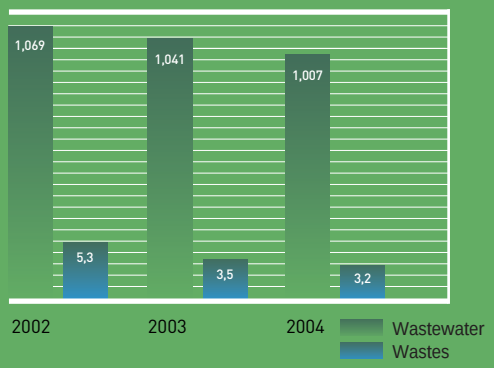
Annual Environmental Investment
Unit: Millions of Korean Won / year



Annual Environmental Costs
Unit: Millions of Korean Won / year



Basic Unit of Discharged Wastewater and Wastes
Unit: kg / product-ton



Additional Value from Energy Saving
Unit: Millions of Korean Won / TOE

2005

RC
REPORT

In Pursuit of Balance between Business and Nature

LG Chem is an outgrowth of nature.
Inspired by nature, we turn natural resources
into ideas and products
through an alchemy of science and passion.

As nature provides us business sustenance,
in return we protect nature with environmental management
that can bring balance in nature and business activities alike.

When it comes to achieving business success
and environmental preservation,
balance is what matters most.
Because from balance comes sustainability.

At LG Chem, nature is our best friend,
one who goes hand in hand wherever we go
and whatever we do.

LG Chem 2005 Responsible Care (RC) Report contains pictures of endangered species in Korea. We will do our utmost so we all can enjoy the sight of a flock of black swans gliding down a clean river where a school of spotted barbells splash.

Natural Reserves and Endangered Species

Habitats of animals and plants, natural marine and terrestrial features, minerals, as well as animals and plants considered to be rare and highly valuable in research, are designed and protected as natural reserves or endangered species. As of January 2005, 444 kinds of natural reserves and endangered species are being designated and protected in Korea.

Being with

contents

nature

Report Outline

Period & Scope

LG Chem has published its annual Responsible Care (RC) Report since 2003, focusing on the sustainable development of global environment through carrying out wholesome environment, safety, health, and energy management. The 2005 RC Report clarifies for customers, investors, non-government organizations (NGOs), and other stakeholders our business achievements relevant to environmental management for the period from January 1 to December 31, 2004. It includes a review of the operation of our nine domestic establishments: Yeosu, Cheongju, Ulsan, Onsan, Naju, Iksan, and Daesan Plants; Ochang Techno Park; and LG Chem Research Park in Daejeon. It excludes our overseas subsidiaries.

Guidelines

The 2005 RC Report is prepared prior to publishing a full-coverage sustainability report. In strict accordance with the guidelines of the Environmental Report 2004 of Korea's Ministry of Environment and the 2002 Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI), this report covers our business results centered on environmental management. It will be stepped up to the level of a sustainability report in coming years. Thus interested parties can see at a glance how our environmental, economic, and social activities are directed to facilitate future sustainability.

Public Notice

This report is printed in Korean, English, and Chinese, and posted at www.lgchem.com, also offering Korean, English, and Chinese versions.

Contact Point

For more inquiries about this report, feel free to call, mail, or e-mail us any time at the addresses. We welcome your input. Please fill in the questionnaire included in the Appendix and send it to us. Your opinions will be reflected in our next edition.

Address_ LG Chem Environment and Safety Team, LG Twin Tower, 20 Yeouido-dong, Yeongdeungpo-gu, Seoul 150-721, Korea
Tel_ 82-2-3773-7645, 7995
Fax_ 82-2-3773-7215
e-mail_ redglass@lgchem.com

Taking agile steps to secure sustainable development with long-term environmental and safety management in line with Responsible Care initiatives.

The chemical industry has provided the staples needed in our lives and a wide range of industries. Despite such contributions, the chemical industry is perceived by many in the public as the source of environmental contamination. Therefore, more systematic, active environmental and safety management has become an indispensable tool for chemical industries in building both their corporate strength and sustainability of the environment.

At LG Chem, environment, health, and safety (EHS) Management backed by Responsible Care initiatives has become an integral part in our entire operation. Anticipating it, measuring it, and managing it, we have solidified the EHS foundation that can balance both business activities and environmental preservation.

In particular, the Kyoto Protocol, an amendment to the United Nations Framework Convention on Climate Change (UNFCCC) which came into force on February 16, 2005, called on us to ratify the agreement in real practice. Accordingly, our Climate Change Convention Task Force Team reinforces activities to maximize the use of natural resources and minimize pollutant factors, in order not to cause any environmental risks. To further root out any pollutants from the source, we are continuously creating green product processing technologies and processing systems.

As for social contribution, we carry out various activities in an effort to bring hope to those in need. To promote the importance of chemistry and cultivate youth talented in chemical science, we offer intriguing chemical programs including the Mobile Chemistry Lab and Chemistry Camp.

This 2005 RC Report embodies our belief that environmental and social care should never be compromised for business reasons. Hoping this report helps you better understand our activities, we pledge to do our utmost in facilitating the sustainable development of people and nature. Thank you.

Ki-Ho No

President and CEO, LG Chem
May 2005

Fulfilling our responsibility through minimizing environmental risks while delivering eco-products and social contribution activities.

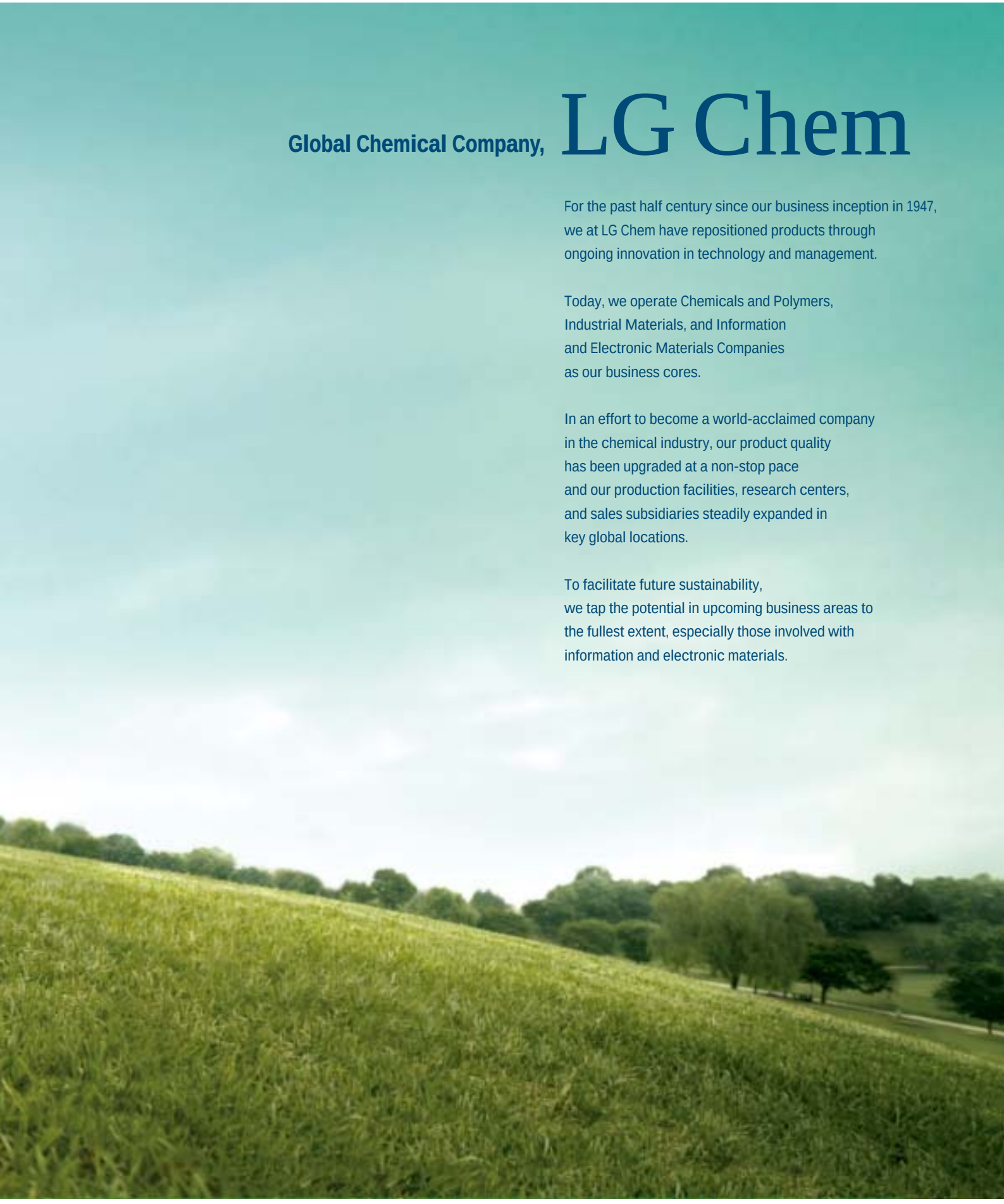
LG Chem envisages holding a global leading position through creating innovative technologies and solutions that can secure the safety of people and nature. Under this vision, we minimize environmental risks in our entire operation from production and distribution to disposal.

Our environment, health, and safety (EHS) management is incorporated with our Responsible Care initiatives. It has become one of our key strengths, allowing us to work through market fluctuations and keeping us on course for building long-term competitiveness. Our company-wide practices based on rigorous EHS Management resulted in the acquisition of ISO 14001, Process Safety Management (PSM), OHSAS 18001, and KOSHA 18001 certificates. Today, we step up the standards of EHS Management in line with the continued reduction of greenhouse gas emission, energy use, and environmental and safety risks inside and outside the Company. Our goal is to achieve our ultimate environmental objective, 「Pollutant Emission 'Zero'.」

At LG Chem, we have published the RC Report to inform customers, investors, the community, non-government organizations (NGOs), and other stakeholders about our business and environmental performance. The 2005 RC Report is prepared in accordance with the guidelines of the Environmental Report 2004 of Korea's Ministry of Environment. This report goes a step further than the Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI) made in 2002. We plan to upgrade this annual RC Report to a full-coverage sustainability report, and to reflect your valuable input in our upcoming edition. We look forward to your continued interest and support. Thank you.

Jong-Kee Yeo

Chairman of the RC Committee /
President and CTO, LG Chem
May 2005



Global Chemical Company, LG Chem

For the past half century since our business inception in 1947, we at LG Chem have repositioned products through ongoing innovation in technology and management.

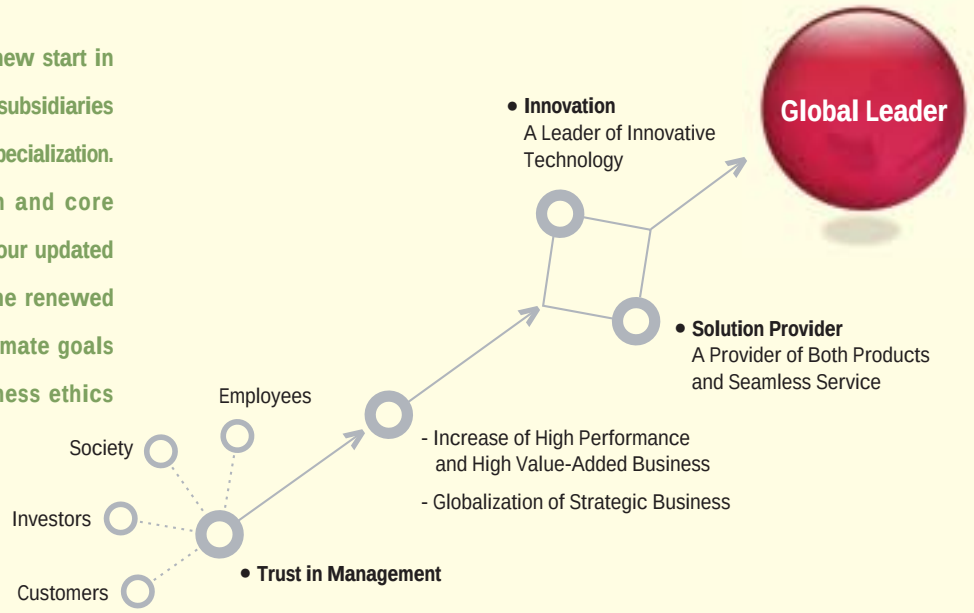
Today, we operate Chemicals and Polymers, Industrial Materials, and Information and Electronic Materials Companies as our business cores.

In an effort to become a world-acclaimed company in the chemical industry, our product quality has been upgraded at a non-stop pace and our production facilities, research centers, and sales subsidiaries steadily expanded in key global locations.

To facilitate future sustainability, we tap the potential in upcoming business areas to the fullest extent, especially those involved with information and electronic materials.

Vision

At LG Chem, we made a new start in 2001 when LG Group-wide subsidiaries were spun off for business specialization. Accordingly, our vision and core values were reset to suit our updated organization structure. The renewed vision addresses our ultimate goals and core values in business ethics and practices.



Vision Goals

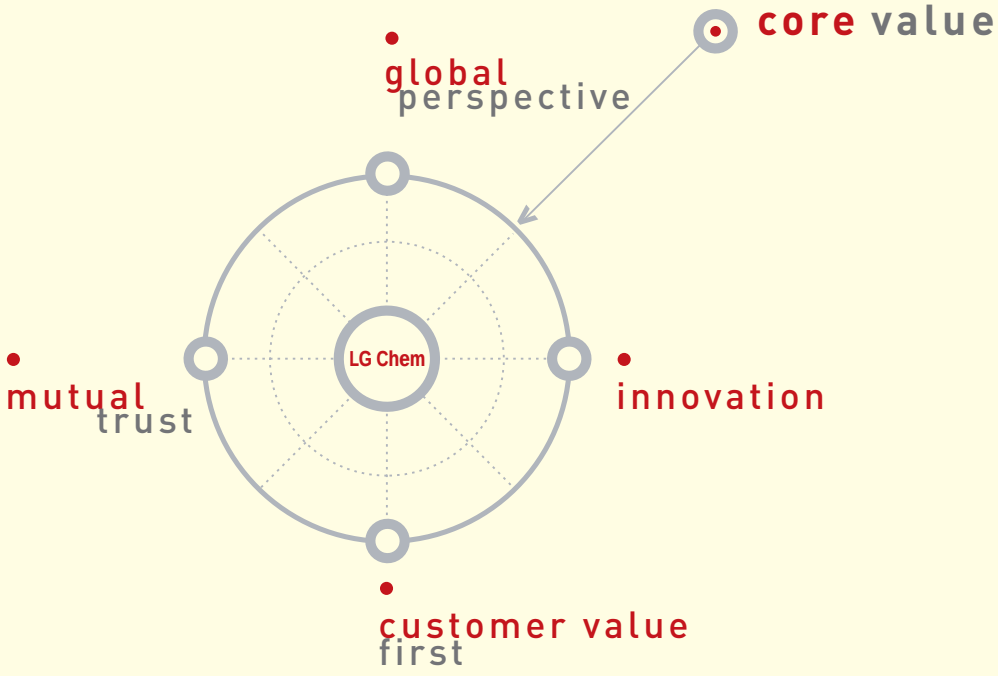
For World-Acclaimed Technologies, Products, and Solutions

We continue to create breakthrough technologies, solutions, and customer values in advance of our competitors, and exceed customers' expectations. Ongoing innovation in technology and management is essential to achieve our goals.

Individual differences of our employees are respected and tuned harmoniously in our corporate teamwork. Within a creative and forward-looking culture and with performance-based incentives, our employees are inspired to do their utmost.

Capitalizing on opportunities in real turnovers from upcoming business areas means we stay the course to seize the leadership position in the related global market earlier than competitors. Through leveraging lucrative profits and corporate values regardless of changing business environment, we strive to retain and increase our customers' and investors' confidence. Input from our customers, shareholders, and employees is always valued and reflected in our open management system.

Core Values



customer value first

We maximize our corporate value by anticipating customers' needs to exceed their expectations.

mutual trust

We follow trustworthy practices governed by management ethics, a timeless promise to our customers, shareholders, and employees.

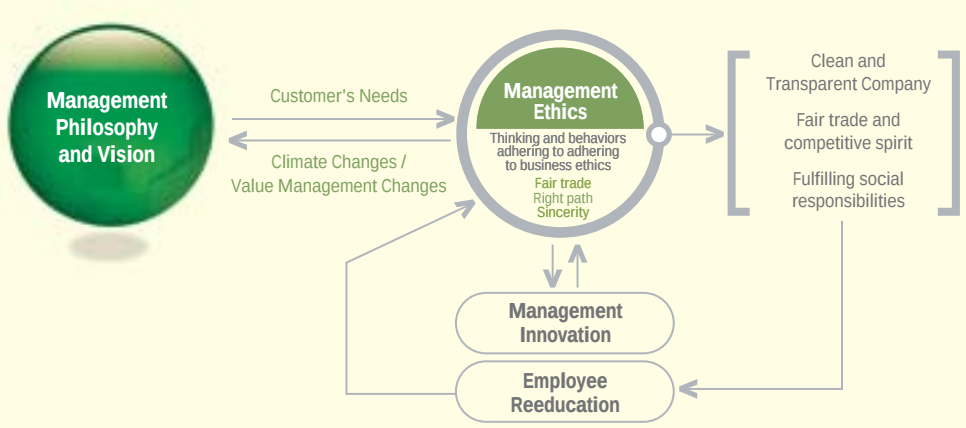
innovation

We raise technology and product quality to new heights through innovation in thinking and actions.

global perspective

We think, operate, and compete globally.

Management Ethics



At LG Chem, respect for individuals and customer-focused activities has been integral to our management ethics. In 1994, we compiled the LG Code of Ethics to further fulfill our sense of social responsibility. The Management Disciplines, renewed to effectively implement the code, have been imprinted in our minds and practiced in our actions.

We operate a Customer Service Center to promptly respond to customers' complaints and requests. To build greater trust in the hearts of customers and investors, we practice transparent management in line with aggressive investor relations promotion.

In 2004, as parts of our Enterprise Resource Planning (ERP) system, online procurement and injustice report systems were put into effect on the basis of fair trade practices. We empower win-win relationship with our business partners and suppliers through providing consultations on matters related to technology, environment, safety, and energy. The corruption report system aims to eradicate any inside corruption and illegalities. Our publicity and advertising activities are based on fair trade and competitive spirit not negative advertising.

In pursuit of our 'No. 1 LG Vision,' Six Sigma initiatives have been mobilized in everyday performance, sharpening excellence in broad aspects. To inculcate the importance of adhering to business ethics, regular and special cyber reeducation and group training courses are provided to employees, while executives have signed a written pledge to strictly abide by the LG Code of Ethics.

The Management Ethics Steering Secretariat, established at headquarters and each local branch and plant, effectively supports employees in ethical practices with self-discipline. Employees carry out various social contribution activities diversified by division or regional circumstances.

With ethical practices and in many other ways, LG Chem gives an impetus to shaping a world-acclaimed presence trusted by customers and investors.

Management Ethics

Grand Prize Received at the Ethical Management Awards

Figures and Facts

Statement of Income

Unit: Millions of Korean Won

Classification	2002	2003	2004
Sales	5,114,624	5,672,466	7,127,411
Cost of Sales	4,001,361	4,519,928	5,784,125
Gross Profit	1,113,263	1,152,538	1,343,286
Selling and Administrative Expenses	602,765	678,880	820,368
Operating Profit	510,498	473,685	522,918
Non-operating Profit	150,491	208,138	468,517
Non-operating Expenses	181,934	198,976	271,723
Ordinary Income	479,055	482,820	719,712
Income before Income Taxes	479,055	482,820	719,712
Income Tax Expenses	133,778	120,711	183,292
Net Income	345,277	362,109	536,420

Breakdown of Employees

As of December 31, 2004

Classification	Office	Production	Total
Number of Men	4,045	4,733	8,788
Number of Women	859	215	1,074
Total	4,904	4,948	9,852

Products Sold in 2004

Unit: Millions of Korean Won

Business Division \ Classification	Markets	Sales 2002	Sales 2003	Sales 2004
Chemicals & Polymers	Domestic	1,099,403	1,190,423	1,394,107
	Overseas	1,608,395	1,826,005	2,495,164
	Sub-Total	2,707,798	3,016,428	3,889,271
Industrial Materials	Domestic	1,631,652	1,587,162	1,558,552
	Overseas	339,515	369,995	473,531
	Sub-Total	1,971,167	1,957,157	2,032,083
Information & Electronic Materials	Domestic	52,365	43,571	64,414
	Overseas	383,294	655,310	1,141,643
	Sub-Total	435,659	698,881	1,206,057
Total	Domestic	2,783,420	2,821,156	3,017,073
	Overseas	2,331,204	2,851,310	4,110,338
	Sub-Total	5,114,624	5,672,466	7,127,411

Children know nothing about chemicals

yet LG Chem if part of your natural environment

From alternative products to pure materials, LG Chem is helping you live in a healthier environment, while bringing you closer to nature.

She knows nothing about chemicals

Yet LG Chem is part of your daily life

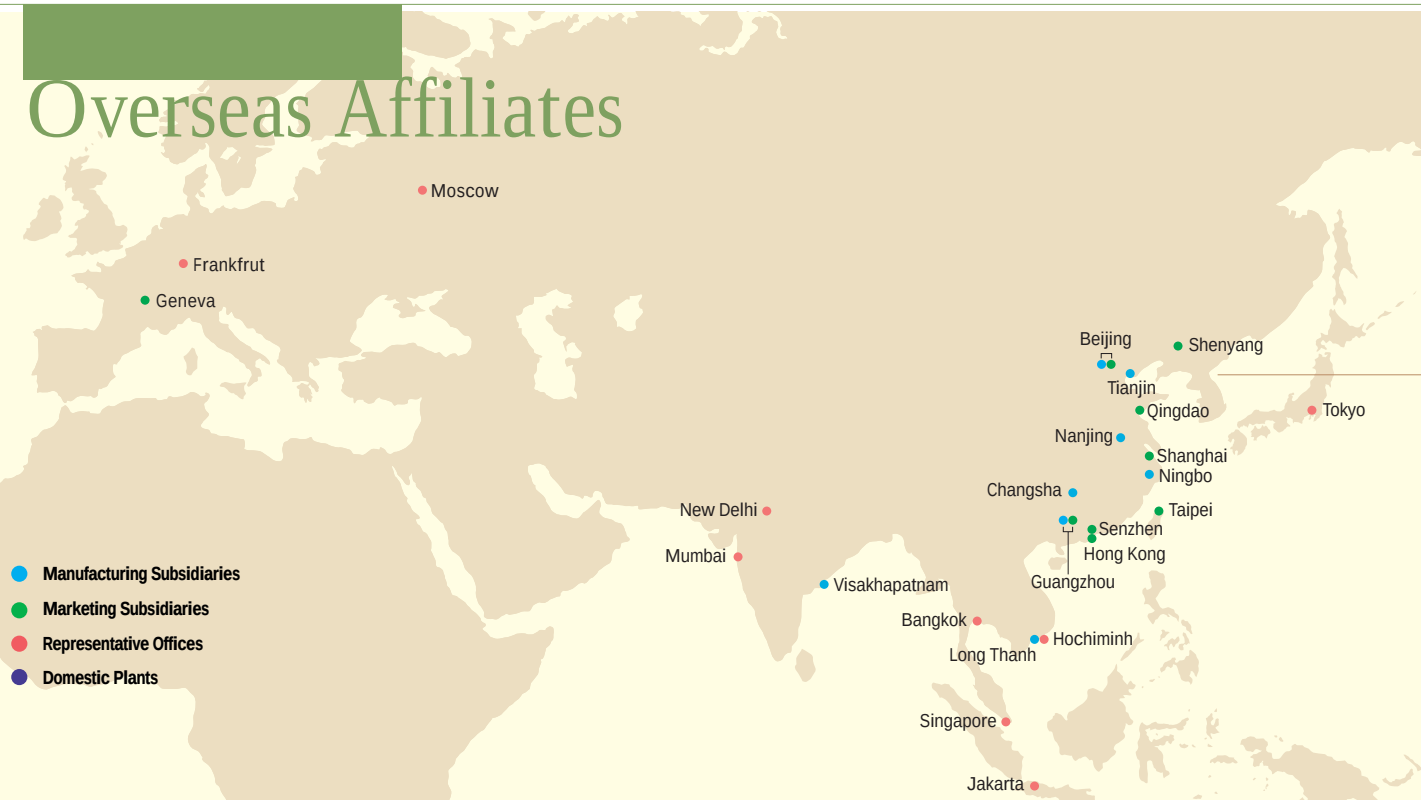
From the core materials of petrochemicals to interior materials, LG Chem is helping to enrich and bring happiness to your life.

He knows nothing about chemicals

yet LG Chem is part of your future

From the core technology of IT to the creation of new materials, LG Chem provides a brighter future, and brings a new level of convenience to your life.

Overseas Affiliates



Representative Offices

Name	Location
LG Chem Tokyo Office	Tokyo, Japan
LG Chem New Delhi Office	New Delhi, India
LG Chem Jakarta Office	Jakarta, Indonesia
LG Chem Bangkok Office	Bangkok, Thailand
LG Chem Singapore Office	Singapore
LG Chem Hochiminh Office	Hochiminh, Vietnam
LG Chem Frankfurt Office	Frankfurt, Germany
LG Chem Moscow Office	Moscow, Russia

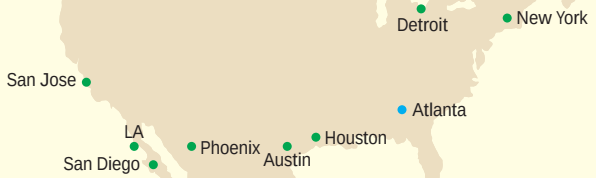
Manufacturing Subsidiaries

Name	Location
LG Polymers India Pvt. Ltd.	Visakhapatnam, India
LG Chem (Hunan) Phosphor Material	Changsha, China
LG Chemical (Guangzhou) Engineering Plastics Co., Ltd.	Guangzhou, China
LG Chem (Nanjing) Information & Electronic Materials Co., Ltd.	Nanjing, China
Tianjin LG Window & Door Co., Ltd.	Tianjin, China
Tianjin LG New Building Materials Co., Ltd.	Tianjin, China
Tianjin LG DAGU Chemical Co., Ltd.	Tianjin, China
Ningbo LG Yongxing Chemical Co., Ltd.	Ningbo, China
LG Vina Chemical J/V Company	Long Thanh, Vietnam
LG Chem Industrial Materials Inc.	Atlanta, USA
Ningbo LG Yongxing Latex Co., Ltd.	Ningbo, China
LG BoHai	Tianjin, China
LG Chem (Tianjin) Engineering Plastics Co., Ltd.	Tianjin, China
LG Chem Display Materials (Beijing) Co., Ltd.	Beijing, China

Marketing Subsidiaries

Name	Location
LG Chem China Investment Co., Ltd.	Beijing, China
	Shanghai, China
	Guangzhou, China
	Shenyang, China
	Qingdao, China
	Shenzhen, China
LG Chem HK Ltd.	Hong Kong, China
LG Chem (Taiwan), Ltd.	Taipei, Taiwan
LG Chemical of America Inc.	New York, USA
	LA, USA
	Detroit, USA
LG Solid Source, LLC	Phoenix, USA
LG Chem Europe Sarl	Geneva, Switzerland

Domestic Plants



Name	Location
Research Park	#104-1, Munji-dong, Yuseong-gu, Daejeon
Yeosu Plant	#70-1, Hwachi-dong, Yeosu-si, Jeollanam-do
Cheongju Plant	#150, Songjeong-dong, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do
Ochang Techno Park	#1114-1, Namchon-ri, Oksan-myeon, Cheongwon-gun, Chungcheongbuk-do
Ulsan Plant	#388, Mangyang-ri, Onyang-eup, Ulju-gun, Ulsan
Onsan Plant	#580, Hwasan-ri, Onsan-eup, Ulju-gun, Ulsan
Naju Plant	#1, Songwol-dong, Naju-si, Jeollanam-do
Iksan Plant	#599, Yongje-dong, Iksan-si, Jeollabuk-do
Daesan Plant	#679-13, Daejuk-ri, Daesan-eup, Seosan-si, Chungcheongnam-do

Research Park

Area_ 85,530 m²
Major Business_
Research on New Materials

Yeosu Plant

Area_ 991,735 m²
Major Products_
VCM, PA, SM, Acrylates, PVC, ABS, EDC, PS, SAN, LDPE, POM, Octanol

Cheongju Plant

Area_ 350,781 m²
Major Products_
-Building Materials
-Living Materials
-Information & Electronic Materials

Ochang Techno Park

Area_ 248,209 m²
Major Products_
-Rechargeable Batteries
-Optical Materials, etc

Ulsan Plant

Area_ 413,785 m²
Major Products_
-Building Materials
-Living Materials
-Functional Materials -Plasticizer

Onsan Plant

Area_ 209,376 m²
Major Products_
Fluorescent substance, UV-Stabilizer

Naju Plant

Area_ 562,793 m²
Major Products_
Octanol, Butanol, Plasticizer, Acrylic Acid

Iksan Plant

Area_ 94,636 m²
Major Products_
ABS Compound, Engineering Plastics, etc.

Daesan Plant

Area_ 192,109 m²
Major Products_
VCM, PVC

environmental management

Nature. Our Best Friend.

Whatever it is you are looking for in life, sometimes you need to get away from the daily routine. For instance, hike in the mountains, or stroll along a serene lakeside esplanade. On a day when you are feeling lonely, with no one to talk to, you will find that wild flowers on a sunny patch are there for you to commune with. Indeed, nature is our best friend. Which is why we at LG Chem welcome environmental management into our hearts.

3.4 to 3.6 Points

The in-house review of our Responsible Care activities in 2004 showed improvement with scores of 3.4 to 3.6 points, ranging between IA (Implementing) and PP (Practice-in-Place) standards.

KRW 21.06 Billion

KRW21.06 Billion

In 2004, a total of KRW21.06 billion was invested for the improvement in environmental management. The investment breakdown by sector is air quality management accounting for KRW13.14 billion, water quality management KRW3.92 billion, and wastes management KRW0.82 billion.

16 Six Sigma Projects

Six Sigma initiatives, first introduced for productivity innovation in 1999, have been spread out to environmental management and other facets of operations. Noteworthy cases among the Six Sigma initiatives carried out in 2004 are 10 projects involved with environmental management, including the construction of non-point pollution sources management system, and 6 projects involved with EHS Management, including the development of methods helping to prevent joint and bone diseases.

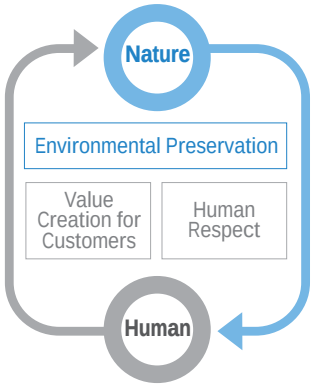
Environmental Management

Environmental Vision and Strategies

01_ Environmental Philosophy

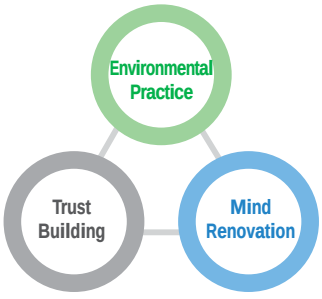
In pursuit of a harmonious blend of people's lives and nature, LG Chem adheres to environment-friendly practices to help preserve nature and the community and to create greater values for customers. This philosophy is expressed as follows:

- The Company faithfully fulfills the role of corporate citizen and pursues mutual prosperity through social contribution, fair business practices, and the preservation of the global environment (Section 4, Article 1, LG Management Charter).
- The Company makes every effort to prevent pollution and protect nature with responsible environmental stewardship (Section 4, Article 6, LG Code of Ethics).



02_ Environmental Policy

Environmental policy directed to realizing our environmental philosophy resolve into the following three points: Environment-friendly practices, innovative thinking, and trustworthy management. All employees at LG Chem work together to make environmental preservation a high priority in the Company's activities for the harmonious progress of people and nature. In short, environmental policy emphasize the following five fronts:



- Our business activities strictly abide by the laws and regulations of Korea and global communities where we operate.
- We gear efforts for improvement in the global environment under environmental goals.
- Our environmental concerns go full spectrum from the development of environment-friendly technology, product design, manufacturing and end user features to disposal.
- We work as corporate citizens and carry out day-to-day performances firmly based on environmental management.
- We are keenly aware that every one of us is responsible for environmental preservation and that environmental performance must be clarified to the public.

03_ Environmental Goals

When it comes to environmental management, LG Chem anticipates risk factors, traces shortcomings in environmental management to their origin, and works out new measures based on quarterly reviews of the achievement of environmental management goals.

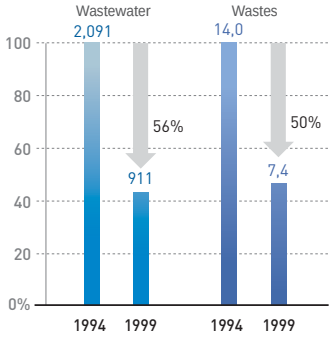
In 1995, LG Chem set environmental management policies that have been directed to the Company's ultimate environmental goal, 「Pollutant Emission 'Zero'.」 To effectively achieve the goals, phase-by-phase master plans were reset to reduce wastewater, wastes, and energy consumption. Today, the Company gears toward realizing the second-phase goals.

1st STEP | 1995 ~ 1999	2nd STEP | 2002 ~ 2006
Pollutant Emission Unit 50% Reduction	Unit Emission Reduction ↗ Wastewater : 50% ↗ Wastes : 40% ↗ Energy Use : 18%

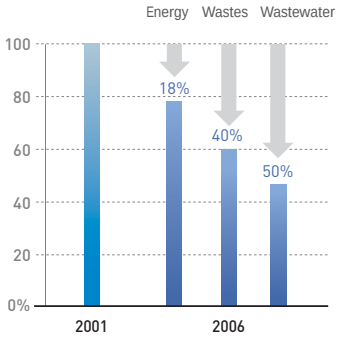
・Cleaner Technology ・Clean Process Improvement ・Recycling System
・Installation and Operation of Optimal Pollution Preventive Facilities

In the first step (1995~1999) the goals for unit emission reduction of wastewater and wastes from the source of origin were surpassed, by 56% and 50%, respectively.

The goals of the second step (2002~2006) were reset due, in large part, to business expansion in information and electronic materials and the group-wide spin off of subsidiaries. The second phase aims to reduce the unit emission of wastewater and wastes, and energy consumption unit by 50%, 40%, and 18%, respectively. To reach these goals, the development of alternative material resources, new manufacturing processes, and wastes treatment technology is accelerated in line with activating energy saving practices.



1st Step Results (1995~1999)
Unit: kg / product-ton



2nd Step Goal (2002~2006)

Environmental Management System (EMS)

LG Chem's environmental management is incorporated with Responsible Care initiatives, a collection of voluntary initiatives designed to take responsibility for the safety and health of people and the environmental preservation.

Rigorous environmental management practiced throughout the Company's worksites resulted in acquisition of ISO 14001, a certificate qualifying environmental management, OHSAS 18001, and KOSHA 18001, a certificate for health and safety management. All worksites were designated as Environmentally Friendly Company by the Minister of Environment of Korea.

LG Chem redefines the standards of Environmental, Health, and Safety (EHS) Management continuously to reflect evolving regulations and technological advancement and to provide current guidance to employees through regular training programs. The results of EHS Management are reviewed periodically by internal and external audits. The results are reported to top management of each establishment in due course to facilitate sustainability.

01_ Responsible Care Committee

Activities of the Environmental, Health, and Safety (EHS) Management Committees, one in each establishment, are integrated under the LG Chem Responsible Care (RC) Committee. The RC Committee serves as a centerpiece for company-wide coverage of responsibility in EHS Management. The RC Committee's general meeting, held twice a year, provides an integrated assessment of EHS and energy management to each EHS committee, including an array of issues and solutions, and a framework of related policies. The EHS committees, in turn, share information on critical issues, successful EHS Management cases, and other mutual concerns.

Each Sector's Role for RC Activity

RC Responsible Care	Production Team at Plant	Business HQ / Business Division	Environment & Safety Dept.	
			Plant	Head Office
Resource Procurement	Using environment-friendly and safe raw and supplementary materials		Environment, safety and health management and support	Planning and supporting of enterprise environment safety and health policy ..... RC Operation on the corporate level
Product Development		Considering environment, safety and health when developing products		
Production	Minimization of environmental impact load Securing of worker's health	Considering environment, safety and health when planning investment		
Sales / Distribution	Prevention of distribution-related accidents and emergency response when an accident takes place			
Service		Providing environment, safety and health information related to products		

02_ Innovation in EHS Management

In 1999, Six Sigma was introduced as an innovation tool to accelerate the 'No. 1 LG Vision.' Six Sigma initiatives have been effective in EHS Management, bringing remarkable reduction in wastewater, wastes, and pollutant emission, as well as improving

Environmental Management System Flow

• ISO 14001 • Environmentally Friendly Company	• OHSAS 18001 • KOSHA 18001	• Voluntary Agreement (VA)
Responsible Care		


RC Committee


Environment Education

the wastewater recycling rate and production processing. Noteworthy cases among the Six Sigma initiatives carried out in 2004 are 10 projects involved with environmental management, including the construction of non-point pollution sources management system, and 6 projects involved with health and safety management, including a program to prevent the development of joint and bone diseases.

03_ Online EHS Network

LG Chem is constructing a cutting-edge IT system to lay an online EHS network for systematic integration, statistics, data storing and sharing, as well as for the real-time assessment of EHS Management performance.

04_ EHS Education

EHS Management has been instilled in the minds and actions of all employees through regular EHS education programs differentiated by job positions and tasks. Each establishment cultivates RC experts by providing in-house specialist EHS courses in line with intensive EHS training courses conducted by professional external organizations.

05_ In-house Audit and Post Inspection

An in-house audit team formed in each establishment carries out EHS Management audits twice a year. Areas in need of improvement are reported to top management in each establishment. Relevant divisions are responsible for redressing shortcomings. After the acquisition of environment-related certificates, post inspection of EHS management practices is carried out by related external organizations at least once a year. Besides the external inspection, in-house audits also evaluate the performance standards based on ISO 14001 and KOSHA 18001 certificates. The Company promotes an integration of varied in-house assessments based on the results of Responsible Care initiatives.

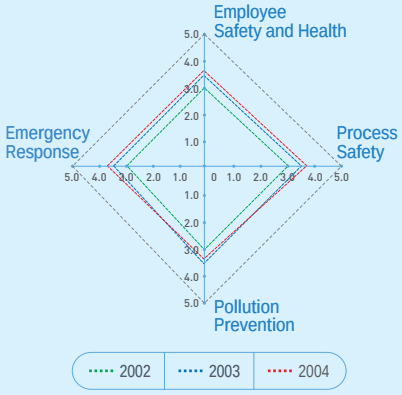
06_ Self- Assessment of RC Activities

Responsible Care (RC) initiatives are largely focused on four fronts: Employee Safety & Health; Process Safety; Pollution Prevention; and Emergency Response. Since 2002, RC activities have been assessed by measures specifically set in each establishment and reflected in RC upgrades. The assessment results in 2004 showed improvement in all four areas, with scores of 3.4 to 3.6 points, signifying the range between IA (Implementing) and PP (Practice-in-Place) standards.

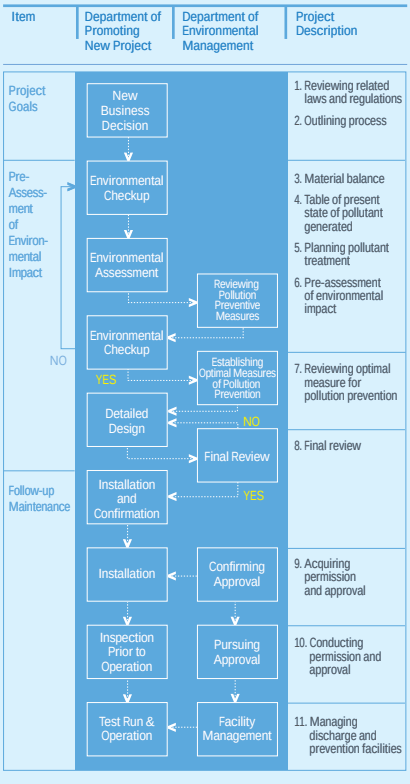
07_ Environment and Safety Inspection

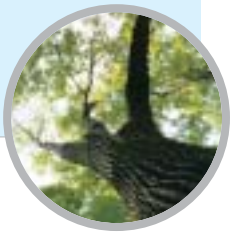
An environment and safety inspection team is composed of external experts and internal persons in charge of related areas in each establishment. To ensure safety and health in workplaces, nature, and the community, the team carries out an environment and safety inspection on a company-wide scale annually. Inspection criteria, pursuant to EHS Management guidelines, emphasize the observance of related regulations and laws, optimal maintenance of environmental and safety facilities, and reduction of potential risk factors through proactive measures. In 2004, an overall environment and safety inspection was carried out in the Company's China, Vietnam, and India subsidiaries. It was intended to narrow the gap between LG Chem's domestic and overseas subsidiaries, thus elevating the overall standards of EHS Management in the Company's overseas subsidiaries. The environment and safety inspection, differentiated by specific conditions of each establishment, is carried out weekly or monthly in line with EHS Management monitoring.

■ RC Self-Assessment Result



■ Pre-Environmental Impact Evaluation





Dahurian buckthorn

Environmental Accounting (EA)

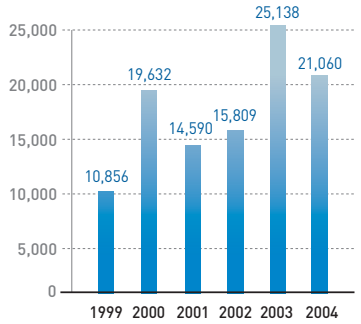
Environmental Accounting is applied for cost-effective investment in environment and safety management. It enables grasp of cost effectiveness and optimal budget allocation in minimizing environmental impact derived from various business activities. The accounting statement is reflected in management decision making, and is available to outside interested parties.

With the experience accumulated through participating in trial Environmental Accounting projects, led by the Ministry of Environment since 2002, LG Chem has started environment-related cost accounting by utilizing the table of environmental management costs classified under the Korean government's Environmental Accounting Guidelines. Since accurate Environmental Accounting can increase management transparency and efficiency, LG Chem is developing a fully computerized Environmental Accounting system linking to the enterprise resources planning (ERP) system.

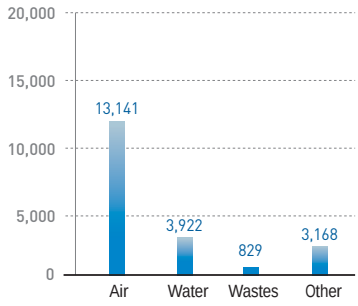
Environmental Costs

Environmental Costs

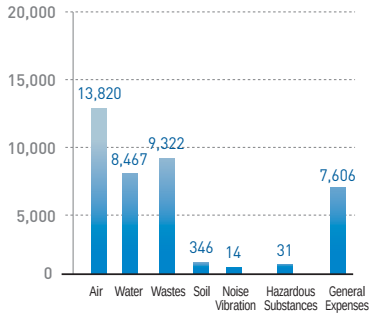
Post treatment Expenses ↙	Expenses for Preventive Activity ↙	Expenses for Activities of Interested Parties ↙	Legal Reserves and Expenses for Environmental Restoration Activities ↙
01 Post treatment Facilities Operational Expenses • Expenses for operating in-house facilities • Treatment expenses paid to contractors • Other	**01 Expenses for Operating Environmental Management System (EMS)** • Expenses for EMS-related certificates • Expenses for training • Expenses for environmental impact surveys and inspections • Other	**01 Expenses for Outside Cooperation** • Expenses for supporting environment-related NGOs • Expenses for community cooperation	**01 Legal Reserves** • Expenses for contributions and donations (dues) • Fines
	02 Expenses for Material Resources Saving and Recycling Activities • Expenses for operating in-house facilities • Treatment expenses paid to contractors • Energy saving and climate change reserves • Expenses for improving logistics and distribution • Other	**02 Expenses for Other Activities** • Expenses for outside environmental preservation and forestation • Expenses for publishing environmental advertisements and reports	**02 Expenses for Environmental Restoration Activities** • Expenses for indemnities and litigation • Insurance premiums • Other
	03 Expenses for Research and Development • Expenses for process improvement • Expenses for product quality improvement		
	04 Expenses for Other Activities • Expenses for workplace tree planting		



Annual Environmental Investment
Unit: Millions of Korean Won / year



Breakdown of Environmental Investment (2004)
Unit: Millions of Korean Won / year



Breakdown of Environmental Costs (2004)
Unit: Millions of Korean Won / year

Environmental Performance Evaluation (EPE)

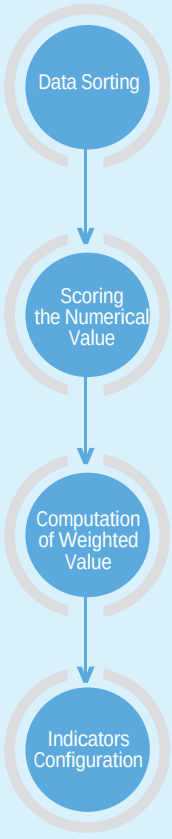
Performances related to environmental management is analyzed, assessed, and clarified to the public. The evaluation results are reflected in decisions concerning social and environmental matters for sustainable development.

As to strategically strengthening environmental management and communication with interested parties, LG Chem included an integrated evaluation system incorporating the Six Sigma system to measure its environmental performances accurately. Analyzing the indicators specified in the Global Reporting Initiative (GRI) table and ISO 14031 guidelines, indicators suitable for measuring LG Chem's environmental performances were sorted out, and the method for computing weighted value was developed to assign numerical value to each environmental performance. The pilot test for the evaluation system clearly shows the improvement or deterioration of the environmental performance year after year. In coming years, the evaluation indicators will be upgraded to properly measure environmental performance of each establishment in detail and will be used throughout the Company as key performance indicators (KPIs).

EPE Indicators

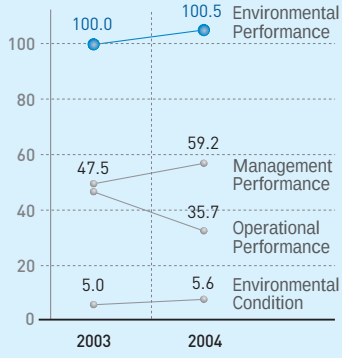
Classification ↙	Sub-Classification ↙		Evaluations ↙
Internal	Management Performance	01 Environmental Management System	Observance of environmental management guidelines specified in the ISO certificate
		02 Observance of Regulations and Laws	Responsible management through the observation of environment-related regulations and laws
		03 Application of the Latest Environmental Management System	Improvement of corporate value and capabilities by applying the latest environmental management system
		04 Relationship with the Community	Sustainable progress of the community sought through the establishment of a close relationship with community people and responsible environmental management
	Operational Performance	01 Input	Efficient use of materials and energy and cost-reduction activities
		02 Output	Tangible and intangible outcomes made for pollutant reduction and environmentally-friendly production
External		01 Status of Environmental Pollution in the Community	Pollutant management improved steadily through surveys of environmental pollution in the communities

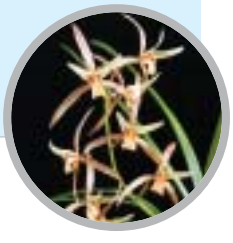
EPE Methods



- Environmental performance data of 2003 and 2004 are sorted out according to EPE methods and measurement
- Each environmental performance of 2004 is scored into numerical value
- Each numerical value of environmental performance is multiplied to compute aggregated weighted value
- The aggregated numerical value and the aggregated weighted value are multiplied
- Configuration of the EPE indicators according to the increase or decrease of aggregated numerical value

EPE Results (Cheongju Plant)





Jeju Island orchids

Emergency Response System

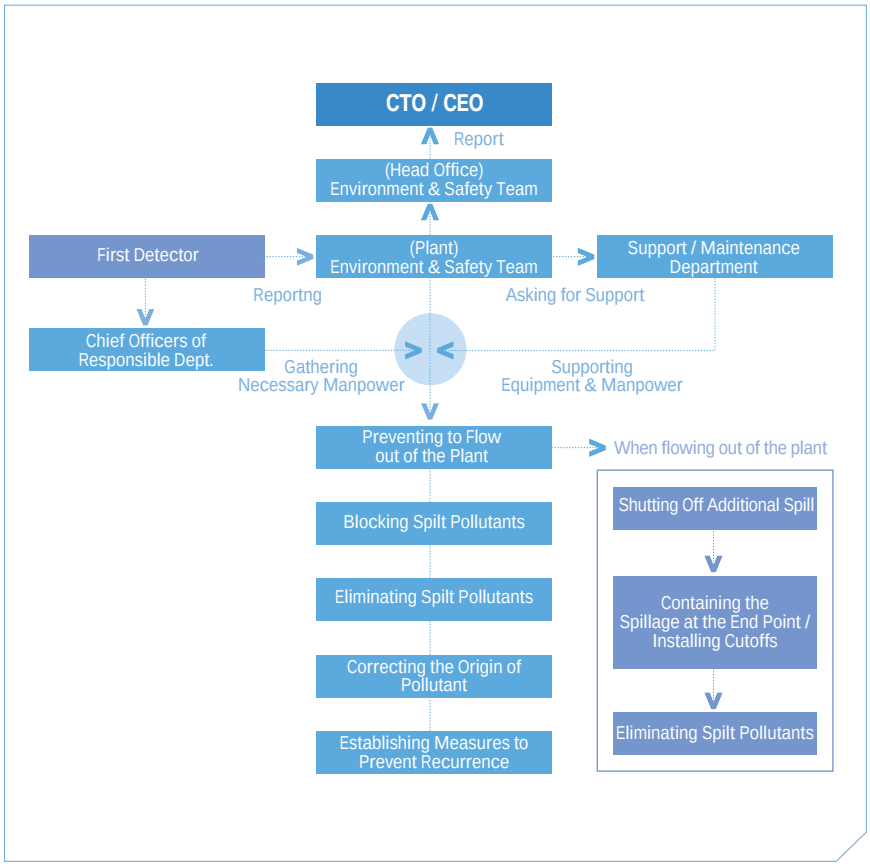
01_ Prevention of Environment and Safety Risks and Accidents

LG Chem anticipates environment-related problems to proactively prevent any environment and safety risks. On this ground, the environment and safety team and each production team conduct regular environment and safety inspections.

At each production team, an operating manager takes charge of inspections on a daily basis. The environment and safety team operates an exclusive patrol team for major facility inspection for 24 hours. Intensive inspection by the patrol team takes place in those areas deemed most vulnerable to emitting polluted substances due to malfunction in processing lines. Crosschecks on environmental facilities by the environment and safety team and each production team doubly ensure pollution prevention.

For prompt action in the event of accidents, emergency handling scenarios are prepared according to different emergency types and facilities. Each production site exercises a regular emergency drill. Looking closely at the results of each emergency drill can identify shortcomings, lead to supplementation through countermeasure upgrades, and improve future emergency drills to further ensure airtight safety.

■ Flow of Emergency Response (Spill)




Emergency Control Center

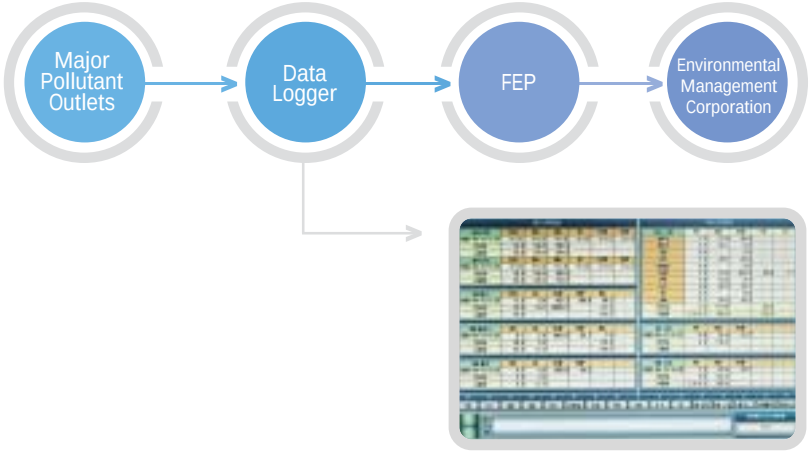

Emergency Reservoir


Emergency Drill for Spill Prevention

02_ Tele-Metering System (TMS)

The TMS is installed in major pollutant outlets. It monitors and records the operational status of air-pollution prevention facilities and wastewater treatment plants in real time. When pollutant emission exceeds the standard level, an alarm is automatically activated to allow immediate control. It is a key step to prevent environmental risks and disasters beforehand. TMS data is transmitted online to relevant government organizations via the TMS Control Center of the Environmental Management Corporation.

■ TMS Data Transmission



Real Time Management (TMS)

03_ Emergency Response during Distribution

In the event of toxic chemical spill inside the Company, the problem or damage can be promptly controlled with in-house cutting-off facilities and measures on top of a streamlined emergency network. However, considering traffic conditions in Korea, response to environmental accidents or spill during the transportation of chemicals requires additional measures. Accordingly, LG Chem strives to eliminate any risks or disasters throughout distribution channels from product shipment to delivery. Emergency response drills and training programs are provided to drivers and distributors so can they build capabilities to handle problems in the event of a disaster. The Company also provides emergency response manuals and vehicle inspections, as well as operating an emergency team and network.


Drivers' Safety and Emergency Response Manual

■ Flow of Emergency Response during Distribution

01 Shipment Preparation

LG Chem
- Check adequacy of operator and vehicle
- Vehicle safety education and provision of emergency response information

Driver
- Compliance with shipment safety rules
- Vehicle inspection and familiarization of emergency response information

02 Transportation of Chemicals

LG Chem
- Check safe transportation

Driver
- Compliance with traffic laws and regulations
- Operation of designated route (Pre-education on the passage prohibited area)

03 Emergency Response in the Case of Accident

LG Chem
- Operation of Emergency Response Commission
- Mobilization of Emergency Response Unit
- Support Request (Public offices, suppliers,etc)

Driver
- Initial Response (Prevention of diffusion, blockade the surrounding)
- Emergency Contact (LG Chem)

04 Completion of Transportation

LG Chem
- Check the safe arrival at a destination

Driver
- Compliance with safety rules at a destination
- Notification of completion of transportation (LG Chem)

Apricot tree native to Korea

environmental impact & performances

Nature. Our Great Mentor.

It is said that everything has a clock of its own time in nature. The ripe time for azaleas to bloom is in the spring. For migratory birds to fly south is autumn. Nature has taught us there are reasons that even a single dewdrop forms on the grass, or a firefly lights a world of its own aga ure.

25 Eco-Labels / 12 HB Marks

At LG Chem, 25 kinds of products acquired the Eco-Label and 12 kinds the Healthy Building (HB) Material Mark. These inform customers of environment-friendly features.

79.8%

79.8%

The recycling rate of wastes was 79.8%, a 3.8% increase from the previous year's 76.9%, while volume of wastes was reduced by 8.6% (3.5 to 3.2kg/product-ton).

3.3%

In 2004, improvement in processing lines and the recycling rate of wastewater contributed to the reduction of wastewater, a 3.3% decrease (1,041 to 1,007kg/product-ton).

Environmental Impact and Performances

Environmental Performances
01 | Air Quality

LG Chem tracks air pollutants from the source of origin. Pollutants and industrial wastes generated from production activities are treated in pollution preventive facilities. To ensure optimal treatment, a regular inspection is carried out facility by facility according to a checklist. A Tele-Metering System installed in major pollutant outlets screens the level of air pollutants. It transmits real-time data to the TMS Control Center operated by the Environmental Management Corporation.

Non-point pollution sources are detected with a portable detector. If a problem is found in a related facility and device, immediate repair work or replacement follows. By curtailing air pollutants, the Company manages an air pollutant level within 40% of the legal standard.

When the Foul Odor Prevention Act in Korea went into effect in 2005, the legal standard for air pollutant emission of the Clean Air Conservation Act was brought to a higher level. In 2004, LG Chem proactively prepared countermeasures with the investment of KRW13.1 billion for the alteration of clean fuel resources, manufacturing process improvement, and renovation of pollution preventive facilities.

Odor Map

Increase of Interest in Environment / Health

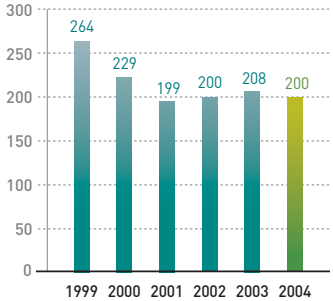
Strengthening of Various Restrictions Related to Offensive Odor

Carrying Out the VOC / Odor Map Project

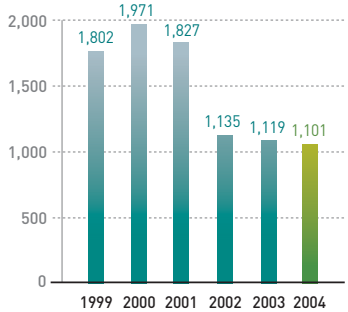
- On site survey
- Identification of bad odor generation materials' source and generation trend
- Identification of major component of offensive odor
- Identification of generated volume through quantitative analyses
- Measurement of distribution on the bad odor within business sites

Expected Effect

- Identification of offensive odor, major components of VOC and emission volume by process
- Evaluation of Impact upon the surrounding of offensive odor and VOC
- Formulation of guidelines for optimal prevention facilities



Dust Emission I Unit: tons / year

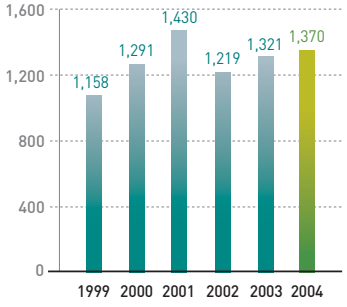


SOx Emission I Unit: tons / year

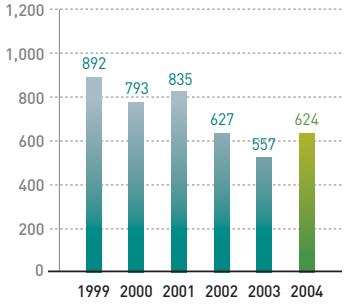
In **Yeosu Plant**, a total of KRW2.7 billion was invested to install a Stripping Facility developed by its proprietary technology, for the recovery of residual vinyl chloride monomer (VCM) in half-finished products during the drying process. To prevent leakage of volatile organic compounds (VOCs) and offensive odor, VOC pumps are replaced with non-seal pumps while wastes of odorant sources are incinerated in the regenerative thermal oxidizer (RTO).

Cheongju and **Ulsan Plants**, with an investment of KRW2.2 billion, also installed RTO to increase the efficiency of treating VOCs and offensive odor with minimal generation of secondary pollutants and free from catalytic poison. The RTO have reduced the emission of air pollutants significantly in both plants.

Naju Plant installed a Scrubber for preliminary treatment of offensive odor generated from some manufacturing processes and replaced old processing lines. The plant continues facility renovation and air-tight maintenance.



NOx Emission I Unit: tons / year



CO Emission I Unit: tons / year

Stripping Facility

RTO

Non-seal Pump

02 | Water Quality

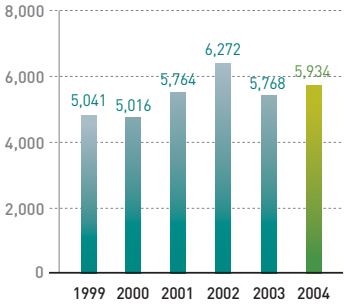
In 2004, LG Chem used 2,000m³ of water of which 97% was industrial water and 3% underground water. Water is used mainly in manufacturing lines, for cooling, fire hydrants, as well as tap water.

Wastewater is treated in the wastewater treatment plant operated at each production site and discharged directly to a nearby river or retreated in the wastewater terminal treatment plant. Sewage is sent through separate pipes to the sewage terminal treatment plant.

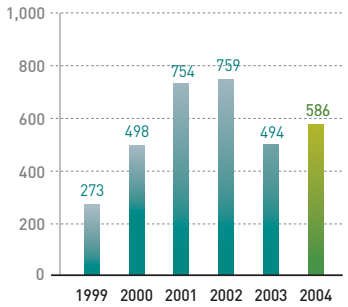
Under the ultimate environmental goal, 「Pollutant Emission 'Zero',」 LG Chem puts all-out efforts into reducing the total volume of wastewater with reduction plans set at each wastewater facility. Improvement in processing lines and the recycling rate of wastewater contributes to the reduction. As a result, the volume of wastewater per unit production in 2004 showed a 3.3% decrease (1,041 to 1,007kg/product-ton).

Yeosu Plant, with an investment of KRW1 billion, added a media filter to the existing wastewater recycling system to eliminate non-degradable polymers. This has improved the quality of wastewater and contributed to increasing the wastewater recycling amount to more than 180,000m³ annually. Treated wastewater from the wastewater recycling system, which filters out pellets, dust particles, oil, and other pollutants, is reused as cooling water at the cooling towers. This has contributed to reducing the volume of wastewater discharge by more than 3,000m³ annually.

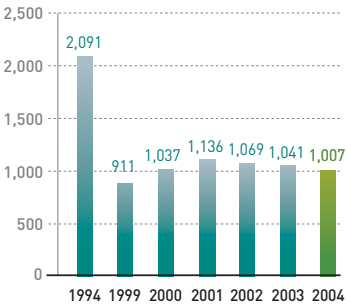
Cheongju Plant installed an emergency wastewater basin to prevent any backflows of wastewater in the event of malfunction of the wastewater treatment plant, as well as to stabilize wastewater treatment. Recycling of concentrated wastewater generated from the Reverse Osmosis (RO), a pure water processing facility in the optical materials processing operation, reduces the use of water by more than 3,000m³ annually.



Wastewater Generated
Unit: 1,000 tons / year



Wastewater Recycled
Unit: 1,000 tons / year



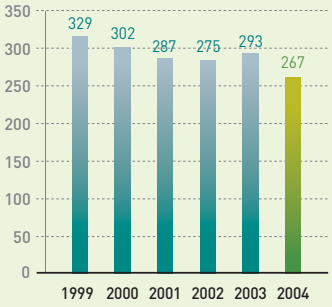
Basic Unit of Wastewater Discharge
Unit: kg / product-ton

In **Naju Plant**, the high content of Cl^- ion contained in the treated wastewater was a major obstacle for wastewater recycling. This was remedied with new technology developed jointly with university laboratories that reduces remaining Cl^- ion and heavy metals in treated wastewater. The plant replaced old pumps, pipes, measuring gauges, and blowers with the latest models, improving the quality of treated wastewater.

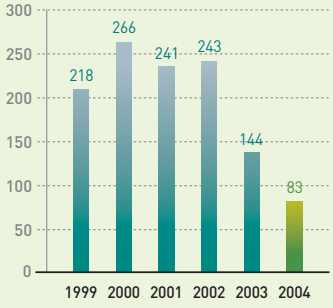
Ulsan Plant biodegrades daily sewage with microorganism, reducing the volume of wastewater discharge. Old blowers in aerobic tanks were replaced, increasing operational efficiency of the wastewater treatment plant. Renovation of air supply pipes raised the efficiency of pollutant treatment.

Wastewater Treatment Plant

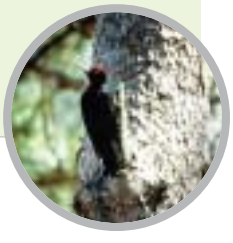
Reverse Osmosis (RO)



COD Discharged
Unit: tons / year



T-N Discharged
Unit: tons / year

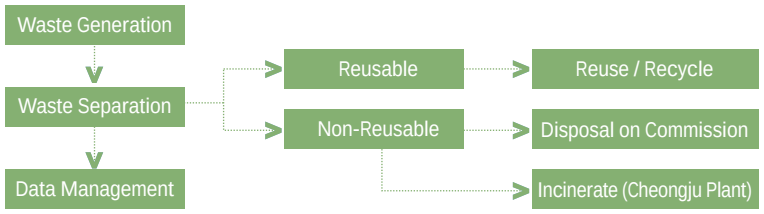


Black woodpecker native to Korea

03 | Wastes

LG Chem thoroughly screens the status of wastes treatment in each production site from wastes discharge to final disposal in real time via the 「Wastes Manifest System,」 a website operated by Korea Environment and Resources Corporation. As for outsourced wastes management, the Company carries out an annual inspection and maintenance service for wastes treatment and recycling contractors. In line with the environmental goal, 「Pollutant Emission 'Zero',」 the Company has made every effort to minimize the volume of wastes from the source and maximize the recycling rate of wastes. In 2004, the recycling rate of wastes was 79.8%, a 3.8% increase from the previous year's 76.9%, while volume of wastes per unit production was reduced by 8.6% (3.5 to 3.2kg/product-ton).

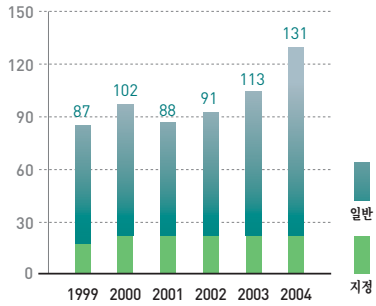
■ Flow of Waste Management



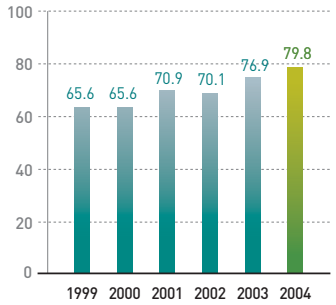
Evaluation of Goals (By Dept., Plant, and Business Unit)

Yeosu Plant continues to reduce wastes as part of its resources reutilization policies. For instance, existing boilers were renovated for the use of methanol, a clean energy source and byproduct made during product processes. Poly vinyl chloride (PVC) wastewater-treated sludge is provided to PVC pipe makers as supplementary raw material, acrylonitrile butadiene sytrene (ABS) wastewater-treated sludge goes to cement makers as supplementary fuel in furnaces, and flammable sludge serves as intermediary mixture for cement production. In addition, synthetic resin wastes are provided to plastic product makers.

Cheongju Plant has operated its in-house wastes incinerator (1.3 ton per hr.) since 1992. Steps to improve efficiency include the replacement of fireproof bricks and an air nozzle for the secondary combustion in the incinerator. With an investment of KRW100 million, the Selective Non-catalytic Reduction facility was built, minimizing NOx discharge with ammonia water spray. The waste heat generated from wastes incineration is used for producing steam, which is used in processing lines.



Waste Generated
Unit: 1,000 tons / year



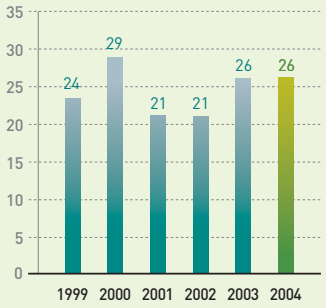
Waste Recycling Rate
Unit: %

In **Ulsan Plant**, scraps that were previously incinerated by contractors are now outsourced to professional recyclers. 590 tons/yr of scraps are recycled into construction materials. An old facility for plasticizing catalyst injection has been replaced with an automatic injection facility. It has reduced the loss of raw and supplementary materials and the volume of wastes.

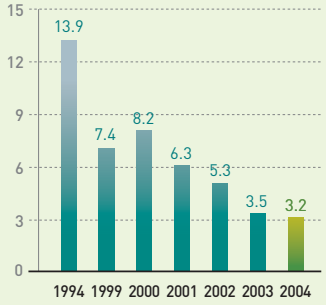
Onsan Plant, after two and a half years of research jointly with a zinc manufacturer, developed the technology for separating zinc and sulfuric acid from zinc sulfate. With this achievement, the previously incinerated zinc sulfate is now recycled, and KRW300 million is saved a year.

Wastes Incinerator

Wastes Storage Yard



Waste Discharged
Unit: 1,000 tons / year



Basic Unit of Waste Discharge
Unit: kg / product-ton

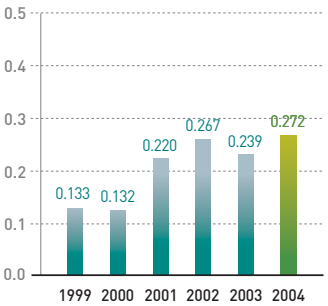
Yellow-beak snowy herons

04 | Toxic Chemicals

LG Chem carries out rigorous management of toxic chemicals from warehousing to disposal. MSDS (Material Safety Data Sheet) for safe handling of toxic chemicals are prepared for all processing lines, and regular trainings are provided to all personnel involved in toxic chemical handling. To prevent any leakage accidents, monthly inspections are conducted at all sensors and interceptors installed in warehouses. Toxic chemicals are additionally stored separately for emergency use and an emergency drill is conducted monthly.

The use of toxic chemicals has been reduced each year through application of alternative materials and treating methods. Although the unit use of toxic chemicals showed an increase in 2004, due to ethylene dichloride (EDC) being included in the toxic chemical category since 2001, the average usage of toxic chemicals each year has been reduced due to scientific management including toxics release inventory (TRI).

In December 2004, LG Chem signed a voluntary agreement (VA) on Toxics Use Reduction, part of the Ministry of Environment policies. To comply with the VA, the Company aims to reduce use of toxics by 30% within three years (2007) and 50% within five years (2009), by steadily improving processing methods and applying a resources recovery system and a leak detection and repair (LDAR) system.



Basic Unit of the Use of Toxic Chemicals
Unit: tons / product-ton

The use of toxic chemicals shows an increase since ethylene dichloride (EDC) was added to the toxic chemical category in 2001.

Signing the Voluntary Agreement (VA) for Reducing Toxics Release

Leak Detection and Repair (LDAR)

Toxic Chemicals Storage Tank

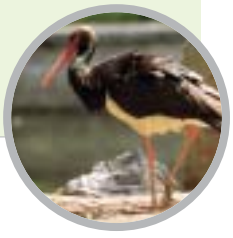
05 | Soil Pollution

At LG Chem, soil pollution management mainly addresses the issues of prevention of soil contamination and treatment of contaminated soil. The soil management manual strictly governs procedure from construction to disposal of soil-contaminating facilities in all production sites. To prevent pollutants permeating the soil, soil-contaminating facility area is paved with concrete and waterproofed. Dikes are installed to block pollutant outflow. Regular inspections ensure watertight soil management.

In 2004, surveys of soil conditions at soil-contaminating facilities in LG Chem's plants showed favorable conditions within legal limits according to the Soil Environment Conservation Act of Korea. For proactive soil conservation practices, the in-house Soil Management Manual is circulated to all plants. The Company continues examinations for soil and underground water quality in an effort to protect people and nature.

Flow of Soil Pollution Management

01 Building Facilities of Soil Pollution Materials	02 Warehousing	03 Storage / Use	04 Disposal / Closing
1. Reporting 2. Installation of Prevention Facilities	1. Consider The Contents of MSDS 2. Attach Information Plate 3. Train Transporting Drivers 4. Check the Attendance of Responsible Personnel	1. Check Facilities 2. Check Dikes & Floor 3. Check Drainage Arrangements 4. Check Sample Points 5. Regular Monitoring and Legal Inspection	1. Reporting 2. Regular Inspection 3. Waste Treatment of Residuals 4. Facility Closing / Demolition



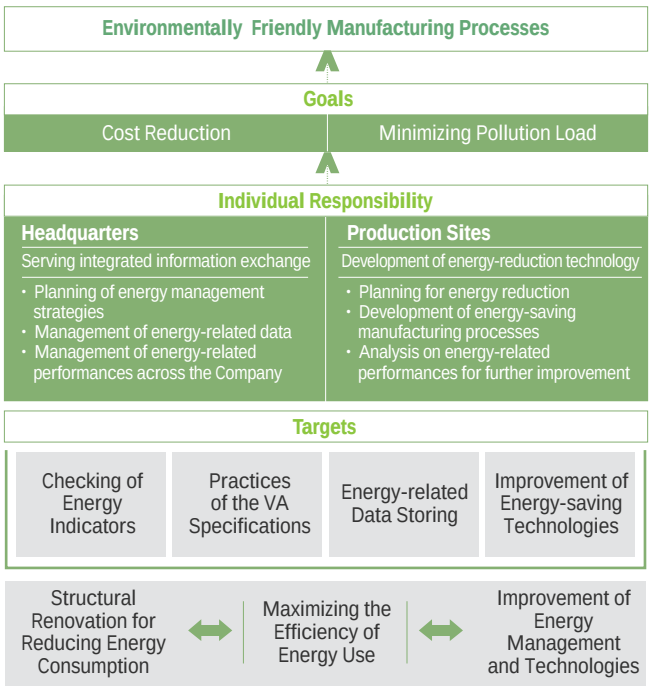
Black swan

Energy

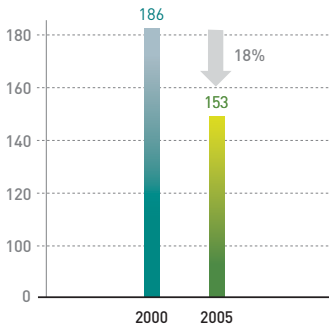
LG Chem prioritizes energy reduction activities as part of building corporate strength to succeed whatever the business climate may bring.

The Company's energy management at all production sites is directed to solidifying the foundation for environmentally friendly production processes through maximizing the use of energy resources and thus minimizing costs and the environmental load.

■ Energy Management Vision and Targets



As for energy saving strategies, the Company set the mid-term (from 2000 to 2005) goal of energy reduction by 18%. To achieve this goal, the Energy Impact Free (EIF) PRO campaign has been carried out across the Company backed by process innovation at all production sites, organizational restructuring for low-energy consumption, and effective support activities.



Energy Saving Goal
Unit: kgOE / product-ton

Certificate of a Superior VA-practiced Company

Association for Sharing Best Practice for Energy-Saving

Energy Impact Free (EIF) PRO campaign

P Process Innovation

Production Sites

Process Innovation

- Innovation in processing lines
- Task force team leading energy reduction activities
- Energy-saving concept boosted in minds and actions

+

R Restructuring

Headquarters & Business Divisions

Structural Renovation

- Increase of high value-products
- Investment in new energy-saving facilities
- Structural renovation for lowering energy consumption

+

O Optimizing Management

Staff

Support for Activities

- Framing mid to long-term energy plans
- Technical support for energy reduction
- Review on energy management to improve efficiency

Advanced energy management free from external impact

01_ Energy Saving Activities

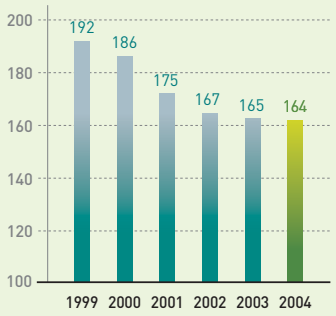
All production sites at LG Chem combine efforts with the task force team in creating energy-saving products and benchmarking outstanding cases of energy-saving products and production processes. At the same time, each production site drives an energy saving campaign year round, forging an energy-saving mindset. As a result, energy intensity has been improved each year.

02_ Creating Additional Value from Energy Saving

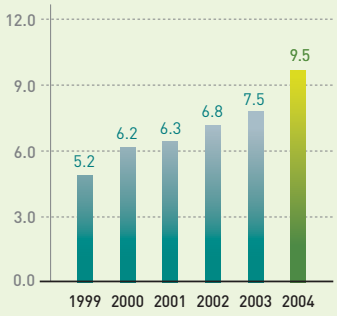
Each production site strategically targets creation of energy-saving products and production processes. The process innovation continued across the Company has reduced energy consumption significantly. Facilities have been renovated or replaced in order to furnish energy-saving and eco-friendly features, thus generating additional value for both the Company and customers.

Energy Management Strategies

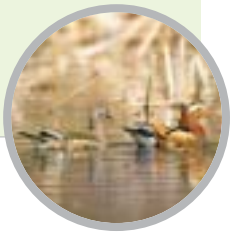
	Period	Strategies
Phase Ⅰ	2001 ~ 2005	EIF PRO campaign
Phase Ⅱ	2006 ~ 2017	Energy management shifting to greenhouse gas management



Energy Intensity
Unit: kgOE / product-ton



Additional Value of Energy
Unit: Millons of Korean Won / TOE



Mandarin ducks

Response to the Convention on Climate Change

LG Chem prepares the Convention on Climate Change, which will take effect in coming years, concerning the upcoming development of environmental regulations and policies in the world. Currently, the focus of LG Chem's energy management is shifting to greenhouse gases on the basis of three strategic disciplines: The development of a greenhouse gas management system; study and application of Clean Development Mechanism (CDM) and emission credit trading; and development of energy-saving products and production processes.

Master Plan

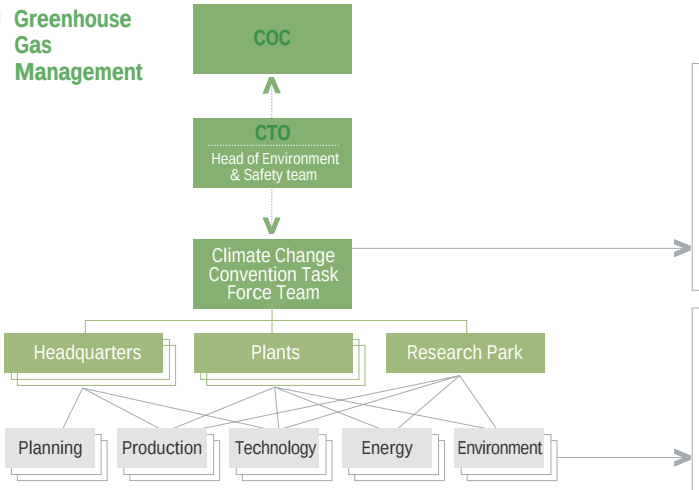
Targets	Strategies		Period
Development of Greenhouse Gas Management System	01	Development of greenhouse gas inventory system	2005
	02	Technology development for and investment in reducing greenhouse gas emission	2006
	03	Development of a greenhouse gas registry system	2006
Application of CDM and the Development of a Management System for Greenhouse Gas Emission Rights and Trading	01	Application of Clean Development Mechanism (CDM) and development of a management system for greenhouse gas emission rights and trading	2005 ~ 2008
	02	Greenhouse gas emission rights and trading managed by the related division and production site	2006 ~ 2008
	03	Expert training programs	2005 ~ 2008
Development of Energy-Saving Products and Processes	01	Research activities centered on production process technologies for the development of breakthrough energy-saving products	Continued

Terms and Targets

Period	Targets
Short Term (2005 ~ 2007)	Completion of laying the foundation of a greenhouse gas management
Mid Term (2008 ~ 2012)	Advancement of a greenhouse gas management system
Long Term (2013 ~ 2018)	Compulsory reduction of greenhouse gases pursuant to the regulations of the Climate Change Convention

LG Chem is proactive and agile in laying foundation for company-wide greenhouse gas management before the regulations of the Climate Change Convention come into force. The Company formed a task force team to carry out strategic tasks and make prompt decisions on related issues. The team comprises 120 staff members who were selected from each processing line in each plant. Its activities are reported to top management for the adjustment of upcoming plans and schedules.

Greenhouse Gas Management



Responsibility

Climate Change Convention Task Force Team

1. Development of a company-wide greenhouse gas inventory system
2. Tasks strategically set project by project
3. Project management by related production site
4. Support for greenhouse gas rights and trading
5. Leading company-wide activities and data sharing

Responsible Personnel of Production Sites

1. Directing the goals for reducing greenhouse gas emission
2. Identifying items that can reduce greenhouse gas emission and putting them in practice
3. Carrying out projects by each production site and enhancing capability

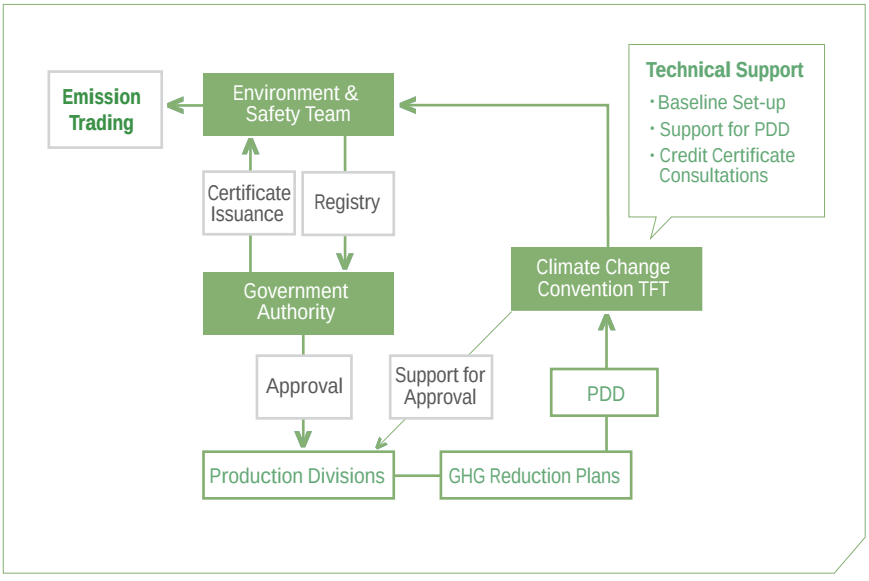
01_ Assessment of Greenhouse Gases

LG Chem is developing company-wide systems for systematic greenhouse management. The development is scheduled in four stages: A company-wide greenhouse gas inventory system; planning and analyzing the reducibility of potential amount of greenhouse gases; a greenhouse gas registry system; and an integrated greenhouse gas management system.

02_ Registry System for Greenhouse Gas Reduction

The Environment and Safety Team led by the CTO takes charge of reporting the Company's performance in reducing greenhouse gases to certified government offices. The Climate Change Convention Task Force Team provides the guidelines to set up baseline, project design document (PDD), and other technical support.

■ Registry System for Greenhouse Gas Reduction



■ Four Development Stages for Greenhouse Gas Management

01 Company-wide greenhouse gas inventory system

- Emission factors computed by different energy sources
- Framing in-house guidelines based on statistic data
- Level of greenhouse gas emission intensity assessed by different product processes

02 Project planning and analyzing the reducibility of potential reduction of greenhouse gases

- Estimating emission level of greenhouse gases
- Analyzing reducibility of potential reduction of greenhouse gases
- Compulsory allocation scenario estimation
- Marginal cost estimation and cost-reduction planning

03 Greenhouse registry system

- Development of an online-based report system to post emission level of greenhouse gases
- Development of a greenhouse gas registry system to post performance related with greenhouse gas reduction
- Development of a management system for greenhouse gas emission rights

04 Integrated greenhouse gas Management system

- Carrying out greenhouse gas reduction projects in stages
- Management for emission trading

Yellow mandarin fish

Safety and Health

LG Chem has made every effort to ensure the safety and health of its employees and the community. Safety and health management has been revised to sufficiently cover a wide range of business activities from procurement, production and sales to customer services.

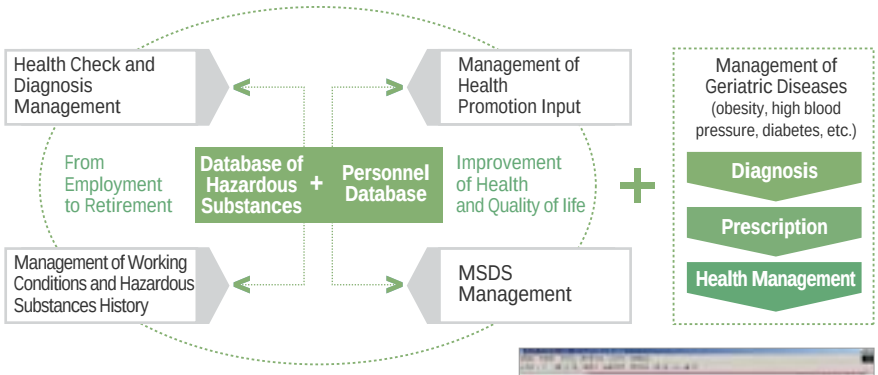
01_ Accident Prevention

LG Chem aims for an ideal working environment free from any accidents. The Company conducts regular health and safety audit under the Responsible Care guidelines, Process Safety Management (PSM), OHSAS 18001, and KOSHA 18001. To improve the quality of internal audits, various safety and health inspections and diagnoses were combined into an integrated system and the qualification of internal auditors was raised to a higher standard. To doubly ensure safe and healthy workplaces across the Company, the headquarters formed an internal auditors pool in which all production sites can exchange related information and benchmark best pratices.

02_ Health Promotion System

LG Chem integrated a database of employees' health checks, working conditions, workplace inspections, Material Safety Data Sheets (MSDS), etc. The Company computerized the Health Promotion System (HPS), a powerful health and safety tool that enables database browsing, computation of statistics, and related analysis and solutions. In coming years, the HPS will be stepped up to a two-way system so can employees interact with practitioners online for health inquiries, diagnoses, and prescriptions. The Company prevents not only its employees' occupational diseases but also geriatric diseases through encouraging a wholesome diet and exercise.

■ Health Promotion System



LG Chem's Health Promotion Website

In-house Healthcare Center

Safety First Group Education

Safety First Manuals

03_ Safety and Health Education

At LG Chem, the concept of safety and health is a priority in all employee activities. The newly-developed 'Safety First' curriculum further enhances safety and health promotion. The curriculum is designed for actual practices that can be easily applied to day-to-day operations.

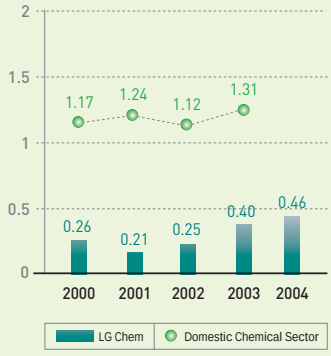
■ Safety First Courses

Safety First

Classification	Safety Leader Courses		
1. Courses	Level I Basics	Level II Widespread	Level III Safety Manner in Daily Practice
2. Objectives	Enhancing the importance of safety awareness by following the basics needed in workplaces and correcting unsafe practices	Pre-and-post skills needed for airtight safety company-wide	Comprehensive management to ensure safety of employees, safe operation of facilities, and safety-intensifying technologies
3. Responsibility	Safety management with coaching, guidance, and support		
4. Curriculum	• Understanding Process Safety Management (PSM) • Procedures for safe operation • Approval for safe working conditions	• Assessment of safety risks in processing lines • Environment and safety checking prior to operation • Internal audit	• Hands-on studies for Process Safety Management (PSM) • Enhancement of troubleshooting skills

Classification	General Courses		
1. Courses	Level I Basics	Level II Widespread	Level III Safety Manner in Daily Practice
2. Objectives	Ensuring airtight safety through intensifying awareness of employees with continued safety reeducation Enhancement of safety-handling capabilities through hands-on programs		
3. Responsibility	Strict observance and practice of safety management guidelines		
4. Curriculum	• Procedures for safe operation • Approval for safe working conditions	• Procedures for safe operation • Environment and safety checking prior to operation	• Procedures for safe operation • Capability enhancement to sufficiently identify operational shortcomings

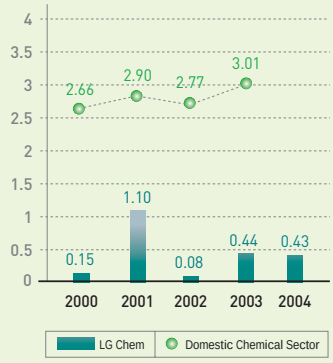
■ Injury Rate



$$\text{Injury Rate} = \frac{\text{Number of persons who sustained an accident}}{\text{Average number of workers}} \times 100$$

※ The injury rate increased from off-site accidents (22% of total accidents) due to a growing number of sports and leisure activities, outdoor get-to-together meetings, etc.

■ Severity Rate



$$\text{Severity Rate} = \frac{\text{Total loss of working days}}{\text{Total annual working hours}} \times 1{,}000$$

Spotted barbell

Eco-Products

LG Chem strives to make eco-products that can meet both the requirements of the EU, which has the toughest environmental standards in the world, and the general growing trend to embrace a healthy lifestyle. To this end, the Company continues increasing investment in pollution-free, high-performance products and the development of innovative processing technologies. The Life Cycle Assessment (LCA) introduced in 1997 allowed assessment of the potential environmental impact of a product life cycle, thus contributing to the reduction of environmental load in all products. Today, LG Chem produces 25 kinds of eco-products labeled with an environmental mark, clarifying environment-friendly features for customers, and 10 kinds of building materials labeled with the Healthy Building Material Mark, which assures pleasant air quality and environment indoors.

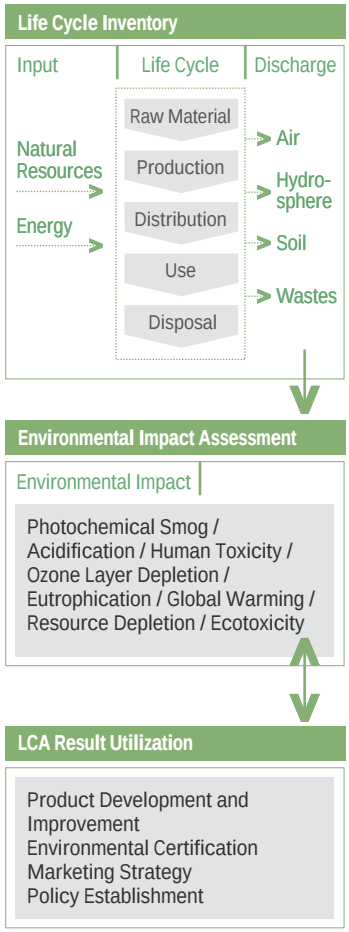
Eco-Label

01_ Life Cycle Assessment (LCA)

LG Chem introduced the LCA in 1997 as a tool to develop eco-products. The Company applies the LCA for assessing the volume of material and energy resources needed in a product lifecycle, from material procurement and production to disposal, and the potential environmental impact of the product on air, water, and soil. The range of LCA applications has been expanded into various products to improve environment-friendly features through minimizing environmental impact.

Since 2000, LG Chem has participated in the national LCA standardization database project, a joint research carried out with the Ministry of Commerce, Industry and Energy and the Ministry of Environment. The Company has secured Life Cycle Inventory (LCI) regarding 15 kinds of synthetic resin products including poly vinyl chloride (PVC). In 2004, the LCI was framed for 12 kinds of raw materials, including octanol and butanol, and information and electronic materials, including polarizers, photoresists, and rechargeable batteries, all of which provided references for publishing the Environmental Report on Products 2004. In addition, the environmental impact assessment was performed on all products to identify shortcomings throughout their life cycles. The report will feed data for the Environmental Declaration of Products (EDP) certificate and meet the customers' growing demands for environmental information on the Company's products.

■ LCA



■ Development of Eco-Products

Consideration of Life Cycle of Products	Environmental Assessment / Cost Analysis and Quantification	Evaluation of Product's Competitiveness	Environmental Improvement of Products	Publicity of Product Environmentality
Raw Materials Production	• Natural Resources • Materials Discharged into Air • Materials Discharged into Water System • Wastes	• Life Cycle Assessment (LCA)	• Recycling Rate • Prohibition/ Reduction of Restricted Materials	• Eco-Label • Eco-Declaration
Product Production				
Distribution		• Eco-Efficiency Analysis		
Use	• Life Cycle Cost		• Minimization of Environmental Impact	• Environmental Declaration of Products
Recycling / Disposal	• Environmental Restrictions	• Eco-Indicator		

02_ Eco-Products

Sumokwon Wood Floor is an environment-friendly flooring product line. Containing green tea ingredients, it significantly reduces the emission of formaldehyde and volatile organic compounds (VOCs). Meeting the present day's wellbeing trend, it did not only acquired the highest rating of the Healthy Building (HB) Material Mark in Korea, but also the F-Star, the highest rating of an eco-friendly building material certificate in Japan, and the M1, the highest of a prestigious building material certificate in EU.

Mozel is an environment-friendly wallpaper product line. It is Korea's first of its kind which does not emit any formaldehyde, a main source causing Sick House Syndrome. Some 97% of hazardous substances of wallpapers are usually emitted from synthetic-resin layer printed or embossed with patterns. With the use of water-based ink, the Mozel line dramatically reduces the emission of hazardous substances. In particular, the emission of VOCs is reduced to 3.4ppm, which is way lower than the level (160ppm) of conventional oil-based ink wallpapers. With this superior safety feature, even surpassing the rigid EU-required safety level (5.1ppm), Mozel line acquired the highest quality rating (Super-Excellent) of the HB Material Mark.

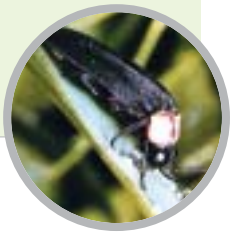
Heatrix, developed jointly with the Korea Institute of Construction Technology, is the next-generation floor-heating hypocaust system. If used when renovating an old hypocaust system, the Heatrix system allows the installation work without removing already-existing cement and mortar, thus reducing the amount of wastes and renovation time. With this environment-friendly feature, it acquired the Eco-Label.

Healthy Building (HB) Material Mark


Sumokwon Wood Floor


Mozel Propose


Heatrix


Firefly

New Woodstone is a flooring material line compounded with natural wooden outer layers and a natural elvan-chip inner layer. It gives wholesome effect on floors similar to that of a traditional Korean floor-heating hypocaust method. It also acquired Korea's Healthy Building (HB) Material Mark and the highest rating (F☆☆☆☆) of an eco-friendly building material certificate in Japan.

TRAUM is a window frame product line. Compounded with PVC and wood, it help reduces the cost of indoor cooling and heating by more than 30% compared with conventional aluminum window frames. It acquired the High Efficiency Tools and Materials Mark certified by the Korea Energy Management Corporation and the Eco-Label by the Korea Eco-Labeling Association. Customer appreciation of its high heat insulation and soundproofing property was demonstrated when consumers voted TRAUM the Best Wellbeing Product in the Consumer Wellbeing Index 2004 among customized windows frame products. The customized TRAUM is the first in Korea providing a special function for collecting dewdrops formed on windows due to the difference in interior and exterior temperatures and discharging the dewdrops through the separate groove made on the bottom frame. The tilting system allows natural air ventilation without sudden change of temperature.

Eco-Label Certificate


HB Material Mark Certificate

■ Eco-Products

Eco-Label Certified (25 kinds)

Nanogreen, Cheongmac, Rexcourt, EQ Floor, Deluxe Tile, Gallant Tile, VIP Marble Tile, VIP Conductive Tile, Wood floor (Kaldeumi), Kangmaru, New Woodstone, Heatrix, TRAUM U-PVC T/T, TRAUM U-PVC P-S/T, TRAUM N-L/S, BENIF, Deco sheet, etc.

HB Material Mark Certified (12 kinds)

Sumokwon Wood Floor, Mozel Propose, L-Greco, Mozel Fiance, Mozel Gracia, Nanogreen, HI-MACS, Deco sheet, BENIF, etc.

Concerning the wellbeing of customers, LG Chem makes every effort to create environment-friendly processing technologies and products and to develop effective pollutant control technologies.

Polycarboxylic Copolymer

LG Chem gears the development of people-friendly and environment-friendly building materials to cope with the regulations of the Act on Indoor Air Quality Control for Multiple-Use Facilities in Korea, which will come into force in coming years and prohibit the emission of formaldehyde and other VOCs in building materials. Polycarboxylic copolymer (PC) is a high-function concrete admixture serving an air entraining (AE) and water reducing agent. The PC is not an item subject to an environmental certificate. However, the Construction Materials Certification Committee tested and analyzed it under the same conditions for testing environment-friendly materials and judged it to be environment-friendly material.

Acrylate Styrene Acrylonitrile (ASA)

LG-produced ASA resin boasts excellent weatherability. Its high weatherability, which does not require paint when used as exterior material, makes it non-pollutant and perfect material for building and vehicle exteriors.

Exclusion Coating (LB-7507)

Largely used for plastic packaging of beverages, it minimizes changes in taste and smell that are often caused by plastic packing materials.

Halogen Free Flame Retardant PC / ABS

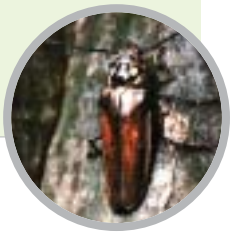
Free of halogenated flame retardants, these materials are used for electric and electronic parts, CD-ROM, DVD, and optical storage products.

Halogen Free Laminate / RCC

As an eco-friendly panel using no halogenated flame retardant, it meets the standards of the EU restrictions on the use of RoHS, which will come into effect in July 2006. Its heat resistance is improved to withstand the lead-free soldering process.

Deco sheet

BENIF



Long-horned beetle

partnership with interested parties

Nature. Our Future.

The origin of life goes back to the primordial soup, which brewed fish, birds, flowers, and animals, including human beings. As in the past, in the year 2005, balance in the food chain is still held in nature's invisible hands and will be perpetuated so our far-reaching generations can breathe crisp air under a clear sky if we do our part. Which is why we at LG Chem work hard for environmental preservation to let nature sing its glory.

ISO 14001

LG Chem has poured efforts into solidifying an environmental management system from 1996. This is apparent in each of worksites that has acquired the ISO 14001 certificate. In 2004, the Ochang Techno Park and Iksan Plant acquired the certificate.

ISO 14001

OHSAS / KOSHA 18001

With the Cheongju Plant as a starter in 1999, each of worksites has acquired the OHSAS 18001 or KOSHA 18001, a certificate for health and safety management. In 2004, Onsan Plant acquired the KOSHA 18001 and Ochang Techno Park acquired the OHSAS 18001.

Partnership with Interested Parties

Social Outreach

LG Chem has carried out social outreach programs as part of social contribution activities. Intended to boost a friendly image in public perception of the chemical industry, many of the programs and events are specifically aimed at raising interest in chemistry among young people.

Outreach programs were prepared by professionals who incorporated approaches gleaned from comparative studies of successful cases in other countries. They include Mobile Chemistry Lab as a hands-on program for elementary students, Chemistry Camp for middle school students, and Chemistry Frontier Festival for high school students, all designed to cultivate talent in science and engineering.

Mobile Chemistry Lab

01_ Mobile Chemistry Lab

"It promotes interest in children's minds while on the go."

The Mobile Chemistry Lab is a specially-renovated, cutting-edge vehicle for experiments and experiences in chemistry. It visits elementary schools and orphanages weekly, providing children with hands-on programs and knowledge of chemicals in easy-to-learn and intriguing ways. With the support of the Korea Science Foundation, it is jointly operated with the Science and Technology Promotion Center for Youths at Hanyang University.

02_ Chemistry Camp

“Students find much fun in the great outdoors.”

Chemistry Camp, themed on 'Smashing Time with Friends at LG Chem Camp,' is 3-day program during summer vacation for middle school students every year. Professionals in chemical science or recreation add spice to chemical programs and group activities. Thus, students enjoy a taste of Chemistry in the great outdoors and have memories that will remain fresh in the years to come.

03_ Chemistry Frontier Festival

“Learn all you need to know about chemical science.”

The Chemistry Frontier Festival (www.ilovechem.com) is designed to cultivate creativity in high school students talented in chemical science and life science. It is organized by Korea Advanced Institute of Science and Technology (KAIST) and co-hosted by the Ministry of Education and Human Resources Development, LG Chem, Hanwha Chemical, SK Corporation, Honam Petrochemical, and Samsung Total. Contestants selected in a preliminary contest compete in feats of knowledge and creativity dealing with assigned subjects (environment, energy, life science, sociology, traditional Korean science) or free subjects, with results announced in a presentation and on posters. At the same time, a Q&A Forum is held for like-minded high school students, with issues mainly focused on the future of chemical science, and with professors of KAIST and researchers as panels. The festival accompanies various events, including a product show displaying up-to-date products of the co-hosts, visits to cutting-edge research labs, award ceremony, and a dinner reception.

Chemistry Camp

Award Ceremony

Leaflets for the Chemistry Frontier Festival

Certifications

LG Chem has heightened the standards of environment-related performance through continued repositioning of its Environment, Health, and Safety (EHS) management. This is apparent in each of worksites that has acquired the ISO 14001, a certificate qualifying environmental management, (the) OHSAS 18001, and (the) KOSHA 18001, a certificate for health and safety management. Internal and external audits periodically review the Company's status as to practices specified in the certificates. The Company was designated an Environmentally Friendly Company by the Minister of Environment.

It is notable that the Ochang Techno Park, just completed in 2004, acquired the OHSAS 18001 and KOSHA 18001 in November 2004. In addition, the Iksan plant was certified the ISO 14001 in December 2004. LG Chem Research Park aims to acquire the ISO 14001 by 2005. Daesan Plant, acquired in 2001, and all overseas production sites strive to acquire these certificates by enhancing the level of EHS Management.

Certifications

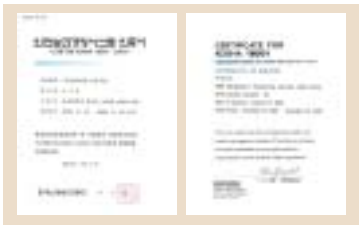
Worksite	Type of Certification	Certifying / Designating Org.	Date of Acquisition
Yeosu Plant	ISO 14001	DNV	Dec. 1996
	OHSAS 18001	DNV	Dec. 2000
	Environmentally Friendly Company	Ministry of Environment	Dec. 1995
Cheongju Plant	ISO 14001	DNV	Nov. 1999
	OHSAS 18001	DNV	Dec. 1999
	Environmentally Friendly Company	Ministry of Environment	Dec. 1995
Ochang Techno Park	ISO 14001	DNV	Nov. 2004
	OHSAS 18001	DNV	Nov. 2004
	Environmentally Friendly Company	Ministry of Environment	By 2006
Ulsan Plant	ISO 14001	KSA	Dec. 1996
	KOSHA 18001	KOSHA	Nov. 2000
	Environmentally Friendly Company	Ministry of Environment	Dec. 1995
Onsan Plant	ISO 14001	KfQ	Oct. 1996
	KOSHA 18001	KOSHA	Oct. 2004
	Environmentally Friendly Company	Ministry of Environment	Feb. 2000
Naju Plant	ISO 14001	DNV	Jul. 1997
	KOSHA 18001	KOSHA	Sep. 2000
	Environmentally Friendly Company	Ministry of Environmen	Apr. 1998
Iksan Plant	ISO 14001	DNV	Dec. 2004
	KOSHA 18001	KOSHA	Nov. 2001
	Environmentally Friendly Company	Ministry of Environmen	May. 1996

※ KOSHA: Korea Occupational Safety & Health Agency
KSA: Korean Standards Association
KfQ: Korean Foundation for Quality

Certificate for the Designation of an Environmentally Friendly Company

ISO 14001

OHSAS 18001



KOSHA 18001

Environment and Safety Awards

LG Chem's systematic operation and faithful practices in compliance with the standards of environmental, and safety certificates have been highly appreciated by the public and received many awards. In addition, the Company's 2004 Responsible Care Report received an excellence award at the Environmental Report Publishing Company Awards in the chemical sector held by the Korea Green Foundation.

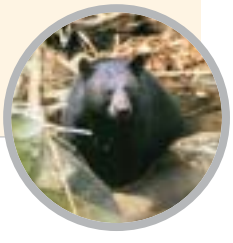
■ Environment and Safety Awards

Date	Awardee	Award	Awarder
Nov. 1999	Ulsan Plant	Excellent Green Energy Company Award	Korea Federation for Environmental Movement, etc.
Nov. 1999	Cheongju Plant	Environmental Technology Award	Ministry of Environment
Nov. 2000	Cheongju Plant	President Award for Excellent Environmental Management	Ministry of Commerce, Industry and Energy
Nov. 2000	Yeosu Plant	President Award at the Convention for Electric Safety Promotion	Ministry of Commerce, Industry and Energy
Dec. 2000	Naju Plant	Award for Outstanding Social Volunteer Work	Naju City
Dec. 2000	Ulsan Plant	Excellence Award for Environmental Management	Ulsan Metropolitan City
Jun. 2001	Cheongju Plant	Gold Medal at the Cheongju City Environmental Awards	Cheongju City
Nov. 2001	Ulsan Plant	Gold Medal at the Convention of Excellent Environmental Management Practiced Cases	Korean Association of Environmentally Friendly Enterprises
Jun. 2002	Cheongju Plant	President Award for Environment Preservation Merit	Ministry of Environment
Oct. 2002	Cheongju Plant	Prime Minister Award at the Convention for Electric Safety Promotion	Ministry of Commerce, Industry and Energy
Nov. 2002	Ulsan Plant	President Award at the National Quality Unit Contest	Ministry of Commerce, Industry and Energy
Jul. 2003	Yeosu Plant	Best Company Award for Labor-Management Cooperation in Prevention of Industrial Accidents	Ministry of Labor
Jul. 2003	Yeosu Plant	Grand Prize for the Honorary Industrial Safety Supervisor Case	Ministry of Labor
Jul. 2003	Ulsan Plant	Excellence Award at the Quality Unit Contest of Ulsan Metropolitan City	Ulsan Metropolitan City
Oct. 2003	Cheongju Plant	Award received for 4 consecutive years for Excellent Energy-Saving Practices in Compliance with the VA	Ministry of Commerce, Industry and Energy
Nov. 2003	Cheongju Plant	Grand Prize at the Convention of Excellent Environmental Management Practiced Cases	Ministry of Environment
Nov. 2003	Ulsan Plant	President Award at the National Quality Unit Contest	Ministry of Commerce, Industry and Energy
Jun. 2004	Cheongju Plant	Grand Prize in the Field of Chemical Engineering for Environmental Management	Ministry of Environment
Jul. 2004	Cheongju Plant	Award for Excellent Operation of Chimney Telemetering System	Ministry of Environment
Oct. 2004	Cheongju Plant	Award for Excellent Energy-Saving Practices in Compliance with the VA	Ministry of Commerce, Industry and Energy
Nov. 2004	LG Chem	Excellence Award in the Chemical Sector at the Environmental Report Publishing Company Awards	Korea Green Foundation

※ Individual award recipients of environment preservation merits are excluded.

Grand Prize Received for Excellent Environmental Management

Excellence Award Received for Superior Environmental Report



Manchurian black bear

Environmental Preservation Activities

01_ Ecology Protection

In 1997, LG Chem established the LG Evergreen Foundation for the purpose of balanced development and efficient use of land, along with protection of wildlife, mountain forestation, opening of wildlife observation paths, a campaign for improving Korean burial customs, and other activities based on environmental preservation. LG Chem reaches out hands to help shape a better world where people and nature can thrive together in harmony.

02_ Community Environment Protection

LG Chem volunteers activities for the protection of nature and the community as part of its commitment to help preserve a clean and green environment. Keeping this in mind, each establishment carries on various campaigns including 'One Mountain, One River Cleanup,' 'Migratory Birds Feeding,' 'Extermination of Negative Foreign Fishes,' and 'Tree Planting' campaigns and puts them in practice.

03_ Green Landscape

Each worksite at LG Chem landscapes an ecology garden. As a way to perceive environmental changes and to clean up air pollutants through natural means, the ecology garden is planted with various trees and flowers, both sensitive to and resistant to air pollution. For instance, Cheongju and Ulsan Plants are the showcases. The ecology garden serves as an environmental indicator, and, at the same time, offers reposeful moments for employees and visitors. In addition, each production site is broadening green patches in its compound to create a more pleasant working environment, while monitoring the status of air pollution in the neighboring community. When an abnormal level of air pollutants is detected, prompt treatment and survey take place in the area.

A Gala Occasion Held by the LG Evergreen Foundation

Community Environment Preservation Campaign

The Ecology Garden Serving as an Environmental Indicator

Ecology Park

Volunteer Activities for the Community

01_ Environmental Education Center

LG Chem operates regional Environmental Education Centers offering hands-on environmental facilities and environmental programs to encourage regional children and grownups to join in environmental preservation and eco-friendly experiences.

02_ Eco-Industrial Park Trial Project

LG Chem has participated in the Eco-Industrial Park Trial Project led by the Management Corporation for the Cheongju Industrial Complex and supported by the Ministry of Commerce, Industry and Energy. The project aims to lay an eco-friendly industrial network through resources recycling with contaminated materials, byproducts, and waste heat generated from the Cheongju Industrial Complex, providing recycled resources as feedstock to downstream industries.

03_ Technical Support for Partners and Small Companies

LG Chem provides environment-related technical support for partner companies to enhance their capabilities to deal with environmental issues and management. On the basis of win-win partnership, the Company carries out regular assessment of their practices regarding the environment. Environmental management know-how, eco-friendly technologies and production processes, and post-management skills are offered to the community's small companies to help build their competitiveness in environmental management.

04_ Coordination with Community NGOs

LG Chem's environmental commitment goes to various nature-saving activities in coordination with non-government organizations (NGOs) active in the community. NGOs include the Environmental Association of Yeosu Industrial Complex, Association for Beautiful Yeosu 21 Promotion, Environmental Sustainability Association of Cheongju Industrial Complex, and Association for Green Cheongju 21 Promotion.

05_ Volunteer Work for the Community

All worksites at LG Chem have formed social volunteer teams that practice their social commitment through diverse activities. They reach out helping hands by providing financial support to home-alone senior citizens, teenage households, the disabled, and others in need. The Women Employees' Association, formed in each worksite at LG Chem, has operated an annual One-day Teahouse with profits going to welfare facilities.

06_ Environmental Performance Open to the Public

In an effort to build trust in the public and interested parties, LG Chem has released information on its environmental performance in the annual Responsible Care Report. The report is printed in Korean, English, and Chinese and circulated online and off.

Field trip for Environment-Caring Experiences

Environmental Education Class

Volunteer Works for the Community

Opening of Environmental Performances to the Public

flying squirrel

Being with nature

Glossary

Eco-Label
Eco-label is a symbol on a product or its package informing customers how the product was made in an environmentally sensitive manner. The eco-label aims to promote products with a reduced environmental impact from production, distribution and use, to disposal.

Global Reporting Initiative (GRI)
The Global Reporting Initiative (GRI) was founded in 1997 by the United Nations Environment Programme (UNEP) and the Center for Agricultural, Resource and Environmental Systems (CARES) GRI is a multi-stakeholder process and an independent institution whose mission is to develop and disseminate globally applicable Sustainability Reporting Guidelines, mainly for business enterprises.

Healthy Building (HB) Material Mark
The HB Material Mark employed in the architectural community is certified in 5 grades according to the emission level of VOCs and formaldehyde in building materials (veneer boards, flooring materials, wallpapers, wood, panels, paints, adhesives, etc) produced at home and abroad.

Leak Detection and Repair (LDAR) System
Causing a drop in system pressure, leaks can significantly increase cost of operation and energy consumption. The LDAR system detects the leakage, allowing the cost reduction and air-tight management.

Life Cycle Assessment (LCA)
The LCA allows assessment of the volume of material and energy resources needed in a product lifecycle and the potential environmental impact of the product on air, water, and soil.

Process Safety Management (PSM)
The standards of PSM are intended to prevent or minimize the consequences of a catastrophic release of toxic, reactive, flammable or explosive highly hazardous chemicals (HHCs) that could occur in facilities where large quantities of these chemicals are stored or used.

Regenerative Thermal Oxidizer (RTO)
The RTO oxidizes VOCs and exhaust gases in high heat(800℃). It incorporates specialized ceramic media in a wide regenerator (heat transfer bed) to allow thermal rate efficiencies in excess of up to 97%, making it a high energy-saving and cost effective solution for air pollution control.

Responsible Care (RC)
Responsible Care (RC) is an international volunteer movement of chemical companies to facilitate sustainable development of people and nature with strict management of toxic materials used for chemical production, thus ensuring the safety and health of both the environment and people.

Restriction of Hazardous Substances (RoHS)
The ROHS directive is part of a legislative initiative prohibiting the generation of six hazardous substances in the production of electrical and electronic goods. The following six substances will be prohibited as of January 2006: lead (Pb), mercury (Hg), cadmium (Cd), chromium VI (Cr +6), polybrominated biphenyl (PBB), and polybrominated biphenyl ether (PBDE).

Selective Non-Catalytic Reduction (SNCR) System
With the SNCR system, NOx emissions in the flue gas are converted into elemental nitrogen and water by injecting a nitrogen-based chemical reagent instead of a catalyst.

Sustainability Report
Currently, many business enterprises use the framework of a Sustainability Report to publish their environmental reports. The Sustainability Report presents a holistic picture of company activities and provides a balanced view of benefits and trade-offs among social, economic and environmental impacts.

Sustainability Management
Business enterprises should practice responsible management of their economic, environmental, and social aspects. The bringing of sound sustainability in nature and people into harmony with business activities is becoming a common denominator among business enterprises.

Tele-Metering System (TMS)
Under the Clean Air Conservation Act of Korea, the TMS has been installed on chimneys and other pollution outlets in production facilities. It automatically measures the pollutant emission level and the real-time data is transmitted to the TMS Control Center of the Environmental Management Corporation. Upon receiving the data, relevant government offices draw up atmospheric policies or levy environmental fines to the responsible facilities.

Toxics Release Inventory (TRI)
The TRI contains information concerning wastes management activities and the release of over 600 toxic chemicals by facilities, production, distribution, or other use of such materials. The relevant government office integrates the TRI data of business enterprises and releases the information to the public.

United Nations Framework Convention on Climate Change (UNFCCC)
To prevent adverse effects of climate change, many countries have entered the UNFCCC (Korea, 1993) for the observation of regulations of global warming greenhouse gases, which include CO_2, CH_4, N_2O, PFCs, HFCs, and SF_6.

Voluntary Agreement (VA)
Business enterprises of Korea voluntarily ratify the agreement with the Ministry of Commerce, Industry and Energy, for reducing the emission of greenhouse gases and maximizing the use of energy resources.

Being with **nature**

2005 RC REPORT

Facsimile Questionnaire upon the LG Chem 2005 RC Report

Being with nature

Recipient

Fax | 82-2-3773-7215

Environment & Safety Team, LG Chem

Sender

Name _____

Gender _____

Occupation _____

LG Chem has published the 2005 RC Report since 2003 to inform the public about our environment, safety, health, and energy management. This report will be further upgraded upon your valuable input and answers on this questionnaire.

01 For what purpose do you use this report?

- ○ To know the overall environmental and safety management and performances of LG Chem
- ○ To know the environmental activities and the improved results of each production site in the community it operates
- ○ To provide the information of this report to LG Chem customers
- ○ Other

02 How do you find understanding this report?

○ Easy ○ General ○ Difficult

03 In which area(s) are you interested in this report?
(Mark one or more)

- ○ Introduction
- ○ Environmental Management
  - ○ Environmental Vision and Strategies
  - ○ Environmental Management System (EMS)
  - ○ Environmental Accounting (EA) / Environmental Performance Evaluation (EPE)
  - ○ Emergency Response System
- ○ Environmental Impact and Performances
  - ○ Environmental Performances
  - ○ Energy / Response to the Convention on Climate Change
  - ○ Safety and Health
  - ○ Eco-Products
- ○ Partnership with Interested Parties
  - ○ Social Outreach
  - ○ Certifications
  - ○ Environment and Safety Awards
  - ○ Environmental Preservation Activities
  - ○ Volunteer Activities for the Community

04 In which area(s) do you find it to be improved?
(Mark one or more)

- ○ Introduction
- ○ Environmental Management
  - ○ Environmental Vision and Strategies
  - ○ Environmental Management System (EMS)
  - ○ Environmental Accounting (EA) / Environmental Performance Evaluation (EPE)
  - ○ Emergency Response System
- ○ Environmental Impact and Performances
  - ○ Environmental Performances
  - ○ Energy / Response to the Convention on Climate Change
  - ○ Safety and Health
  - ○ Eco-Products
- ○ Partnership with Interested Parties
  - ○ Social Outreach
  - ○ Certifications
  - ○ Environment and Safety Awards
  - ○ Environmental Preservation Activities
  - ○ Volunteer Activities for the Community

05 If you think there are some areas to be improved in this 2005 RC Report, please state your opinion below.

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.....

06 If you have any input regarding this 2005 RC Report, please write your comments below.

.....

.....

*** If you wish to receive the next edition of this RC Report, please complete the information below.**

Address _ .....

Tel _ .....

Fax _ .....

e-mail _ .....

Thank you for your response.

Company History

1947. 01. Lucky Chemical Industrial Corporation established (cosmetics production launched)
1951. 11. Headquarters moved to Bujeon-dong, Busanjin-gu, Busan Metropolitan City
(Produced Korea's first injection-molded synthetic resin products)
1954. 06. Construction of Busan Yeonji Plant completed (synthetic resin processing lines expanded)
1959. 03. Lucky Fats and Oils Industries Co., Ltd., established

1962. 08. Lucky Vinyl Co., Ltd., established
1966. 01. Company name changed to Lucky Chemical Industries Co., Ltd.
1966. 03. Produced Korea's first synthetic detergent
1969. 10. Company went public
1974. 02. Company name changed to Lucky, Ltd.
1976. 11. Construction of Yeosu PVC Paste Resin Plant completed
1978. 08. Construction of Ulsan Plastic Processing Plant completed
1979. 12. Lucky Central R&D Center in Daejeon opened

1984. 03. Naju Plant of Korea Chemical Co., Ltd., acquired
1992. 10. Construction of Yeosu Phthalic Anhydride Plant completed
1993. 04. HCFC Resistant Resin developed and commercialized first in the world
1994. 10. 1st phase construction of LG Chem Research Park completed
1995. 02. Company name changed to LG Chemical, Ltd.
1996. 11. India's Hindustan Polymer, Ltd., acquired
1997. 12. Selected as Asia's Best Company by Euromoney, UK's economy magazine
1998. 05. Tianjin LG Dagu Chemical PVC Plant, China, completed
Tianjin LG New Building Materials Flooring Plant, China, completed

1998. 07. Ningbo LG-Yongxing Chemical ABS Plant, China, completed
1999. 02. 2million negotiable DRs issued (first among listed companies in Korea
1999. 10. Production facilities for information and electronic materials (lithium ion batteries, optical materials, CCL for MBLs, etc.) completed; Color filter photoresists for LCDs successfully commercialized

2000. 07. Phosphor for PDP developed
2000. 10. Ningbo LG-Yongxing Chemical ABS Plant, China, expanded (90,000 M/T)
2000. 11. Hyundai Petrochemical's PVC Business acquired

2001. 03. Compact Power Inc., a U.S. -based battery research center, established
2001. 04. Company demerged into LG Chem Investment, LG Chem, and LG Household & Healthcare
2001. 10. Production facilities in LG-Dagu Chemical PVC Plant, China, expanded

2002. 04. Production capacity of rechargeable batteries at Cheongju Plant doubled with an investment of KRW100 billion

2003. 03. Construction of Window Frame production facility in China completed
2003. 06. Hyundai Petrochemical acquired in consortium with Honam Petrochemical
2003. 08. LG Chem (Nanjing) Information & Electronic Materials Co., Ltd., China, established
2003. 11. LG Chem Industrial Materials Inc. (LG CIM), Georgia, USA, established

2004. 03. Ochang Techno Park established
2004. 06. LG-Yongxing Latex established in Ningbo, China
2004. 07. LG Chem (Taiwan), Ltd., established
2004. 12. LG Chem China Investment Co., Ltd., established

Contact Point

For more inquiries or any opinion about the LG Chem 2005 RC Report, feel free to call, mail, or e-mail us at the addresses below.
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The LG Chem 2005 RC Report can be downloaded from: www.lgchem.com.

Contents of the 2005 RC Report are based on LG Chem's performances as of December 31, 2004.
They are subject to change without prior notice.

Responsible Care®

LG Chem | www.lgchem.com

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