

LG CHEM  
SUSTAINABILITY REPORT



2024

# LG CHEM SUSTAINABILITY REPORT



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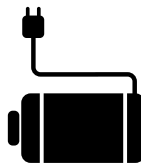
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# BUSINESS AND STRATEGY

# CEO MESSAGE

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# CEO MESSAGE

Dear Valued Stakeholders,

Today, we are experiencing a period of tremendous transformation where geopolitical conflicts are reshaping global supply chains and economic uncertainty is intensifying. These changes demand fundamental innovation in business structure and strategy beyond short-term responses. At the same time, sustainability has become an irreversible trend and core value that determines corporate survival and growth.

Despite these challenging circumstances, LG Chem is transitioning to a business portfolio that can secure both sustainable growth and profitability, leading innovation based on future technologies, and expanding the scope of sustainability management across the entire value chain.



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LG Chem Is Optimizing Its Business Portfolio Around Three Key Growth Drivers: Eco-Friendly Materials, Battery Materials, and Innovative New Drugs.

LG Chem is redefining product applications from the customer's perspective and providing optimized material solutions. We are accelerating the transition to electric vehicles by improving battery life and charging speed, reducing fossil fuel consumption through improved tire fuel efficiency, and contributing to humanity's healthy life through the development of medical device materials. Furthermore, we are pioneering the integration of bio-based raw materials and the recycling of plastics to minimize our carbon footprint.

We continue to invest in the battery materials sector as part of our strategy to secure new growth drivers and expand our market leadership. The Cathode Material plant with an annual capacity of 60,000 tons currently under construction in Tennessee, USA, will supply materials for approximately 600,000 high-performance electric vehicles starting from 2026. Even amid global supply chain restructuring, we are turning crisis into opportunity through close collaboration with customers.

In the innovative new drug sector, Korea's first domestically developed diabetes treatment, Zemiglo, has surpassed KRW 1 trillion in cumulative sales, achieving an average annual growth of 35%. We are also accelerating the development of AI-powered next-generation oncology drugs. These efforts and achievements have earned LG Chem recognition as the 7th most innovative company among the Global Top 100 and as a chemical company with the 2nd highest global brand value.

Guided by Our Vision “We Connect Science for Better Future,” LG Chem Is Securing Differentiated Technological Competitiveness to Preempt Future Competitive Advantages.

LG Chem is leading the development of carbon reduction technologies. Participating in the "CCU Mega Project," LG Chem is collaborating with POSCO Holdings, Korea Research Institute of Chemical Technology, and the Gyeongsangbuk-do Provincial Government to demonstrate how Dry Reforming of Methane (DRM) technology can transform industrial carbon dioxide generated from steelmaking processes into valuable resources. This is an attempt to create a technological breakthrough for Net-Zero through collaboration that transcends industrial boundaries. Furthermore, it will serve as a new solution to economically secure key raw materials for various chemical products and eco-friendly fuels.

To protect consumers from electric vehicle fires, we have developed new materials that suppress battery thermal runaway, with our findings published in the prestigious international journal Nature Communications. In the first half of 2025, we plan to mass-produce Precursor Free Cathode Materials for the first time in Korea. While improving electric vehicle performance, it will also contribute to reducing greenhouse gas emissions and wastewater generated during the precursor production process. The Biaxially Oriented Polyethylene (BOPE) technology that enables single-material packaging promotes plastic recycling and brings us one step closer to realizing a circular economy.

LG Chem Will Expand the Scope of Sustainability Management Across the Entire Value Chain, Fulfill Corporate Social Responsibility to Our Various Stakeholders, and Lead the Sustainable Transformation of the Industrial Ecosystem.

LG Chem strengthens joint efforts and win-win cooperation for climate action. We provide comprehensive support for suppliers' carbon reduction activities to fulfill our social responsibility for a sustainable future. For responsible mineral procurement, we evaluate supply chain risks for lithium, nickel, and cobalt used as raw materials for Cathode Materials and continuously strengthen our management systems. We safely manage hazardous chemicals and minimize the emission of pollutants. LG Chem makes every effort to protect the health of employees including those at partner companies and the environment of local communities by preventing environmental and safety accidents.

All these advancements and achievements have been possible thanks to our employees, whose passion and dedication have remained unwavering through every challenge. LG Chem will continue to respond flexibly to changing external environments, contribute to solving global environmental problems, and continuously secure business sustainability and competitiveness. We ask for the continued interest and support of all our stakeholders.

LG Chem  
CEO Shin Hak-cheol



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# COMPANY PROFILE

## A Global Science Company Leading the Sustainable Future

LG Chem seeks to create new value and drive positive changes in human life based on scientific knowledge, technology, and solutions accumulated across various business areas including petrochemicals, Advanced Materials, and Life Sciences. We are tirelessly working to realize a better future by connecting science and life.

Moving forward, LG Chem aims to identify new growth drivers aligned with future megatrends such as battery materials, sustainability, and bio to lead the market and achieve steady growth as the world's leading science company. To achieve this goal, we will strengthen sustainable growth and global competitiveness based on structural transformation plans while providing innovative solutions to challenges facing the world.

LG Chem will establish itself as a company that goes beyond simply developing science and technology to drive positive change for people, the planet, and the future, with innovation and sustainability as our core values.

### General Overview

Company Name	LG Chem Ltd.
Establishment Date	January 1947
CEO	Shin Hak-cheol
Number of Employees	14,000 in Korea, 5,000 overseas (rounded to the nearest hundred)
Headquarters Location	LG Twin Towers, 128 Yeoui-daero, Yeongdeungpo-gu, Seoul 07336
Key Business Areas	Petrochemicals, Advanced Materials, Life Sciences

### Financial Performance

Revenue ❶

KRW 48.9trillion

Operating Profit ❷

KRW 900billion

### 2024 Sustainability Management Performance

Scope 1+2 Emissions (Global)

9,351,641tCO<sub>2</sub>e

Renewable Energy Usage (Global)

835,370MWh

Number of Landfill Zero Certified Sites ❸

6sites

PC Reuse•Recycling Input Ratio ❹

5.3%

Employee•Subcontractor Fatality Rate ❺

0%

Female Employee Ratio ❻

16%

Number of Suppliers Completed ESG Self-Assessment ❼

955sites

Social Contribution Expenses

KRW 20.236billion

❶ Based on consolidated financial statements revenue for 2024.  
❷ Based on consolidated financial statements operating profit for 2024.  
❸ 6 sites (Yeosu (Hwachi), Gimcheon, Cheongju (Separator), Guangzhou, Quzhou, Tianjin).  
❹ Reuse/Recycling Materials: Includes PCR (Post-Consumer Recycled) or PIR (Post-Industrial Recycled) products, calculated by dividing the annual PCR or PIR material input (based on sales volume) by the total sales volume of the respective product group.  
❺ Fatality Rate: Total number of fatalities \* 200,000 / Total working hours.  
❻ Based on permanent domestic workers.  
❼ Suppliers refer to domestic and international regular trading companies with annual purchase amounts of KRW 100 million or more and 3 or more PO issuances.



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# BUSINESS GROWTH STRATEGY

## Business Model Transformation Toward a Sustainable Future

Throughout 2024, LG Chem laid the foundation for sustainable growth by restructuring low-growth and low-profit businesses through robust business structure advancement. We are also transforming to a sustainable business model that improves the constitution of existing businesses and focuses on new growth drivers to respond to climate change and social demands. The Advanced Materials Business Division adjusted its portfolio through the sale of polarizer, polarizer materials, and film businesses, while the Petrochemicals Business Division successfully completed optimization work through efficiency improvements in major processes such as PVC, EG, and SM lines in Yeosu. Through these structural reorganizations, we were able to achieve efficient resource utilization and profitability improvement. Furthermore, based on the 3C (Customer, Competitor, Company) strategy, we strengthened execution capabilities to enhance the profitability of high-value-added products such as electronic materials, ABS, HPM, and acrylic, and solidified our position as a global supplier in the vaccine field. These results are derived from executing core strategies for LG Chem's sustainable growth and future competitiveness enhancement.

## Performance Creation Through Three New Growth Drivers

LG Chem is creating differentiated performance through selective investment in three new growth drivers: sustainability, battery materials, and new drugs. As sustainability-oriented growth drivers to reduce carbon emissions and realize a circular economy, we can cite the establishment of a joint venture for HVO, an eco-friendly biofuel, and the commencement of construction of a supercritical technology demonstration plant in the chemical recycling field. In the battery materials sector, we are successfully diversifying our customer base through contract agreements with new customers in North America, and proceeding with the mass production of Cathode Materials at the Gumi joint venture and with North American investment as planned. In the new drug sector, we are strengthening our oncology portfolio through Phase 3 initiation for head and neck cancer, and Phase 1 clinical trials for immunotherapy and cancer cachexia treatments.

## Strengthening Business Capabilities Through Resource Efficiency Maximization and Profitability Enhancement

LG Chem focused on cost reduction, commercial excellence, and working capital management to maximize resource efficiency and improve profitability, laying the foundation for sustainable growth. In 2025, we will build on these achievements by pursuing even more dynamic and forward-looking portfolio shifts to drive sustainable growth. In particular, we are focused on elevating our structural competitiveness by improving the quality and impact of our sustainability initiatives, battery materials, and pharmaceutical innovations. We plan to accelerate the transition to performance-oriented R&D for preempting future technologies and refine investment priorities to secure both optimal resource allocation and financial soundness. Based on cost competitiveness and product competitiveness through strengthening customer-centered commercial excellence, we will achieve profitability differentiation within the industry and strengthen future core competitiveness.

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# KEY BUSINESS AREAS AND STRATEGIC DIRECTION

## PETROCHEMICALS BUSINESS DIVISION

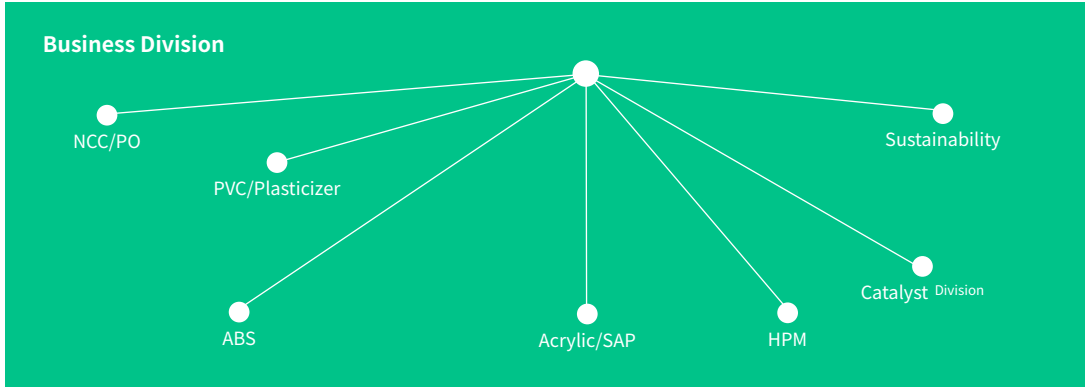
### Innovation Focused on Sustainable Growth and High-Value-Added Products

The Petrochemicals Business Division is LG Chem's core business area that produces basic petrochemicals such as ethylene, propylene, butadiene, and benzene from raw materials like naphtha, and manufactures various synthetic resins including PE, PVC, ABS, SAP, and synthetic rubber. Through a vertically integrated system, we maintain world-class productivity and cost competitiveness while leading innovation and transformation for sustainable growth.

The Petrochemicals Business Division is focusing on portfolio transformation centered on high-value-added products and fostering promising future materials for business structure advancement. We are accelerating the transition to high-value-added businesses through the development of Advanced Materials such as semiconductor-grade IPA and high-performance SSBR, aiming to further strengthen market competitiveness. Additionally, the Petrochemicals Business Division is enhancing eco-friendly business competitiveness in the global market by responding to environmental demands through the development of PCR (Post-Consumer Recycled) products and BCB (Bio-Circular Balanced) products using bio-naphtha. These efforts by LG Chem contribute to responding to climate change and reducing carbon emissions while providing eco-friendly product solutions to customers.

### 2024 Key Achievements

In 2024, the Petrochemicals Business Division was affected by poor market conditions due to increased supply in Northeast Asia and global economic slowdown. Despite rising oil and raw material prices and increased freight costs due to geopolitical risks leading to overall cost burden increases and reduced profitability of major products, high-value-added application products including semiconductor-grade IPA and automotive ABS maintained solid profitability.



### 2025 Strategic Direction

- Structural Reorganization of Commodity Business and Cost Competitiveness Enhancement**  
We plan to focus on structural reorganization aimed at improving profitability by adjusting the portfolio of low-profit and commodity businesses, while also strengthening cost competitiveness.
- Enhancement of High-Value Application Competitiveness and Portfolio Expansion Through New Business Development**  
We will strengthen competitiveness in high-value-added application products and expand our portfolio by discovering new businesses to further solidify our market position.
- Continued Promotion of Sustainability Business Development for Future Market Preemption**  
We plan to strengthen the competitiveness of eco-friendly businesses and continue efforts to preempt future markets through the development of sustainable products and solutions such as recycled plastic (PCR) and BCB products using bio-naphtha.

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## ADVANCED MATERIALS BUSINESS DIVISION

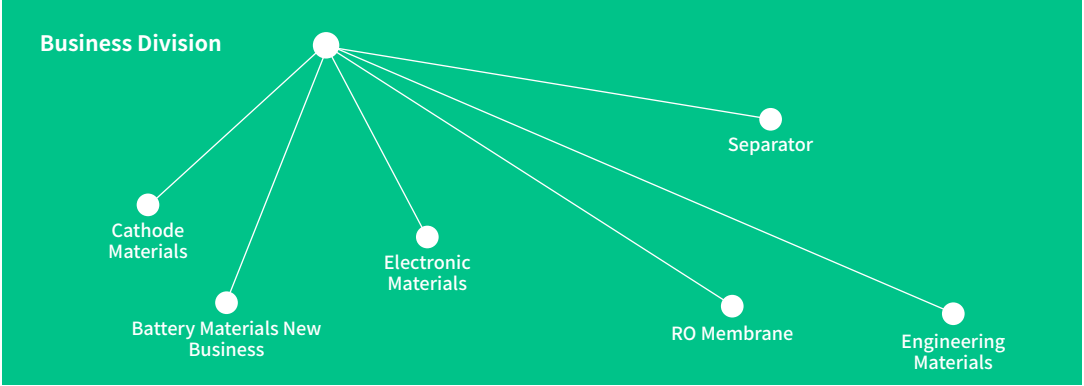
### Innovation and Sustainable Growth Leading Future Industries

The Advanced Materials Business Division is responding to the growth of the electric vehicle market and AI-driven market trends by delivering differentiated technologies and materials tailored to specific customer needs. In particular, the battery materials sector is expected to show solid growth in the mid to long term due to increasing demand for electric vehicles, energy storage, and renewable energy. Additionally, significant growth is expected in the electronic and engineering materials market equipped with heat dissipation, high heat resistance, and shielding technologies following automotive electrification and lightweighting trends, as well as in the semiconductor materials sector driven by AI market growth.

The Advanced Materials Business Division is strengthening local responsiveness based on global production bases. Adapting to the rapidly changing industrial environment, we are securing world-class technological capabilities in battery cost reduction, solid-state battery technology development, waste battery recycling technology commercialization, and semiconductor new material development to create the future lifestyle that customers envision.

### 2024 Key Achievements

In 2024, the Advanced Materials Business Division achieved quantitative and qualitative growth by expanding the shipment volume of battery materials such as Cathode Materials despite the downturn in the global electric vehicle market. We also accelerated the development of new growth businesses such as display, semiconductor materials, and e-mobility materials while strengthening the company's business portfolio through rationalization of low-growth businesses.



### 2025 Strategic Direction

#### Building a Balanced Business Portfolio Through Discovery of New Growth Drivers in Battery/Electronic Materials Business

We will discover new growth drivers in battery and electronic materials business and build a balanced portfolio to pursue sustainable growth.

#### Customer Base Diversification and Strategic Customer Partnership Expansion

We will strengthen our market position through our customer base diversification and expand partnerships with strategic customers to create mutual benefits.

#### Maintaining High Profitability by Expanding Customer First-in in Engineering/Electronic Materials Business

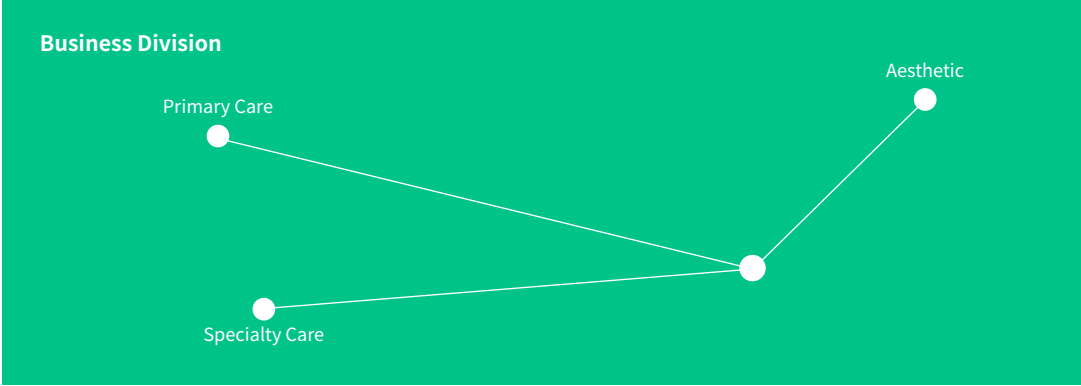
We aim to maintain high profitability with customer-centered strategies in engineering and electronic materials business to strengthen market competitiveness.

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LIFE SCIENCES BUSINESS DIVISION

**Leaping to Global Leadership Through Innovative Drug Development**  
While the Life Sciences industry creates substantial opportunities to drive economic growth due to increasing M&A cases between companies, LG Chem's Life Sciences Business Division is strengthening its market position by producing and selling various pharmaceuticals. We are maintaining and strengthening stable revenue generation and market position with products including diabetes drug Zemiglo, human growth hormone Eutropin, arthritis injection Synovian, rheumatoid arthritis treatment Eucept, hyaluronic acid filler Yvoire, pentavalent vaccine Eufenta, and polio vaccine Eupolio. In particular, we focus R&D on oncology and diabetes/metabolism areas to secure growth potential in areas with unmet medical needs and position ourselves as a global leader in pharmaceutical innovation through foundational technologies.

**2024 Key Achievements**  
In 2024, the Life Sciences Business Division achieved annual revenue of KRW 1.3 trillion including revenue from subsidiary AVEO. We also exported technology for a rare obesity drug to Rhythm Pharmaceuticals in the US, achieved market leadership and stable revenue from major products such as Zemiglo, Eutropin, and Eucept, and continued global new drug development including Phase 3 clinical trials for head and neck cancer treatment.



2025 Strategic Direction

**Pursuing Sustainable Growth Through Structural Competitiveness Enhancement of Business Divisions**  
We plan to strengthen structural competitiveness of business divisions to pursue sustainable growth and maintain and strengthen market positions of major products.

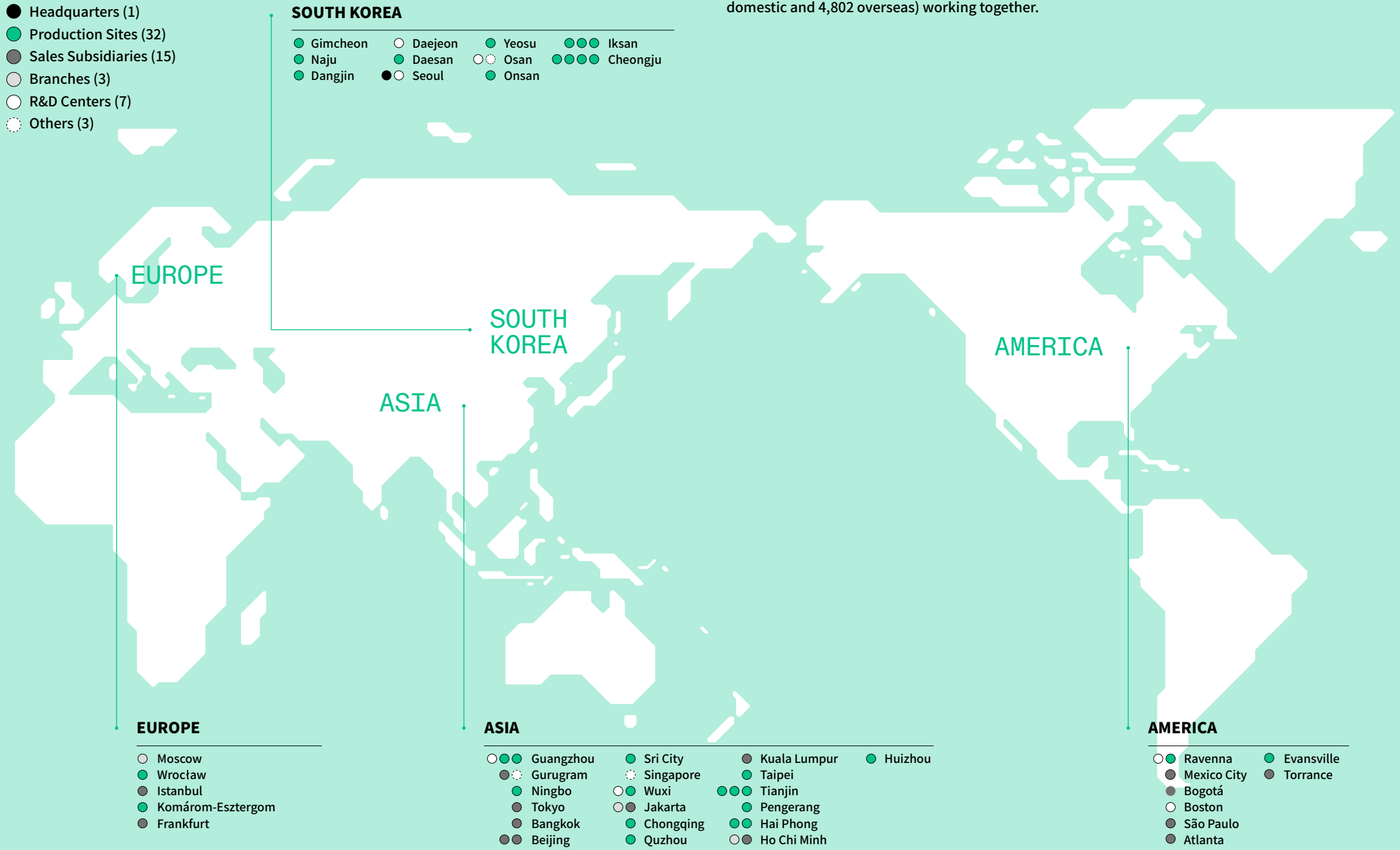
**Oncology New Drug Portfolio Expansion and Global Business Capability Enhancement**  
We plan to expand our oncology new drug portfolio and enhance global business capabilities to increase market competitiveness.

**Future Competitiveness Enhancement Through R&D Investment**  
We aim to strengthen future competitiveness through enhanced R&D investment and continue developing innovative new drugs.

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# GLOBAL PRESENCE

LG Chem’s first gateway to overseas markets opened in 1972 with the establishment of the Los Angeles branch. Since then, we have evolved into a global leader in science and innovation, with 61 production sites, sales subsidiaries, and R&D centers worldwide. As of June 2025, we operate facilities in 43 regions including Korea (our headquarters), Asia, and North America, with a total of 18,543 employees (13,741 domestic and 4,802 overseas) working together.



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# STAKEHOLDER ENGAGEMENT

**Activating Communication Channels by Key Stakeholder Groups**  
To continuously secure broad insights on sustainability topics, LG Chem collaborates with various stakeholders and experts across the entire value chain to comprehensively understand related expectations and impacts. We define stakeholders that significantly impact business activities as customers, employees, shareholders•investors, suppliers, local communities, and government, and operate various communication channels to understand the requirements of each stakeholder group. In customer communication, we transparently share product sustainability information, while in supplier communication, we establish common sustainability goals and seek collaboration methods, applying differentiated approaches for each stakeholder group.

**Stakeholder Engagement Process**

**1 Stakeholder Identification and Communication Planning**  
LG Chem identifies stakeholders that impact the organization and establishes communication plans reflecting the needs and characteristics of each group.

**2 Stakeholder Communication and Requirement Identification**  
We operate customized communication channels (digital platforms, workshops, meetings, etc.) for each stakeholder group including customers, suppliers, and local communities to identify requirements.

**3 Short-term and Mid-to-Long-term Improvement Planning**  
Based on identified requirements, we establish short-term and mid-to-long-term improvement plans and reflect them in business activities.

**4 Business Activity Reflection and Implementation Monitoring**  
We monitor the progress of business activities implemented according to improvement plans and adjust strategies when necessary.

**5 Sustainability Performance Improvement and Continued Stakeholder Communication**  
We pursue performance improvement through continuous monitoring and feedback while continuously expanding and strengthening communication with stakeholders.

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**Stakeholder Engagement Approach**

LG Chem utilizes digital platforms, meetings, workshops, and surveys to communicate with various stakeholders including customers, employees, shareholders and investors, suppliers, local communities, and governments. We regularly hold meetings and committee sessions with key stakeholders to reflect their input, while implementing tailored programs to strengthen communication with local communities and socially vulnerable groups.

LG Chem also responds quickly to stakeholder demands and ensures sincere and reliable stakeholder participation through two-way communication. To ensure such participation is meaningful, collected stakeholder feedback is actively reflected in decision-making processes, and their impact and progress are reported separately. Furthermore, we proactively consider potential barriers, such as language and cultural differences as well as power imbalances, throughout the participation process when selecting the most effective communication methods for each stakeholder.

Through these processes, LG Chem continuously strengthens cooperation with stakeholders, responds quickly to business environment changes, and seeks to provide differentiated value to stakeholders by improving sustainable performance. These efforts form a crucial foundation for LG Chem’s pursuit of global leadership in shaping a sustainable future.

Key Issues by Stakeholder Group		
Stakeholder	Key Communication Channels	Key Issues of Interest
Customers	<div>— Customer satisfaction surveys</div> <div>— KAM (Key Account Management) activities</div> <div>— Customer VOC</div>	<div>— ESG information disclosure</div> <div>— Greenhouse gas and energy targets and policies</div> <div>— Supply chain sustainability</div>
Our Employees	<div>— Labor-management councils and meetings</div> <div>— Employee satisfaction surveys</div> <div>— Grievance handling system</div>	<div>— Employee competency development</div> <div>— Organizational culture and labor relations</div> <div>— Employment and welfare benefits</div>
Suppliers	<div>— Integrated procurement management system</div> <div>— Supplier meetings and analysis exchange meetings</div> <div>— Shared growth committee</div>	<div>— Fair trade culture creation</div> <div>— Financial and business support</div> <div>— Supplier ESG capability enhancement</div>
Local Communities	<div>— Local community meetings and resident autonomous committees</div> <div>— Welfare facility and organization management committees near business sites</div> <div>— Community contribution programs</div>	<div>— Business site and community environmental safety management</div> <div>— Local job creation and economic revitalization</div> <div>— Social contribution business expansion</div>
Government	<div>— Policy meetings</div> <div>— Industry associations</div> <div>— Regional local governments</div>	<div>— Compliance and fair trade</div> <div>— Indirect economic effects</div> <div>— Environmental (greenhouse gas, energy), safety and health policy and regulatory response</div>
	<div>— Shareholder meetings and quarterly earnings presentations</div> <div>— NDR, conferences and ad-hoc conference calls</div> <div>— Financial and ESG performance disclosure</div>	<div>— Economic performance</div> <div>— Board management and supervision enhancement</div> <div>— ESG information disclosure</div>



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**Partnership of Consultation and Cooperation**

Countries around the world including the European Union (EU), United States, China, Japan, Korea, and ASEAN continued to introduce carbon emission reduction regulations and policies in 2024 to respond to climate change. Each country is pursuing carbon reduction in various ways according to its economic situations and policy needs, which is impacting the global economy and industries overall. Reflecting these global trends, LG Chem actively participates in climate action initiatives and continuously monitors policy trends regarding carbon emissions and recycling regulations within the industry. Based on this, we voluntarily establish industry standards and encourage mutual implementation to further expand corporate roles in climate action.

Setting standards for a sustainable future, developing solutions, and pursuing common agendas are responsible business activities and play important roles in creating a better world for future generations. As part of these efforts, LG Chem establishes partnerships for resource recycling and waste reduction within the value chain and builds a closed-loop resource circulation ecosystem that contributes to reducing environmental impact. Moving forward, LG Chem will create new business opportunities that accelerate the sustainability of plastic and battery industry ecosystems and lead sustainable management.



**External Assessments for Building Stakeholder Trust**

ESG assessments provide important insights into stakeholder expectations while being an area where we receive requests for responses on evaluation scores and improvement points from customers and investors. Accordingly, LG Chem actively monitors and communicates major ESG assessment indicators including MSCI, S&P DJSI, CDP, KCGS, and Sustainalytics, and works to ensure that topics important to stakeholders align with LG Chem's priorities.

### External Recognition



2024 MSCI Korea Country ESG Leaders Capped Index



2024 S&P DJSI Asia-Pacific & Korea Index



2024 CDP Climate Change B, Water Security B



2024 KCGS Overall B+  
(Environment B+, Social A, Governance B+)



2024 Sustainalytics Medium Risk

RE:ACT TO ZERO

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# MATERIALITY ASSESSMENT

LG Chem established its sustainability vision and strategy in 2019, selected 9 key areas, and announced mid-to-long-term goals derived around 5 top priority tasks. This is based on the stakeholder capitalism concept proposed by the World Economic Forum (WEF), and reflects global megatrends and requirements of various stakeholders to identify risk factors and opportunity factors by petrochemical, Advanced Materials, and Life Sciences industries, and comprehensively review the impact of short- to mid-to-long-term business.

In 2023, LG Chem enhanced its materiality assessment. Going beyond setting simple reporting frameworks, we expanded the assessment process to be used for defining strategically relevant topics for long-term business success that respond to stakeholders' complex and sometimes conflicting requirements and expectations. In particular, for stakeholder materiality assessment, we identified key issues from the perspectives of internal stakeholders (employees) and external stakeholders (customers, suppliers, local communities, etc.) and evaluated the relevance of each issue through quantitative and qualitative methods.

In the 2024 materiality assessment, we conducted more sophisticated evaluation of environmental and social impact and financial impact through in-depth analysis and clearly established corporate sustainability strategies and priorities from stakeholder perspectives. In particular, the importance of a strengthened global response to the climate change crisis and supply chain and human rights issues became more prominent, and we conducted an in-depth review of corporate responsibilities and opportunity factors accordingly. LG Chem integrated the 2024 materiality assessment results to realign our sustainability management strategy and operational direction. This commitment laid the foundation for strengthening stakeholder trust and advancing as a responsible company.

**Double Materiality Assessment Process**

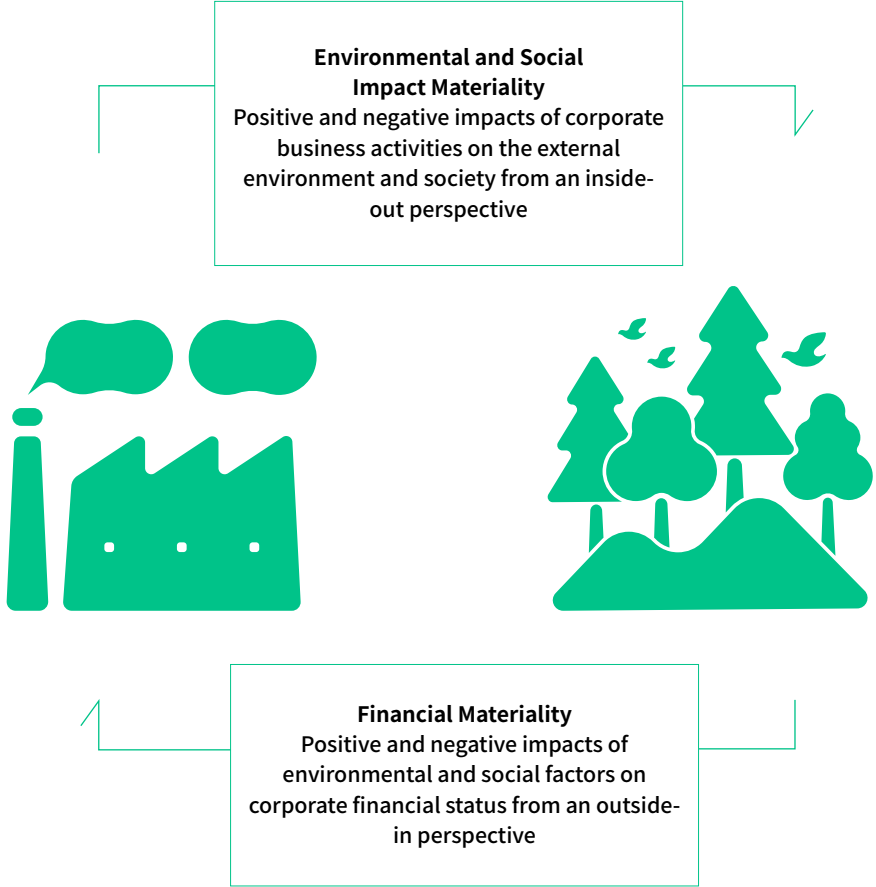
In the 2024 materiality assessment that further strengthened the double materiality concept, we conducted more sophisticated evaluation of environmental and social impact and financial impact based on the 2023 process while reflecting stakeholder requirements and global environmental changes. Through this double materiality assessment, LG Chem is strengthening its capability to integrally review not only the impact of corporate activities on the environment and society but also the financial impact on corporate value.

**Environmental and Social Impact Materiality Assessment**

LG Chem thoroughly evaluated the actual and potential positive and negative impacts of activities across the entire value chain both quantitatively and qualitatively, considering various factors including the scale, scope, and likelihood of impacts.

**Financial Materiality Assessment**

We conducted more detailed analysis of financial risks and opportunity factors affecting corporate operations and business strategies. Through this, we reconfirmed that environment-related issues such as climate action and renewable energy transition are key factors that not only pose financial risks but also enhance corporate value in the long term.



Materiality Assessment Process

- 1 Issue Pool Composition
- 2 Impact Assessment
  - 1) Environmental and Social Impact Assessment
  - 2) Financial Impact Assessment
- 3 Materiality Assessment Result Analysis and Key Issue Identification
- 4 Key Issue Management and Reporting

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**Assessment Scope Expansion and Refinement**  
LG Chem is expanding the assessment scope by continuously quantifying impacts and supplementing qualitative evaluations. We plan to additionally include new stakeholder groups in the future, which will further strengthen the reliability and validity of the assessment process. In particular, we plan to transparently disclose the assessment process and results through communication with various stakeholder groups including employees, shareholders, customers, suppliers, and local communities, and based on this, clearly identify key issues for sustainable management and systematically set priorities from a mid-to-long-term perspective.

**Double Materiality Assessment Results**  
LG Chem conducted an in-depth review of issues derived from double materiality assessment results through regular management reporting and selected 10 key issues by considering the combined impact of environmental and social impact and financial impact on stakeholder groups.

Climate action, renewable energy transition, and the circular economy emerged as key areas with the highest environmental and financial impact for companies, significantly affecting the entire value chain. On the other hand, ecosystem protection and supply chain management were classified as issues requiring continuous management, with somewhat lower environmental and social impact but very high impact on stakeholders. Additionally, worker and process safety and health, employee DE&I, human rights and labor rights, product management, and business ethics are areas having a particularly high impact on stakeholders, playing important roles in corporate social responsibility fulfillment and positive corporate image enhancement.

Specific implementation plans and detailed information on the top 10 key issues can be found in the PROGRESS ON ESG chapter of this report.

● High Impact ● Medium Impact ○ Low Impact																
Top 10 Material Issues		Environmental and Social Impact				Financial Impact					Stakeholder Impact					
#	Key Issue Name	Impact Level	Upstream	Business Operations	Downstream	Impact Level	Revenue	Cost	Risk	Opportunity	Impact Level	Our Employees	Shareholders	Customers	Suppliers	Local Communities
1	Climate Action	Very High	●	●	●	Very High	●	●	●	●	High	●	●	●	●	●
2	Renewable Energy Transition	High	●	●	●	Very High	○	●	●	●	High	○	●	●	○	●
3	Circular Economy	Very High	●	●	●	Very High	●	●	●	●	High	●	●	●	○	○
4	Ecosystem Protection	High	○	●	●	High	○	●	●	○	High	○	●	○	○	●
5	Supply Chain Management	High	●	●	○	High	○	●	●	●	High	○	●	●	●	○
6	Worker and Process Safety	High	●	●	○	High	○	●	●	○	Very High	●	●	●	●	●
7	Employee DE&I	Low	○	●	○	High	○	●	○	●	Low	●	○	○	○	○
8	Human Rights and Labor Rights	High	●	●	○	High	○	●	●	●	High	●	●	○	●	●
9	Product Management	High	○	●	●	High	●	○	○	●	High	●	●	●	○	○
10	Business Ethics	High	●	●	●	High	○	○	●	○	High	●	●	●	●	○

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Impacts Across the Value Chain and Sustainability-Related Risks and Opportunities

LG Chem identified potential sustainability topics to comprehensively understand environmental, social, and economic impacts. Based on this, we considered both positive and negative impacts arising from business activities across the entire value chain and factors that could affect corporate performance. While these sustainability topics cannot completely include all impacts and issues, they encompass the diverse and important impacts arising from corporate activities that produce materials fundamental to life. Value chain assessments deepen the understanding of risks and dependencies related to raw materials and operations, while also providing insights into current and emerging customer challenges and supporting the development of impactful solutions. Through this, LG Chem seeks to discover new business opportunities and contribute to sustainable growth.

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# CLIMATE CHANGE RISKS AND OPPORTUNITIES

In 2025, ten years after the Paris Agreement was signed, humanity is experiencing the severity of climate change more clearly. The year 2024 was recorded as the hottest in history, with some regions observing temperature increases exceeding 1.5°C. Additionally, greenhouse gas concentrations reached the highest levels compared to pre-industrial times (1850-1900), and the rate of sea level rise doubled from when satellite observations began. This acceleration of climate change is intensifying risks such as abnormal temperatures, natural disasters, and food and water shortages globally. In this situation, corporate responsibility for climate action is increasing. In particular, carbon-intensive industries face not only physical risks such as tangible asset damage, supply chain disruptions, and worker productivity decline, but also transition risks such as strengthened carbon emission regulations, low-carbon technology adoption, and consumer perception changes in the process of transitioning to a low-carbon economic system.

LG Chem seeks to expand the scope for managing climate change risks and opportunities across the entire value chain, beyond product production and sales processes, to include new investments, mergers and acquisitions, raw material supply and transportation, and production, use, and disposal of finished products using our products. To this end, we explored physical risks expected through 2050 and transition risks and opportunities reflecting sector-specific characteristics from multiple angles, focusing on business sites located in Asia including Korea and Europe. Through such scenario-based analysis, we identified physical risk factors at major business sites and conducted risk analysis considering regional and business sector characteristics.

**Physical Risk Analysis**  
Based on physical risk analysis, LG Chem plans to supplement physical risk response plans for major business sites and establish adaptation measures.

**Overview of Physical Risk Analysis**

**Scenario-based Analysis**  
Based on SSP1-2.6 (limiting temperature rise to within 2°C by 2100) and SSP5-8.5 (projecting temperature rise of approximately 5°C by 2100), annual average projected loss values were calculated for eight physical risk factors.

**Analysis Target Sites**  
Major business sites including Seoul headquarters, Yeosu, Daesan, Cheongju, Iksan, Tianjin in China, Wuxi, Ningbo, Hai Phong in Vietnam, and Wrocław in Poland.

**Analysis Results**  
Asset value loss risks due to extreme temperatures were confirmed at most business sites, with expected increases in recovery and maintenance costs and facility operation suspension risks due to heavy rain, typhoons, and droughts.

Modeled Average Annual Loss in Asset-Value under SSP1-2.6

	Pluvial Flooding			Extreme Temperature			Drought			Tropical Cyclone		
	~'29	~'39	~'49	~'29	~'39	~'49	~'29	~'39	~'49	~'29	~'39	~'49
Seoul												
Yeosu												
Daesan												
Cheongju												
Iksan												
Tianjin												
Wuxi												
Ningbo												
Hai Phong												
Wrocław												

○ 0% ● Less than 1% ● 1% or more

Modeled Average Annual Loss in Asset-Value under SSP5-8.5

	Pluvial Flooding			Extreme Temperature			Drought			Tropical Cyclone		
	~'29	~'39	~'49	~'29	~'39	~'49	~'29	~'39	~'49	~'29	~'39	~'49
Seoul												
Yeosu												
Daesan												
Cheongju												
Iksan												
Tianjin												
Wuxi												
Ningbo												
Hai Phong												
Wrocław												

○ 0% ● Less than 1% ● 1% or more

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**Transition Risks and Opportunity Factors**  
LG Chem participates in global climate crisis response, declares goals of Carbon-neutral Growth by 2030 and Net-Zero by 2050, and is accelerating the transition to a low-carbon management system. LG Chem systematically manages climate change risks and opportunities and pursues strategies for sustainable growth. Through this, we aim to accelerate the transition to a low-carbon management system to enhance competitiveness in the global market.

**Major Transition Risks**

**❶ Policy Risk**  
**Assessment:** As a K-ETS emission trading system allocated company, increased response\ costs are expected due to strengthened domestic and international greenhouse gas regulations.  
**Response:** LG Chem has established a 2050 Net-Zero roadmap, is detailing type-specific reduction roadmaps, and has introduced internal carbon pricing (ICP) to reflect regulatory costs from carbon emissions in mid-to-long-term business plans.

**❷ Technology Risk**  
**Assessment:** Greenhouse gas generation issues from NCC (Naphtha Cracking Center) crackers may arise.  
**Response:** LG Chem is pursuing bio raw material substitution and electric cracker conversion technology development, and maximizing direct reduction through low-carbon fuel conversion and energy efficiency improvement.

**❸ Market Risk**  
**Assessment:** Corporate competitiveness weakening is a concern due to increased demand for eco-friendly products and expanded greenhouse gas reduction requirements within the supply chain.  
  
**Response:** LG Chem is advancing LCA-based data collection and analysis systems, strengthening collaboration with suppliers to secure low-carbon competitiveness across the entire supply chain, and enhancing eco-friendly product competitiveness through customer-customized LCA analysis.

**❹ Reputation Risk**  
**Assessment:** The influence of climate action levels on corporate credit ratings and customer contracts is gradually increasing.  
**Response:** LG Chem is strengthening competitiveness through expanding eco-friendly product portfolios and implementing a Net-Zero roadmap.

Impact and Response Status by Major Physical and Transition Risk Factors			
	Type	Factor	Major Impact and Response Status
Physical Risk	Acute Risk	Business site facility damage and production delays due to climate-induced disasters	Supplementation of climate scenario-based business site emergency response plans and management enhancement
	Chronic Risk	Worker productivity decline due to average temperature rise	Expansion of break time and convenience facilities to ensure worker safety and prevent health accidents
Transition Risk	Policy Risk	Rising costs for greenhouse gas regulation response	Inducing carbon reduction activities and investments through internal carbon pricing introduction
	Technology Risk	Increased investment costs for carbon reduction technologies	Expanding direct reduction through innovative process introduction and energy efficiency improvement
	Market Risk	Strengthened demand for eco-friendly products and environmental proof	Performing LCA for all domestic and international products Obtained ISCC Plus certification for 62 products including SAP and ABS
	Reputation Risk	Reduced capital raising capacity due to inadequate climate action	Strengthening capital raising capacity through eco-friendly product portfolio expansion and Net-Zero roadmap implementation

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# SUSTAINABILITY GOVERNANCE

LG Chem is strengthening its sustainability management implementation system that links business and sustainability by identifying and managing potential risks and opportunities according to sustainability strategy directions and establishing and managing mid-to-long-term roadmaps. Additionally, we have introduced and operate a sustainability performance management system linked to executive compensation to strengthen the execution capability of sustainability management.

### Board of Directors' Oversight Role in Sustainability Management

LG Chem's Board of Directors serves as the highest decision-making body, deliberating and resolving key matters of company business including sustainability issues and supervising management's job execution. The ESG Committee within the Board of Directors, chaired by the CEO, makes independent and objective judgments on major sustainability issues and reflects them in management strategies during key decision-making processes. The committee reviews major sustainability policies and strategies including greenhouse gas reduction targets and promotion strategies, and regularly receives reports on sustainability management issues from the ESG Committee to monitor climate action implementation status.

### Management's Emphasized Role and Participation as Control Tower

LG Chem management is committed to integrating sustainability issues derived from the materiality assessment into business operations and annual planning processes. The CSSO serves as the control tower for sustainability management, communicating with stakeholders to present feasible solutions and leading sustainability strategies. Organizations under the sustainability department identify and present major sustainability-related agenda items to the ESG Committee and management meetings, and derive new improvement tasks based on sustainability-related stakeholder requirements to collaborate with relevant departments. We establish roadmaps for achieving Carbon-neutral Growth by 2030 and Net-Zero by 2050, review the economic feasibility of carbon reduction tasks and encourage implementation, procure renewable energy, and calculate product carbon footprints. By actively communicating these matters with customers, investors, government agencies, and others, we are building and operating management systems for sustainability including LG Chem's Net-Zero commitment.

### Sustainability-Related Executive Performance Evaluation and Compensation Linkage

LG Chem integrates ESG-related indicators into executive performance evaluation and compensation systems to strengthen management's responsibility for sustainability management activities, promote low-carbon economic transition, and expand eco-friendly business opportunities. Since 2021, we have linked key performance indicators (KPIs), including greenhouse gas emission reduction, eco-friendly product development, supplier evaluation system establishment, and safety and health, to the respective sectors overseen by each executive. Through this, we set measurable sectoral performance targets and built a system to internalize ESG management by department and individual employees. This integrated indicator system serves as the foundation for inducing not only management but the entire company to practice ESG management. Furthermore, we link compensation systems to performance evaluation to encourage active promotion of eco-friendly management activities and strengthen management's responsibility and commitment to Net-Zero and sustainable growth. Through this, we aim to encourage active promotion of eco-friendly management activities and establish a company-wide eco-friendly management culture by making sustainable management a core task for management.



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# SUSTAINABILITY STRATEGY

LG Chem has set the goal of providing innovative and differentiated sustainable solutions for the environment and society and selected five key tasks: climate action, renewable energy transition, resource circulation activities, ecosystem protection, and responsible supply chain development and management.

## LG Chem's Five Key Tasks of Sustainability Strategy

- 1 Climate Action**

**Goal:** Declaration of 2030 Carbon-neutral Growth, 2050 Net-Zero

**Strategy:** Expanding transition to eco-friendly fuels and low-carbon raw materials, developing and introducing carbon capture and utilization (CCU) technology, strengthening process and facility energy efficiency
- 2 Renewable Energy Transition**

**Goal:** Achieving 100% renewable energy transition by 2030 for overseas sites and by 2050 for domestic sites

**Strategy:** Expanding renewable energy use and optimizing energy mix
- 3 Resource Circulation Activities**

**Strategy:** Mechanical and chemical recycling and renewable raw material-based plastic research and development, realizing circular economy through expansion of waste plastic and battery recycling
- 4 Ecosystem Protection**

**Strategy:** Promoting zero waste landfill within business sites, strengthening eco-friendly product development and hazardous substance reduction efforts
- 5 Responsible Supply Chain Development and Management**

**Strategy:** Strengthening risk assessment and due diligence activities for major raw material supply chain improvement, enhancing supply chain transparency and traceability

## LG Chem's Challenge Toward 2050 Net-Zero

LG Chem is finding ways for sustainable survival and growth by responding to greenhouse gas emissions accompanying business growth and product expansion. To discover new business opportunities and respond proactively under changing market order, we announced a sustainability strategy centered on 2050 Carbon-neutral Growth in 2020, the first in Korea's chemical industry. Two years of company-wide carbon reduction efforts have brought us closer to our goals. This momentum has enabled us to accelerate our existing Carbon-neutral Growth target by 20 years (2030) and set a new goal of achieving Net-Zero by 2050. To accomplish this, we are actively pursuing process innovations, transitioning to eco-friendly raw materials and fuels, and expanding the use of renewable energy. Additionally, to secure low-carbon competitiveness of products, we are building management systems beyond regulatory areas (Scope 1, Scope 2) to voluntary areas (Scope 3). Since global Net-Zero cannot be achieved through individual company efforts alone, LG Chem seeks to lead a sustainable industrial ecosystem by collaborating with strategic and influential partners.

## Accelerating Low-Carbon Transition

- New process introduction and expansion of eco-friendly raw material and fuel use
- Renewable energy transition
- Carbon emission offsetting

## Strengthening Low-Carbon Product Competitiveness

- Expanding eco-friendly product portfolio
- Establishing Scope 3 management system and measuring and managing supplier carbon footprints

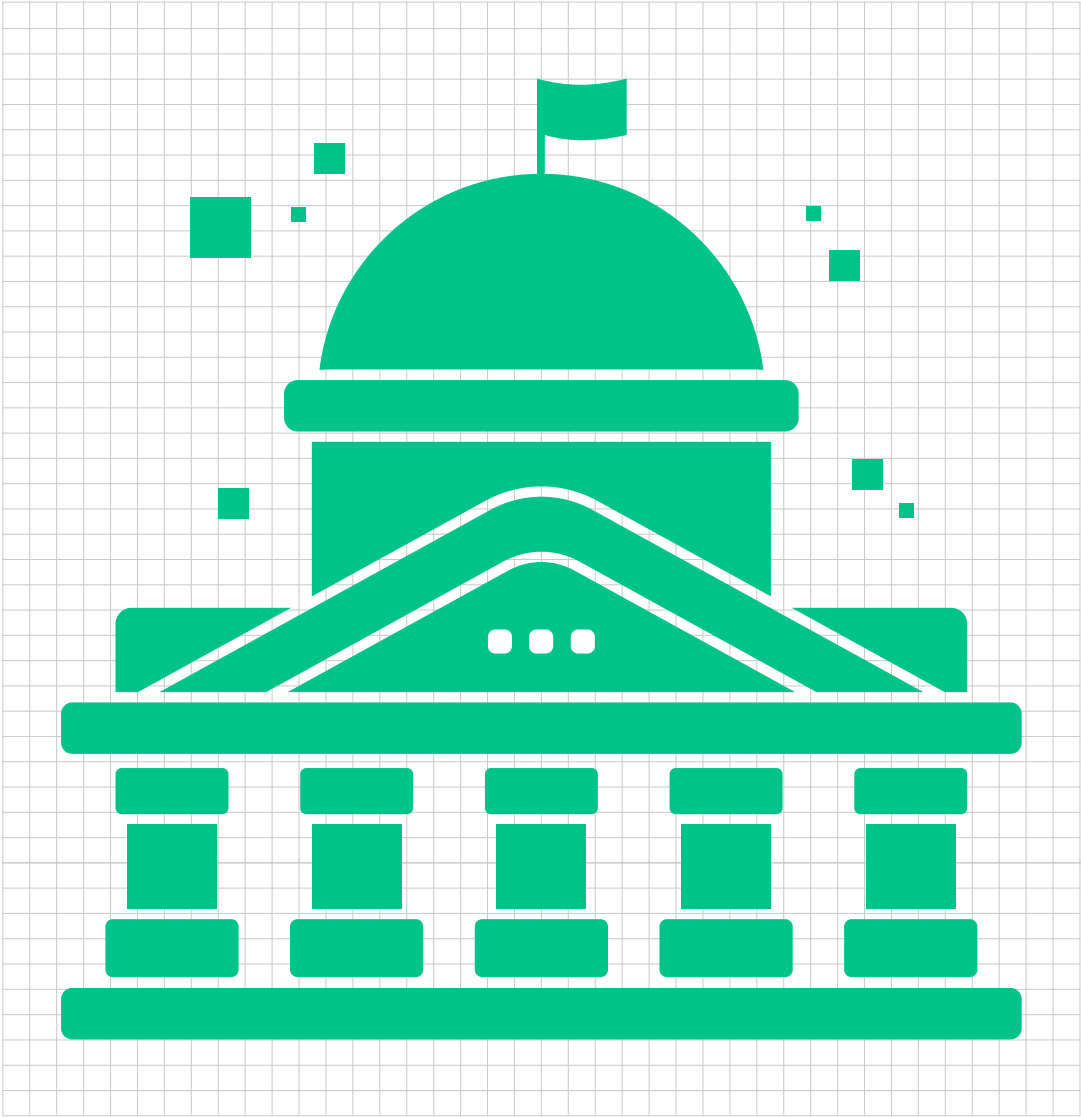
## Realizing Net-Zero Through Partnerships

- Demonstrating global climate leadership for climate action
- Developing innovative technologies and building circular economy through inter-industry cooperation
- Building cooperation networks for achieving global Net-Zero goals

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# COMMITMENTS AND ACHIEVEMENTS

## GOVERNANCE



### Board of Directors

Commitment	Progress
— Building a global-level transparent governance system and practicing board-centered responsible governance	<ul style="list-style-type: none"><li>— <b>Board Independence</b> Appointing more than half of board members (4 members) as independent directors and selecting directors with diverse backgrounds and expertise to avoid representing specific interests</li><li>— <b>Board Diversity</b> 5 males (71%), 2 females (29%)</li><li>— <b>ESG Committee Operation</b> Holding ESG Committee meetings (twice a year) and reporting a total of 4 major sustainability-related issues</li></ul>

### Compliance

Commitment	Progress
— Building trust with stakeholders through a commitment to compliance	<ul style="list-style-type: none"><li>— <b>Strengthening compliance risk management</b><ul style="list-style-type: none"><li>❶ Identifying and reporting management systems for 6 core compliance risk areas (environmental safety, quality, information security, corruption, human resources and labor, fair trade) to the board</li><li>❷ Conducting risk management activities by organization and reflecting them in all employees' KPIs</li><li>❸ Extending certifications for anti-corruption management system (ISO 37001) and compliance management system (ISO 37301)</li></ul></li></ul>

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ENVIRONMENTAL



Greenhouse Gas Reduction

Commitment	Progress
— Carbon-neutral Growth by 2030, Net-Zero by 2050	— Implementing Net-Zero-specific decision-making governance
— 100% renewable energy transition for overseas facilities by 2030	— Achieving 65,000 tons of carbon reduction through approximately 142 GWh renewable energy use at domestic sites, and 400,000 tons of carbon reduction effect through approximately 693 GWh renewable energy procurement at overseas sites
— 100% renewable energy transition for domestic facilities by 2050	— Establishing Scope 3 emission calculation system and securing reliability through third-party verification

Product Carbon Footprint Management

Commitment	Progress
— Performing LCA for all products and building data	— Supporting small and medium-sized suppliers to perform LCA based on actual measurement data and supporting the introduction of supply chain carbon reduction items based on this
— Strengthening LCA data completeness through actual measurement data	

Transition to Circular Economy

Commitment	Progress
— Expanding eco-friendly product portfolio and technology development	— <b>Mechanical Recycling</b> <ul style="list-style-type: none"><li>① Expanding recycled plastic portfolio for various products including ABS, PC, PC/ABS, PVC, PE, PP</li><li>② Utilized 6,593 tons of PCR raw materials in 2024 (approximately 360-fold increase compared to 2020)</li></ul>
— Building circular economy system through collaboration	— <b>Chemical Recycling</b> Completion of Supercritical Pyrolysis Oil Plant with an annual capacity of 20,000 tons
	— <b>Introduction of Renewable Raw Materials</b> <ul style="list-style-type: none"><li>① Obtained ISCC Plus certification for 62 products including ABS and SAP through biomass balanced product development</li><li>② Established joint venture with Italian company ENI Group for HVO (Hydrotreated Vegetable Oil) production</li></ul>
	— <b>Technology Development</b> Developed Biaxially Oriented polyethylene to realize single-material packaging that facilitates plastic recycling

Minimizing Pollutant Emissions

Commitment	Progress
— Protecting sustainable ecological environment by minimizing environmental impacts on air, water quality, and soil	— <b>Air Pollutant Emission Reduction</b> Voluntary participation in the 6th Fine Dust Seasonal Management System (December 2024-March 2025) with companies in southern Korea, achieving 83% reduction in nitrogen oxides (NOx), 49% reduction in sulfur oxides (SOx), and 87% reduction in fine dust at Yeosu Hwachi plant in 2024 (compared to 2018)
	— <b>Zero Waste to Landfill</b> Expanded certified sites from 4 to 6 (Yeosu Hwachi plant Gold grade, Tianjin plant in China Platinum grade)

## SOCIAL



## Environment, Health And Safety

Commitment	Progress
— Operating the Environment, Health and Safety regulations that lead domestic and international industries of the same type and complying with laws and regulations	— <b>Environment, Health and Safety Policy Establishment and Amendment</b> Established and amended 24 regulations and guidelines to ensure employee safety
— Building safety and health systems to proactively identify and mitigate hazards and risk factors	— <b>Continuous Improvement and Investment for Environmental Safety</b> Total environmental safety investment of 145.9 billion KRW in 2024 Discovered 15 Best Practice cases from 10 unit plants through Mother Factory system
— Continuous innovation throughout the entire production process to provide eco-friendly products and services	Expanded environmental safety education to overseas business sites
— Creating safe and comfortable work environment and establishing an organizational culture that thoroughly adheres to basic principles	

## Our Employees

Commitment	Progress
<ul style="list-style-type: none"> <li>— A company where employees can proactively enhance their own value through meaningful work</li> <li>— Creating an efficient work environment that allows focus on core tasks</li> <li>— Providing recognition and rewards in fair and diverse ways</li> <li>— Supporting a healthy and stable life for employees</li> </ul>	<ul style="list-style-type: none"> <li>— <b>People-oriented Management</b> <ul style="list-style-type: none"> <li>① Global Human Rights and Labor Policy Revision and pilot implementation of human rights impact assessment at 4 domestic and overseas business sites</li> <li>② Identifying core compliance risks related to company-wide human rights and labor laws and conducting simulation training</li> </ul> </li> <li>— <b>Expanding Diversity Within Organization</b> <ul style="list-style-type: none"> <li>① Achieved 30% female ratio among new hires and 11.3% female ratio among team leaders and above</li> </ul> </li> <li>— <b>Talent Development and Capability Enhancement Programs</b> <ul style="list-style-type: none"> <li>① Expanded Career Week participants from 5,500 (2023) to 6,200 (2024)</li> <li>② Operated a total of 394 online and offline training courses covering quality, production, R&amp;D, environmental safety, and IT in 2024</li> </ul> </li> <li>— <b>Building Efficient Work Environment</b> Implementing various flexible work systems including flexible working hours (5,829 people), elastic working hours (4,501 people), and work from home (2,790 people)</li> </ul>

## Local Communities

Commitment	Progress
— Providing meaningful economic, social, and environmental value to support the development of society and local communities	— Community-customized social contribution activities — Through a seagrass habitat restoration and research project, 70,000 seagrass plants were transplanted, resulting in a 3.436-hectare increase in seagrass habitat and a 10.2-ton increase in carbon sequestration

GOVERNANCE

ENVIRONMENT

SOCIAL

RESPONSIBLE GOVERNANCE

COMPLIANCE MANAGEMENT

ETHICAL MANAGEMENT

CLIMATE ACTION

TRANSITION TO  
CIRCULAR ECONOMY

ENVIRONMENTAL POLLUTANT  
EMISSION MANAGEMENT

ENVIRONMENT, HEALTH  
AND SAFETY

SUPPLY CHAIN  
SUSTAINABILITY

OUR EMPLOYEES

LOCAL COMMUNITIES

PROGRESS  
ON ESG

# GOVERNANCE

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  - 1) Board Composition
  - 2) Board Operation
  - 3) Board Performance Evaluation and Compensation
- 2. Management
  - 1) Management with Emphasized Role and Participation as Control Tower
  - 2) Sustainability-Related Management Performance Evaluation and Compensation Linkage
  - 3) Strengthening Company-wide Crisis Management Capabilities for Sustainability
  - 4) Risk Management Process

COMPLIANCE MANAGEMENT

- 1. Compliance Management System
  - 1) Compliance Governance
  - 2) Compliance Management Strategy
- 2. Compliance Program
  - 1) Key Risk-Centered Management System
  - 2) Corruption Risk Directly Managed by Compliance Team
  - 3) Regional Compliance Management Overseas
  - 4) Compliance Indicator Monitoring
  - 5) Compliance IT System Utilization
  - 6) Spreading Compliance Culture Through Employee Education
- 3. Compliance Certification and Evaluation

ETHICAL MANAGEMENT

- 1. Jeong-do Management Promotion System
  - 1) Jeong-do Management Philosophy
  - 2) Operating Dedicated Organization Directly Under CEO
- 2. Jeong-do Management Policies and Systems
  - 1) Ethics Code and Jeong-do Management Practice Pledge
  - 2) Money and Gift Receipt Reporting System
- 3. Internal Audit System
  - 1) Regular Management Assessments
  - 2) Operating Fraud and Corruption Reporting Channels
  - 3) Whistleblower Protection Principles
- 4. Systems for Establishing Jeong-do Management
  - 1) Operating Integrated Jeong-do Management IT System
  - 2) Establishing Jeong-do Management Culture Through Education and Promotion

GOVERNANCE

ENVIRONMENT

SOCIAL

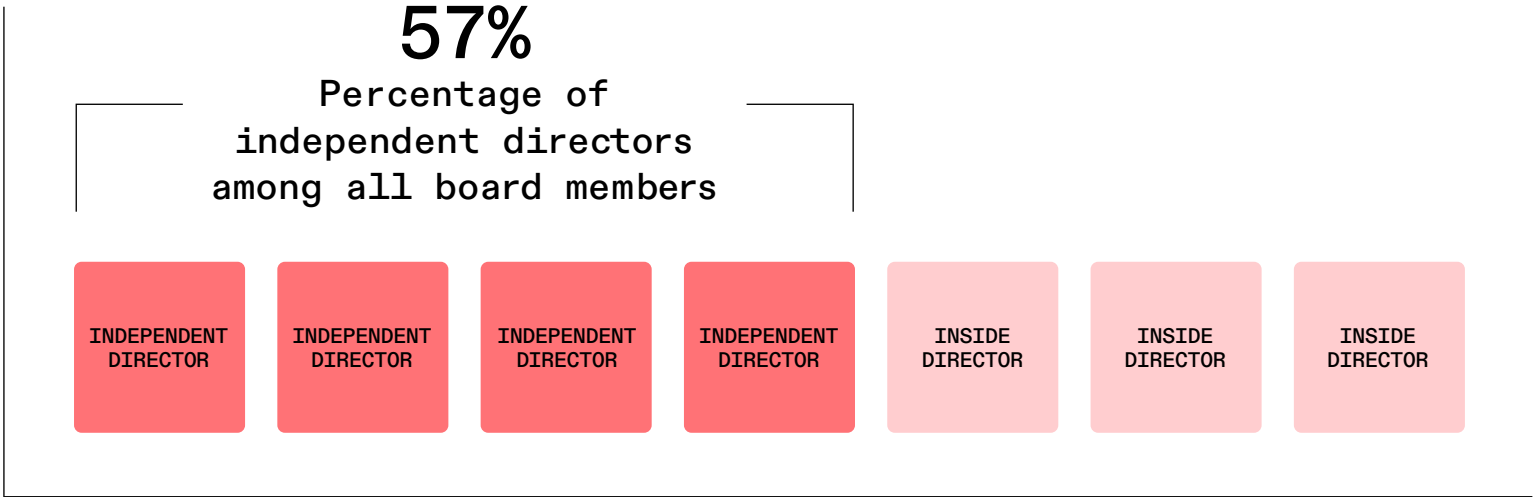
RESPONSIBLE GOVERNANCE

LG Chem practices responsible governance through board composition and operation that strengthens professionalism, independence, and efficiency. We also established dedicated organizations under management and integrated management of sustainability strategies and implementation including climate action to strengthen responsible governance.

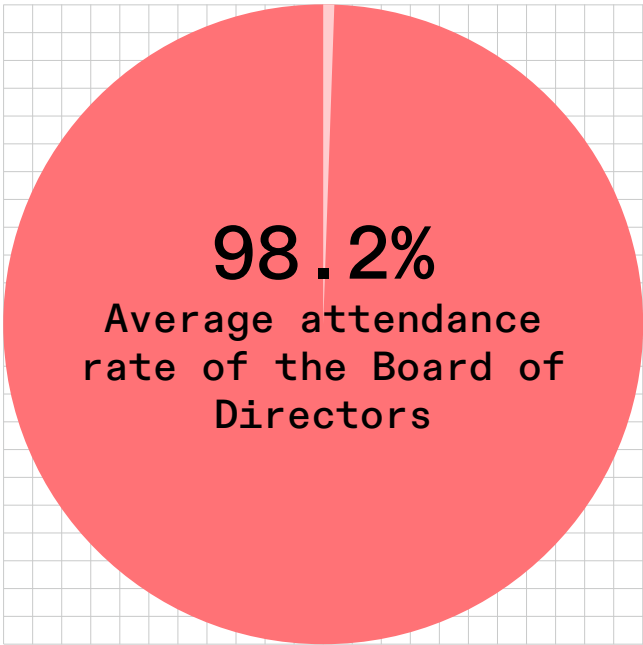
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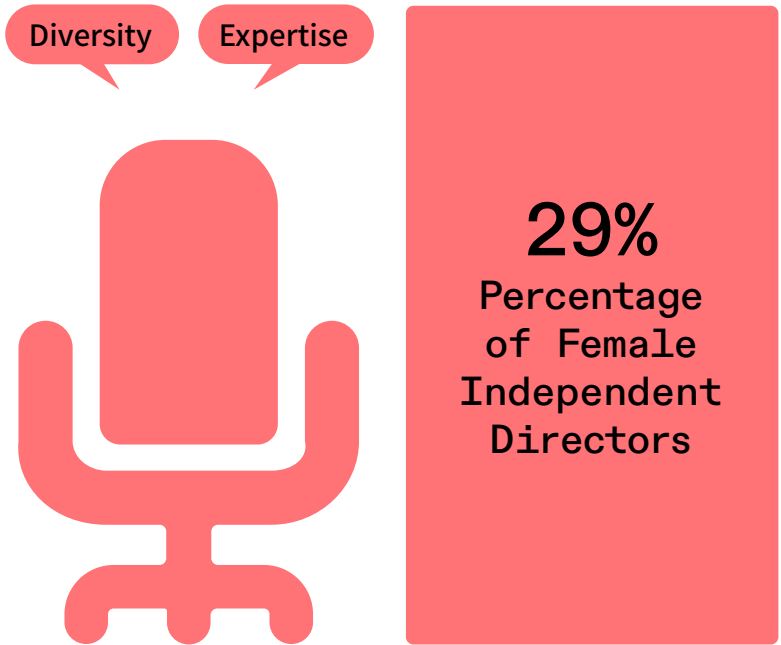
57% of Board Members Are Independent Directors



The Average Attendance Rate for the Eight Board Meetings in 2024 was 98.2%



To Ensure Diversity and Expertise, Women Represent 29% of Appointed Independent Directors





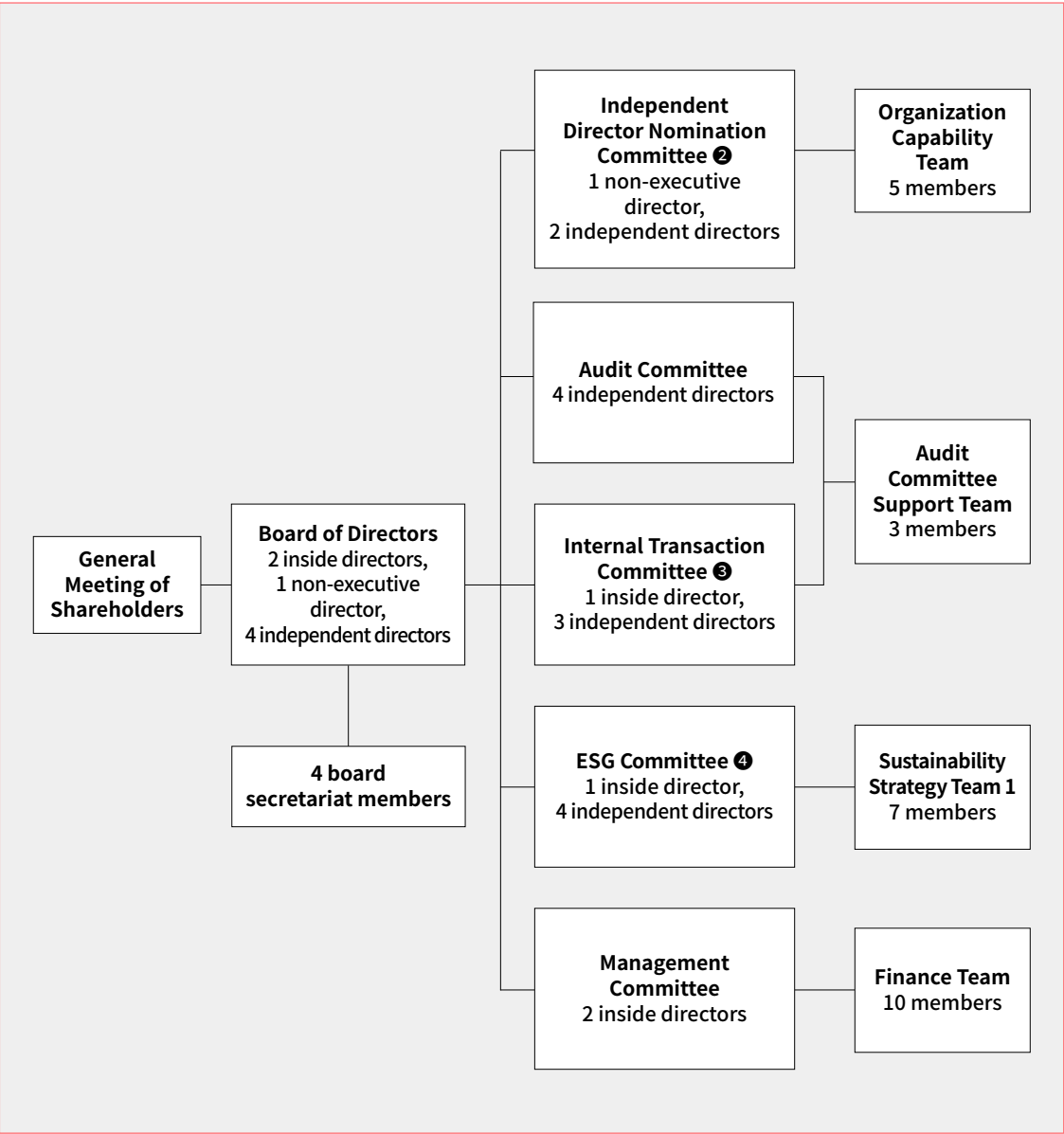
- RESPONSIBLE GOVERNANCE
- COMPLIANCE MANAGEMENT
- ETHICAL MANAGEMENT

# RESPONSIBLE GOVERNANCE

## BOARD OF DIRECTORS

LG Chem practices board-centered responsible governance for sustainability management. The board, which consists of 2 inside directors, 1 non-executive director, and 4 independent directors (7 members in total), oversees the Independent Director Nomination Committee, Audit Committee, Internal Transaction Committee, ESG Committee, and Management Committee.

Board Organization Chart ❶



❶ Board, committees within the board, and support departments are listed as of June 30, 2024.

❷ The Independent Director Nomination Committee is a standing body composed of 1 non-executive director and 2 independent directors.

❸ The Internal Transaction Committee was established on July 1, 2021, and is composed of 1 inside director and 3 independent directors.

❹ The ESG Committee was established on April 28, 2021, and is composed of 1 inside director and 4 independent directors.

GOVERNANCE

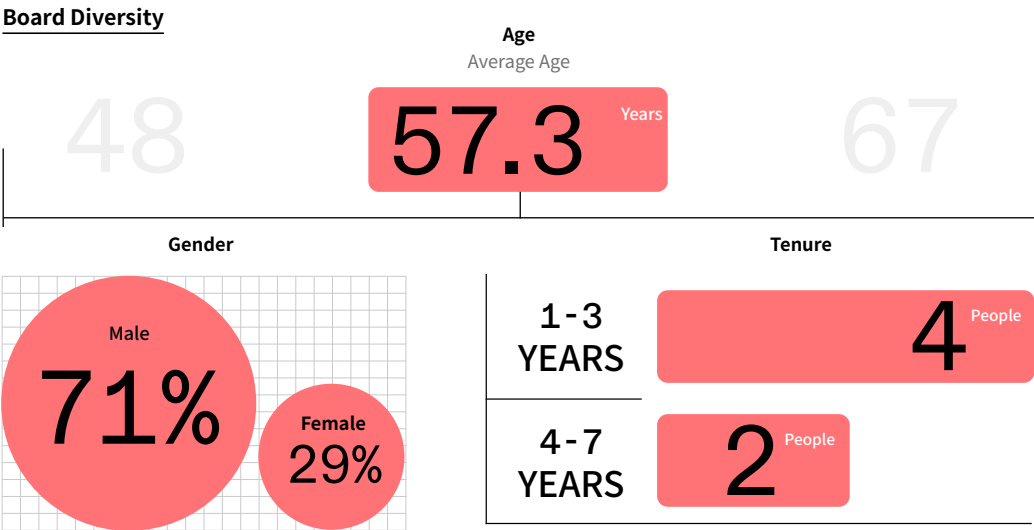
ENVIRONMENT

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**Board Composition Securing Independence, Diversity, and Expertise**  
LG Chem appoints 4 out of 7 board members as independent directors to ensure board independence, making independent directors the majority (57%). In particular, all 4 members of the Audit Committee are independent directors, and 2 out of 3 members of the Independent Director Nomination Committee are independent directors.

The board is composed of inside directors who are management experts, non-executive directors, and independent directors with expertise in various fields. Among them, 2 female independent directors are included to reflect balanced expert perspectives. For independent directors, experts in industry, management consulting, law, accounting, and tax fields are appointed after recommendation by the Independent Director Nomination Committee and verification of expertise and independence. Independent directors deliberate and advise on board agenda items based on diverse backgrounds, expertise, and independence. To enhance independent directors' management expertise, we operate education programs on directors' roles and responsibilities and conduct seminars on topics related to job performance.



Board Expertise	Shin Hak-cheol	Cha Dong-seok	Kwon Bong-seok	Cho Hwa-soon	Lee Hyun-joo	Cheon Kyung-hoon	Lee Young-han
Corporate Management	O	O	O				
Legal						O	
Accounting•Tax							O
Politics, Economics, Social Sciences				O			
Chemistry					O		

Board Composition							
Category	Name	Gender (Age)	Position	Appointed date ❶	Term Expiration Date	Area of Expertise	Key Career Background
CEO	Shin Hak-cheol	Male(67)	Member of the Audit Committee, Member of the Internal Transactions Committee, Chair of the Independent Director Nomination Committee, Member of the ESG Committee	2019.3.15.	Until the AGM in March 2027	Business Administration in General	3M Vice Chair and Executive Vice President
Inside Director	Cha Dong-seok	Male(62)	Management Committee Member, Internal Transaction Committee Member	2020.3.20.	Until the AGM in March 2027	Business Administration in General	SERVEONE Inc. CFO
Non-Executive Director	Kwon Bong-seok	Male(61)	Independent Director Nomination Committee Member	2022.3.23.	Until the AGM in March 2028	Business Administration in General	LG Electronics Inc. CEO
Independent director	Jho Wha-sun	Female(59)	Chairs the Audit Committee, Internal Transaction Committee Member, ESG Committee Member	2022.3.23.	Until the AGM in March 2028	Politics, Economics, Social Sciences	Yonsei University Department of Political Science and International Studies Professor
Independent director	Lee Hyun-joo	Female(48)	Audit Committee Member, Independent Director Nomination Committee Member, Chairs the ESG Committee	2022.3.23.	Until the AGM in March 2028	Chemistry	KAIST Department of Chemical and Biomolecular Engineering Professor
Independent director	Chun Kyung-hoon	Male(52)	Audit Committee Member, Chairs the Internal Transaction Committee, ESG Committee Member	2023.3.28.	Until the AGM in March 2026	Legal Affairs	Seoul National University School of Law Professor
Independent director	Lee Young-han	Male(52)	Audit Committee Member, Internal Transaction Committee Member, Chairs the Independent Director Nomination Committee, ESG Committee Member	2024.3.25.	Until the AGM in March 2027	Accounting and Taxation	University of Seoul Department of Science in Taxation Professor

\*As of June 30, 2025.  
❶ For reappointment, the initial appointment date is listed.

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- ETHICAL MANAGEMENT

**Board Operation**  
The board meets once every quarter in principle, and conducts preliminary reports and Q&A sessions on each agenda item 1-7 days before the board meeting. When there are agenda items difficult to submit to regular board schedules, ad-hoc interim board meetings are held. There were 8 board meetings in 2024 to handle 38 agenda items (25 approvals, 13 reports). The average attendance rate of directors during this period was 98.2%. The Board of Directors operates five committees to ensure the highest standards of professionalism, independence, and efficiency.

2024 Board Meeting Status			
	Meetings (Times)	Agenda Items (Cases)	Attendance Rate (%)
Board of Directors	8	38 (25 Approvals, 13 Reports)	98.2

**Major Roles of Committees within the Board**

Independent Director Nomination Committee	1. Establishment, review, and supplementation of independent director appointment principles 2. Recommendation of independent director candidates to be appointed by shareholders' meeting 3. Management of independent director candidate pool and candidate verification.
Audit Committee	1. Supervision of directors' and management's work 2. Approval of external auditor selection 3. Other matters related to audit work as stipulated in articles of incorporation or company regulations
Internal Transaction Committee	1. Review of transactions with specially related parties and transactions subject to private benefit regulation 2. Internal transaction-related matters that require board approval under law
Management Committee	1. Efficient board operation and review of routine management matters 2. Review and resolution of matters delegated by the board to the management committee and other routine management matters
ESG Committee	1. Establishment of basic policies and strategies for ESG management 2. Setting ESG mid- to long-term goals 3. Important matters related to compliance control such as establishing compliance management policies and managing core compliance risks

2024 Board Committee Meeting Status		
Composition	Meetings (Times)	Agenda Items (Cases)
Independent Director Nomination Committee	1	1 (1 Approvals, 0 Reports)
Audit Committee	5	19 (6 Approvals, 13 Reports)
Internal Transaction Committee	2	7 (4 Approvals, 3 Reports)
Management Committee	1	1 (1 Approvals, 0 Reports)
ESG Committee	2	4 (0 Approvals, 4 Reports)

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**Board Performance Evaluation and Compensation**

Directors' compensation is paid according to internal regulations within the total director compensation limit approved by the shareholders' meeting pursuant to Article 388 of the Commercial Act. Inside directors' compensation consists of annual salary, role-based pay according to position, and incentives based on business and individual performance, determined by comprehensively considering inflation rate, business environment, scope of responsibility and management difficulty, productivity, etc.

Compensation for independent directors is paid at the average level of the same industry. For independent directors, we evaluate board attendance rate, contribution to agenda review and management decision-making, and (for audit committee members) contribution to internal control and oversight. Evaluation results are used as reference materials for independent director reappointment decisions and are not reflected in compensation to maintain independent directors' independence.

**ESG Committee for Sustainability Strategy and Implementation**

LG Chem recognizes sustainability as a core element of future business competitiveness beyond corporate responsibility. The company established the ESG Committee under the board in 2021 to systematize the establishment and implementation of sustainability strategies. The ESG Committee is composed mainly of independent directors to secure independence and expertise and regularly holds committee meetings at least once per half year. The ESG Committee establishes the direction of sustainability management encompassing climate action, responsible supply chain management, human rights protection, etc., deliberates and resolves mid- to long-term strategies and major policies, and monitors sustainability performance.

The ESG Committee actively supports achieving the 2030 Carbon-neutral Growth, 2050 Net-Zero goals and portfolio transformation centered on three key growth drivers. In particular, in 2024, as strengthening corporate implementation capabilities related to sustainability and transparent communication with stakeholders became more important, we discussed in depth the Sustainability Disclosure Promotion Plan and Sustainability Governance Strengthening measures.

2024 ESG Committee Meeting Status				
Session	Date	Attendance/ Capacity	Agenda	Resolution Status
2024 1st Session	2024.4.29	5/5	Sustainability Disclosure Promotion Plan Report	Report
			— Mandatory sustainability disclosure requirements — Climate response scenario disclosure — 3-year disclosure response plan	
2024 2nd Session	2024.11.21	5/5	Compliance Risk Management System Report	Report
			— Detailed status of management systems by major risk categories (environmental safety legal obligation violations, national core technology leaks, public official-related corruption, product-related defects, subcontracting legal obligation violations, collusion)	
			Sustainability Trends and LG Chem's Governance and Engagement Enhancement Strategy Report	Report
			— Changes in regulatory and stakeholder requirements and identification results of LG Chem's important sustainability issues — Business Impact-based decision-making system enhancement measures — LG Chem's leadership securing measures through strengthened engagement	
			Compliance Risk Management Status Report	Report
			— Management status and improvement task implementation status for public official-related corruption and national core technology leaks among key risks	

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MANAGEMENT

Management's Emphasized Role and Participation as Control Tower  
LG Chem management is committed to integrating sustainability issues derived from the materiality assessment into business operations and annual planning processes. The CSSO serves as the control tower for sustainability management, communicating with stakeholders, presenting feasible solutions, and leading sustainability strategies. Organizations under the sustainability department identify and present major sustainability-related agenda items to the ESG Committee and management meetings, and derive new improvement tasks based on sustainability-related stakeholder requirements to collaborate with relevant departments. LG Chem has established a roadmap with the goal of achieving Carbon-neutral Growth by 2030 and Net-Zero by 2050. To achieve this, we review the economic feasibility of carbon reduction tasks and encourage implementation, procure renewable energy, and calculate product carbon footprints. By actively communicating these matters with customers, investors, government agencies, and others, we are building and operating management systems for sustainability including LG Chem's Net-Zero commitment.

Sustainability-Related Management Performance Evaluation and Compensation Linkage  
LG Chem integrates ESG-related indicators into performance evaluation and compensation systems to strengthen management's responsibility for sustainability management activities, promote low-carbon economic transition, and expand eco-friendly business opportunities. To strengthen management's sustainability management activities, we began linking key performance indicators (KPIs) in 2021 to the respective responsibilities of each executive, covering such areas as greenhouse gas emission reduction, eco-friendly product development, supplier evaluation system establishment, and safety and health. Through this, we set measurable sectoral performance targets and built a system to internalize ESG management by department and individual employees. This integrated indicator system serves as the foundation for inducing not only management but the entire company to practice ESG management. Furthermore, we link compensation systems to performance evaluation to encourage active promotion of eco-friendly management activities and strengthen management's responsibility and commitment to Net-Zero and sustainable growth. Going forward, LG Chem will continue its commitment to a company-wide eco-friendly culture by upholding sustainable management as a core priority.

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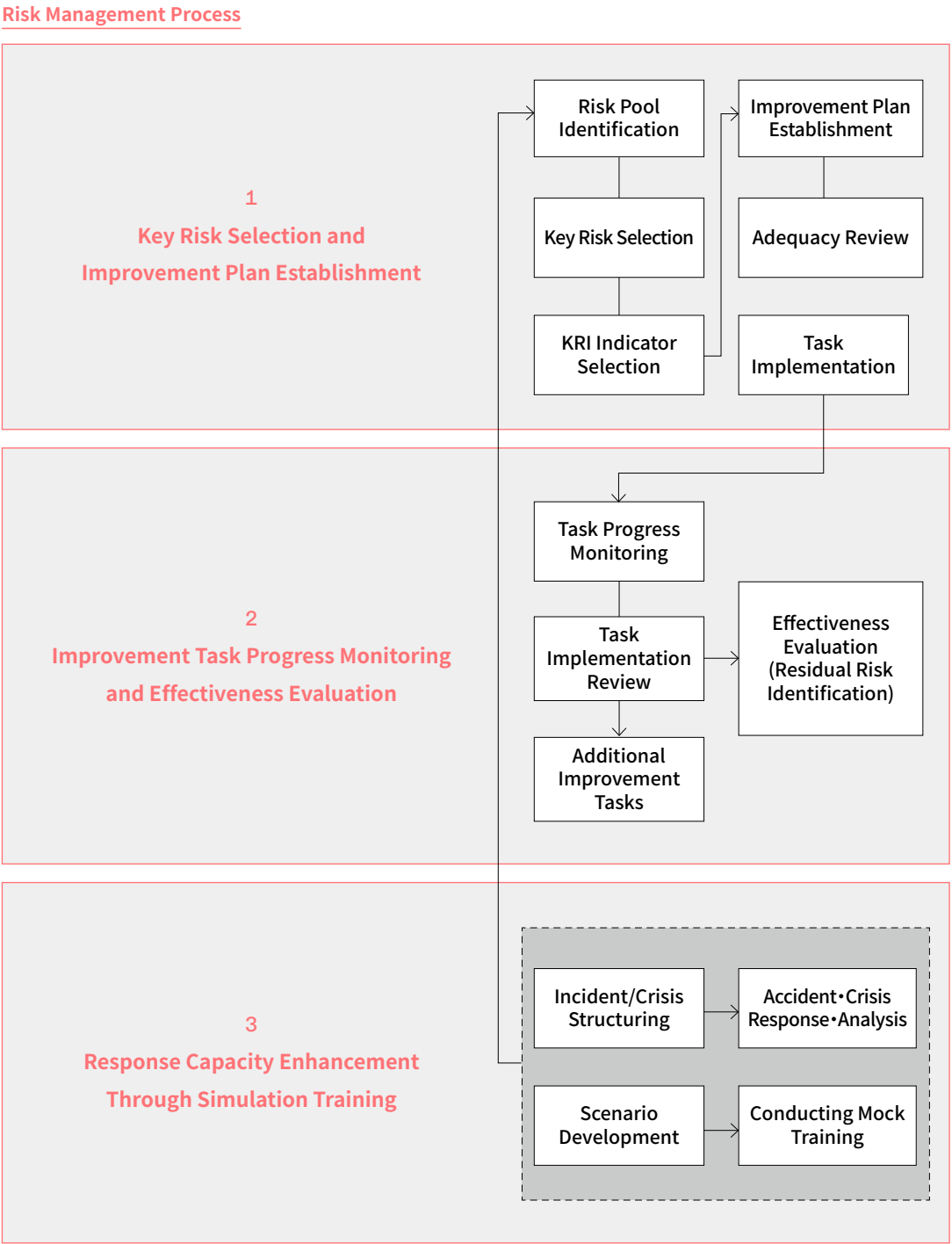
- RESPONSIBLE GOVERNANCE
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**Strengthening Company-wide Crisis Management Capabilities for Sustainability**

LG Chem appointed a Chief Risk Officer (CRO) in May 2021 and established a dedicated company-wide crisis management organization. The CRO holds crisis management committee meetings once per quarter to establish a company-wide crisis management system, make decisions on important company-wide crisis management issues, and monitor the implementation status of prevention and recurrence prevention measures. The crisis management committee is divided into 8 subcommittees: environmental safety, quality, information security, compliance, procurement, logistics/trade and customs, HR, and finance. Each subcommittee includes the subcommittee head, public relations manager, and external cooperation organization head.

The crisis management committee analyzes potential risks that could affect corporate management, categorizes them by type, and develops proactive prevention and management activities considering damage impact and probability of occurrence. The goal is to achieve rapid situation communication and efficient crisis response when critical issues arise. To achieve this, we have established an immediate reporting system that includes each business site manager, relevant department leaders, and management by crisis level (A-D grades) according to a predefined Call-tree. We also conduct advanced simulation training through emergency response committees and comprehensive situation rooms led by the CEO, CRO, or CSEO, and verify their appropriateness.

Through this, LG Chem has established an integrated crisis management system by announcing company-wide crisis management regulations that clarify crisis management principles, policies, responsibilities and authorities, and processes. For all critical issues, we identify post-incident causes, establish recurrence prevention measures, and monitor implementation. Additionally, by operating the Crisis Management Information System (CMIS), we systematically manage the occurrence and response history of major domestic and international incidents and accidents covering environmental safety, quality, information security, SCM, procurement, and logistics areas. We also continuously revise and publish a comprehensive guidebook on crisis response protocols to minimize risks.



GOVERNANCE

COMPLIANCE MANAGEMENT

LG Chem secures sustainable growth and stakeholder trust through global-level compliance operations. We have established a Key Risk-centered management system and are implementing corruption risk management for employees and business partners. Overseas business sites conduct compliance checks according to local conditions.

COMPLIANCE MANAGEMENT

1. Compliance Management System

- 1) Compliance Governance
- 2) Compliance Management Strategy

2. Compliance Program

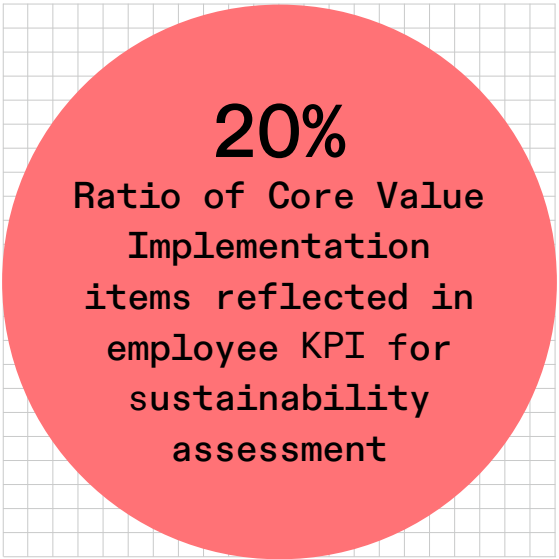
- 1) Key Risk-Centered Management System
- 2) Corruption Risk Directly Managed by Compliance Team
- 3) Regional Compliance Management Overseas
- 4) Compliance Indicator Monitoring
- 5) Compliance IT System Utilization
- 6) Spreading Compliance Culture Through Employee Education

3. Compliance Certification and Evaluation

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Reflecting 20% of Core Value Implementation items in KPI (Key Performance Indicators)



Obtaining ISO 37001 (Anti-Bribery Management System) and ISO 37301 (Compliance Management System) certifications





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COMPLIANCE MANAGEMENT

COMPLIANCE MANAGEMENT SYSTEM

Compliance governance to strengthen commitment to compliance management

**Compliance Control System**  
LG Chem operates a compliance control system to fulfill corporate social responsibility and minimize risks. The Compliance Officer and Compliance Team identify and evaluate compliance risks that may arise in relation to business operations, periodically review and improve risk management status, and report the results to the Board of Directors. We have also established detailed evaluation items and criteria based on the ECCP (Evaluation of Corporate Compliance Programs) used by the U.S. Department of Justice (DOJ) to objectively and quantitatively evaluate the effectiveness of the compliance control system.

**Strengthening Board Deliberation**  
As the duty of compliance oversight of directors for internal control has been emphasized, LG Chem has strengthened the board's compliance deliberation function. We have reestablished compliance governance with the Board of Directors at its apex and actively reflect the top management's commitment to compliance management. The ESG Committee under the board (composed of the CEO and all independent directors) deliberates on compliance matters and reports key issues to the board.  
The ESG Committee deliberated on the compliance risk management system (management status and improvement plans) in April 2024 and reported it to the board. In November 2024, we reported on the management status of six core risks (environmental safety, quality, information security, corruption, HR/labor, and fair trade areas) and timely deliberation plans. We also deliberated and reported on the management status and improvement plan implementation results for public official corruption risks and national core technology leakage risks.

**External Declaration of Compliance Policy**  
To publicly declare top management's commitment to compliance to employees as well as various stakeholders, we have posted the [Policy of Compliance](#) and [Anti-corruption Policy](#), and LG Chem [Compliance Guidelines \(Code of Conduct\)](#) containing core compliance principles on our [website](#) and internal standard portal.

Compliance Management Strategy

**Monitoring Regulatory Trends**  
To respond to various international regulations in a timely manner, LG Chem continuously collects and monitors domestic and international regulatory agency materials, legislation enactment and amendment matters, and media articles using RPA (Robotic Process Automation). We also conduct SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis of monitored content and post it on the compliance bulletin board or disseminate it to relevant departments for employee awareness. When necessary, we distribute work checklists and educational materials or form task force teams to respond.

**Goal Management**  
LG Chem establishes and manages company-wide and departmental goals based on SWOT analysis results and stakeholder requirements and expectations. LG Chem's compliance goal is participation of all organizations in norm compliance and anti-corruption. To implement this, we conducted organizational risk management activities in 2024. In March, we selected company-wide risks and established goals, in June we conducted face-to-face inspections of randomly selected departments to encourage risk management activities, and in September we reviewed the risk management status of all organizations. Based on the risks identified in March, each organization conducted a self-assessment using a checklist and submitted the results to the Compliance Team. The team reviewed the submissions and used the findings to inform future compliance plans. Additionally, when establishing individual goals, we reflect core value implementation items at 20% in all employees' Key Performance Indicators (KPIs). This is to evaluate performance from a sustainability perspective (responsibility for society and the environment).

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COMPLIANCE PROGRAM

Key Risk-Centered Management System

Risk Identification and Risk Pool Management

LG Chem identifies risks related to business areas to establish a risk pool, periodically evaluates them, and establishes and manages appropriate management measures. Additionally, risks identified through domestic and international legislation enactment and amendment and regulatory trends, contract reviews, and legal advice are promptly added to the pool.

Key Risk Management

For 30 Key Risks requiring focused management (fair trade, corruption, business management, environmental safety, quality, information security, trade regulation, HR/labor, accounting/tax, intellectual property, etc.), we designate compliance functional departments that exclusively manage them as risk supervising departments and have them establish and manage risk-specific management measures. Management status is periodically monitored through the compliance IT system. Key Risk monitoring is conducted annually, and improvement plan implementation checks are conducted at least twice a year.

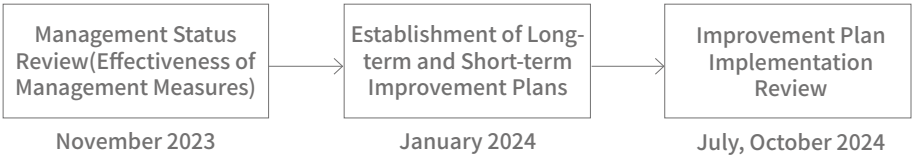
Operating Compliance Council

For organic cooperation between organizations, the compliance council is held at least twice a year. Along with the council participated by the CFO, executives from each risk management supervising department (environmental safety, HR/labor, trade/logistics, quality, information security, procurement, finance, external cooperation, legal affairs), and compliance officers, we also operate compliance working meetings with participation from all risk management supervising departments to address practical discussions and details. Among the Key Risks (30) discussed at the compliance council, six core risks requiring special focused management (environmental safety, quality, information security, corruption, HR/labor, fair trade areas) are also deliberated by the ESG Committee and the Board of Directors.

Compliance Inspection

LG Chem selects focus areas annually to conduct compliance inspections to check risk management status, improve deficiencies, and support changes to work processes when necessary. For professional inspections, we also conduct inspections through collaboration with risk management supervising departments.

Key Risk Monitoring



2024 Headquarters Major Inspection Items

- ▽ Compliance inspection targeting procurement departments (focus areas: information security, fair trade, anti-corruption, etc.)
- ▽ Status review of organizational risk management activities

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**Corruption Risk Directly Managed by Compliance Team**  
LG Chem maintains a zero-tolerance policy toward corruption and bribery and has identified corruption risk as both a Key and Core Risk to maintaining the company’s trust and integrity. The Compliance Team has direct oversight of this. Since establishing the anti-corruption management system in 2021, we have continuously implemented measures for risk identification, evaluation, and prevention. By establishing management measures utilizing IT systems, we comprehensively manage corruption risks by employees, business partners, and suppliers.

**Corruption Risk Management as Key Risk**

- November 2023: Confirmation of management status and effectiveness of management measures
- January 2024: Establishment of long-term and short-term improvement plans
- July-October 2024: Confirmation of improvement plan implementation results

**Corruption Risk Management as Core Risk**

- April 2024: Establishment of corruption risk management system including management status and improvement plans
- November 2024: Reporting and deliberation of system implementation results to ESG Committee and Board of Directors

**Anti-Corruption Program for Employees**  
To declare top management's strong commitment to anti-corruption to employees and stakeholders, LG Chem established an anti-corruption policy in July 2023. To comply with domestic and international anti-corruption laws and policies (U.S. Foreign Corrupt Practices Act (FCPA), Korea's Act on the Prohibition of Solicitation and Graft (Anti-Graft Act) and Act on Prevention of Bribery of Foreign Public Officials in International Business Transactions (International Anti-Bribery Act), UK Bribery Act, China's Anti-Unfair Competition Law, etc.), we have posted Regulations on the Prevention of Corrupt Practices specifying anti-corruption principles that employees must comply with on our website and internal standard portal. We operate anti-corruption practical guidelines and checklists for employees to refer to in various situations they face while performing their duties. In 2024, we additionally established and distributed an anti-corruption management manual and anti-corruption guide for media organizations. All LG Chem employees participate in annual anti-corruption pledges and are required to complete anti-corruption training. We also conduct annual anti-corruption awareness surveys of all domestic employees to monitor the organization's anti-corruption culture.

**Anti-Corruption Program for Business Partners and Suppliers**  
To manage corruption risks associated with business partners, we have introduced a contract-by-contract anti-corruption inspection process utilizing IT systems. After identifying and evaluating corruption risks in contracts, when corruption risks are anticipated, we obtain anti-corruption pledges and responses to due diligence questionnaires from counterparties, and conduct periodic post-monitoring even after contract conclusion. We also obtain anti-corruption pledges from suppliers and conduct additional monitoring after selecting management targets through corruption risk identification and evaluation. We encourage business partners and suppliers to participate in LG Chem's ESG management and actively manage corruption risks, and as part of this effort, we provide an Anti-Corruption Guide for Business Partners in Korean, English, and Chinese.

**Anti-Corruption Policy and Communication** [🔗](#)

- Anti-corruption Policy
- Management Message on Anti-corruption
- Regulations on Prohibition and Prevention of Corrupt Practices
- Anti-Corruption Guide for Business Partners

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**Regional Compliance Management Overseas**  
To manage various risks that may occur at overseas business sites according to local conditions and laws, we have designated local legal experts as compliance officers for each region (Business Service Center, BSC) in China, Asia, Americas, and Europe, and established a management system led by local compliance officers. Regional compliance officers benchmark the headquarters compliance program to select a compliance risk pool, periodically monitor the management status of risk management supervising departments, derive tasks, and operate a circular system to improve them. They also select timely topics to conduct compliance inspections. For Americas and Europe BSCs, they also operate Compliance Committees benchmarking the headquarters compliance council, and we plan to expand this to China and Asia regions.

**2024 Major Regional Compliance Inspection Items**

- China: Anti-corruption
- Asia: Fair trade, anti-corruption
- Americas: Labor law
- Europe: Personal information

**Compliance Indicator Monitoring**  
LG Chem conducts annual employee compliance awareness surveys (March 2024) and anti-corruption awareness surveys (September 2024). We support the advancement of compliance culture by collecting various employee opinions on organizational culture, compliance, and anti-corruption policies, reflecting them in policies, and providing feedback. We also monitor various indicators such as organizational risk management activity participation rates, company-wide education completion rates, effectiveness evaluation results of Key Risk management measures, employee pledge receipt rates, and ISO certification maintenance to verify that compliance and anti-corruption programs are operating well.

**Compliance IT System Utilization**  
LG Chem has introduced a compliance IT system befitting its status as a global science company at domestic and overseas business sites. LG Chem has established the foundation for a systematic and unified compliance program that meets global standards by grafting an Enterprise Risk Management (ERM) system onto an effective compliance monitoring system. In particular, we operate a self-inspection system through employee engagement to enhance their participation in compliance activities and internalize compliance culture as a core organizational value.

**Utilization of IT System**

- ✓ **Regulatory trend monitoring using RPA**  
Continuous collection and monitoring of domestic and international regulatory agency materials, legislation enactment and amendment matters, media articles, etc.
- ✓ **Risk Pool Management**  
Timely risk identification and management based on laws related to LG Chem's business areas, domestic and international enacted and amended laws and regulatory trends, contract reviews, and legal advice
- ✓ **Key Risk Management**  
Periodic monitoring of management status and improvement plan establishment and implementation results, and identification of vulnerabilities through Risk Dashboard
- ✓ **Awareness Survey**  
Conducting simple question-and-answer format inspections for all company departments
- ✓ **Compliance Inspection**  
Inspection requesting target departments to submit subjective answers and supporting documents to verify risk management status in detail
- ✓ **Organizational Risk Activities and Monitoring**  
Activities and monitoring involving all departments [Risk Selection → Goal Setting → Self-inspection of Goal Implementation] and monitoring
- ✓ **Compliance Activity Bulletin Board**  
Posting and distribution of compliance notices
- ✓ **Anti-Corruption Inspection**  
Process for identifying corruption risks of counterparties, obtaining anti-corruption pledges and responses to due diligence questionnaires from counterparties based on evaluation results, and conducting periodic post-monitoring even after contract conclusion
- ✓ **Introduction of AI Solutions in Contract Review Process**  
Systematic and consistent contract-related compliance risk management through review

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**Spreading Compliance Culture Through Employee Education**  
LG Chem has established LG Chem Compliance Guidelines (Code of Conduct) containing core principles that employees must comply with so that employees can easily understand and efficiently respond to risks that may arise during work performance. To help employees understand and perform their duties, we select monthly focus areas to create educational materials in Korean, English, and Chinese and disseminate them through screensavers, compliance newsletters, etc. Additionally, we produce various compliance topic-specific guidelines for global regulatory response and compliance management practice, distributing and educating them so all employees can understand and utilize them. LG Chem also conducts various compliance education programs to cultivate employees' compliance awareness. We educate domestic and overseas employees on major compliance issues such as fair trade, anti-corruption, trade regulation and supply chain management, environmental safety, and information security, and conduct customized education based on position and job function.

2024 Mandatory Employee Education Topics - Domestic Business Sites

Course Name	Target Audience	Supervising Department
Compliance Integrated Education (Compliance importance, trade secret leakage/infringement, use of undisclosed material information, anti-corruption, environmental safety, fair trade, etc.)	All employees	Compliance Team Environmental Safety Planning Team Fair Trade Policy Team
Disability Awareness Improvement Education		
Workplace Sexual Harassment/ Bullying Prevention Education		Learning Innovation Team
Information Security Education		Organizational Culture Development Team Information Security Team
Jeong-do Management Education	Office employees	Ethics Office
Import/Export Compliance Education	Sales, marketing, procurement, planning job groups	Trade and Customs Team
Fair Trade Subcontracting Education	Procurement, SCM, R&D, quality job groups	Fair Trade Policy Team
Fair Trade Dealership Education	Sales, marketing job groups	Fair Trade Policy Team
Drug Stability Education	Life Sciences Business Division employees	Life Sciences HR Talent Development Team
Chemical Substances Control Act Worker Education	Designated targets by business site	Environmental Safety Planning Team

\* To verify educational effectiveness, evaluations based on educational content are conducted and completion requires achieving above the standard score.

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2024 Mandatory Employee Education Topics - Overseas Business Sites		
Course Name	Target Audience	Supervising Department
Antitrust	All overseas employees	Compliance Team
Gifts and Entertainment		
Personal Information and Information Security		
Respect for Diversity and Prohibition of Discrimination		
Human Rights Protection		
Company Information Protection		
Anti-corruption		
Conflict of Interest Prevention		
Insider Trading		
Workplace Harassment and Mutual Respect		
Fraud Reporting		
Record Keeping		

\*The above list is limited to education conducted for overseas subsidiary employees led by headquarters supervising departments, with Americas, Europe, China, and Asia regions conducting additional education required for local situations led by compliance officers and risk management supervising departments.

LG Chem conducts not only the above mandatory education topics but also compliance education courses appropriate for positions and situations. For overseas expatriates representing LG Chem at business sites around the world, we conduct education on the importance of overseas compliance and major compliance risks before overseas assignment. For new employees, we operate domestic and international education courses to understand and prevent major compliance risks by business division and job function. For leaders (managers and team leaders and above), we conducted leader education courses to understand LG Chem's compliance governance and make proper decisions.

COMPLIANCE CERTIFICATION AND EVALUATION

As part of LG Chem top management's strong commitment to compliance, we obtained international standard certifications for ISO 37001 (Anti-Bribery Management System) and ISO 37301 (Compliance Management System) for all headquarters business sites in September 2023 and renewed these certifications in September 2024. LG Chem passed the renewal audit (including document and on-site inspections) conducted by Lloyd's Register Quality Assurance (LRQA) headquartered in the UK. This audit verified that LG Chem's compliance and anti-corruption policies, risk management systems, etc. meet international standards for ISO certification and that we have established and operate a global-level compliance program. LG Chem expects that obtaining these two certifications will serve as a foundation for enhancing stakeholder trust.

LG Chem prepares annual management review reports and submits them to top management to evaluate and improve the effectiveness of ISO 37001 and ISO 37301. This report includes internal and external issues (SWOT analysis), stakeholder expectations and requirements, risk assessment results and additional management measures, corrective action results according to previous year's improvement requests, corrective actions for compliance non-compliance, improvement results from compliance inspections and whistleblowing investigations, internal audit results, organizational goals and indicators, and future improvement plans.

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ETHICAL MANAGEMENT

All LG Chem employees work according to LG's Code of Ethics. The Jeong-do Management Division directly under the CEO maintains the principles of ethical management through regular management assessments as well as operating fraud and corruption reporting channels and the Jeong-do Management Portal.

ETHICAL MANAGEMENT

- 1. Jeong-do Management Promotion System
  - 1) Jeong-do Management Philosophy
  - 2) Operating Dedicated Organization Directly Under CEO
- 2. Jeong-do Management Policies and Systems
  - 1) Code of Ethics and Jeong-do Management Practice Pledge
  - 2) Money and Gift Receipt Reporting System
- 3. Internal Audit System
  - 1) Regular Management Assessments
  - 2) Operating Fraud and Corruption Reporting Channels
  - 3) Whistleblower Protection Principles
- 4. Systems for Establishing Jeong-do Management
  - 1) Operating Integrated Jeong-do Management IT System
  - 2) Establishing Jeong-do Management Culture Through Education and Promotion

Jeong-do Management Practice Pledge Signing Status



99.9%  
Domestic



99.5%  
Overseas

Ratio of signers among Jeong-do Management practice pledge signing targets

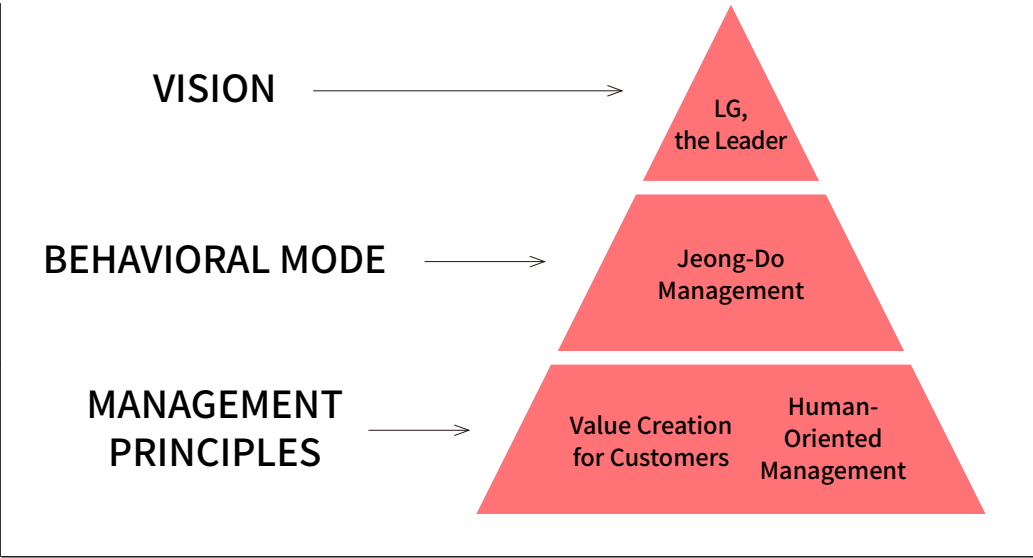


- RESPONSIBLE GOVERNANCE
- COMPLIANCE MANAGEMENT
- ETHICAL MANAGEMENT

# ETHICAL MANAGEMENT

## JEONG-DO MANAGEMENT PROMOTION SYSTEM

Jeong-do Management Philosophy  
LG Way is LG Group's unique management philosophy that practices Jeong-do Management as a unique behavioral approach to realize value creation for customers and people-centered management. LG Chem makes every effort including education, promotion, and system support to ensure that LG Way is not just a simple declaration but can be applied to work by all members.



Operating Dedicated Organization Directly Under CEO  
LG Chem operates a Jeong-do Management Division directly under the CEO to ensure that Jeong-do Management takes deep root in everyday organizational culture. The Ethics Office within the Jeong-do Management Division establishes company-wide Jeong-do Management policies and management systems, conducts Jeong-do Management education for members, and performs whistleblowing investigations. The Jeong-do Management Administration Team conducts preventive inspections to prevent Jeong-do Management-related risks. The Jeong-do Management Team is responsible for internal audit work.

As a global company, LG Chem also has Jeong-do Management teams at major overseas business sites, operating organically together with the headquarters organization. Overseas Jeong-do Management teams establish operating systems for Jeong-do Management policies, systems, and norms reflecting the laws and cultural characteristics of the region and check that all business activities conform to Jeong-do Management.

GOVERNANCE

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- RESPONSIBLE GOVERNANCE
- COMPLIANCE MANAGEMENT
- ETHICAL MANAGEMENT

JEONG-DO MANAGEMENT POLICIES AND SYSTEMS

Code of Ethics and Jeong-do Management Practice Pledge  
LG Chem has established the **LG Code of Ethics** to serve as the top priority standard for proper behavior and value judgment that all employees must follow. The LG Code of Ethics consists of ethical norms containing basic principles and specific implementation guidelines. The Code of Ethics is revised when there are social demands or changes are needed. All LG Chem employees understand their roles and responsibilities through Code of Ethics Implementation Guidelines and perform their duties according to relevant regulations and standards.

LG Code of Ethics Structure

❶

Responsibilities and Obligations to Customers (Customer respect, value creation, value provision)

❷

Fair Competition (Pursuit of free competition, compliance with laws and regulations)

❸

Fair Transactions (Equal opportunities, fair transaction procedures, support and aid for business partners)

❹

Basic Ethics for Employees (Basic ethics, completion of duty, self-development, fairness in performance, avoiding conflicts of interest with the company)

❺

Corporate Responsibilities to Employees (Respect for human dignity, fair treatment, promotion of creativity)

❻

Responsibilities to Society and the Country (Rational business development, protection of shareholder interests, contribution to social development, environmental conservation)

Money and Gift Receipt Reporting System  
LG Chem strictly prohibits employees from receiving money, gifts, or entertainment from stakeholders, including any congratulatory or condolence money or other personal gifts. If money, gifts, or congratulatory/condolence money is unavoidably received, it must be reported to the Ethics Office through the money and gift receipt reporting system and then returned. If return is impossible, we either donate the items directly to social welfare organizations or deliver them to the Ethics Office for internal auction. The proceeds generated are donated to social welfare organizations.

2024 Jeong-do Management Practice Pledge Signing Status

Category	Target Audience ❶	Signers	Ratio
Domestic	14,520	14,518	99.9%
Overseas	4,622	4,597	99.5%

❶ All suppliers accessing our procurement system (excluding one-time purchase suppliers, etc.).

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INTERNAL AUDIT SYSTEM

**Regular Management Assessments**  
LG Chem enhances competitiveness by business division and checks operational soundness through management assessments. Regular assessment targets include all business activity areas within the company such as procurement, sales, production, and logistics. Through assessments, we identify potential risks and ethical violations, analyze causes, derive improvement tasks, and manage the implementation of improvement tasks through continuous follow-up inspections. This contributes to the company's sustainable performance creation and building better operating systems.

**Operating Fraud and Corruption Reporting Channels**  
LG Chem operates the Jeong-do Management Cyber Report Center where fraud and corruption can be reported to ensure transparency for fair business conduct. The reporting channel can be used not only by employees but also by all stakeholders related to LG Chem, including suppliers and local community members. Reports can be made through various methods such as email, phone, and fax, with Chinese and English provided.  
When a report is received, investigation proceeds according to documented report handling procedures, and the veracity of the reported content is determined based on objective evidence. After investigation completion, disciplinary action or rewards are implemented through fair procedures. When unreasonable systems or work processes are discovered, improvement measures are implemented. Report status and action results are reported to the audit committee as activity records.

**Fraud and Corruption Reporting Targets**

- 1 Manipulation of documents and figures
- 2 Receipt of money, gifts, and entertainment
- 3 Unfair equity participation in suppliers
- 4 Embezzlement and misappropriation of assets (public funds)
- 5 Unfair trade
- 6 Information leakage
- 7 Sexual harassment, etc.

**Whistleblower Protection Principles**  
LG Chem has established and operates whistleblower protection guidelines to prevent disadvantages to whistleblowers. We do not disclose the identity of whistleblowers or any information suggesting it without their consent, and the reporting system is protected by a secure security system. The Ethics Office regularly checks whether there have been any disadvantageous measures against whistleblowers following the completion of investigations and implementation of related support measures.

**Fraud and Corruption Reporting Channels**

Address: LG Chem Ethics Office, 19th Floor, East Tower, LG Twin Towers, 128 Yeoui-daero, Yeongdeungpo-gu, Seoul  
Phone: 1522-9941  
Fax: 02-3773-7314  
Email: ethicsoffice@lgchem.com

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SYSTEMS FOR ESTABLISHING JEONG-DO MANAGEMENT

Operating Integrated Jeong-do Management IT System  
LG Chem shares LG Code of Ethics, behavioral principles, etc. in detail through the Jeong-do Management Portal and supports employees to easily check the latest information related to Jeong-do Management through continuous updates and improvements. The system is provided in Korean, English, and Chinese for employees at all global business sites. Employees can ask questions about various ethical concerns they face in actual work performance at any time. LG Chem provides detailed advice on these questions.

Establishing Jeong-do Management Culture Through Education and Promotion  
LG Chem conducts Jeong-do Management education for all employees to prevent fraud, corruption, and other Jeong-do Management violations. We are implementing education segmented by position levels including new employees, managers, and position appointees. Overseas business site employees receive customized education with materials in each country's language at their respective sites, and education programs are also prepared for external suppliers.  
We also periodically send CEO Jeong-do Management messages to employees and business partners, promote compliance with internal ethical norms and excellent Jeong-do Management cases, and share violation cases to establish Jeong-do Management culture within the organization.

# ENVIRONMENT

CLIMATE ACTION

- 1. Greenhouse Gas Reduction
  - 1) Low-Carbon Management System Transition
    - Policy and Decision-Making System
    - Internal Carbon Pricing
    - Net-Zero Portal
    - Introduction of Carbon Reduction Activation Mechanism
    - Scope 3 Emissions Calculation and Management System Establishment
  - 2) Multi-faceted Strategies for Greenhouse Gas Reduction
    - Direct Reduction Investment Promotion
    - Greenhouse Gas Reduction Through Innovative Technology
    - Indirect Reduction Through Renewable Energy Transition
    - Complementary Use of Offset Reduction
- 2. Life Cycle Assessment
  - 1) LCA System Enhancement and Strengthening Member Capabilities
  - 2) Enhancing LCA Data Completeness Through Measured Data
  - 3) Category-wise Scope 3 Emissions Calculation Linked to LCA Data
  - 4) Strategic Customer-Centered LCA Analysis Diversification and Communication Enhancement

TRANSITION TO CIRCULAR ECONOMY

- 1. Plastic Recycling
  - 1) Mechanical Recycling Expansion
    - White Color PCR-ABS Commercialization and Expansion
    - Recycled Engineering Plastic Portfolio Expansion
    - High-Purity PIR Production and Eco-Friendly Plasticizer Development
  - 2) Chemical Recycling Commercialization Promotion
    - Supercritical Pyrolysis Oil Plant Completion
    - Waste Plastic Quality Management Process Establishment
- 2. Renewable Raw Material Utilization
  - 1) BCB(Bio-Circular Balanced)
  - 2) HVO(Hydrotreated Vegetable Oil)
- 3. Battery Recycling
  - 1) Policy Environment Changes Leading Recycling System Establishment in Each Country
  - 2) Battery Circulation System Establishment and Recycled Metal Production
  - 3) Strategic Promotion of Battery Recycling Business

ENVIRONMENTAL POLLUTANT EMISSION MANAGEMENT

- 1. Air Pollutant Emission Management
  - 1) Operation of Air Pollutant Emission Reduction Facilities
  - 2) Total Air Pollutant Emission Management System
  - 3) Efforts to Improve Odor Control
- 2. Water Pollutant Emission Management
- 3. Soil Pollutant Emission Management
- 4. Waste Management
- 5. Continuous Risk Management Through Self-Inspection
- 6. Environmental Impact Assessment

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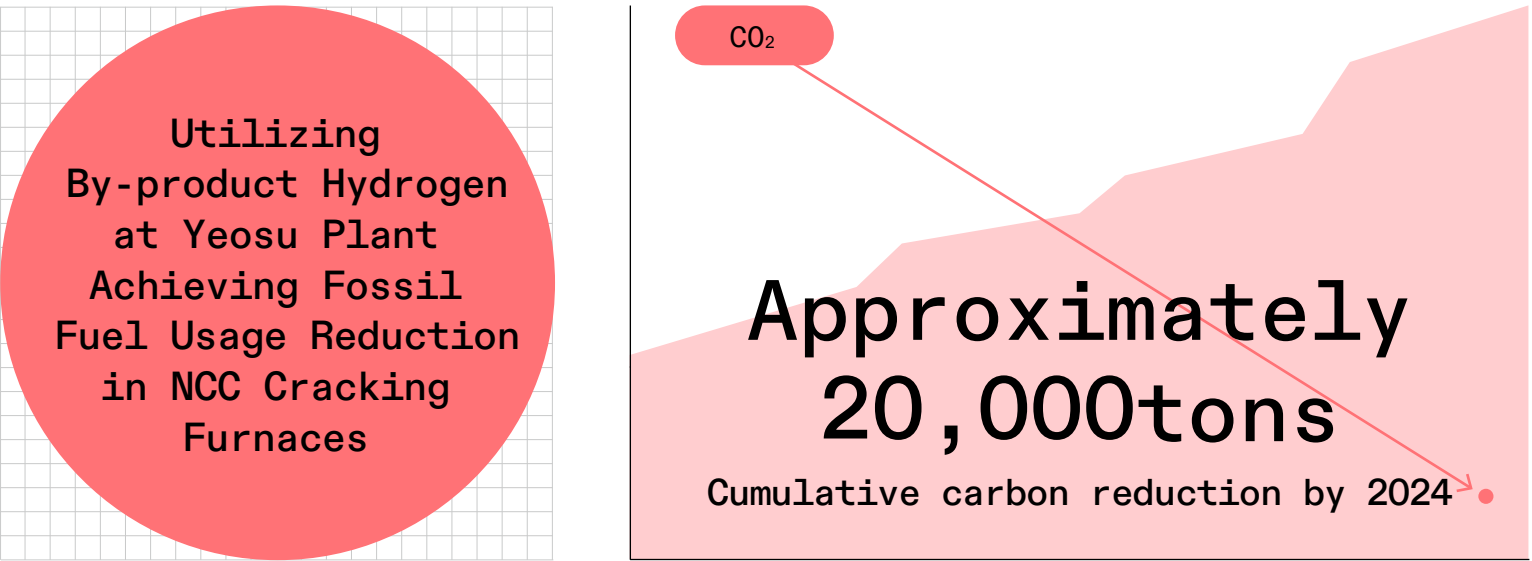
CLIMATE ACTION

LG Chem has officially declared the achievement of Net-Zero by 2050 and is advancing carbon reduction strategies. We have introduced a carbon reduction activation mechanism to internalize low-carbon management. Furthermore, we have advanced the LCA system and established a system to calculate and manage Scope 3 emissions. We are also pursuing multi-faceted strategies for direct, indirect, and offset reduction of greenhouse gases. In particular, we are concentrating research capabilities on developing innovative technologies for carbon reduction and laying the foundation for long-term growth drivers.

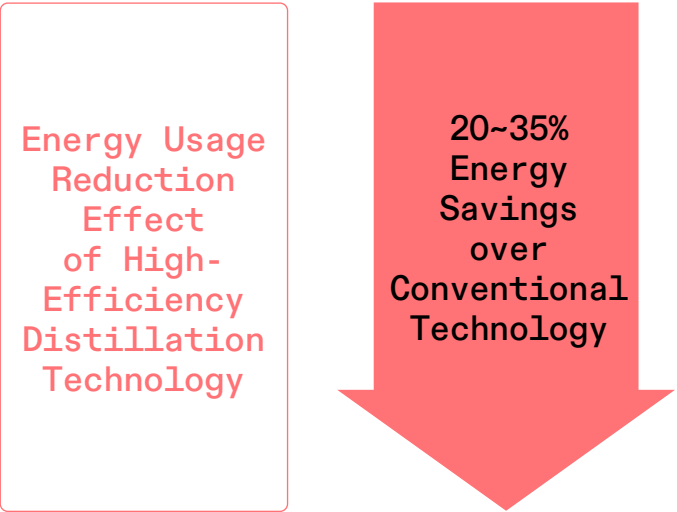
CLIMATE ACTION

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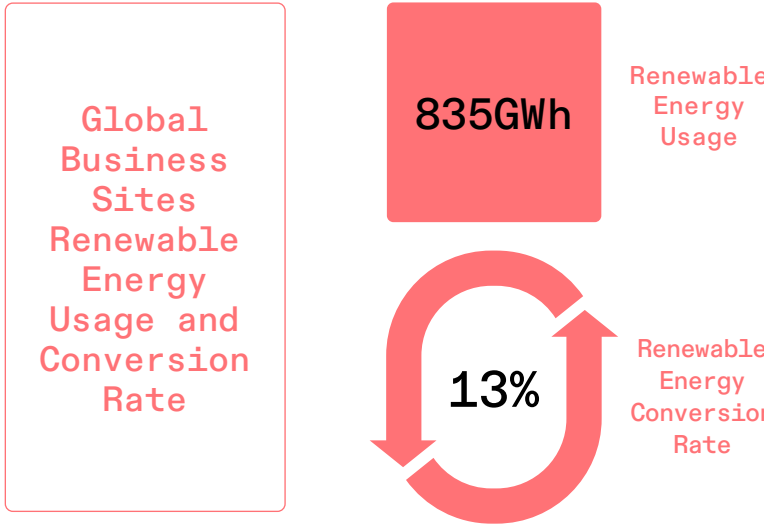
Investment to Reduce Fossil Fuel Use in NCC Cracking Furnaces by Utilizing By-Product Hydrogen Generated at the Yeosu Plant, Achieving Cumulative Carbon Reduction of Approximately 20,000 Tons by 2024



Energy Usage Reduction of 20~35% Compared to Conventional Distillation Technology With High-Efficiency Distillation Technology



Achieving 13% Renewable Energy Conversion Rate by Using a Total of 835 GWh Renewable Energy at Global Business Sites



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CLIMATE ACTION

GREENHOUSE GAS REDUCTION

Low-Carbon Management System Transition

LG Chem is simultaneously pursuing the transition to a low-carbon management system and sustainable growth to actively respond to climate change. In February 2022, we officially declared Carbon-neutral Growth for Scope 1 and Scope 2 by 2030 and Net-Zero achievement by 2050, and have since continuously advanced carbon reduction strategies. As carbon emission regulation response costs such as carbon emission trading and carbon border tax, expected as major transition risks, are anticipated to increase, we have been setting and reflecting internal carbon prices in business planning and investment reviews since 2022. Furthermore, we have integrated carbon reduction into strategic decision-making and internalized low-carbon management by establishing the Net-Zero Portal, a carbon reduction investment promotion and performance management system. Through this, LG Chem is continuously strengthening internal capabilities for carbon reduction implementation.

Approach

LG Chem prioritizes cost efficiency in the process of discovering and promoting carbon reduction tasks. We also balance regulatory compliance and business opportunity creation. An example is calculating Marginal Abatement Cost (MAC) to quantitatively analyze reduction effects versus investment, and prioritizing and executing tasks with the highest cost-effectiveness based on this.

Key Keywords for Carbon Reduction Tasks

- Cost Efficiency: Prioritize investment in the most economical reduction tasks based on marginal abatement cost.
- Regulatory Response: Establish proactive response strategies to minimize cost burden from strengthened domestic and international carbon regulations.
- Business Opportunities: Secure opportunities to enhance eco-friendly image and enter green markets through carbon reduction solutions.

Organizational Structure and Decision-Making System

LG Chem is building a collaborative system among various departments for carbon reduction task discovery and execution. LG Chem also operates a carbon reduction solution solicitation program to actively collect ideas from each department and supports priority investment for tasks with excellent economic feasibility.

Carbon Reduction Task Implementation Departments

- Production Team: Monitor carbon emissions from manufacturing sites and discover reduction tasks.
- Technology Team: Research carbon reduction technologies and propose improvements.
- Utility Support Team: Energy use management and renewable energy procurement technical support.

Policies for Effective Carbon Reduction Promotion

- Internal Carbon Pricing: Calculate internal carbon prices considering carbon emission trading system and carbon cost reduction effects and reflect them in investment decision-making.
- Carbon Reduction Investment Incentives: Provide incentives to departments and projects actively participating in carbon reduction.
- Emission Allowance Allocation Incentive System: Differential allocation by production team based on reduction performance to strengthen the motivation for additional reductions.
- Long-term Supply Contract Approval Process: Operate systematic review and approval procedures including financial and ESG perspectives when concluding renewable energy PPAs and long-term contracts.



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**Internal Carbon Pricing**  
LG Chem has introduced internal carbon pricing to pre-reflect regulatory costs from carbon emissions when establishing mid- to long-term business plans and reviewing investment economics. We also actively induce activities and investments for carbon reduction by setting carbon prices exceeding current emission allowance prices, assuming strengthened emission allowance regulations. Through this, we aim to proactively respond to uncertainties in domestic emission allowance allocation and regulatory introduction and strengthening trends by global locations, and induce low-carbon-centered business portfolio transformation to mitigate potential business risks.

**Net-Zero Portal**  
To accelerate the transition to a low-carbon management system and secure low-carbon-based business competitiveness, LG Chem began with refining BAU (Business As Usual, projected greenhouse gas emissions without greenhouse gas reduction efforts) in 2022 and materialized reduction roadmaps and implementation plans. As part of this effort, we became the first in the domestic industry to establish the Net-Zero Portal, a carbon integrated management system to verify how investments to reduce carbon emissions lead to profit and loss changes. The Net-Zero Portal can calculate highly reliable BAU by linking not only basic data such as production volume and energy use but also overall business plans including mid- to long-term production plans and new facility investments, and is utilized as an important means for business decision-making with functions for carbon reduction investment promotion and performance management.

**Introduction of Carbon Reduction Activation Mechanism**  
LG Chem introduced the carbon reduction activation mechanism starting in 2024 to internalize low-carbon management and continuously strengthen implementation momentum on this foundation. We discover tasks with high feasibility and economic efficiency through new reduction task solicitation while linking them to rewards by reflecting them in headquarters evaluations. We have also established measures to secure investment priorities so that these tasks can actually be implemented as investments. We have established incentives to activate the entire process from reduction task discovery to investment and implementation, including providing incentives based on reduction performance achieved after investment. Additionally, LG Chem has strengthened its responsibility for carbon reduction implementation and management by materializing the Net-Zero promotion system and establishing decision-making systems specialized for Net-Zero efforts. We have granted self-leadership in implementation to business divisions, which are carbon reduction implementation entities, and introduced quarterly project reviews (QPR) with C-level participation to improve management efficiency. Through QPR, we review progress and performance of carbon reduction-related investments and conduct internal and external issue reviews and overall strategic decision-making for Net-Zero achievement.

**Carbon Reduction Activation Mechanism**

Continuous Carbon Reduction Task Discovery	New Reduction Task Competition	Business Division-Led Carbon Reduction Task Competition
	Discovery Performance Rewards	Evaluation and Rewards Based on Expected Reduction Amount of New Reduction Tasks
Strengthening Net-Zero Implementation Momentum	Quarterly Review of Reduction Status	Enhanced monitoring through quarterly reviews of reduction performance status with C-level participation
	Reduction Performance Rewards	Providing incentives and penalties for actual implementation reduction performance

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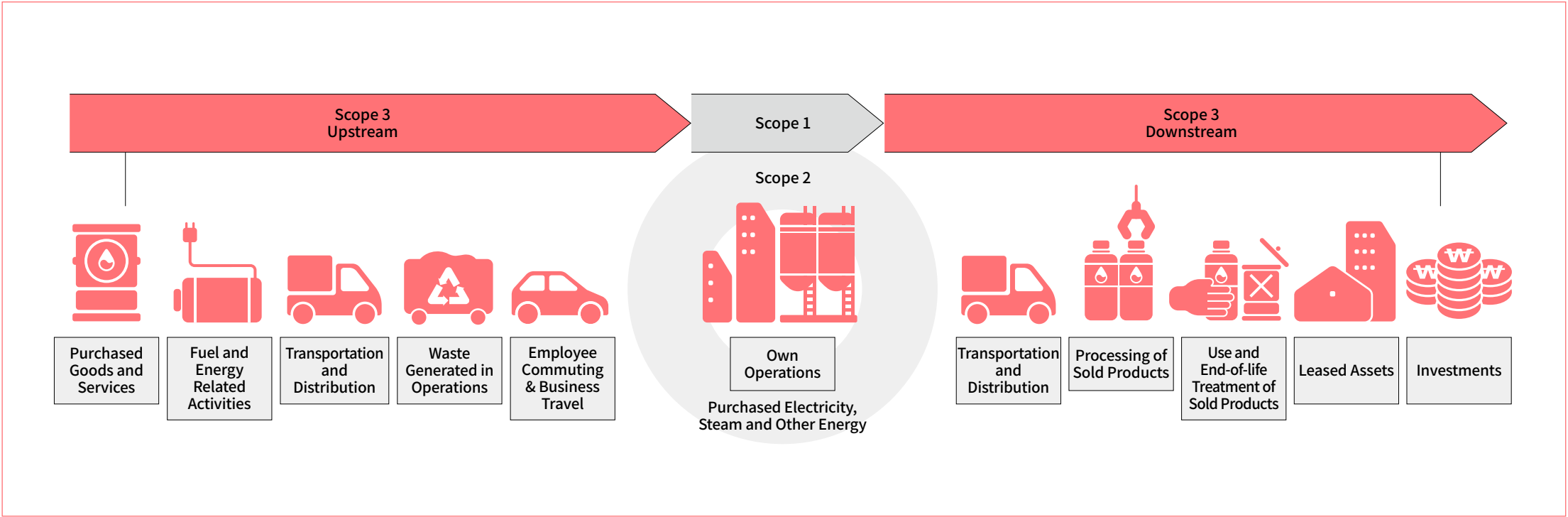
ENVIRONMENTAL POLLUTANT  
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**Scope 3 Emissions Calculation and Management System Establishment**  
Scope 3 emissions management has emerged as an essential task for corporate sustainability. Scope 3 emissions occurring throughout the supply chain account for a large portion of companies' total carbon footprint and can be effectively managed using systematic LCA data. Based on LCA implementation experience, LG Chem has organized data linked to raw material production, transportation, waste generation, etc., and reviewed emission factors to establish a foundation for Scope 3 calculation. To improve the accuracy and completeness of Scope 3 calculation, in 2024 we analyzed relevant institutional and other company cases based on GHG Protocol guidelines and established category-specific Scope 3 calculation standards. We also set calculation scope considering business relevance and data management possibilities, completed emissions calculation based on 2024 business activity data, and secured reliability through third-party verification. The calculated Scope 3 emissions increased significantly compared to the previous year, and we plan to establish carbon reduction targets across the entire value chain based on the expanded domestic and international business site scope by 2026.

**Greenhouse Gas Emission Scope Definition**

Scope	Description
Scope 1	Greenhouse gases emitted from business sites directly operated and controlled
Scope 2	Greenhouse gases generated in the process of producing purchased electricity and steam energy
Scope 3	Greenhouse gases generated in the raw material transportation, use, and disposal value chain of produced products

**Major Greenhouse Gas Emission Sources in Value Chain**



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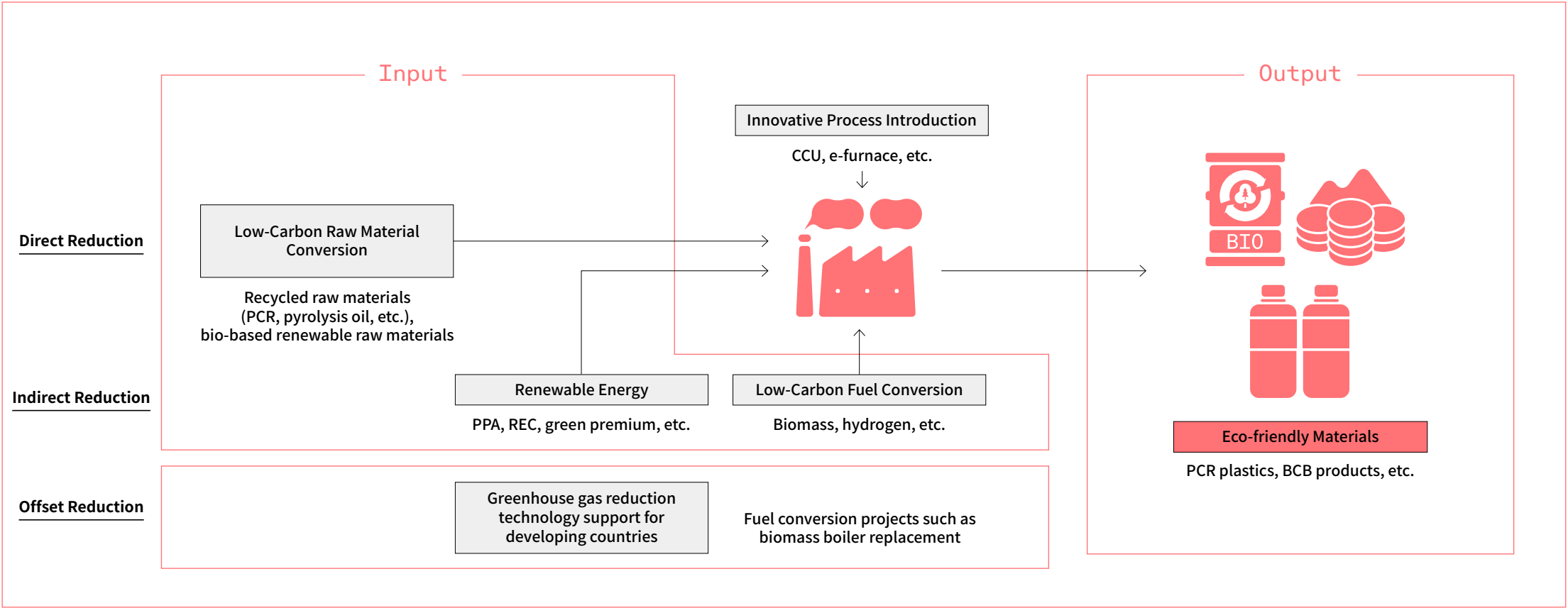
MULTI-FACETED STRATEGIES FOR GREENHOUSE GAS  
REDUCTION

LG Chem understands the greenhouse gas emission characteristics of business sites for greenhouse gas reduction and is reviewing the introduction of optimal reduction technologies by reduction type based on this understanding.

Greenhouse Gas Reduction Types

Direct Reduction	Scope 1 emission reduction through introduction of innovative processes, low-carbon fuel and raw material conversion, and energy efficiency improvement
Indirect Reduction	Scope 2 emission reduction by converting fossil fuel-based externally purchased electricity to renewable energy
Carbon Offset	Offsetting direct and indirect emissions using reduction credits generated outside organizational boundaries

Greenhouse Gas Reduction Strategy



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Direct Reduction Investment Promotion

LG Chem is promoting direct reduction investments considering emission characteristics by process. We plan to reduce upstream carbon emissions by introducing mid-to long-term innovative technologies such as NCC (Naphtha Cracking Center) electric cracking furnaces, CCU (Carbon Capture Utilization), and low-carbon fuel conversion (hydrogen co-firing), and to reduce downstream carbon emissions through energy demand management including low-carbon fuel conversion, high-efficiency equipment replacement, and unused energy recovery and utilization.

Low-Carbon Fuel Conversion

Hydrogen

Hydrogen is attracting attention as an effective low-carbon fuel in industrial sectors where electrification is difficult. As part of low-carbon fuel conversion in 2023, LG Chem implemented an investment to reduce fossil fuel use in NCC cracking furnaces by utilizing by-product hydrogen generated at the Yeosu plant and achieved cumulative carbon reduction of approximately 20,000 tons by 2024. Along with this, we are accelerating construction of the industry’s first hydrogen production plant to reduce carbon emissions in petrochemical processes. The hydrogen production plant uses by-product methane generated in the NCC process as raw material. The produced hydrogen reduces carbon emissions by replacing methane, the existing NCC pyrolysis fuel. LG Chem is expanding the proportion of clean fuel use in NCC processes, reviewing ways to utilize hydrogen in bio-raw material production, and building a circular value chain that utilizes carbon dioxide generated during hydrogen production as a resource.

Biomass

LG Chem signed a main contract with GS EPS in December 2022 to establish a biomass power plant that produces industrial steam and electricity from waste wood. With the goal of operation in the first half of 2027, we established TW Biomass Energy at LG Chem's Yeosu Hwachi plant. Fuel securing and investment are currently in progress. TW Biomass Energy uses waste wood from domestic households and industrial sites, which is typically incinerated and landfilled, into woodchips for use as fuel. It is attracting attention as a fuel that can produce large amounts of thermal energy (steam) among renewable energies and can achieve approximately 99% greenhouse gas reduction compared to coal. When thermal energy and electricity produced by TW Biomass Energy are input into nearby factory and complex operations, we expect an annual carbon emission reduction effect of 400,000 tons.

Low-Carbon Raw Material Conversion

Naphtha, a major raw material for petrochemical products, emits large amounts of greenhouse gases during the extraction and production process of fossil-based raw materials and accounts for most of Scope 3 upstream carbon emissions. Therefore, conversion to eco-friendly raw materials is one of the core strategies for LG Chem to achieve carbon reduction goals.

Recycled Raw Materials → See detailed content

LG Chem is promoting the transition to a low-carbon economy by producing recycled plastics using plastic waste discarded by end consumers (PCR) and waste generated during industrial production processes (PIR) as raw materials. We are supplying products with excellent properties such as ABS, PVC, PC, and PE through mechanical recycling methods. LG Chem has built a supercritical pyrolysis oil plant for chemical recycling in Dangjin, Chungcheongnam-do in preparation for commercial operation this year. Furthermore, we are pursuing multi-faceted cooperation with various local governments for a stable source of waste plastic materials.

Bio Raw Materials → See detailed content

Biomass such as plants and agricultural by-products grows by absorbing carbon dioxide through photosynthesis. Even if burned or decomposed after being processed into bio raw materials, the overall carbon emissions (net emissions) can have low or near-zero effects. This is because the carbon absorbed during biomass growth is re-released during product production and combustion processes. Additionally, products made from bio raw materials can reduce carbon emissions from fossil fuel combustion by replacing existing fossil fuels. LG Chem plans to establish a joint venture with Italy's largest state-owned energy company ENI Group to produce HVO (Hydrotreated Vegetable Oil) using waste cooking oil, a type of biomass. With GS Caltex, we have begun construction of a 3HP (3-Hydroxypropionic Acid) demonstration plant through joint business cooperation. LG Chem will implement carbon reduction and lead the market based on such differentiated technological capabilities and strategic partnerships.

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Greenhouse Gas Reduction Through Innovative Technology

LG Chem is developing promising technologies based on leading research capabilities for mid- to long-term direct carbon reduction and utilization as growth drivers.

Technology for Converting Generated Carbon

LG Chem is reviewing the feasibility of various carbon utilization technologies for carbon conversion, electrification technologies to replace energy sources in chemical plants from fossil fuels to eco-friendly electricity, and technologies to manufacture chemical materials using low-carbon raw materials such as waste plastics or biomass. Carbon conversion technologies include catalytic conversion technology where LG Chem's research capabilities have accumulated, electrochemical conversion technology using electricity, and biological conversion technology utilizing biological methods such as fermentation.

Catalytic Conversion Technology

LG Chem is focusing on research for eco-friendly raw materials and fuels. We have developed DRM (Dry Reforming of Methane) technology that produces syngas, a raw material for chemical products, from carbon dioxide and methane. This technology has secured world-class catalyst performance and durability, and we are preparing national projects aimed at large-scale technology demonstration through collaboration with steel companies. LG Chem is also conducting research on manufacturing Sustainable Aviation Fuel (SAF) from carbon dioxide and hydrogen. We have developed world-class performance catalysts at laboratory scale and are preparing national projects aimed at large-scale technology demonstration, similar to the DRM project. In the future, we plan to gradually promote the commercialization of eco-friendly aviation fuel manufacturing technology in cooperation with refineries that have aviation fuel refining and quality management capabilities.

Electrochemical Conversion Technology

LG Chem has secured performance equal to or better than leading companies in the world's largest commercial-scale cells and stacked stacks, and with support from Chungcheongnam-do Provincial Government, we are preparing for pilot-scale demonstration with KIST in the second half of this year.

Technology for Fundamentally Blocking Carbon Generation

Electrification technology that fundamentally blocks carbon generation is a method of replacing energy required for reactors from fossil energy such as LNG to renewable energy. This technology is being developed as a mid- to long-term initiative, considering factors such as materials, power control, and safety, and is expected to contribute to manufacturing cost reduction through facility size reduction along with carbon reduction.

Technology for Reducing Carbon Emissions by Improving Energy Efficiency

High-Efficiency Distillation Technology

The high-efficiency distillation technology being developed by LG Chem is expected to significantly improve the performance of separation and purification technology essential in petrochemical processes. Currently, about 95% of separation and purification technology in petrochemical processes relies on distillation technology, and more than 40% of energy consumed in the entire petrochemical process is used in distillation processes. Considering this high energy dependence, improving the low energy efficiency of existing distillation technology is a very important task in terms of greenhouse gas reduction. To overcome the limitations of existing distillation technology and improve energy efficiency, we are applying various innovative approaches. The core of the high-efficiency distillation technology being developed by LG Chem lies in maximizing the contact time between gas and liquid inside the distillation column and effectively suppressing re-mixing phenomena between separated compositions. Improving separation efficiency can significantly reduce energy use and thereby reduce greenhouse gas (GHG) emissions by 20-30%, playing an important role in helping companies fulfill their environmental responsibilities.

High-efficiency distillation technology is effective as it can lead to operational cost (OPEX) savings. According to LG Chem's research, this technology can reduce energy use by 20-35% compared to conventional distillation technology, reducing petrochemical process operating costs and ultimately leading to improved cost competitiveness of products. Particularly in the energy-intensive petrochemical industry, energy savings of nearly 30% are an important factor that can significantly improve corporate competitiveness. High-efficiency distillation technology also provides economic advantages in terms of facility scale (CAPEX). Reducing facility size through improved separation efficiency can reduce initial investment costs by 20-50%. It can also significantly improve corporate capital efficiency.

LG Chem aims to accelerate technological differentiation of core capabilities we possess while enhancing development speed and reliability for capabilities we don't possess through external cooperation and participation in national projects. Through joint research agreements with KIST, we have received transfers of two technologies related to electrochemical conversion and biological conversion, and continue cooperation for technology advancement through joint laboratory operations. We are also participating in mid- to long-term national projects in carbon conversion and electrification fields to conduct related research. LG Chem will continue to discover innovative technologies for carbon reduction and strengthen technology development capabilities.

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Indirect Reduction Through Renewable Energy Transition

Based on the judgment that replacing fossil fuel-based electricity with renewable energy is most effective for carbon reduction, LG Chem has declared renewable energy transition goals since 2020. We have established goals to convert 100% of overseas business sites' electricity to renewable energy by 2030 and expand this to all domestic and international business sites by 2050. We also plan to advance internal renewable energy procurement systems and expand direct PPA and other producer-linked procurement ratios to fulfill responsibilities in climate action while contributing to building sustainable business models.

Portfolio Composition for Renewable Energy Transition

LG Chem adopts a multi-faceted approach to strengthen sustainable energy use and achieve carbon reduction goals through renewable energy procurement. We utilize various renewable energy sources such as solar, wind, and bioenergy and have composed an optimal energy source portfolio through comprehensive analysis of environmental friendliness and economic efficiency. LG Chem manages its portfolio by prioritizing supply sources and procurement methods with high economic efficiency, stability, and carbon reduction contribution. We flexibly adjust the portfolio as needed and continuously expand renewable energy use.

Renewable Energy Procurement Approach

In procurement methods, LG Chem pursues Power Purchase Agreements (PPA) to secure stable power supply and cost predictability, and indirectly expands renewable energy use by utilizing green premiums and Renewable Energy Certificates (REC). Through expanding renewable energy use, we seek cooperation opportunities with renewable energy power generation companies such as solar and wind power, and contribute to creating a sustainable energy ecosystem.

Renewable Energy Long-term Supply Contracts and Project Investment Plans

LG Chem strives to secure stable supply chains through renewable energy long-term supply contracts. As of 2024, we are proceeding with PPA agreements for wind power projects including Yeongdeok Wind Farm and Yeongyang Wind Farm, and plan to conclude formal contracts at future construction points. We are also conducting phased feasibility studies for solar installation utilizing factory sites and rooftops.

Renewable Energy Procurement Performance

As of 2024, domestic business sites used approximately 142 GWh of renewable energy through REC and green premiums, achieving approximately 50,000 tons of carbon reduction effect. Overseas business sites procured approximately 693 GWh of renewable energy through certificate purchases and other methods, achieving approximately 410,000 tons of carbon reduction effect.

Renewable Energy Usage Status

Unit : MWh

	2022	2023	2024
Total	741,480	876,843	835,370

Complementary Use of Offset Reduction

LG Chem focuses not only on internal reduction but also on external reduction strategies to achieve Net-Zero goals. We are actively reviewing ways to use offset reduction as a complementary means in case Net-Zero achievement is difficult even after maximally applying direct and indirect reduction measures. As part of this effort, LG Chem promoted a cookstove distribution project in Uganda in 2020. We collaborated with local companies to develop activities that increase energy efficiency and reduce carbon emissions. Such proactive initiatives culminated in a transition application under Article 6.4 of the Paris Agreement in 2023.

In 2025, approval of the project made it possible to secure more stable offset credits. LG Chem is also pursuing various efforts to activate the system, including abolishing the validity period of offset credits available in K-ETS and expanding submission limits. Through this process, we aim to create an environment where the offset system can operate more effectively and ultimately move one step closer to achieving Net-Zero goals.

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LIFE CYCLE ASSESSMENT

As global carbon emission regulations recently expand to product carbon footprints, customer demands for product environmental information are increasingly growing and diversifying. Accordingly, LG Chem has been systematically managing product environmental information by conducting Life Cycle Assessment (LCA) for all products since 2020, and continuously strengthening eco-friendly competitiveness through this approach.

LG Chem is pursuing company-wide activities to secure the accuracy of LCA data to meet advancing customer demands, along with conducting LCA and building data for all products. To minimize human errors in the data collection process, we have built a DX-based LCA data collection and Product Carbon Footprint (PCF) analysis system and expanded it to 11 major domestic and international business sites. Through this system, we generate annual data to ensure continuity in product-specific PCF calculation and management while continuously improving data quality. Furthermore, to respond to various LCA/PCF utilization demands, we have built data simulation and analysis functions within the system along with data calculation and management. Additionally, we have developed functions for smooth LCA data communication among internal members to support LG Chem members' efficient LCA data calculation and utilization. LG Chem also supports LCA capability enhancement of suppliers and customers within the value chain and continuously expands the scope of data management and utilization. Through this, we steadily continue efforts to enhance low-carbon competitiveness across the entire value chain.

**LCA System Enhancement and Strengthening Member Capabilities**

Since the quality of LCA data is directly linked to the accuracy of collected basic data, the importance of securing capabilities of members who collect and manage data, conduct and analyze LCA, and communicate with stakeholders based on this is increasingly growing. Based on the expertise of LCA implementation organizations, LG Chem provides continuous education and guidelines to data collection and utilization personnel in each business division to enhance understanding of related work. We also strengthen the reliability of LCA data by collaborating with process personnel who have expertise in product manufacturing processes to develop standard processes and functions for data collection and review within the system.

**Enhancing LCA Data Completeness Through Measured Data**

LG Chem signed a win-win cooperation ESG management promotion agreement (MOU) with the Ministry of Environment and Korea Environmental Industry & Technology Institute in March 2024. Through this, we support LCA implementation of small and medium-sized suppliers while supporting the introduction of improvement items for key improvement areas (Hot Spots) of product environmental impact derived from LCA implementation results using shared growth funds. Starting with support for 8 suppliers in 2024, we plan to continue such support in 2025.

Through such activities, we aim to enhance data completeness and reliability by securing measured product LCA data for eco-friendly product raw materials and regulated product raw materials and reflecting this in LG Chem product LCA implementation. Furthermore, we will continue efforts to enhance eco-friendly competitiveness of products and supply chains by utilizing this as basic data for establishing product environmental impact reduction strategies. We also plan to expand LCA implementation support scope to small and medium-sized customers in 2025. We plan to quantify the environmental impact generated by LG Chem's eco-friendly products at the product development stage and utilize this as basic data for collaborative activities to improve it. Through this, we aim to strengthen low-carbon competitiveness across the entire value chain from raw material companies to LG Chem to product manufacturing companies.



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Category-wise Scope 3 Emissions Calculation Linked to LCA Data

Scope 3 emissions occurring outside companies' direct management scope are increasingly becoming more important to manage. Scope 3 emissions occurring throughout the supply chain account for a significant portion of companies' total carbon footprint, and systematic approaches utilizing LCA data are necessary for effective management. LG Chem has organized data and emission factors linked to Scope 3 activities, such as raw material production, transportation, and business site waste generation, through Life Cycle Assessments (LCA) implementation. Building on the expertise gained from years of conducting LCAs, we have completed an initial review of the feasibility of collecting Scope 3 activity data and the application of our existing emission factors. Based on these activities, we organized and operated Scope 3 2024 Task Force (TF) to complement and advance the range of existing Scope 3 emissions. Through the TF, we comprehensively analyzed the GHG Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard along with materials from institutions and councils within the chemical industry and other company cases to establish LG Chem's Scope 3 calculation standards.

LG Chem calculated Scope 3 emissions based on 2024 activity data according to established standards and conducted third-party verification to ensure result reliability. We considered business relevance and activity data manageability as LG Chem's calculation standards and performed calculations for all categories except Category 8 (upstream leased assets), 10 (processing of sold products), 13 (downstream leased assets), and 14 (franchises).

LG Chem's Scope 3 emissions increased significantly compared to previously disclosed data due to expanded calculation targets and scope. For example, Category 1 (purchased goods and services) emissions disclosed until 2022 were calculated mainly around some petrochemical raw materials, but according to our established Scope 3 calculation standards, we included raw materials representing over 95% of petrochemical and Advanced Materials raw material purchase amounts in the calculation scope. Emissions increased due to this expanded calculation scope. LG Chem plans to expand Scope 3 emissions calculation scope to include not only domestic but also overseas business sites by 2026, and plans to promote carbon reduction across the entire value chain through establishing mid- to long-term reduction targets for Scope 3 emissions.

Strategic Customer-Centered LCA Analysis Diversification and Communication Enhancement

Demands for product LCA information are continuously increasing centered on strategic customers. Requirement levels are gradually diversifying including providing results based on customer companies' own methodologies, scenario analysis, annual updates, and linkage with carbon reduction roadmaps. LG Chem has built close collaboration systems between each business division at customer touchpoints and LCA implementation organizations to respond quickly to customers' diverse demands. We operate internal verification procedures from the data collection stage for LCA implementation to strengthen reliability of data provided to customers while continuing systematic communication through customer-customized data calculation and analysis.

Going forward, LG Chem plans to pursue establishment of carbon reduction strategies for major products linked to LG Chem's sustainable management and Net-Zero strategies and implementation monitoring, beyond LCA implementation and data analysis. Through this, we plan to further strengthen products' sustainable competitiveness and proactively respond to customer demands.

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LG Chem continuously strives for technological innovation to realize a circular economy in plastic and battery recycling and renewable raw material utilization. We provide differentiated value to customers by supplying high-quality recycled plastics through stable waste plastic raw material supply chain establishment and plastic recycling technology innovation. As a global battery materials company, we are actively fostering the battery recycling business based on expertise and core technologies in the battery materials sector to reduce battery costs and promote the expansion of electric vehicle use.

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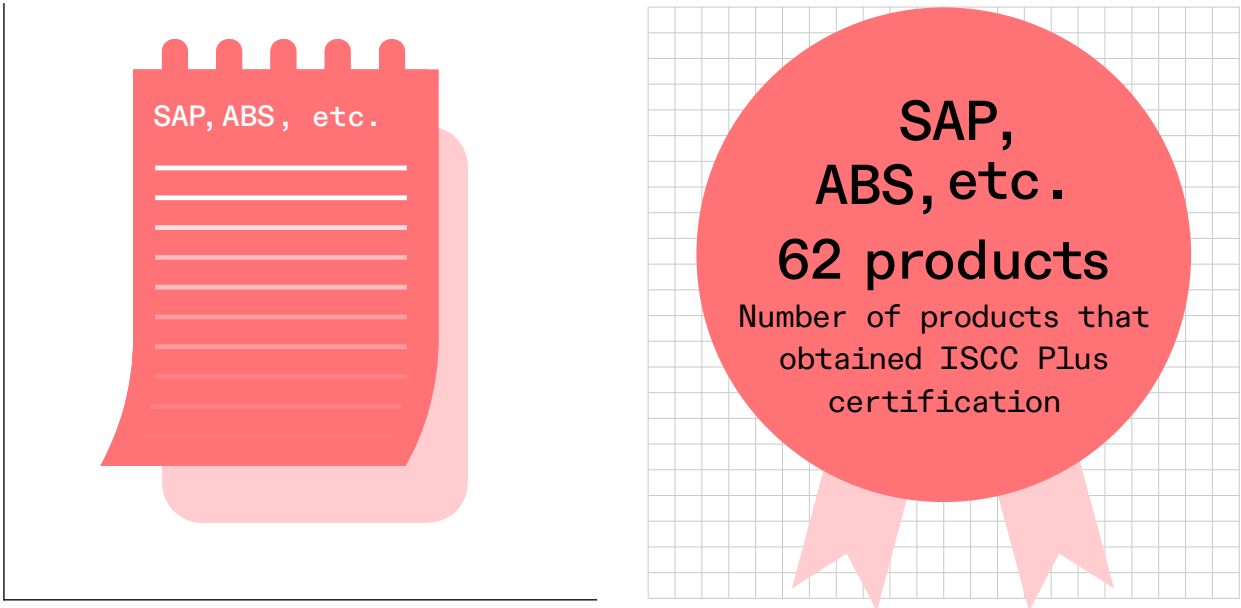
- 1. Plastic Recycling
  - 1) Mechanical Recycling Expansion
    - White Color PCR-ABS Commercialization and Expansion
    - Recycled Engineering Plastic Portfolio Expansion
    - High-Purity PIR Production and Eco-Friendly Plasticizer Development
  - 2) Chemical Recycling Commercialization Promotion
    - Supercritical Pyrolysis Oil Plant Completion
    - Waste Plastic Quality Management Process Establishment
- 2. Renewable Raw Material Utilization
  - 1) BCB(Bio-Circular Balanced)
  - 2) HVO(Hydrotreated Vegetable Oil)
- 3. Battery Recycling
  - 1) Policy Environment Changes Leading Recycling System Establishment in Each Country
  - 2) Battery Circulation System Establishment and Recycled Metal Production
  - 3) Strategic Promotion of Battery Recycling Business

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Achieved 9,389 Tons in 2024 Sales Through Commercialization and Expansion of White PCR-ABS



2024 SAP (Super Absorbent Polymer), ABS (Acrylonitrile Butadiene Styrene), etc.  
Obtained ISCC Plus Certification for 62 Products



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# TRANSITION TO CIRCULAR ECONOMY

## PLASTIC RECYCLING

The global plastic recycling market is showing growth despite continued uncertainties such as economic downturn. Global companies' eco-friendly goal declarations, increasing consumer demand for eco-friendly materials, and advancement of recycling technology serve as major growth drivers, with market size projected to expand at an annual average of over 8% from approximately \$55 billion in 2023 to approximately \$110 billion in 2030. Efforts to build a circular economy continue, with the European Union (EU) Council approving the Packaging and Packaging Waste Amendment in December 2024 to strengthen plastic recycling and reuse obligations, and the New York State Assembly recently considering introduction of the Packaging Reduction and Recycling Infrastructure Act.

LG Chem is pursuing mechanical recycling and chemical recycling to contribute to minimizing environmental damage to Earth by preventing plastic waste from being landfilled or incinerated. In addition to PCR (Post-Consumer Recycled Material), which means materials made by recycling plastics used and discarded by end consumers, we also partially include PIR (Post-Industrial Recycled Material), which utilizes waste generated during some industrial production processes. As a leader in the petrochemical industry, LG Chem aims to drive the transition to a circular economy by establishing a stable waste plastic supply chain and advancing innovative plastic recycling technologies to provide customers with high-quality recycled plastics that offer exceptional value.

### Mechanical Recycling Expansion

Mechanical recycling is a method of mechanically crushing waste plastics, removing impurities, and producing recycled plastics through compound processes. The production process for regenerated raw materials is simpler and less costly compared to chemical recycling, making it the most widely used recycling method currently.

LG Chem is building a diverse product portfolio including PCR-PE (Polyethylene) and PCR-PP (Polypropylene) recycled from polyethylene (PE) commonly used in daily life such as food, industrial, and agricultural films and household containers, and polypropylene (PP) used for various purposes from automotive materials to medical applications, as well as PCR (Post-Consumer Recycled)-ABS (Acrylonitrile-Butadiene-Styrene), PCR-PC (Polycarbonate), PCR-PVC (Polyvinyl Chloride), and others. LG Chem's PCR material utilization in 2024 was 6,593 tons, an increase of approximately 360 times compared to about 18.2 tons in 2020. These PCR products achieve quality equivalent to virgin materials, can be perfectly applied to existing applications, and can be recycled repeatedly. They are also provided in various product forms such as for films and injection molding, enabling customer-customized applications.

### White Color PCR-ABS Commercialization and Expansion

LG Chem succeeded in commercializing white PCR-ABS for the first time in the world in August 2020. Existing PCR-ABS has limited applications because the mixed colors of its raw materials resulted in darker colors. We achieved white color by isolating light-colored raw materials prior to the crushing stage. For this, we standardized physical property specifications of raw materials that went through selection processes and developed proprietary technology for color implementation. As a result of these efforts, sales in 2024 increased by approximately 80% compared to the previous year, reaching 9,389 tons.

### Recycled Engineering Plastic Portfolio Expansion

LG Chem has secured quality levels equivalent to existing petrochemical products and ultra-high content recycled material technology of up to 96% in other recycled engineering plastic materials fields, recording annual average revenue growth of 23% over the past three years. In addition to current main products PCR-PC and PCR-PC/ABS, we are continuously promoting expansion of recycled product portfolios utilizing various raw materials such as PA, PBT, ABS, and PET. As demand for PCR products is expected to increase due to ELV (End of Life Vehicles) regulations, we have completed approval for approximately 40 eco-friendly material parts in cooperation with various automotive OEM customers.

### High-Purity PIR Production and Eco-Friendly Plasticizer Development

Since 2023, LG Chem has been producing Neat-grade Recycled PVC (PIR) by separating only PVC from heterogeneous PVC products that are difficult to recycle, such as waste wallpaper, waste tarpaulin, and waste synthetic leather. LG Chem's high-purity Recycled PVC, which achieves the same physical properties as existing products, can be applied to various products easily encountered in real life such as flooring materials, synthetic leather, and tarpaulins. We are also making efforts to enhance the environmental friendliness of plasticizers needed to maintain the quality of such Recycled PVC. LG Chem obtained GRS (Global Recycled Standard), a U.S. global recycling standard certification for eco-friendly plasticizers, in October 2023. In January 2024, we developed an eco-friendly plasticizer using waste PET bottles as raw materials that can reduce carbon emissions by approximately 30% or more compared to existing plasticizer products and began pilot mass production.

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Highlight

PCR PFAS-Free Flame Retardant PC/ABS Development

LG Chem developed PFAS-Free flame retardant PC/ABS containing recycled plastics and became the first in the world to obtain UL94 V-0 grade, a U.S. certified standard flame retardancy test, in August 2024. PFAS (per- and polyfluoroalkyl substances) have been widely used as flame retardants in various industries due to their heat resistance and low solubility in water and oil. LG Chem has also incorporated them into its existing PC/ABS products. However, PFAS are known as substances that do not naturally decompose and remain in the environment for long periods, posing potential risks to humans and ecosystems. As a result, regulations on their use have been introduced mainly in Europe and the United States. Accordingly, global demand for PFAS-Free materials is increasing.

In response to this market trend, LG Chem succeeded in developing PFAS-Free PC/ABS materials using over 50% recycled plastics (PCR), reducing carbon emissions by approximately 46% compared to existing PC/ABS. LG Chem's PCR PFAS-Free PC/ABS with special flame retardation processes applied is expected to be utilized in various fields including electronic devices, chargers, interiors, and construction materials.

Highlight

Technological Innovation for Recycling, BOPE

For plastic recycling, compositions with single materials suitable for recycling processes is key, but existing packaging films frequently used for beauty products and others are mostly made of composite materials, so many are being incinerated or landfilled. To solve this, LG Chem developed single polyethylene (PE) packaging films with performance equivalent to composite materials by designing optimal molecular arrangements based on nano-level molecular structure analysis. The resulting UNIQABLE is an eco-friendly product that maintains the same transparency, printability, and durability as existing composite packaging films while being 100% recyclable without additional separation processes.

LG Chem won the highest award, the Presidential Award, at the 2024 Korea Industrial Technology R&D Grand Prize with Biaxially Oriented Poly Ethylene (BOPE) technology applied to UNIQABLE processing, and also obtained National Excellent New Technology (NET) certification. It was also listed as a recommended product by Germany's Bruckner, the world's largest film manufacturing equipment company, gaining recognition for its technology in the global market.

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Chemical Recycling Commercialization Promotion

To preoccupy the future eco-friendly market, LG Chem is continuously promoting its chemical recycling business that recycles low-quality or composite waste plastics that are currently difficult to recycle through mechanical recycling methods. Chemical recycling is a method of chemically converting waste plastics back into their basic raw material state for the production of new plastics. This method is advantageous for building plastic virtuous cycle structures as there is no quality degradation of reproduced plastics or limitations on recycling frequency.

Supercritical Pyrolysis Oil Plant Completion

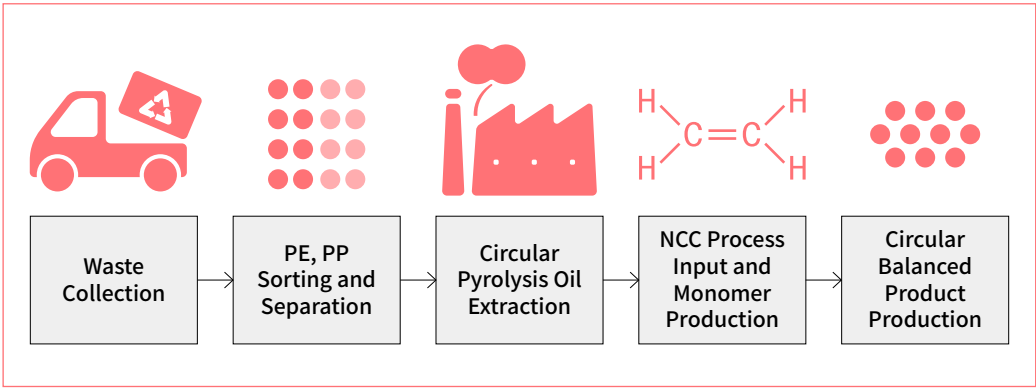
LG Chem recently completed a supercritical pyrolysis oil plant with an annual capacity of 20,000 tons at Dangjin Seokmun National Industrial Complex in Chungcheongnam-do, which is scheduled for commercial operation within 2025. Pyrolysis technology that can extract pyrolysis oil without distinction even when various materials are mixed can significantly increase plastic recycling rates. The pyrolysis oil market is projected to grow to approximately 2 million tons by 2030. About half of the pyrolysis oil produced at the Dangjin plant will be directly input into the Naphtha Cracking Center (NCC) process, with by-product gas being reused as energy for process operation.

Waste Plastic Quality Management Process Establishment

LG Chem continues multi-faceted efforts for stable procurement of chemical recycling raw materials and quality enhancement of recycled raw materials. First, we are strengthening raw material supply and demand foundation through purchase contracts with multiple suppliers, and have established Korea's first waste plastic quality management process to manage recycled raw materials by grade according to strict quality standards. We are also expanding cooperation for stable securing of household waste plastics by signing MOUs with local governments including Siheung City in 2022, Seoul City in 2023, and Ansan City in 2024.

Eco-Friendly Transparent ABS Commercialization

In 2021, LG Chem succeeded in commercializing eco-friendly transparent ABS utilizing Recycled MMA (Methyl Methacrylate) obtained through chemical recycling of artificial marble waste. This is a technology that recovers MMA from PMMA through depolymerization, a type of pyrolysis, and produces PCR transparent ABS based on this. It is evaluated as a meaningful achievement in that it overcame the color implementation limitations of existing mechanical recycling methods and secured technology to stably produce high-quality transparent ABS. LG Chem sold 9,737 tons of its recycled transparent ABS in 2024, which is being utilized in home appliances, IT devices, toys and other industrial fields.



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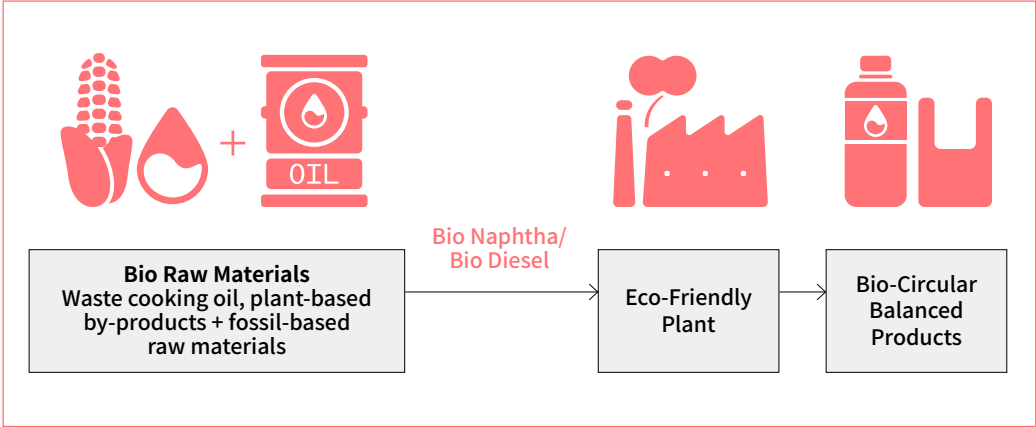
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RENEWABLE RAW MATERIAL UTILIZATION

**BCB(Bio-Circular Balanced)**  
LG Chem developed BCB (Bio-Circular Balanced) products, sustainable materials that incorporate Bio-Mass Balance technology for the first time in Korea. BCB products are manufactured by mixing bio-renewable feedstock extracted from renewable vegetable oils and fossil-based feedstock. An advantage is the ability to reduce dependence on fossil-based raw materials while utilizing existing petrochemical product production infrastructure. Based on such BCB technology capabilities, LG Chem obtained ISCC Plus certification for 62 products including SAP (Super Absorbent Polymer) and ABS (Acrylonitrile Butadiene Styrene) in 2024. ISCC is an international certification system that verifies product sustainability throughout the entire process from raw material procurement to production and distribution.

**HVO(Hydrotreated Vegetable Oil)**  
HVO is a next-generation bio-oil produced by adding hydrogen to vegetable raw materials such as waste cooking oil. This fossil-free bio-oil serves as a raw material for plastic products such as ABS, PVC, and SAP. It has the advantage of showing performance similar to fossil fuel-based diesel without freezing even at low temperatures while significantly reducing greenhouse gas emissions, making it applicable to Sustainable Aviation Fuel (SAF) production.  
To preoccupy the HVO market, LG Chem invested KRW 68.2 billion in the joint venture LG-ENI Biorefining with Italian company ENI in February 2025 and established a plan to build an HVO production plant with an annual capacity of 340,000 tons in Daesan, Chungcheongnam-do by 2026. We plan to continue strengthening cooperation systems with excellent technology and raw material companies and have the capacity to fulfill customer demand for eco-friendly products.



BATTERY RECYCLING

As a global battery materials company, LG Chem aims to realize environmental protection by expanding electric vehicle distribution using batteries as resources. Based on expertise and differentiated core technologies in the battery materials field, we are building a competitive battery circular economy across the entire process from production to recycling.

**Policy Environment Changes Leading Recycling System Establishment in Each Country**  
With the rapid growth of the electric vehicle industry, waste battery treatment issues are emerging as major concerns. Accordingly, each country is introducing regulations related to battery reuse and recycling to establish domestic recycling systems. The European Union (EU) regulated through CRMA (Critical Raw Materials Act) that more than 25% of recycled metals should be procured within the EU by 2030, and completely banned export of Black Mass, a battery recycling raw material containing key metal components, to non-OECD countries. The United States provides tax benefits for domestic manufacturing, production, and investment of battery recycling raw materials through the Inflation Reduction Act (IRA). Korea has also reclassified the battery recycling industry from waste treatment to manufacturing, simplifying licensing procedures for factory establishment. We also provide policy support to activate the battery recycling industry by recognizing Black Mass as recycling resources rather than waste and facilitating raw material imports.

**Battery Circulation System Establishment and Recycled Metal Production**  
The battery circulation system starts with waste battery collection. Waste batteries collected through various channels are converted to Black Mass, a recycling intermediate material, through preprocessing processes such as physical crushing and grinding. LG Chem operates post-processing processes to recover metals usable for Cathode Material production from Black Mass. LG Chem's post-processing processes have high process efficiency compared to competitors, providing excellent processing competitiveness. LG Chem's recycled metals also have low impurity content and uniform quality. Precursor Cathode Materials manufactured using these can secure quality levels equivalent to new metal raw materials. Recycled metals recovered this way are manufactured into high-quality recycled Cathode Materials based on LG Chem's precursor and Cathode Material production expertise and stably supplied to battery manufacturers.

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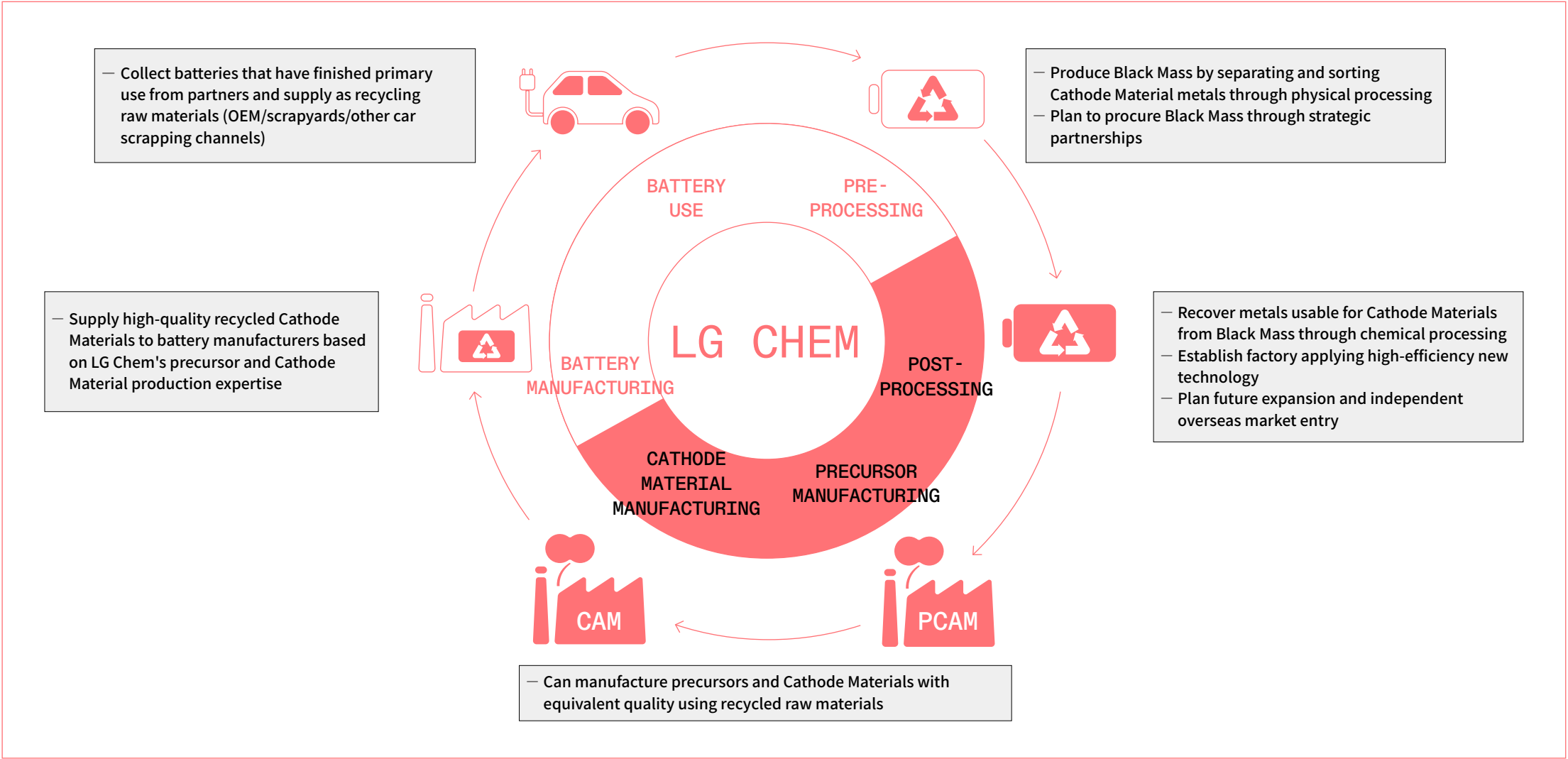
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**Strategic Promotion of Battery Recycling Business**  
LG Chem plans to operate mass production facilities in Yangsan in 2028 after building and verifying battery recycling pilots in 2025. We are also jointly promoting battery recycling projects with multiple battery cell manufacturers and automotive companies who are Cathode Material customers, and support customers to easily establish resource circulation systems for battery recycling. LG Chem adjusts recycling processes to produce not only precursor raw materials but also precursor-free Cathode Material raw materials in line with next-generation Cathode Material technology trends. LG Chem will continue contributing to the creation of an eco-friendly society by enhancing battery cost competitiveness and strengthening the supply of high-quality recycled Cathode Materials.





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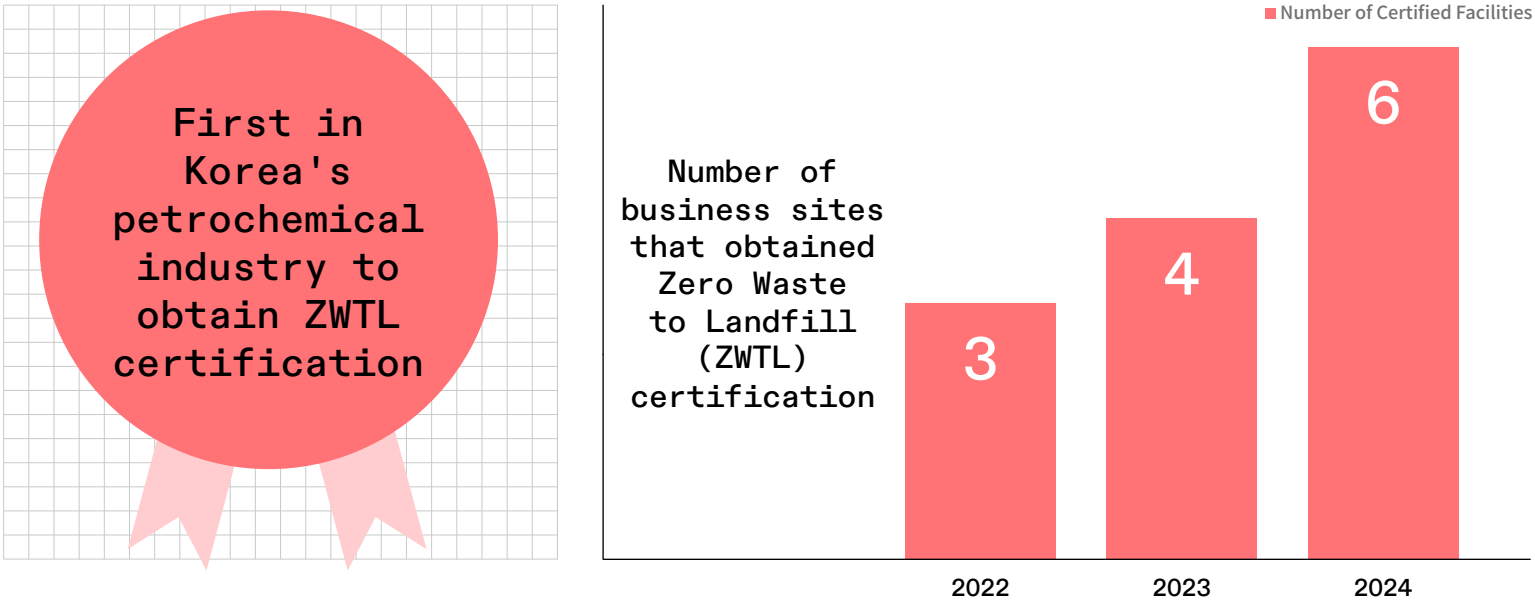
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LG Chem thoroughly complies with strengthening domestic and international environmental regulations and continuously implements environment-related improvement tasks by reflecting them in annual investment plans. We periodically monitor the enactment, revision, and policy trends of environmental laws related to air pollution, odor, water pollution, waste, etc., and proactively identify impacts by business site to check related matters. We also actively communicate with company-wide and related departments such as production and facilities centered on environmental safety organizations, and systematically manage compliance risks through organic collaboration.

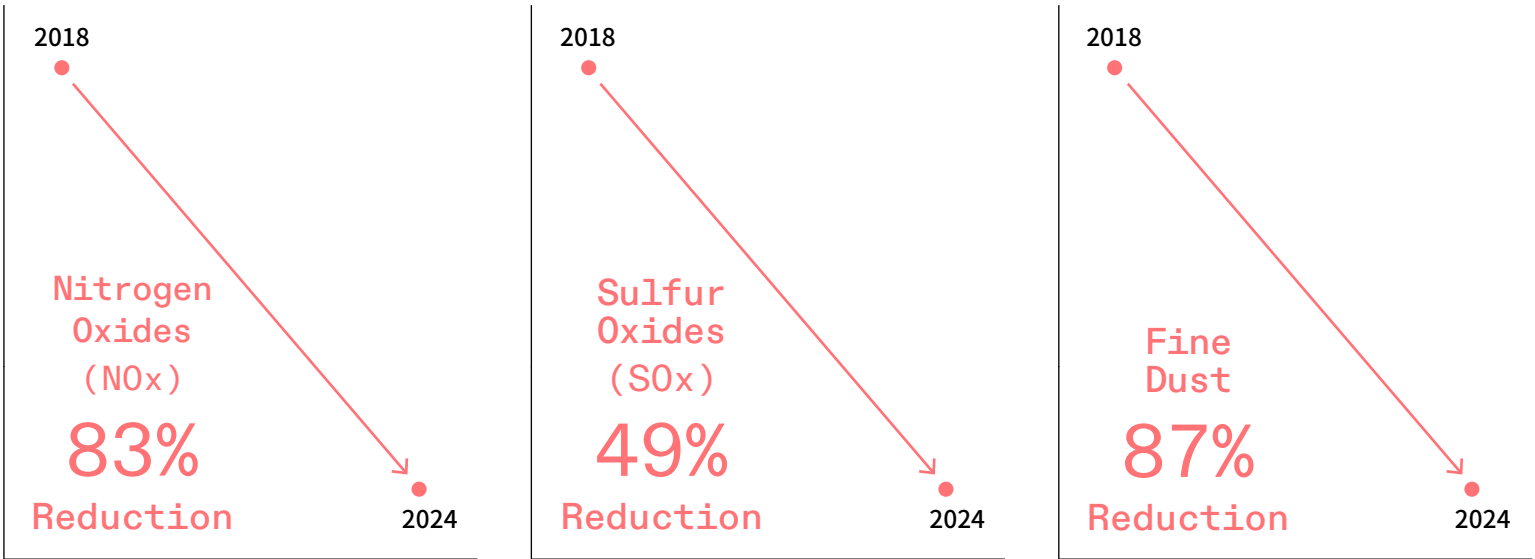
ENVIRONMENTAL POLLUTANT EMISSION MANAGEMENT

- 1. Air Pollutant Emission Management
  - 1) Operation of Air Pollutant Emission Reduction Facilities
  - 2) Total Air Pollutant Emission Management System
  - 3) Efforts to Improve Odor Control
- 2. Water Pollutant Emission Management
- 3. Soil Pollutant Emission Management
- 4. Waste Management
- 5. Continuous Risk Management Through Self-Inspection
- 6. Environmental Impact Assessment

Obtained Zero Waste to Landfill (ZWTL) Certification for the First Time in Korea's Petrochemical Industry in 2022, and Expanded Certified Business Sites to 6 Locations to Date



Reduction Rates of Nitrogen Oxides (NO<sub>x</sub>), Sulfur Oxides (SO<sub>x</sub>), and Fine Dust Compared to 2018 (Based on Yeosu Hwachi Complex)



Air pollutant reduction rate at Yeosu Hwachi Complex compared to 2018

# ENVIRONMENTAL POLLUTANT EMISSION MANAGEMENT

## AIR POLLUTANT EMISSION MANAGEMENT

LG Chem thoroughly complies with legal allowable standards for major air pollutant emissions required by the Air Quality Control Act and Clean Air Conservation Act, including nitrogen oxidesNOx, sulfur oxidesSOx, and fine dust during process operations. Furthermore, we strive to improve air quality at our major business sites beyond legal requirements, reflecting our commitment to protect the health of local residents. Since 2019, we have signed a Voluntary Agreement for Implementation of the 1st Fine Dust Seasonal Management System with the Yeongsan River Basin Environmental Office, and in 2024, voluntarily participated in the 6th Fine Dust Seasonal Management System (December 2024 to March 2025) with southern region companies. Through such activities, we reduced nitrogen oxidesNOx by 83%, sulfur oxidesSOx by 49%, and fine dust by 87% in 2024 compared to 2018, based on the Yeosu Hwachi Complex.

### Operation of Air Pollutant Emission Reduction Facilities

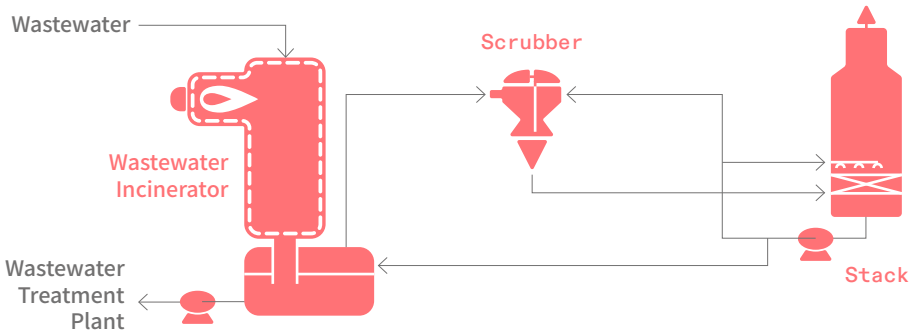
LG Chem minimizes air pollutant emissions during processes by installing air pollution prevention facilities according to process characteristics such as Flare Stack, Regenerative Thermal Oxidizer (RTO), and Scrubber. We have built continuous monitoring systems that comprehensively measure flare gas emissions, gas components, and calorific values at Yeosu and Daesan business sites to manage incomplete combustion and harmful substance emissions of exhaust gases. We also monitor oil vapor leakage and incomplete combustion by measuring oil storage facilities and exhaust gas flare stacks daily with OGI (Optical Gas Imaging) cameras.

To minimize nitrogen oxide emissions, LG Chem became the first in the petrochemical industry to introduce ozoneO<sub>3</sub> treatment nitrogen oxideNOx emission prevention facilities in the final air pollution prevention facility (Scrubber) of wastewater incinerators. This technology efficiently complements existing Selective Catalytic Reduction (SCR) and Selective Non-catalytic Reduction (SNCR) systems.

### Petrochemical Division's Air Pollutant Reduction Activities

- Clean Fuel Conversion: Investment in progress to convert boiler fuel from coal to biomass at Yeosu Hwachi Complex
- Introduction of Pollutant Reduction Equipment: Low NOx Burner, Selective Catalytic Reduction (SCR De-NOx), Ozone Scrubber, etc.
- Management of Hazardous Air Pollutant Leaks from Process Facilities and Equipment: Establish Leak Detection and Repair (LDAR) system to manage Hazardous Air Pollutants (HAPs) from transfer, transport, distribution, and measurement facilities, and immediately maintain and replace faulty devices
- Enhanced Regular Inspections: Annual inspection and action for air pollutant leaks from fugitive emission facilities (Flange, Valve, etc.)

### Strengths of Ozone<sub>3</sub> Treatment Nitrogen Oxide (NOx) Emission Prevention Facilities



- ✓ High reduction efficiency possible (90% or more)
- ✓ Energy cost reduction and carbon emission reduction possible with low operating temperature conditions
- ✓ No need to use hazardous chemicals (ammonia reducing agents)

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Total Air Pollutant Emission Management System

The Total Air Pollutant Emission Management System determines the total amount of pollutants that the air environment can accommodate by region and manages by allocating allowable emission totals to each company every five years. LG Chem's Yeosu, Daesan, Naju, Cheongju, Ochang (separator), and Osong business sites are subject to this system and strictly comply with established air pollutant emission limits. As the installation target for Tele Monitoring System (TMS) expanded from 2020, we established a TMS control center at Yeosu plant in August 2021, the first in Korea's petrochemical industry, to manage air pollutants more systematically. As of the end of 2024, we operate 115 TMS units within Yeosu, Daesan, and Cheongju plants, and monitor air pollutant emission status in real-time using the location-based integrated management IT system Eagle Eye. The TMS control center operates continuously, including nights and holidays, and has prepared work guidelines and response manuals for emergency situations such as process abnormalities or measurement equipment failures, and standardized situation-specific response systems.

Efforts to Improve Odor Control

LG Chem manages to enable nearby residents to live comfortably by installing odor reduction facilities. Volatile Organic Compounds (VOCs) and odor gases generated from facilities such as wastewater treatment plants are either combusted at high temperatures through Regenerative Thermal Oxidizer (RTO) or absorbed and removed through physical and chemical methods using activated carbon installed in adsorption towers (A/C Tower). We operate odor monitoring facilities at business site boundaries to measure real-time concentrations of hydrogen sulfide, ammonia, and VOCs, while analyzing weather conditions, wind speed and direction to identify odor emission sources and promptly implement corrective measures.

WATER POLLUTANT EMISSION MANAGEMENT

LG Chem operates wastewater treatment facilities at each business site to treat wastewater generated from production processes using physical, chemical, and biological methods. The treated effluent is then discharged to public or municipal wastewater treatment plants following water quality measurements. Some high-concentration wastewater that is difficult to treat at wastewater treatment plants within LG Chem business sites is incinerated or treated through specialized consignment treatment companies.

SOIL POLLUTANT EMISSION MANAGEMENT

Environmental safety teams at each LG Chem business site identify facilities subject to soil contamination inspection according to the Soil Environment Conservation Act. We also measure soil contamination according to legally prescribed cycles and perform soil contamination investigation and remediation work. We annually prepare plans for legal soil contamination investigation targets, request investigation from independent external specialized institutions, and record and store relevant details when contamination is not detected during inspection processes. Conversely, when contamination is detected, we proceed with remediation activities through specialized remediation companies and receive remediation completion verification through investigation institutions. For contamination inspections, initial inspections are conducted within 6 months of facility designation, followed by inspections every 5 years, and every 2 years after 15 years. For leak inspections, facilities under 500,000 liters undergo initial inspection within 10 years of facility installation, followed by inspections every 8 years.

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WASTE MANAGEMENT

As part of company-wide ESG management, LG Chem promoted waste discharge and recycling as a key task and became the first in Korea's petrochemical industry to obtain Zero Waste to Landfill (ZWTL) international certification in 2022. To realize the resource virtuous cycle of production-consumption-regeneration, two additional business sites obtained certification in 2024: China Tianjin plant (platinum grade) and Yeosu Hwachi plant (gold grade). This is an important achievement for three consecutive years following China Quzhou in 2022 and Guangzhou in 2023, expanding Zero Waste to Landfill (ZWTL) internationally certified business sites to a total of 6 locations.

Tianjin plant achieved a 100% recycling rate by recycling all waste wood and plastic containers generated from manufacturing processes. Yeosu Hwachi plant recorded a 96% recycling rate by recycling wastewater treatment sludge that was previously incinerated, and signed a public-private cooperation agreement with Yeosu City and Korea Environment Corporation to gradually expand waste plastic recycling within the business site by 2026. As part of these efforts, we are replacing packaging bags for intermediate raw materials and products with recycled post-consumer recycled (PCR) materials. LG Chem plans to systematically establish strategies for zero waste to landfills targeting all global business sites and continuously expand ZWTL certification.

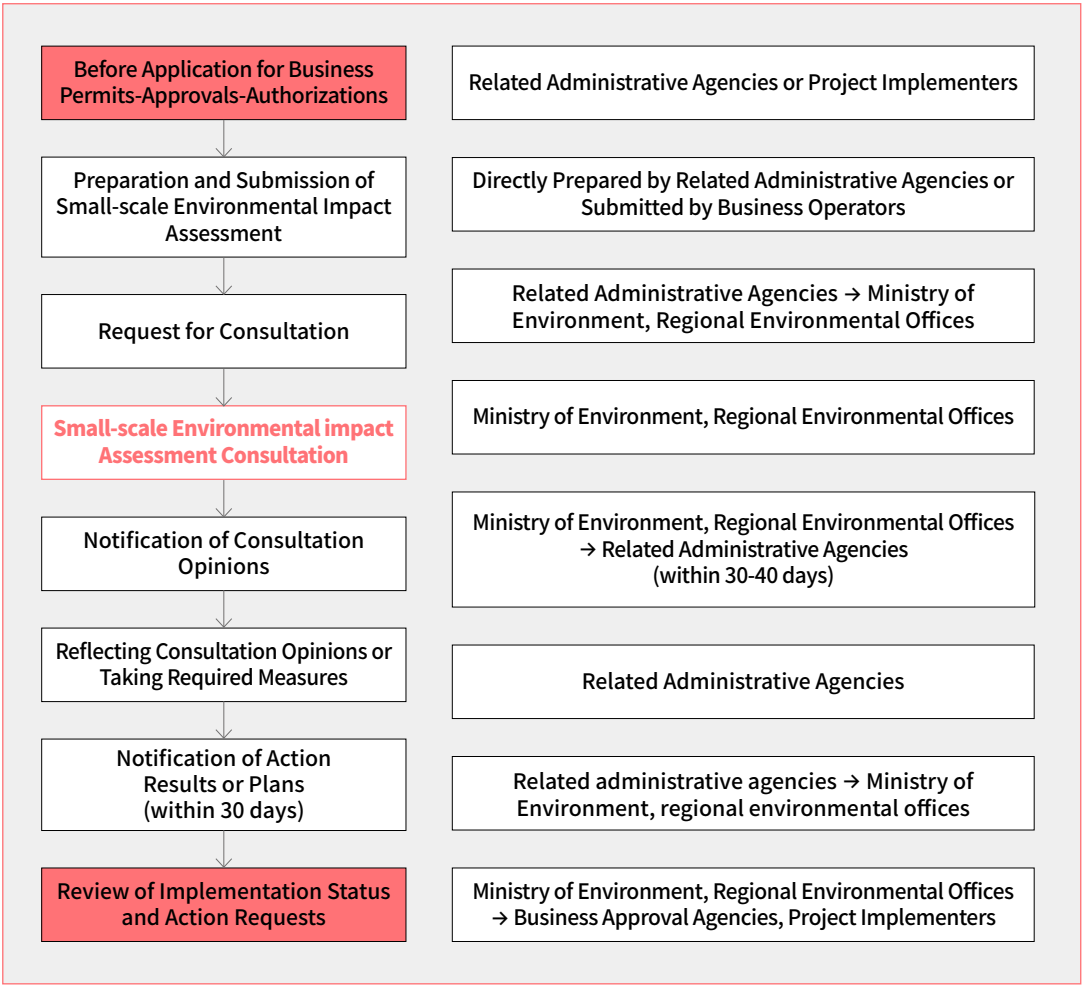
CONTINUOUS RISK MANAGEMENT THROUGH  
SELF-INSPECTION

LG Chem thoroughly complies with environment-related regulations and manages related risks through close collaboration among departments such as production, facilities, and environmental safety. We produce and distribute updated self-inspection guidebooks by field and conduct annual self-inspections at all domestic and international business sites to identify and report non-conformities. For non-conformities, we derive improvement items and register them in the system to continuously monitor progress.

ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

LG Chem predicts and evaluates in advance the environmental impact of development projects for the health, life, and ecosystem conservation of local residents and sustainable development. Environmental impact assessments can be broadly divided into Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA), and for Gas Turbine Generator (GTG) facilities, small-scale environmental impact assessments are conducted. We manage measures to minimize impacts on air quality and odor through compliance with optimal operation manuals for power generation facilities, management of non-point pollution reduction facilities, and TMS monitoring.

Small-scale Environmental Impact Assessment Procedures



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- 1. Environmental Safety Strategy and Policy
  - 1) Efforts for Safe and Clean Environment
  - 2) Environmental Safety Organization with Enhanced Implementation
  - 3) Prevention-Centered Environmental Safety Management System
  - 4) Environment, Health and Safety (EHS) Policy Enactment and Amendment
  - 5) Accident Prevention Capability Improvement at All Domestic and International Business Sites Through Mother Factory System
- 2. Environmental Safety Implementation
  - 1) Environmental Safety Accident Prevention Process
  - 2) Continuous Investment for Environmental Safety
  - 3) Emergency Response Process for Damage Minimization
  - 4) DX-based Environmental Safety Management Enhancement
  - 5) Education and Campaigns for Environmental Safety Culture Establishment
- 3. Toxic and Hazardous Substance Management
  - 1) Sustainable Product Development Through Product Toxicity Management
  - 2) Identification and Management of Hazardous Substances Reflecting Global Environmental Regulations

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- 1. Sustainable Supply Chain Governance
  - 1) Organizational Structure for Internal Cooperation
    - Internal Organization for Supply Chain Sustainability
    - Reporting Cycle and Targets
    - Subcommittee Operation Status
  - 2) Strengthened Policies and Internal Regulations
    - Responsible Sourcing Policy
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    - Addition of Compliance with Related Laws and Due Diligence in Basic Purchase Contracts
    - Operation of Supplier Grievance Handling Channels
  - 3) Supply Chain Management Performance Reflected in Evaluation and Compensation
- 2. Sustainable Supply Chain Risk Management
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    - Supply Chain Sustainability Process
    - Strengthening and Unification of Supplier Management Standards
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  - 2) Comprehensive Risk Management Including Prevention, Education, and Support
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    - 2024 Supplier ESG Assessment Results and Improvements
    - Supplier ESG Capability Enhancement and Support Strategy
    - Activation of Supplier Grievance Handling Channel Operations

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- 1. LG Chem's Employee Values and Philosophy
  - 1) LG Chem's Core Values and Employee Value Proposition
  - 2) LG Chem's Human Respect Management
- 2. Excellent Talent Acquisition and Growth Foundation Establishment
  - 1) Business Competitiveness Enhancement Through Excellent Talent Acquisition
  - 2) Employees Growing with the Company
- 3. Organizational Culture Building
  - 1) Horizontal Organizational Culture Building and Employee Engagement Enhancement Programs
  - 2) Continuous Efforts for Diversity, Equity, and Inclusion
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LOCAL COMMUNITIES

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  - 1) Sustainability Management Through Community Cooperation
  - 2) Participation Through Community Communication
  - 3) Community-Related Goals and Programs
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  - 5) Response System for Community Damage
- 2. Local Ecosystem Conservation Project
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  - 2) Seagrass Transplantation Process and Advanced Technology Utilization
  - 3) Ecological and Social Value Creation of Seagrass Transplantation

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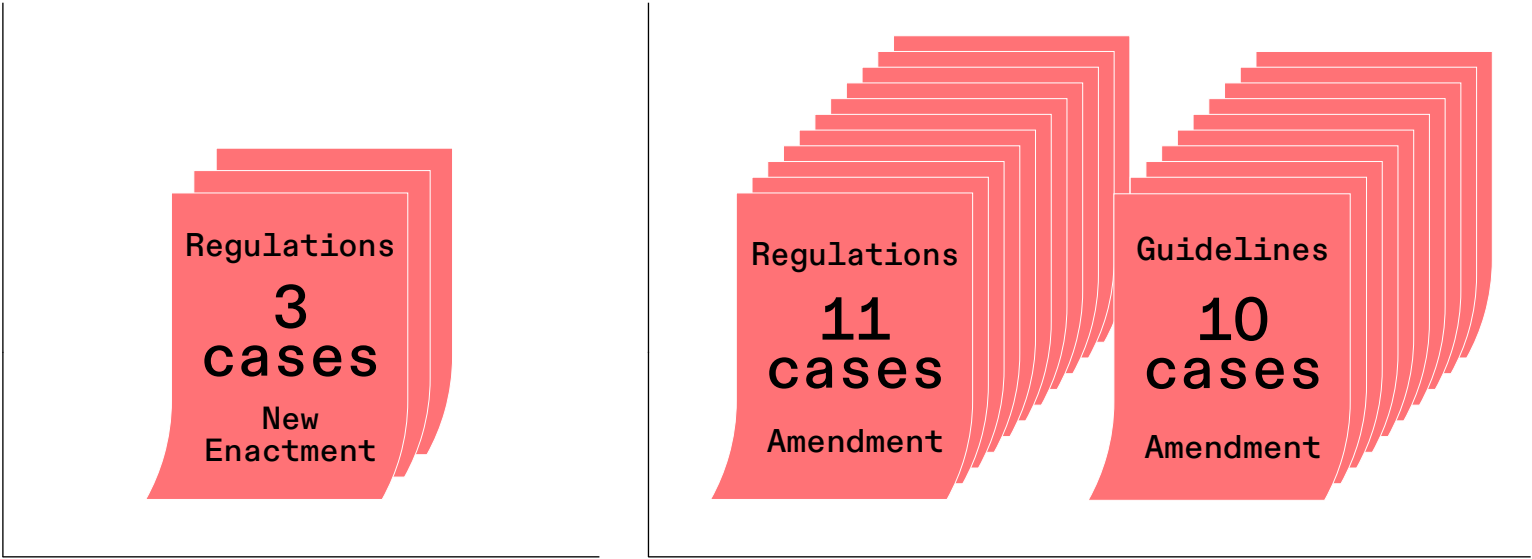
Based on the value that human safety is the top priority in all work, LG Chem has established a prevention-centered Environment, Health and Safety (EHS) management system. The CSEO organization continues to build environmental safety management systems, systematize processes for accident prevention, and invest in securing safety of high-risk processes and facilities. We are also expanding the scope of safety management to include suppliers and promoting sustainable product development through strict management of toxic and hazardous substances.

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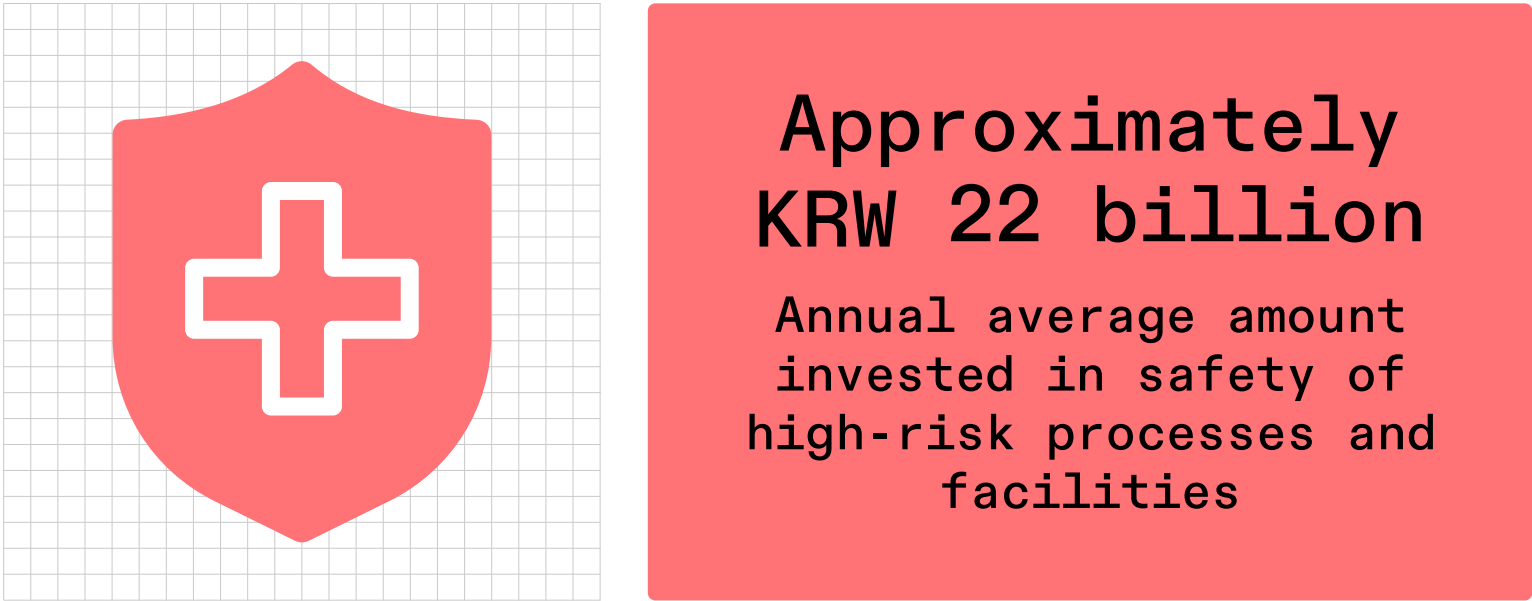
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Reflecting Changes in National Laws and Policies Related to Environmental Safety, New Enactment of Company-Wide Environmental Safety Policies in 2024 Includes 3 Regulations, and Amendments Include 11 Regulations and 10 Guidelines



Annual Average Investment of Approximately KRW 220 Billion in Safety of High-Risk Processes and Facilities for Environmental Safety Accident Prevention





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# ENVIRONMENT, HEALTH AND SAFETY

## ENVIRONMENTAL SAFETY STRATEGY AND POLICY

**Efforts for Safe and Clean Environment**  
Based on the core value that human safety is a top priority, LG Chem implements practical policies along with systematic environmental safety regulations and guidelines that govern all operations. Furthermore, to prevent all types of environmental safety accidents, leaders directly address process and workplace issues through on-site management, and each organization actively conducts its own prevention and risk mitigation activities. When environmental safety-related accidents occur, we thoroughly analyze causes considering the scale and severity of accidents, operate recurrence prevention programs, and strive to improve practical improvement implementation by enhancing employee awareness.

**Environment, Safety, and Health Policy**

- LG Chem recognizes that environment, health and safety is a basic element for securing differentiated competitiveness, and declares faithful implementation of the following matters for continuous improvement of environment, health and safety performance based on clear goals and strong implementation.
- ✓ We comply with regulations and establish and operate environment, health and safety regulations leading similar industries domestically and internationally.
  - ✓ We build safety and health systems that proactively identify and improve hazardous and risk factors to continuously improve levels.
  - ✓ We pursue continuous innovation throughout the production process to provide eco-friendly products and services.
  - ✓ We create safe and comfortable work environments and establish an organizational culture that strictly adheres to basic principles.
  - ✓ We actively support improving the environment and the health and safety of suppliers and local communities based on social responsibility.
  - ✓ We transparently disclose information and sincerely communicate with stakeholders.

**Environmental Safety Organization with Enhanced Implementation**  
In 2022, LG Chem established the position of Chief Safety & Environment Officer (CSEO) as the company’s highest-ranking executive in charge of all environmental and safety matters. The CSEO has been granted independent and ultimate responsibility and authority for strategy establishment, investment, budget, personnel, and evaluation related to environmental safety. The CSEO organization is the central authority for planning functions such as the establishment of company-wide environmental and safety policies, regulatory response, performance evaluation, and system operation, as well as assessment functions such as technical support and implementation inspections. We have also strengthened on-site response and implementation by placing environmental safety managers at each business site. The CSEO operates various meeting bodies for rapid decision-making and checks environmental safety performance at each business site while discussing improvement measures from time to time.

**Prevention-Centered Environmental Safety Management System**  
The chemical industry is based on producing new products by inducing chemical reactions of various chemicals under high temperature and high pressure conditions. Therefore, preventing environmental pollution from raw material and product spills and leaks, and stably managing the entire process to secure worker and community safety is an important task. We particularly focus organizational capabilities on preventing environmental safety accidents in advance and minimizing damage when accidents occur.

LG Chem conducted emergency and precision safety assessments for all domestic and international business sites and introduced LGC Standards to establish high-risk factor improvement and accident prevention systems. We are also doing our utmost to ensure safety of all members through the 7 Absolute Safety Rules introduced in 2022.



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LGC Standards	
5 Implementation Tasks	
❶ Technical Guidelines	Establish technical guidelines that are LG Chem's unique standards integrating international standards, regulations, design, and operational know-how to level up company-wide environmental safety standards
❷ Mother Factory System	Exchange and support of environmental safety know-how and production technology between domestic and international plants with identical products and processes for the purpose of leveling up environmental safety and technical capabilities and continuously disseminating best practices
❸ Accident Prevention System	Establish plant-level accident prevention systems including operation of risk assessment committees and preparation of high-risk work protocols
❹ Emergency Response System	Minimize accident scale and community damage through process safety assurance when accidents occur, and strengthen response systems for safe evacuation of workers within plants
❺ DX* Utilization	Fundamental innovation in work processes, organizational culture, and technical capabilities using digital technology for major accident prevention and safety assurance

\*Digital Transformation

7 Absolute Safety Rules

- ❶ Wear personal protective equipment specified for work situations
- ❷ Monitor combustible gas concentration and provide fire extinguishers during hot work
- ❸ Monitor harmful gas and oxygen concentrations during confined space work
- ❹ Fall prevention measures and double safety ring safety belt wearing during high-altitude work
- ❺ Conduct work after work permit issuance
- ❻ Prohibition of arbitrary release of interlock
- ❼ Comply with Lock-Out Tag-Out (LOTO) procedures when stopping equipment, including installation of danger tags and locking devices

LG Chem also builds and operates systematic environmental safety management systems based on ISO 14001 and ISO 45001 of the International Organization for Standardization (ISO). International environmental standard ISO 14001 is a system that certifies that a company's environmental management system complies with international standards. ISO 45001 is a certification system that specifies minimum requirements for companies to autonomously identify and manage risk factors to prevent industrial accidents.

Environment, Health and Safety (EHS) Policy Enactment and Amendment  
LG Chem prepares systematically documented environmental safety policies to support all employees in clearly recognizing roles and responsibilities for environmental safety goals and performing efficient and consistent work. We also confirmed 29 regulations related to environment, health and safety as detailed regulations. Environmental policies include development and management of eco-friendly products, environmental impact assessment, safe and legal management of various chemicals, emission management of air, water, and soil pollutants, and operational standards for noise, vibration, and odor management. Safety policies include risk assessment, pre-operation inspection, safe process operation and work permits, hazardous energy management (LOTO), fire prevention, and health management.  
LG Chem annually reflects national laws and policy enactments and amendments related to environmental safety in company-wide environmental safety policies. In 2024, we enacted 1 new regulation (hazardous energy management through LOTO) and two new guidelines (Chemical Substance Risk Assessment and Employee Health Examination), and revised 11 existing regulations and 10 guidelines.

Accident Prevention Capability Improvement at All Domestic and International Business Sites Through Mother Factory System  
LG Chem operates the Mother Factory system under the principle of One Company & One Standard to prevent the recurrence of identical or similar accidents and to promote the overall enhancement of technical capabilities in all operations. We share information on major accident cases such as fire, explosions, spills and leaks, and casualties through regular exchange meetings. Each business site identifies proactive improvement items for accident prevention based on this information. The Mother Factory system supports comprehensive inspection of the Fellow Factory's technical guidelines, equipment, and process operations, while the Fellow Factory implements continuous improvements to close gaps with the Mother Factory. LG Chem selected and awarded 15 Best Practices from 10 unit plants in 2024. We also conducted 15 risk assessments as of the second half of 2024, and held meetings to establish standards for risk assessment culture and established risk reduction measures.

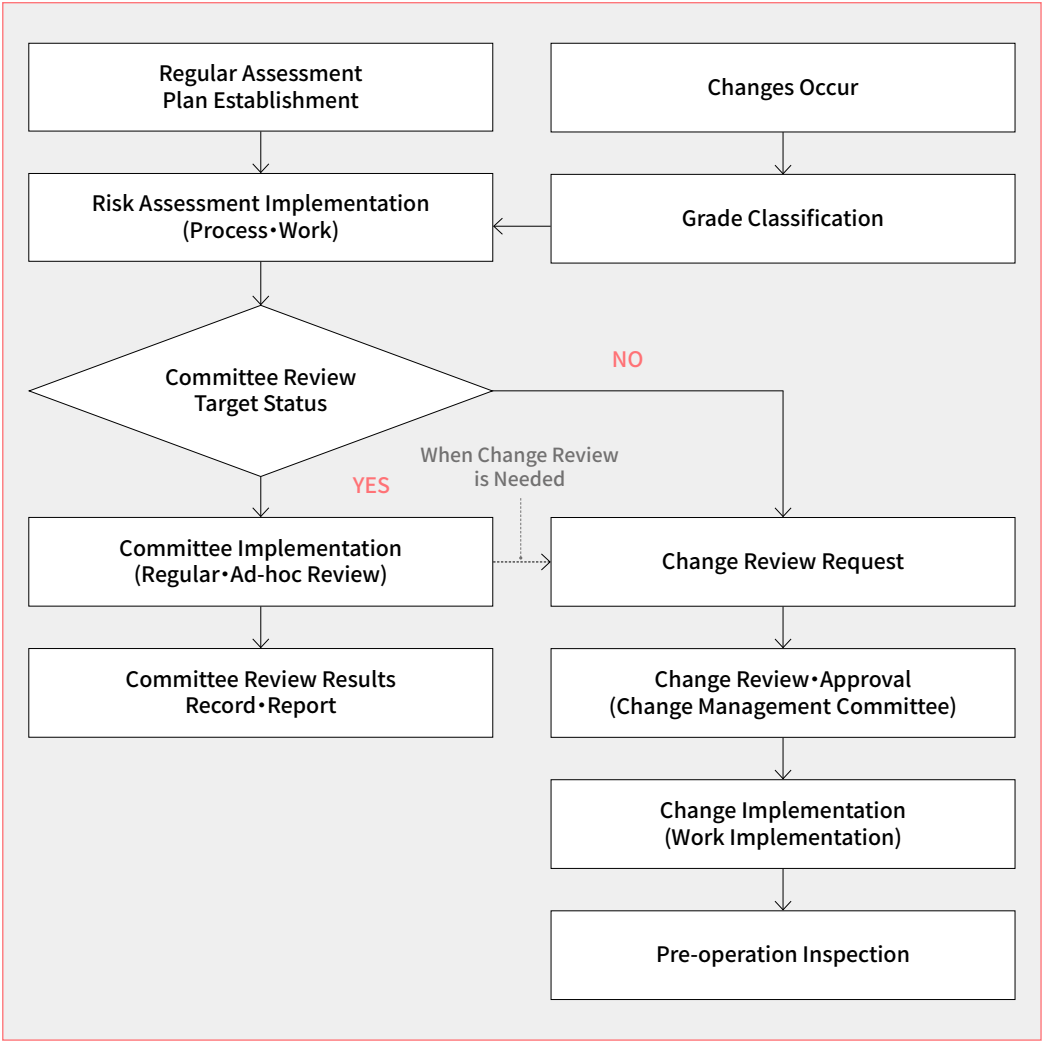
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ENVIRONMENTAL SAFETY IMPLEMENTATION

**Environmental Safety Accident Prevention Process**  
LG Chem periodically monitors environmental safety-related regulatory enactments and amendments as well as social issues and trends, and proactively responds to potential risks by reviewing their impact on the company. We inspect environmental safety elements from the process design stage and reflect them in technical guidelines. We establish safety devices for processes and facilities handling substances with significant impact during spills and leaks, monitor abnormalities in real-time, and shorten safety inspection cycles for aging facilities while conducting precision inspections. We are also expanding regular environmental safety assessment and technical support for all business sites.

**Risk Assessment**  
LG Chem operates risk assessment committees at all domestic and international business sites. The Head of Plant chairs the committee and periodically reviews the adequacy of risk assessments for major accident prevention while continuously evaluating potential risk factors. Before conducting high-risk work, we have established procedures (high-risk protocols) where the plant manager directly confirms key risks and approves work after establishing appropriate safety measures to ensure worker safety.

Risk Assessment and Improvement Process



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Creating Safe Work Environment

LG Chem establishes stronger standards than legal requirements to protect the health of all employees and create comfortable work environments. We conduct Hazardous Factor Work Environment Measurement once every six months through external specialized institutions to inspect harmful factors that may occur at business sites. In particular, we protect employee health through musculoskeletal disease prevention activities within plants and operate various health promotion programs by providing customized medical services through in-house affiliated clinics and health management offices. We also conduct self-inspections of local exhaust systems to manage working in more comfortable environments.

Supplier Environmental Safety Management System

LG Chem not only secures safety of affiliated workers but also supports suppliers' own safety capability enhancement. When selecting suppliers for new construction, expansion, and construction work, we evaluate basic safety management capabilities (1st stage) and inspect specific accident prevention systems (2nd stage) through the Safety Bid Evaluation (SBE) system. We also operate a Safety Observer System to regularly monitor work safety of supplier employees within business sites with specialized personnel. The Risk Assessment Best Practice Library for suppliers supports proactive evaluation of accident risks that may occur during various work processes performed by suppliers within LG Chem business sites and improvement of safety measures. We also hold an annual Environmental Safety Performance Sharing Meeting to select excellent suppliers in the business site environmental safety sector and award them through internal environmental safety sector deliberation.

Proactive Risk Management Through Regular Assessments

LG Chem conducts regular assessments of all business sites through a separate Environmental and Safety Inspection Team to identify potential risks. We manage progress status for improvement items derived this way and manage environmental safety potential risks by reflecting them in environmental safety investment plans when necessary. Domestic business sites conduct unannounced joint inspections of Absolute Safety Rules quarterly, while Chinese business sites conduct them semi-annually.

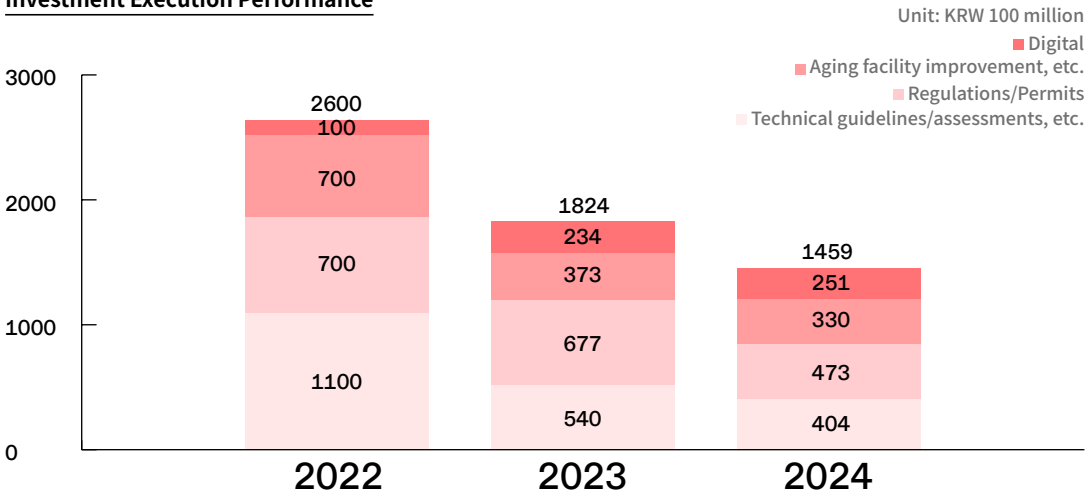
Continuous Investment for Environmental Safety

LG Chem focuses on investment in safety of high-risk processes and facilities for environmental safety accident prevention. From 2021 to 2024, we improved aging facilities with an annual average investment of approximately KRW 220 billion and introduced digital equipment and reinforced specialized personnel. In particular, we have set four core digitalization areas to protect workers' health and safety and are implementing an IT-based digital Safe Factory.

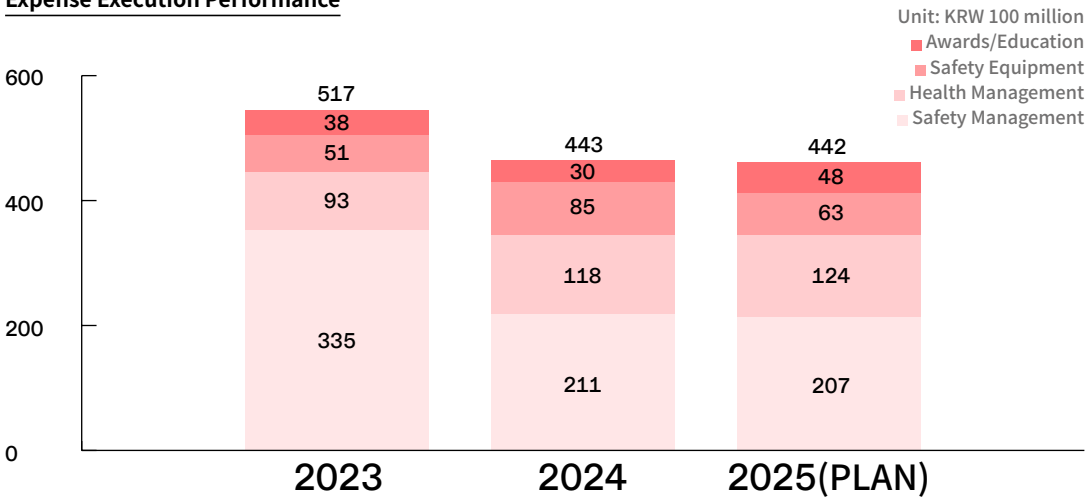
4 Core Areas of Environmental Safety Digitalization

- ① Automation and Unmanned Operation of High-Risk Work
- ② Proactive Risk Management
- ③ Direct Control of Hazardous Work
- ④ Rapid Accident Detection and Response

Investment Execution Performance



Expense Execution Performance



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Highlight

Introduction of Stacker Crane Fool Proof System at Daesan Plant

LG Chem introduced a system to prevent accidents caused by collisions between Stacker Crane and workers at the logistics warehouse of the PO (Polyethylene) plant at Daesan Plant in 2024. Stacker Crane is equipment that automatically loads and ships products within logistics warehouses. Despite complete separation of Stacker Crane's movement path and workers' movement paths to prevent worker injuries, accidents occasionally occurred when workers deviated from designated paths for convenience and moved without authorization. Therefore, we introduced a system that automatically reduces speed or stops when worker approach is detected and sounds situation-specific safety alarms to prevent accidents even when workers violate such safety rules. LG Chem plans to continue building appropriate facilities and systems that can fundamentally prevent safety accidents.

Highlight

Final Approval of Private Safety Experience Training Center at Yeosu Plant

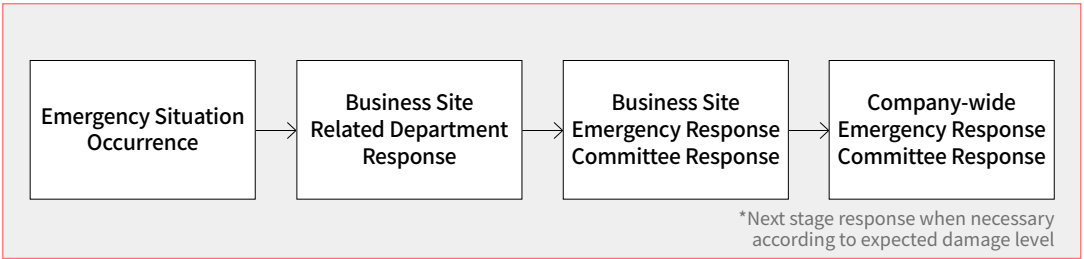
LG Chem completed construction of its Safety Experience Training Center on the first floor of the Yeosu Plant Training Center in June 2024. The center provides experiential and practical safety training for unit plants and suppliers. Places that received final approval for private safety experience training centers from KOSHA (Korea Occupational Safety and Health Agency) underwent strict screening for experience facilities, educational programs, instructors, etc., with 44 companies ultimately being registered nationwide. LG Chem's Yeosu Plant received the first approval. The Yeosu Plant's safety experience education consists of 9 subjects including Environmental Safety Mind-set, Confined Space Experience, Chemical Process Safety Experience, VR Simulator delivered across 3 courses (6HR, 2HR\_A, 2HR\_B). In 2025, training is planned for 1,300 employees from 7 unit plants and 200 staff members from suppliers. It is expected to greatly contribute to accident prevention and safety awareness enhancement through experiential education suited to the unique characteristics of chemical plants.

Emergency Response Process for Damage Minimization → See detailed content

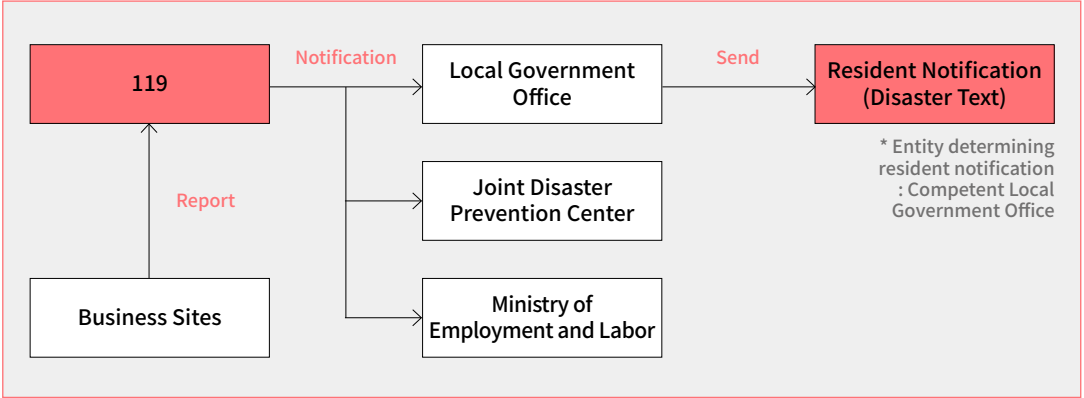
LG Chem complements its accident prevention efforts with strong policies and guidelines covering accident reporting and investigation, root cause analysis of nonconformities, and the implementation of corrective actions when emergency situations occur. We carefully monitor not only accidents that occur within our own business sites but also major domestic and international accident cases, and analyze accident causes and consequences to prevent similar accidents, establishing and managing Corrective Action Plans. We also share accident prevention, mitigation, and recovery cases across LG Chem's global business operations through our Global Accident Case Horizontal Deployment program.

We are also unifying emergency response guidelines for all domestic and international business sites and strengthening emergency training including immediate sharing and evacuation when emergency situations occur. When accidents such as fires, spills, or leaks occur, we closely coordinate with relevant government agencies to minimize damage to local communities and send disaster text messages so residents can evacuate quickly according to the judgment of the responsible local government office.

Emergency Operation System



Establishment of Coordination System with Local Government



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DX-based Environmental Safety Management Enhancement

LG Chem operates integrated IT systems for global environmental safety work standardization. The Environmental Safety Portal provides the latest updates on all environmental safety-related internal policies, guidelines, and standardized documents. Personnel can conveniently access both newly enacted and amended environmental safety regulations at any time. The system builds work processes so employees can automatically comply with environmental safety-related procedures during work, supporting processing of all work according to LG Chem's work standards from risk assessment to safe work permits, fire equipment management, worker management, and work status confirmation. When various environmental safety accidents occur including Emergency Shutdown (ESD), we rapidly disseminate information to necessary personnel through the system and systematically manage improvement status for nonconformities through the system.

We have also expanded system application to all domestic and international business sites including China, United States, Poland, Vietnam, and Malaysia for upward leveling of environmental safety management standards. We are also continuously advancing the system to further strengthen our environmental safety capabilities and implementation and respond to compliance risks from regulatory enactments and amendments.

Education and Campaigns for Environmental Safety Culture Establishment

LG Chem cultivates environmental safety sector experts by operating talent development committees chaired by the CSEO. We operate Environmental Safety Academy to help all related members develop environmental safety priority mindsets and strengthen capabilities. In particular, we expanded education for overseas members in 2024.

We also operate Safety Leadership Courses so newly appointed leaders as executives, managers, and team leaders can demonstrate leadership based on a deep understanding of the company's environmental safety policies and systems. To intensively manage environmental safety at production business sites, we designate Safety Engineers by production team and implement education programs consisting of 14 courses across 3 job areas to support growth as environmental safety experts. We actively collect opinions from education targets and have newly introduced practical courses such as Quantitative Risk Analysis, SIL&LOPA, and industrial ventilation to enhance operational safety and the professional competencies of personnel.

Overseas business sites operate 8 education courses, distinguishing between China and non-China business sites. We provide education not only on LG Chem's environmental safety policies and systems but also on legal obligations that must be complied with by the country where business sites are located.

We also operate Environmental Safety Mindset Education courses twice a year for all members of domestic and international business sites and suppliers. Through bi-annual Environmental Safety Surveys, we actively communicate with members and prepare policies and improvement measures based on Voice of Employees (VoE). We award members who contributed to environmental safety through the Environmental Safety Hero system and motivate all members to participate in accident prevention efforts through the Accident-Free Incentive system. We also conduct various campaigns such as Environmental Safety Slogan Contest to establish environmental safety priority culture.

2024 LG Chem Environmental Safety Academy Operation Performance

Category		Target	Training Course	Format	Operation	Personnel	Completion Hours
Leadership		Domestic managers, plant managers, team leaders, overseas corporation presidents, expatriates	Safety Leadership Course	on/off	4 sessions	83 members	415 hours
				online	2 sessions	28 members	140 hours
Environmental Safety Members	Domestic	Environmental Safety Engineer Production/Facilities Safety Engineer	Environmental Safety Academy	on/off	15 courses	323 members	5,572 hours
				offline	4 courses	131 people	2,544 hours
	Overseas	Environmental Safety/ Production/Facilities	China Region Environmental Safety Course Global Environmental Safety Academy	offline	4 courses	189 members	239 hours
Mind-set		All employees	Company-wide Environmental Safety Mind-set Education	online	1 sessions	12,662 members	-

LG Chem Environmental Safety Academy Education System

Category	Category	Training Course		
Domestic	Lv.3	Accident Investigation Expert Course, Risk Assessment Leader Development Course, Advanced PSM, Chemical Accident Prevention Management Plan Course, Building Risk Assessment Course, Quantitative Risk Analysis Course, SIL & LOPA Course		
	Lv.2	Safety	ENVIRONMENTAL	Health
		— Technical Guideline Understanding Course (Fire Safety Field)	Chemical Substance Management Course	Industrial Ventilation Management Course
		— Technical Guideline Understanding Course (Process Safety Field)	Self-Measurement Understanding Course	
Overseas	Lv.1	Technical Guideline Understanding Course (Fire Safety Field)		
	China	— HAZOP Leader Development Course		
		— LOPA Education		
Non-China		— Safety Engineer Education		
		— Environmental Safety Engineer Education		
		— Technical Guideline Understanding Course (Process Safety Field)		
		— LGC Environmental Safety Policy and System Course		
		— Environmental Safety Portal2.0 Course		
		— Accident Investigation Expert Course		

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TOXIC AND HAZARDOUS SUBSTANCE MANAGEMENT

**Sustainable Product Development Through Product Toxicity Management**  
LG Chem conducts preliminary toxicity assessment before mass production of newly developed products to evaluate potential hazards and produce products with assured safety. To complement limitations of using estimates through calculation of individual chemical substance harmfulness data, we share preliminary toxicity assessment results from self-testing products with workers and users. We also improved the product toxicity management system and established toxicity prediction through Quantitative structure-activity relationship (QSAR) modeling and in-vitro testing systems as animal alternative testing methods at the Foundation Technology Research Institute and Analysis Research Institute located at Magok R&D Campus in 2023. From 2025, we will more carefully review the launch of products confirmed to be harmful according to classification criteria such as Carcinogenic, Mutagenic, or Reproductive Toxicants (CMR), Persistent, Bioaccumulative, and Toxic (PBT), Very Persistent and Very Bioaccumulative (vPvB), and Endocrine Disrupting Chemicals (EDC) among newly developed products through preliminary toxicity assessment and standardized management systems. We plan to continuously replace or reduce harmful substances such as additives in existing products to develop safe products.

**Identification and Management of Hazardous Substances Reflecting Global Environmental Regulations**

**Identification of Managed Substances According to Product Environmental Management Guidelines**  
Hazardous substances are classified into three levels of risk. Those subject to management are strictly controlled from the raw material procurement stage in accordance with the criteria outlined in the Product Environmental Management Guidelines.

**Global Chemical Substance and Regulation Inventory Construction**  
We build global chemical substance regulation databases and chemical substance inventories for our products in compliance with global regulations. We also actively respond to related customer requests. We have built guarantee document issuance systems to immediately respond to customer requests and provide additional review and research results when necessary. In 2023, as PFAS (per- and polyfluoroalkyl substances) regulations became visible, we added PFAS to the internal hazardous substance list and conducted comprehensive surveys of raw materials and products containing PFAS to review substitution possibilities.

**Systematic Management of Product Component Information**  
We integrate product component information into Bill of Substance (BOS) management systems to continuously monitor whether products produced and sold contain hazardous substances and their quantities. We also transparently disclose this information upon customer request.

**Prevention of Hazardous Substance-Related Accidents Through Thorough Management**  
We designate and specially manage 50 high-risk substances among substances with high toxicity and physical hazard or history of international chemical substance-related fatal accidents. We thoroughly manage facilities that store and contain various hazardous chemicals and apply enhanced standards compared to legal requirement levels. High-risk Substance Management Standards have been expanded to overseas business sites based on stable operation of domestic business sites and are firmly managed at global levels through continuous on-site inspections by responsible experts.

- Accident Prevention Activities**
- Strengthening Spill and Leak Monitoring and Alarm Systems: Expansion of intelligent CCTV and gas detector installation
  - Strengthening Safety Management of Tank Truck Chemical Unloading Work: Building pump stop and alarm systems according to tank levels
  - Damage Minimization During Emergencies: Emergency collection and retention, forced exhaust from storage facilities, etc.
  - Confirmation of Material Safety Data Sheet (MSDS) receipt for all chemical substance procurement materials: Clear recording of each item through electronic approval procedures for exceptions



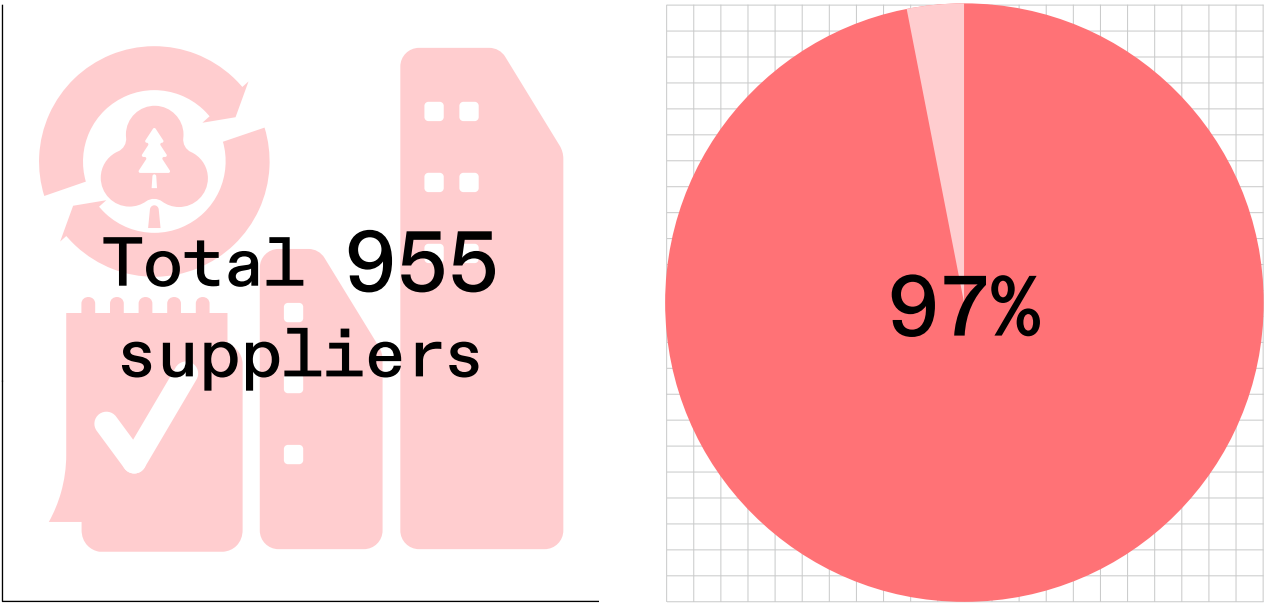
# SUPPLY CHAIN SUSTAINABILITY

LG Chem is strengthening both the framework and systems of supply chain management to enhance transparency and sustainability across the entire supply chain. We have established governance for systematic ESG risk management and built risk management processes that can lead to improvements. We also continuously update supplier codes of conduct and responsible supply chain policies while conducting annual supplier ESG assessments.

## SUPPLY CHAIN SUSTAINABILITY

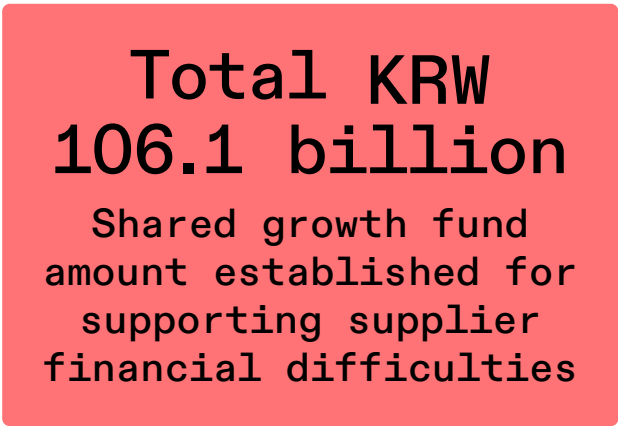
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A Total of 955 Suppliers Participated in ESG Self-Assessment, Accounting for 97% of Total Purchase Amount



Number of suppliers participating in ESG self-assessment and their proportion of total purchase amount

KRW 100 Billion Established as ESG Fund to Support Needed ESG-Related Activities, and KRW 106.1 Billion Established as Shared Growth Fund to Support Suppliers' Financial Difficulties Across the Overall Business Environment





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# SUPPLY CHAIN SUSTAINABILITY

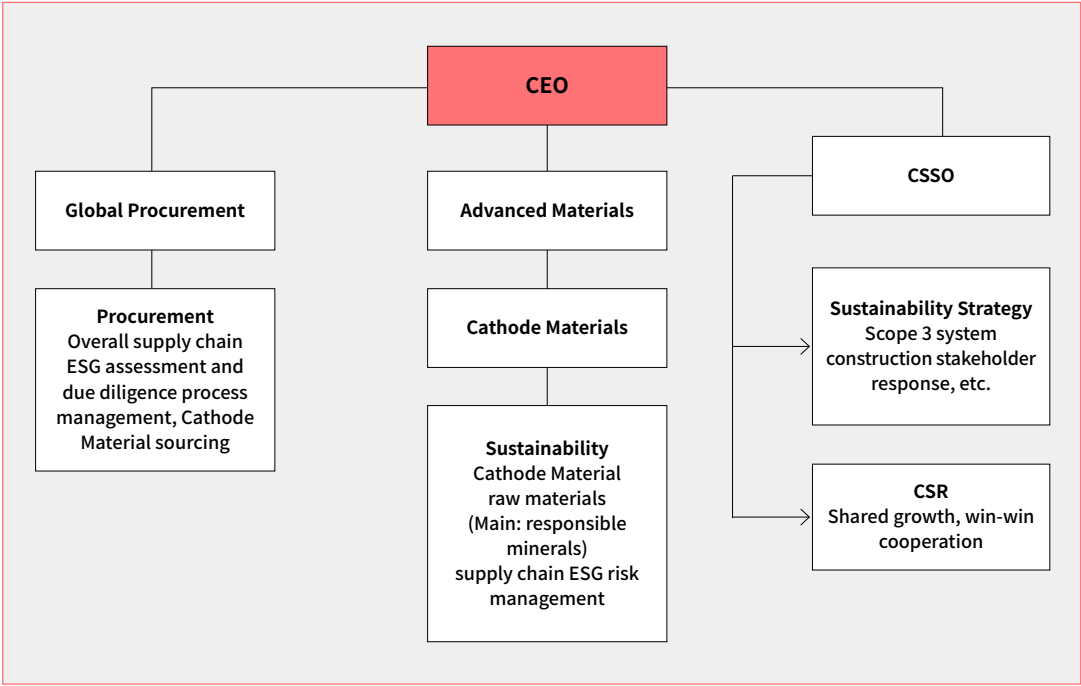
## SUSTAINABLE SUPPLY CHAIN GOVERNANCE

### Organizational Structure for Internal Cooperation

**Internal Organization for Sustainable Supply Chain Management**  
Cooperation between LG Chem's internal organizations plays an important role in systematically managing ESG risks across the entire supply chain and realizing sustainable management. LG Chem's Global Procurement Group Head, who plays a key role in sustainable supply chain management, consistently applies and strengthens supply chain ESG management standards and holds the highest decision-making authority to implement them. We also approve reports on the implementation and improvements of supply chain due diligence management processes and provide overall supervision to ensure that ESG risk identification and assessment processes proceed systematically. Furthermore, by regularly identifying and assessing ESG risks and approving the results, we proactively manage potential risks that may arise across the supply chain and coordinate ESG performance to align with the company's sustainability goals.

The Procurement Planning Team develops and establishes supply chain due diligence management processes, and regularly identifies and assesses ESG risks to monitor suppliers' sustainability levels. We also establish supply chain ESG strategies and are responsible for revising responsible supply chain policies and supplier codes of conduct. Business unit procurement teams collect supplier information and are responsible for due diligence policies and communication to strengthen cooperation with suppliers. Additionally, the CSR team operates programs for suppliers' ESG improvement, while the dedicated Sustainability department manages ESG risks in the cathode raw material supply chain and responds to supply chain-related requests from battery customers to strengthen cooperation with suppliers.

### Organizational Structure



**Reporting Cycle and Target**  
The status and results of ESG supply chain processes are reported to the Global Procurement Group Head once annually. The report includes ESG self-assessment implementation and due diligence results, as well as a final review of content on the overall ESG supply chain process.

**Subcommittee**  
The ESG subcommittee of the LG Group Procurement Council, newly established in 2023, will be operated with LG Chem serving as the subcommittee chair starting from 2025. This subcommittee focuses on promoting joint supply chain ESG responses and benchmarking activities among LG Group affiliates, and performs joint responses for common issues between affiliates, such as selecting third-party due diligence agencies for suppliers. We also exchange due diligence-related information and jointly pursue supply chain ESG-related regulatory benchmarking activities and common training program development.

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Strengthened Policies and Internal Regulations

**Responsible Sourcing Policy** [🔗](#)  
LG Chem continuously updates supplier codes of conduct and responsible supply chain policies to realize sustainable management, strengthening ESG risk management and supply chain transparency. To this end, we established a responsible sourcing policy in 2020 and strengthened it in June 2023.

Strengthened Policy

- ✓ Reflection of OECD due diligence guidelines in supply chain management policy
- ✓ Addition of employee human rights and labor environment items in upstream supply chain stages (mining, etc.)
- ✓ Presenting policy direction for environmental sustainability
- ✓ Expanding management scope from responsible minerals only to entire supply chain

**Supplier Code of Conduct** [🔗](#)  
LG Chem complies with laws and regulations in all regions where suppliers are located and strictly applies sustainability standards. To this end, since 2016, we have established a Supplier Code of Conduct based on international standards such as RBA (Responsible Business Alliance), ILO (International Labour Organization), and OECD Multinational Enterprise Guidelines. Subsequently, in March 2023 and January 2025, we made major revisions to clearly specify supplier compliance requirements and emphasize Scope 3 management.

Major Revisions

- Scope 3 management and biodiversity protection: Establishment of Scope 3 emission calculation and reporting obligations, inclusion of specific measures for biodiversity conservation
- International human rights and labor compliance: Emphasis on compliance with human rights regulations and preventing forced and child labor
- Anti-corruption compliance: Strengthening corruption prevention policies and procedures

Code Revision System

Revision every 2 years (immediate revision when issues arise), reporting to Global Procurement Group Head upon revision and sharing with all stakeholders

Compliance Pledge

We aim to share sustainability values and strengthen partnerships through annual supplier code of conduct compliance pledges. This pledge-based consent process serves as a starting point for proactively responding to global ESG regulations and market demands while enhancing trust with suppliers. In the pledge consent process conducted in 2024, a total of 1,422 suppliers participated, with 1,375 suppliers (97%) signing the pledge, recording a high participation rate.

Strengthening Regulatory Compliance in Basic Purchase Contracts

Since November 2024, LG Chem has reflected related law compliance and due diligence clauses in purchase contracts to systematically manage ESG risks between contracting parties and strengthen regulatory compliance and transparency across the entire supply chain. Purchase contracts specify obligations to comply with major regulatory laws including domestic and international environmental, labor, safety, and anti-corruption regulations. In case of legal violations related to contracted products, the violating party bears the resulting legal and financial responsibilities, while the counterpart is exempted from such liability. This is a measure to minimize corporate burden due to ESG risks. The contract also clearly specifies LG Chem's authority to conduct due diligence in accordance with related laws. This is an essential procedure to verify that ESG standards are properly implemented across the supply chain and to enhance corporate ESG transparency. Through such purchase contracts, LG Chem aims to prevent environmental safety issues that may arise in the supply chain and provide safe products to stakeholders.

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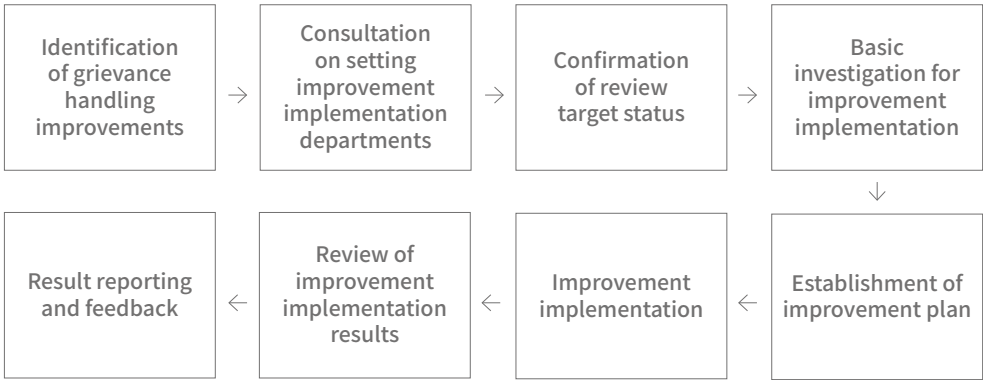
**Operation of Supplier Grievance Handling Channel**  
LG Chem operates a grievance handling channel where all supplier employees within the supply chain can freely report workplace environment issues or human rights violation cases, striving to protect workers and create a fair working environment. This channel not only contributes to the company's sustainable growth and realization of social responsibility, but also has a positive impact on worker satisfaction and productivity improvement. We also operate a multi-stage process to prevent recurrence and promote system improvement, not just short-term responses when grievance cases occur. We prevent problem recurrence to realize sustainable supply chain management and continuously strengthen suppliers' working environment and human rights protection levels.

Supplier Grievance Handling Channel Operation Process

- 1 Grievance case reception: All stakeholders can report violations occurring within supplier organizations, and the dedicated department reviews all received grievance cases.
- 2 Responsible department review
- 3 Content verification and investigation: Verify the content of received grievance cases and conduct additional investigation when necessary.
- 4 Processing completion and result sharing with reporter: After investigation is completed, results are provided as feedback to the reporter, and the reporter's identity and report content are handled confidentially.

\* Content verification and investigation guidance are conducted within 5 business days of receiving the report, and grievance handling results are shared within 10 business days of completing the investigation. If not completed within 10 business days, interim progress status and expected completion date are shared.

Grievance Recurrence and Prevention Process



**Supply Chain Management Performance Reflected in Evaluation and Compensation**  
LG Chem recognizes the importance of sustainable supply chain management and actively pursues it as a strategic goal across the organization. In particular, supply chain management performance is reflected in the evaluation of C-Level executives and related department heads, linked to financial compensation, and strengthens motivation for building responsible supply chains.

Performance Evaluation Indicators - Supplier ESG Assessment

LG Chem conducts annual ESG assessments to strengthen suppliers' ESG capabilities, and assessment results are reflected in management performance evaluations.

- Evaluation indicator: Whether ESG assessment is conducted for suppliers accounting for 75% or more of domestic and international purchase amounts
- Evaluation criteria
  - Excellent: 80% or more of assessment targets
  - Good: 75% or more of assessment targets
  - Average: 70% or more of assessment targets
  - Poor: 60% or less of assessment targets

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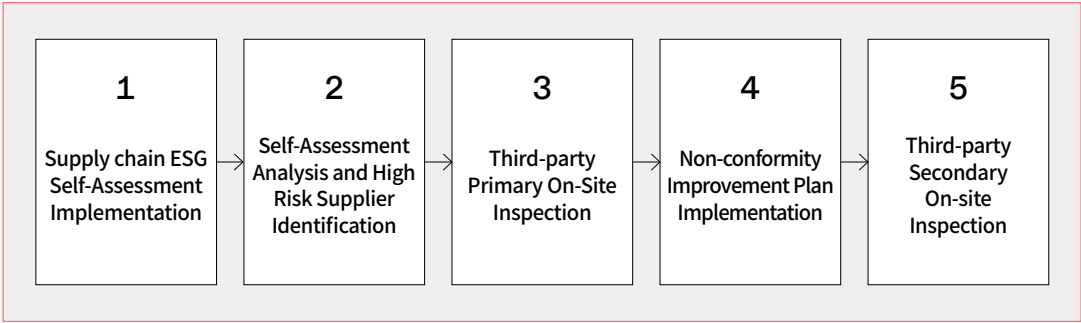
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SUSTAINABLE SUPPLY CHAIN RISK MANAGEMENT

Risk Management Process Leading to Improvement

**Sustainable Supply Chain Management Process**  
LG Chem operates a systematic process for sustainable supply chain management, designed to identify and assess suppliers' risks and opportunities and derive improvements.



**Strengthening and Standardization of Supplier Management Criteria**  
LG Chem is strengthening ESG (Environmental, Social, Governance) areas in new supplier registration assessments and regular evaluations to respond to global demands for ESG management, strengthen corporate social responsibility, and promote sustainable relationship building and shared growth with suppliers.

**Strengthening ESG Assessment Questions**  
We aim to strengthen ESG assessment questions during new supplier registration to identify capabilities in advance in core ESG areas such as environmental management, safety and health, human rights and labor management, and anti-corruption.

**Improvement of New Supplier Registration Assessment Process**  
We expanded the weight of core ESG items such as environmental management, safety and health, human rights and labor, and anti-corruption in new registration assessments. Major assessment items include compliance with our code of conduct, environmental pollutant and carbon emission management, and anti-corruption management levels.

**Expanding ESG Area Reflection in Regular Assessments**  
We strengthened the scoring weight of suppliers' ESG management sections in regular assessments. We expanded the scope from the existing bonus point system to include point deductions based on ESG assessment status and bonus points based on on-site due diligence improvement rates.

**High-Risk Supplier Management and Improvement Support**  
For suppliers classified as high-risk based on ESG assessment results, we conduct on-site due diligence and additional inspections, and thoroughly manage improvement plan establishment and implementation. For companies that do not comply with human rights and labor standards, we support improvement implementation and minimize risks through continuous monitoring.

**Risk Identification and Assessment Methods**  
LG Chem systematically identifies and manages the following risks that may occur with suppliers and across the entire supply chain to build a sustainable supply chain.

**Supplier ESG Self-Assessment**  
We provide a self-assessment system that allows suppliers to assess their own ESG (Environmental, Social, Governance) management levels.

**Proactive Risk Management Through Grievance Handling System**  
We operate a grievance handling system where suppliers and stakeholders can anonymously report potential risks such as human rights violations and environmental issues.

**Risk Detection Through Media Monitoring**  
We monitor social issues or negative reports related to suppliers through domestic and international media to detect risks.

**Identifying Substantial Risks Through ESG On-Site Due Diligence**  
We conduct on-site due diligence with third-party agencies for suppliers classified as high-risk to identify substantial risks.

**Regional Risk Identification and Customized Management Strategy Development**  
We select Conflict-Affected and High-Risk Areas (CAHRA) among Cathode Materials business unit suppliers to verify their risk levels and Responsible Minerals Initiative (RMI) certification status, identify risk factors suited to regional characteristics, and establish effective risk management strategies based on this.

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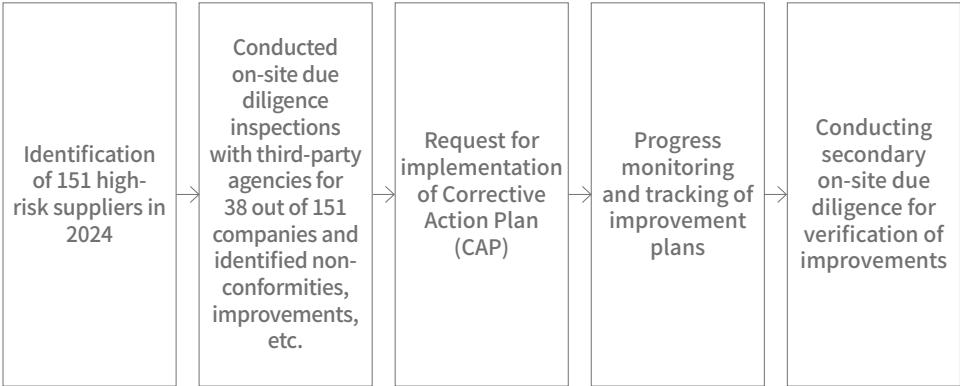
Comprehensive Risk Management Including Prevention, Education, and Support

**Supplier ESG Self-Assessment for High-Risk Group Identification**  
LG Chem has been conducting annual ESG self-assessments for domestic and international suppliers since 2022. The 2024 supplier ESG self-assessment includes a total of 120 items and was developed based on Responsible Business Alliance (RBA) v7.1 standards. A total of 955 suppliers participated in the assessment, with suppliers accounting for 97% of total purchase amount completing the survey. Assessment results are classified into risk levels (Low, Middle, High). High-risk suppliers are identified based on the following criteria. In the 2025 assessment, supplier-customized evaluation questions will be developed reflecting the latest regulations such as Responsible Business Alliance( RBA) v8.0, Corporate Sustainability Due Diligence Directive (CSDDD), and European Union Supply Chain Due Diligence Directive (EUBR).

High-Risk Supplier Identification Criteria

- ✓ Failure to meet minimum standard scores in each ESG area (Environment 1 point or below, Governance 1 point or below, Social 3 points or below)
- ✓ Cases where 2 or more environmental, social, and ethics-related legal violations have occurred

High-Risk Supplier Identification and On-Site Inspection Process



**2024 ESG Assessment Results and Improvements**  
Through the 2024 ESG assessment, LG Chem identified major improvement areas across suppliers' overall ESG performance. In particular, many areas requiring improvement were identified in social responsibility-related areas such as environmental management, human rights, and safety and health, which were used as basic data for establishing improvement plans to enhance supplier sustainability.

Major Findings by Area and Items Requiring Improvement

- Labor
- ✓ Policies related to workers' personal documents
  - ✓ Working hours management process
  - ✓ Minor worker protection regulations
- Health & Safety
- ✓ Personal protective equipment provision management regulations
  - ✓ Employment rules for pregnant women and others
  - ✓ Emergency response training and systems
- Environment
- ✓ Greenhouse gas measurement and target setting monitoring activities
- Ethics
- ✓ Ethical codes and policies
  - ✓ Identity protection and whistleblower protection procedures
  - ✓ Intellectual property operating procedures

**Status of Improvement Plan Establishment**  
All suppliers that participated in the 2024 on-site due diligence established improvement plans (CAP). This demonstrates that LG Chem is effectively managing each company's ESG risks through close cooperation with suppliers. Each supplier prepared specific action plans for identified improvement needs and committed to implementing them. LG Chem also provided ESG on-site due diligence and improvement activity consulting for small and medium-sized suppliers lacking ESG management experience. We supported 21 companies with ESG-related guidelines, process document preparation methods, and guides to enhance understanding of LG Chem's code of conduct.

**Results of Improvement Progress Monitoring**  
Through the 2024 secondary improvement implementation due diligence to monitor suppliers' improvement progress, we confirmed that most suppliers were faithfully implementing their improvement plans. Suppliers showed a total improvement rate of 53%. LG Chem plans to continue supporting suppliers' improvement measures and increase improvement implementation rates through continuous monitoring for systematic sustainable supply chain management.

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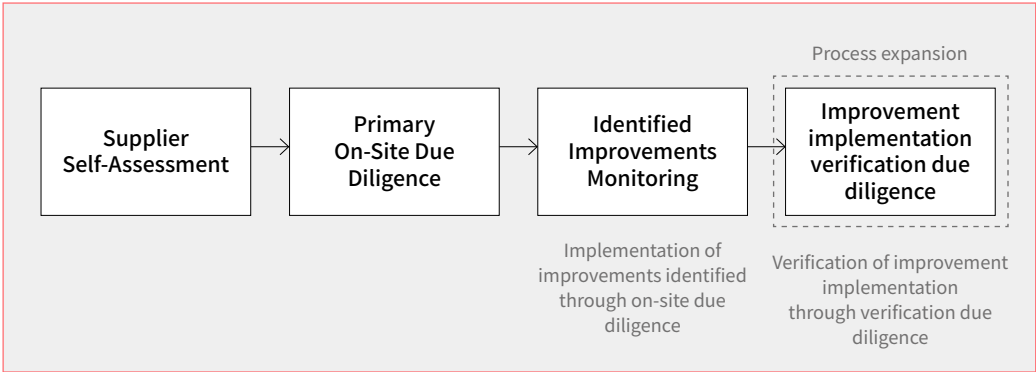
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**Supply Chain ESG Capability Enhancement and Small-Medium Enterprise Support Strategy**  
LG Chem is conducting multifaceted activities to strengthen suppliers' ESG capabilities for building a sustainable supply chain. Through this, we proactively manage Environmental, Social, and Governance (ESG) risks, respond to global regulations, and realize shared growth with suppliers.

**Expansion of Supplier Self-Assessment and Due Diligence Process**  
LG Chem is expanding supplier self-assessment and due diligence processes to strengthen improvement implementation verification and risk mitigation activities.



**Establishment of Internal Processes and Provision of Regulatory Examples**  
LG Chem is establishing internal processes and priorities for suppliers to systematically proceed with ESG improvement implementation. These processes help suppliers establish operating systems that comply with laws and national standards, and provide regulatory examples for substantial improvements. In particular, we present specific improvement directions and implementation methods for each field to support suppliers in strengthening their management capabilities independently.

**Distribution of Educational Publications for ESG Awareness Transformation**  
LG Chem distributes related educational publications to enhance suppliers' ESG awareness levels and strengthen their commitment to improvement. These publications cover the importance of ESG, necessity for improvement, and practical implementation measures, helping suppliers integrate ESG into their overall management. Educational publications are provided customized for each supplier in connection with on-site due diligence results, promoting suppliers' autonomous improvement activities.

**Tracking On-Site Due Diligence Improvement Implementation Rate**  
LG Chem completed consulting for 21 companies in the ESG consulting support project for small and medium-sized suppliers, achieving an average improvement implementation rate of 73% to date. Through this, suppliers are achieving results in strengthening environmental management systems, complying with safety and health standards, and improving human rights and labor practices. LG Chem plans to quickly complete consulting for remaining suppliers and continuously monitor improvement implementation rates to verify goal achievement. This is expected to strengthen small and medium-sized suppliers' ESG capabilities and improve the overall sustainability of LG Chem's supply chain.

**ESG Capability Enhancement Through Practice-Oriented Education**  
LG Chem operates practice-oriented customized education programs to strengthen suppliers' ESG capabilities. This education focuses on enhancing understanding of international sustainability trends and company standards, supporting suppliers to develop capabilities to respond to global regulations and trends, and mitigating and eliminating risks.

**ESG Management Necessity and Trends Education**  
LG Chem conducted ESG Management Necessity and Trends, Self-Assessment Question Education for suppliers. From March 19 to 20, 2024, a total of 178 suppliers and 234 people participated through an online video education platform (Webex). This education was designed to help suppliers understand global sustainability trends, enhance understanding of self-assessment questions, and establish their own ESG strategies based on this.

**Risk Prevention Education Based on LG Group Supplier Code of Conduct**  
LG Chem conducted Risk Prevention Education Based on LG Group Supplier Code of Conduct for suppliers. From June 27 to August 26, 2024, a total of 534 suppliers participated through online videos. This education was designed to help suppliers familiarize themselves with the code of conduct through self-learning and proactively manage risks.

**Financial Support for Suppliers Using ESG Fund/Shared Growth Fund**  
LG Chem operates a financial support program utilizing two funds to support suppliers' sustainable growth. The ESG fund supports funds needed for ESG-related activities such as eco-friendly product production and environment, safety and health, and quality improvement aimed at strengthening suppliers' ESG capabilities, while the shared growth fund supports suppliers' financial difficulties across the overall business environment. LG Chem supports high interest rate reduction benefits to suppliers by establishing KRW 100 billion for the ESG fund and KRW 106.1 billion for the shared growth fund without matching requirements.



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ESG Fund

This fund was established for the first time in the industry in 2021 to enable small and medium enterprises to take interest in ESG areas and conduct improvement activities, with approximately KRW 68 billion being utilized for supplier support activities as of the end of December 2024. In particular, when re-recommending the fund, we compile ESG improvement results to verify the fund's contribution, thereby enhancing the expected effects of future fund utilization.

Shared Growth Fund

This fund resolves suppliers' economic difficulties to create synergy with LG Chem in business areas, with approximately KRW 67 billion supporting suppliers as of the end of December 2024. It is mainly used to support securing working capital to respond to high-value equipment within production facilities and rapid price increases of raw materials. In addition, it plays a role in supporting companies so that items expected for future cooperation can develop. Shared growth fund support adds the effect of improving LG Chem's supply chain by enhancing suppliers' management stability.

Activation of Supplier Grievance Handling Channel Operations

LG Chem operates a grievance handling channel for strengthening communication with suppliers and fair problem resolution, and continuously improves it. There were 12 meaningful grievances processed through the supplier grievance handling channel established on LG Chem's website (as of November 27, 2022). In 2024, 13 reports were received excluding low-relevance cases such as simple promotional emails. All received cases are being processed quickly and fairly.

Feedback Response Time

- Primary feedback  
Average response time: 1.15 days
- Secondary feedback  
For 11 cases requiring additional investigation  
Average response time: 3.18 days
- \* Sharing interim progress status with reporters at each stage
- \* All required days are calculated based on business days

Improvement of Supplier Grievance Handling Process

- Setting specific processing time frames for each stage and disclosing them externally to enhance transparency
- Establishing processes for recurrence prevention and prevention of potential grievance risks
- Operating to meet global customer demands and international standards
- Establishing processes for reporter and victim protection



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LG Chem has established five core values based on Human Respect Management to create a corporate culture where all employees can be protagonists. We strengthen business competitiveness through excellent talent acquisition, systematic career development, and efficient work environment establishment, and strive to build open communication and a horizontal organizational culture through various programs.

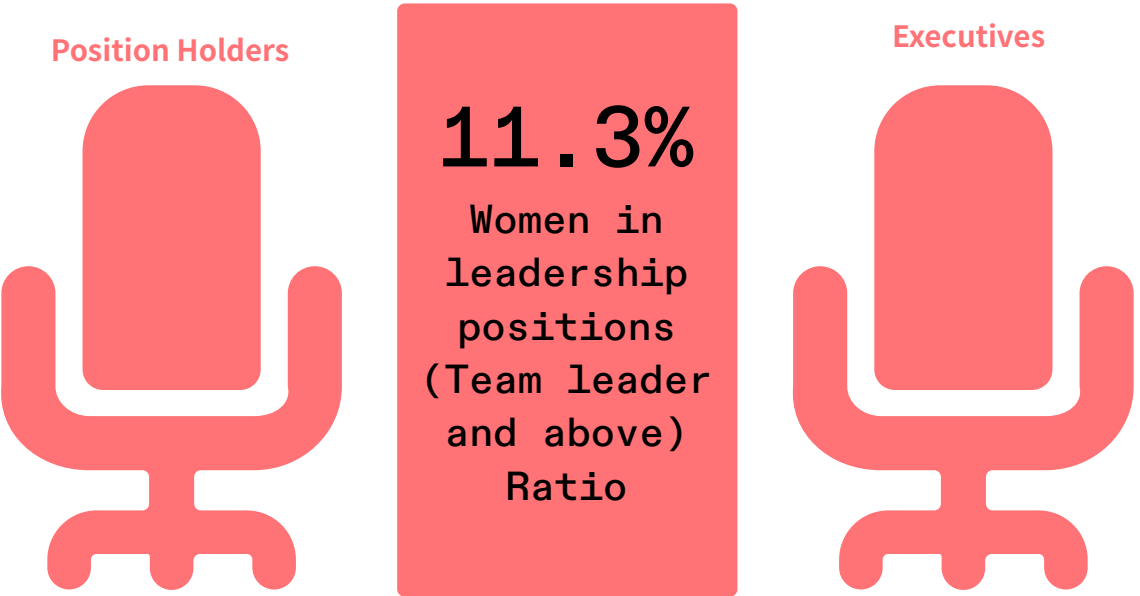
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- 1. LG Chem's Employee Values and Philosophy
  - 1) LG Chem's Core Values and Employee Value Proposition
  - 2) LG Chem's Human Respect Management
- 2. Excellent Talent Acquisition and Growth Foundation Establishment
  - 1) Business Competitiveness Enhancement Through Excellent Talent Acquisition
  - 2) Employees Growing with the Company
- 3. Organizational Culture Building
  - 1) Horizontal Organizational Culture Building and Employee Engagement Enhancement Programs
  - 2) Continuous Efforts for Diversity, Equity, and Inclusion
- 4. Intra-organizational Communication
  - 1) HR Reflecting Employee Voices
  - 2) Elimination of Workplace Harassment and Discrimination Through Grievance Handling Systems

In-house job training: 394 online and offline training courses in 2024



As of 2024, women in leadership positions (team leader and above): 11.3%, female executives: 10%



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# OUR EMPLOYEES

## LGCHEM'S EMPLOYEE VALUES AND PHILOSOPHY

**LG Chem's Core Values and Employee Value Proposition**  
LG Chem declared the vision We Connect Science to Life for a Better Future in 2020 and established five core values that all employees should value and use as behavioral standards. We also reestablished our unique EVP (Employee Value Proposition) called The Good Company and are continuously strengthening detailed programs by area including talent acquisition and development, employee engagement enhancement, diversity promotion, and labor human rights protection. LG Chem actively communicates to create a corporate culture where all employees can be protagonists.

### LG Chem's Five Core Values

- ① Customer Focus: We consider customers as the center of all business.
- ② Agility: We respond flexibly and agilely to all changes.
- ③ Collaboration: We actively collaborate based on mutual respect to create synergy.
- ④ Passion: We grow with the company through passion for work and bold challenges.
- ⑤ Sustainability: We provide innovative and sustainable solutions for the environment and society.

### Definition of The Good Company

- Growth: A company where employees proactively enhance their value through meaningful work
- Work: A company that creates positive changes by focusing on the core in an efficient work environment
- Recognition: A company where one can be recognized in fair and diverse ways
- Care: A company that values the healthy and stable lives of employees and their families

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LG Chem's Human Respect Management

**International Human Rights Compliance**  
Based on the principle of Human Respect Management, LG Chem makes respecting human dignity and guaranteeing rights to freedom and happiness our fundamental values. LG Chem complies with labor laws in all countries and regions where we operate and supports international standards related to human rights and labor such as the UN Universal Declaration of Human Rights, UN Guiding Principles on Business and Human Rights, ILO Core Conventions, and OECD Guidelines for Multinational Enterprises.

**‘Global Human Rights and Labor Policy’ Establishment and Amendment**  
LG Chem strives to improve and spread awareness of human rights and labor to all stakeholders affected by business activities, including customers, suppliers, and local communities. Accordingly, we established the Global Human Rights and Labor Policy in 2016 and have applied it to all business sites worldwide. In June 2024, we amended the Global Human Rights and Labor Policy to include prohibition of all types of forced labor, prohibition of wage discrimination, and expansion of application scope to all workers, and will add human rights impact assessment procedures in 2025.

**Expansion of Human Rights Impact Assessment**  
LG Chem conducted its first independent human rights impact assessment for 3 business sites (2 domestic sites, 1 overseas site) in 2023. As a result, improvements were made to overtime work limits at Chinese business sites (HR system and attendance system improvements). In 2024, we expanded independent human rights impact assessments to 4 business sites (3 domestic sites, 1 overseas site) and derived tasks such as expanding human rights impact assessments company-wide and supplementing data in external disclosure materials. In 2025, we plan to expand human rights impact assessments to all domestic business sites and conduct human rights impact assessments through third-party specialized institutions when necessary.

**Employee Human Rights Education**  
We are revising human rights policies, improving work processes, and implementing human rights education for employees to minimize human rights risks. In particular, we have been conducting Workplace Sexual Harassment/Bullying Prevention Education and Disability Awareness Improvement Education as mandatory online courses to enhance employees' understanding of human rights risks (100% completion rate).

**Human Rights and Labor Law Risk Level Assessment**  
We also define compliance risks and crisis factors related to human rights and labor laws at the company-wide level and conduct annual self-assessment of risk levels for management. Scenarios for efficient response in the event of a crisis for items designated as core crisis factors have been developed, and internal simulation training was conducted in 2024.

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EXCELLENT TALENT ACQUISITION AND GROWTH FOUNDATION ESTABLISHMENT

Business Competitiveness Enhancement Through Excellent Talent Acquisition

LG Chem operates various recruitment programs to secure excellent talent regardless of gender, age, nationality, race, or religion. In 2024, approximately 700 new employees were recruited domestically and internationally.

**Recruitment of Overseas Excellent Talent and Industry-Academic Scholarship Students**  
LG Chem operates a Global Internship program that allows undergraduate students at world-renowned universities to experience actual work to secure excellent overseas talent. We also continuously recruit excellent R&D talent through Target Lab Tour, which visits major domestic university research labs linked to LG Chem's R&D strategy, and Tech Conference, LG Group's R&D talent recruitment event. Additionally, we are making efforts to secure talent through various methods including industry-academic scholarship students and regional hub talent development programs.

**Enhancement of Recruitment Fairness Through Advanced Interviews**  
LG Chem introduced AI Video Interviews to recruit talent that aligns with core values and strengthened preliminary education for interview panel members to ensure fair opportunities and procedures for applicants. Interview panel members discuss interview procedures and questions in advance through pre- and post-interview meetings and standardize those criteria. We also enhance candidates' recruitment experience by shortening procedures through the introduction of One-Day Interview Selection.

Employees Growing with the Company

LG Chem helps employees achieve the best performance in their respective roles and plays a key role in supporting the company's continuous growth.

**Investment in Next-Generation Leadership**  
LG Chem forms candidate groups for major leadership positions and operates systematic development programs to nurture next-generation leaders. We select candidates for Head of Business Unit, Head of Department, and Team Leader positions respectively and provide educational courses for leadership and capability enhancement suited to each position. Through regular Leadership Workshops, we support executive-department head-team leader level organizational leaders to deeply understand business strategies, communicate with members, and demonstrate crisis management capabilities and leadership. We also conduct coaching education certified by the Korea Coach Association for demonstrating coaching leadership. In 2024, 57 people completed the education, and 7 people who took the certification exam received certificates through evaluation. In 2025, we plan to receive certification as an institution capable of directly conducting education – examination – certificate issuance for the coaching education and operate the program independently.

Systematic Career Development

**Self-Job Competency Assessment and Development Interviews**  
LG Chem is strengthening talent development systems that support employees in self-diagnosing their job competencies and proactively designing their careers based on this. To systematically identify and strategically utilize internal talent potential in rapidly changing business environments, we operate job competency assessment and career development interviews company-wide in conjunction. Job competency assessment not only helps employees objectively recognize their competency levels and establish growth plans, but also quantitatively identifies internal employees' competency levels for use as a foundation for strategic HR operations such as talent acquisition, development, and placement.  
Starting from 2025, we are expanding the assessment scope to all office and technical employees and refining systems to enable personalized competency development and career path design based on assessment results. Along with this, we are reorganizing job systems in line with business strategy changes and updating core competencies and required levels by job. We also provide career development interview guidelines to organizational leaders to encourage practical communication about performance feedback and mid- to long-term career design, and support leaders in performing coaching roles to support employee growth.

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**Internal Job Posting System**  
LG Chem has been operating an internal job posting system for office and technical employees since 2020 to expand employee career development. Particularly for research organizations, we are expanding the operation of the R&D Rotation system. This system has established itself as a representative system for supporting employee growth as it allows employees to move to organizations or jobs where they can build their desired careers autonomously. By 2024, a cumulative total of 1,947 employees used the company-wide internal job posting system, and 500 employees moved to their desired organizations and jobs.

**Career Week**  
Since 2023, we have been providing a Career Week program where employees can intensively consider and explore their career development paths for one week. The program includes special lectures by internal and external speakers with diverse careers, introductions to other jobs, exchanges with role models (executives), career development planning workshops, and coaching certification courses. 5,500 employees voluntarily participated in Career Week in 2023, and 6,200 employees in 2024.

**Certification Acquisition Support System**  
We have introduced and are operating a certification acquisition support system to support employee growth. We provide certification acquisition courses in various fields in connection with specialized certification training companies and support tuition and textbook costs within an annual limit of KRW 1 million.

**Performance Evaluation and Job Competency Enhancement Programs**

**Performance Evaluation**  
LG Chem sets organizational and individual KPIs linked to company goals and strategies annually and evaluates performance based on quantitative indicators. During year-end evaluations, we operate a Peer Review system that reflects supervisor and colleague feedback, and encourages organizational leaders to provide regular feedback to team members in addition to regular first- and second-half evaluations.

**Appropriate Wage and Compensation Payment**  
LG Chem's compensation philosophy is oriented toward securing, retaining, and motivating the best talent for vision achievement, and aims to maintain top-tier levels among industry competitors in basic salary and total compensation levels. For this purpose, for domestic employees, wages are adjusted annually reflecting legal minimum wage standards, inflation rates, and economic growth rates. For overseas employees, we analyze wage levels in respective regions based on market data and pay salaries accordingly. In 2024, we secured data from 8 countries to calculate appropriate wages and plan to expand application to other regions in the future.

**Office Job Competency Enhancement Programs**  
LG Chem operates LG Chempus, a job education system covering all internal jobs to develop job specialists with global competitiveness. In 2024, we offered 394 online and offline training courses including DX (15), Quality (11), Production Technology (126), R&D (106), Environment and Safety (46), and ERP (39). Employees can directly apply for and take education necessary to improve their job performance. In 2024, we focused on marketing education (170 people) and KAM education (245 people) to enhance customer value, and DX education (2,557 people) for data utilization and work efficiency. Additionally, we operate Social Learning Programs to support employees' mutual exchange and growth through coaching, mentoring, and counseling. 1:1 social learning covers various topics including career development, leadership, soft skills, and onboarding, with over 130 internal mentors and coaches active.

**Field Expert System for Technical Competency Enhancement**  
LG Chem introduced the LG Chem Master Craftsman and LG Chem Specialist systems to encourage technical workforce competency enhancement. Each year, candidates are selected by business site and undergo rigorous selection processes over several months including internal and external expert reviews. The 8 master craftsmen and 73 specialists selected over the 3 years from 2022 to 2024 provide technical consulting in the field and participate in job-specific education and mentoring activities for junior development. Additionally, to develop continuous job competencies of field experts, those selected as master craftsmen gather quarterly to conduct continuous growth support activities. This includes Master Craftsman Quarterly Council Activities to monitor and share company-wide master craftsman activities, Specialist Workshops (conducted 7 times) to identify and discuss tasks for supporting specialist activities for company-wide specialists, and IDP (Individual Development Plan) establishment to consider and support individual career development for future growth of company-wide specialists.

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ORGANIZATIONAL CULTURE BUILDING

Horizontal Organizational Culture Building and Employee Engagement Enhancement Programs

Programs for Open Communication

LG Chem, which builds a horizontal organizational culture, strives to enable employees to freely propose diverse ideas, actively collaborate, and make rational and swift decisions. Through Town Hall Meetings, we share the company's management strategies and performance with all employees every quarter, and through Discussion Tables, management including the CEO, business heads, and business unit heads discuss business with employees. We also operate Co-Mentoring where employees become mentors and management members become mentees to share the latest trends and working methods of MZ generation employees. LG Cnergy, a mutual recognition system among employees, is also a system that promotes employees' collaboration and positive communication culture. Team Building Programs and Wellness Programs help team members recognize each other's strengths and communicate smoothly. In the first half of 2025, 50 teams and approximately 600 employees participated in the programs.

Building Efficient Work Environment for Employees

LG Chem enables employees to focus on core work in a flexible and efficient work environment We actively listen to employees' voices and continue support to enhance satisfaction. In particular, we regularly monitor to prevent unnecessary overtime work to comply with legal working hours. When overtime work is necessary, we pay overtime allowances according to legal standards. Additionally, employees can freely adjust commuting times and working hours according to personal and work situations. Through the Vacation Use Promotion System, we establish annual vacation usage plans in advance to secure sufficient predictable rest time, establishing a self-directed vacation use culture. Annual leave can be used not only in full-day units but also in 0.5-day (4-hour) and 0.25-day (2-hour) units to provide various options according to personal circumstances. Summer vacation can be used at any time of the year to support flexible vacation use.

2024 Flexible Work Utilization Personnel

- Flextime users: 5,829 people
- Flexible Working Hours users: 4,566 people
- Remote Work users: 2,790 people

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**Continuous Efforts for Diversity, Equity, and Inclusion**  
LG Chem makes diversity, equity, and inclusion core indicators of sustainable organizational culture and makes various efforts to expand them. LG Chem's diversity is a concept that encompasses cognitive diversity beyond gender, generational, and cultural diversity, and is a core value for strengthening mutual respect and cooperation.

**Efforts for Gender Diversity**  
LG Chem establishes and manages internal targets to increase the proportion of women among new hires during recruitment considering Gender Diversity. We also provide equal compensation to male and female employees performing the same grade and same job functions. The proportion of women among new office workers in Korea in 2024 was approximately 33%, an increase of about 8% compared to 2022. When establishing Succession Plans, we encourage important consideration of securing organizational diversity including young talent and women, and support female employees to continue their careers stably through various maternity protection systems. In the mid- to long term, we have established a target for the proportion of women in leadership positions (organizational leaders) to be 15% or more. We are committed to increasing the proportion of women in leadership positions annually during leadership appointment reviews.

	2022	2023	2024
New hires	24.6%	32.1%	33.1%
Leadership positions (team leader and above) ①	9.5%	9.9%	11.3%
Executives ②	8.7%	7%	10%

① Excluding subsidiaries, domestic business sites, excluding executives.  
② Excluding subsidiaries, including special positions.

LG Chem's Maternity Protection System

- ① Pregnancy
  - Maternity protection leave (providing time for fetal examinations during pregnancy)
  - Working hour reduction during pregnancy (2 hours per day, paid): Changed in 2025 to within 12 weeks of pregnancy, after 36 weeks
  - Infertility treatment leave 3 days (paid): Changed in 2025 to 3 paid days, 3 unpaid days
  - Infertility leave up to 6 months: Newly introduced in 2024
- ② Childbirth
  - Maternity leave before and after birth
  - Pregnancy and childbirth medical expense support
  - Miscarriage leave and miscarriage leave system: Newly introduced in 2024
  - Childbirth congratulatory money KRW 1 million support: Amount expanded in 2024
- ③ Childcare
  - Reduced working hours during childcare period (15~35 hours/week, unpaid): Target expanded in 2025 (12 years old or 6th grade and below)
  - Childcare leave 2 years (legal 1 year / non-legal 1 year): Additional 6 months of legal leave period in 2025 (Single-parent families, parents of children with severe disabilities, when couples each use 3 months or more)
  - Daycare centers at each business site

**Efforts to Expand Cultural Diversity and Generational Diversity**  
As a global company, LG Chem strives to enable employees with diverse cultural backgrounds to understand and embrace each other and create synergy based on mutual understanding. We provide work opportunities in Korea for employees working at overseas business sites to promote work and cultural exchanges. We support expatriate leaders dispatched overseas to understand local business site cultures and demonstrate leadership without cultural bias. We also operate a Co-Mentoring system where management and young MZ generation employees become mentors to each other to understand generational differences and create work synergy, and support various programs to understand each other's personalities, strengths, and work styles between department heads and team members and enhance trust.



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INTRA-ORGANIZATIONAL COMMUNICATION

HR Reflecting Employee Voices

**Connect HR**  
LG Chem improves HR-related systems and processes by reflecting employees' ideas and voices in various organizational decision-making processes. Any employee can continuously submit HR-related questions and suggestions through the Connect HR platform. We post feedback within 5 business days for all received questions and monthly for suggestions. Ideas suggested by employees are listened to with interest not only by relevant departments but also by management, and inefficient systems or processes are boldly and quickly improved. In the 2 years since platform introduction, we answered over 3,000 employee questions, and 48 HR systems and processes were improved by December 2024.

2024 Connect HR Major Achievements

- ✓ Establishment of new infertility leave support system
- ✓ Recognition of sick leave for miscarriage in early pregnancy (less than 16 weeks)
- ✓ Expansion of childbirth congratulatory money
- ✓ Establishment of new personal pension system (company provides monthly support funds)

**Pulse Survey**  
LG Chem conducts Pulse Surveys for all employees every quarter to listen to opinions on four core areas of Growth, Work, Recognition, and Care from an EVP (Employee Value Proposition) perspective to improve employee workplace satisfaction. Through this, we continuously develop an organizational culture that meets employees' demands and expectations and focuses on providing fair compensation and recognition and opportunities for individual growth. Through such regular surveys that actively reflect employee voices, we aim to promote the company's sustainable growth and employees' long-term satisfaction.

**Elimination of Workplace Harassment and Discrimination Through Grievance Handling Systems**  
LG Chem operates a Sexual Harassment and Bullying Report Center to create an organizational culture free from workplace harassment and discrimination and a safe work environment. We conduct campaigns to prevent sexual harassment and workplace bullying through various channels, and protect victims through confidentiality maintenance and secondary harm prevention measures based on zero-tolerance principles for related matters. When reports are received, we quickly proceed with fact verification and investigation and take disciplinary action against perpetrators.

**Prevention and Sensing**  
LG Chem mandatorily conducts Sexual Harassment and Bullying Prevention Education for all employees and strives to identify unreported cases of harm through various channels such as Sexual Harassment and Bullying Surveys, HR interviews, and employee councils.

**Investigation and Response to Reported Cases**  
The Sexual Harassment and Bullying Report Center receives damage reports 24 hours a day through various channels including email, phone, and online. The company protects the reporter's personal information and separates the reported person from the reporter and victim while investigation participants who pledged confidentiality immediately investigate the matter. When reported content is confirmed as fact, we take disciplinary action against the perpetrating employee and conduct monitoring for 1 year afterward to check for secondary harm against the reporter, victim, and all employees who participated in the investigation.

**Reporting and Improvement**  
LG Chem analyzes cases handled after reception to develop management systems for sexual harassment and bullying prevention and response and continuously improves them. Handled cases are reported to HR departments including talent development, personnel, labor relations, CHO, and LG Chem's integrity management organization, and reports include investigation plans, investigation results, separation measures, disciplinary levels, and future prevention and response measures. In particular, when workplace bullying and sexual harassment by executives or managers is recognized, the same scope of content is also reported to the CEO and holding company.

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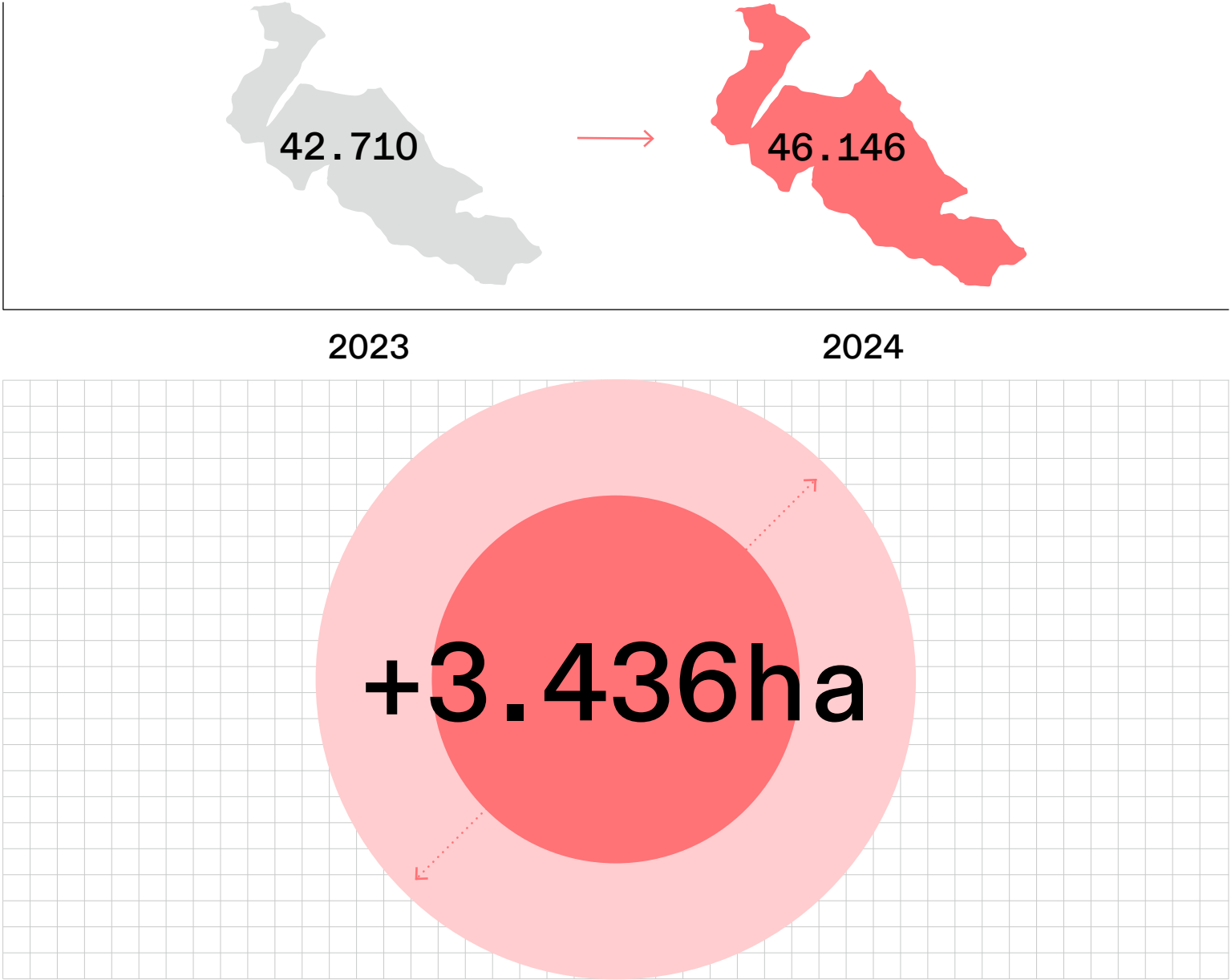
LOCAL COMMUNITIES

LG Chem closely communicates and cooperates with local communities to create sustainable social value. We identify mutual impacts with regions where business sites are located and operate region-customized social contribution programs by collecting opinions from various stakeholders. Additionally, considering impacts on local ecosystems, we continue activities for marine ecosystem restoration and biodiversity conservation near Yeosu.

LOCAL COMMUNITIES

- 1. Community-Customized Social Contribution Activities
  - 1) Sustainability Management Through Community Cooperation
  - 2) Participation Through Community Communication
  - 3) Community-Related Goals and Programs
  - 4) Community Impact Assessment and Performance Indicators
  - 5) Response System for Community Damage
- 2. Local Ecosystem Conservation Project
  - 1) Seagrass Habitat Restoration and Biodiversity Conservation for Blue Carbon Expansion
  - 2) Seagrass Transplantation Process and Advanced Technology Utilization
  - 3) Ecological and Social Value Creation of Seagrass Transplantation

After Transplanting 70,000 Seagrass Shoots Over 2 Years, Seagrass Habitat Increased by 3.436 ha in 2024 Compared to 2023



After transplanting 70,000seagrass shoots over 2 years, seagrass habitat increase in 2024 compared to 2023

# LOCAL COMMUNITIES

## COMMUNITY-CUSTOMIZED SOCIAL CONTRIBUTION ACTIVITIES

LG Chem seeks to create sustainable social value through close cooperation with local communities. Both headquarters and Yeosu and Cheongju business sites implement customized social contribution programs through communication with local communities and realize sustainability management that aligns with the Green Connector vision through performance evaluation. Green Connector is LG Chem's social contribution vision to enhance various values in human life and society overall by connecting social contribution and environmental values, including fulfilling social responsibility for each business site to develop together with local communities. LG Chem will continue efforts for local economic revitalization, environmental problem solving, and social value creation to become a company that coexists and grows together with local communities.

### Sustainability Management Through Community Cooperation

LG Chem operates business through interaction with various stakeholders at business sites across the country. Local community stakeholders who are directly or indirectly affected by LG Chem's business activities include local residents, partner companies, small and medium enterprises, government agencies, NGOs, and civic organizations. Through relationships with them, we receive the human resources, resources, and infrastructure necessary for business operations. Since each business site is inevitably dependent on the region during business activities, we promote mutual development by collecting various opinions from local communities. Through such close cooperation with local communities, we create positive opportunities such as building sustainable business models, improving brand image, creating social value, and strengthening ESG compliance.

LG Chem creates positive opportunities such as building sustainable business models, improving brand image, creating social value, and strengthening ESG compliance through close cooperation with local communities. At the Naju business site, when environmental safety accidents occur at the factory, significant impact is expected on densely populated areas. Factory downsizing is also identified as a potential risk factor that could greatly impact the local community. Conversely, if mutually friendly relationships with local communities are maintained, there are positive opportunities for substantial support including intangible support such as new investments and employment. At the Magok business site, major challenges include educational opportunity imbalances for children and youth in welfare blind spots, aging local welfare facilities, lack of environmental awareness, and lack of cooperation between institutions within the region. We seek to solve these problems through various social contribution activities in cooperation with local communities. Through this, positive effects such as corporate image enhancement, employee pride improvement, and external trust enhancement can be achieved.

### Local Community Stakeholders and Mutual Impacts

Yeosu Business Site	Cheongju Business Site	Naju Business Site	Magok Business Site
Yeosu National Industrial Complex has high dependence on the petrochemical industry, so residents have high interest in regional economic impact and recovery from industrial crises and sustainable development. They react sensitively to employment stability and continue efforts such as requesting designation as an employment crisis region due to global oversupply and China's low-price offensive. Additionally, complaints related to air pollution and odors from the Yeosu National Industrial Complex, which directly affect residents' health and life, are increasing annually.	Cheongju was previously an agriculture-centered city, but as industrialization and urbanization progressed, economic inequality deepened, leading to more attention to solving marginalized group problems and social welfare. Additionally, Cheongju has growing needs for welfare services due to structural changes from low birth rate problems and entry into an aging society.	The Naju business site has become adjacent to a small city residential area of 110,000 people as the new city expanded, leading to increasing protests from local residents. As awareness of environmental pollution and safety issues grows and problems such as odors, noise, and air pollution occur, residents of nearby residential areas and surrounding commercial districts are directly affected.	Magok has formed a complex social structure with mixed occupational groups from various income levels through R&D cluster formation centered on LG Science Park and rapid new city development processes. Accordingly, the need for welfare services and support for vulnerable groups has increased. Additionally, as dual-income households increase, demand for after-school education or care services is high. Despite well-established educational infrastructure, demand for specialized educational welfare services such as educational gaps, special education, and psychological counseling is also increasing.

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**Participation Through Community Communication**  
LG Chem values communication and participation with local communities very importantly. We collect opinions from local stakeholders and review collaboration proposals through social contribution and shared growth inquiry channels on LG Chem's website. Additionally, business sites in each region also operate various channels for communication with stakeholders. We strive to create social value through cooperation with local communities and establish a foundation for long-term coexistence with local communities.

- Yeosu Business Site**  
Through the Yeosu Local Community Social Contribution White Paper, a survey of over 600 citizens revealed that the most urgent social challenges the local community requires are environmental pollution problems, welfare, and expansion of specialized medical facilities. Reflecting this, we are implementing region-customized social contribution programs.
- Cheongju Business Site**  
We strengthen communication with local communities through regular exchanges with departments related to investment attraction and social contribution activities in Chungcheongbuk-do and Cheongju City, regular exchanges with relevant departments of Cheongju Chamber of Commerce and Industry and Cheongju Industrial Complex Management Corporation, participation in regular meetings of major corporate department heads within the Industrial Complex Management Corporation, and regular exchanges with major social welfare organizations (Community Chest of Korea, Green Umbrella). Local communities present opinions to the Cheongju business site regarding job creation through continued investment in new businesses and sponsorship through social contribution activities for various vulnerable groups, and the Cheongju business site strengthens cooperation with local communities by reflecting these.
- Naju Business Site**  
For smooth relationships between the factory and local community, we communicate through a local institutional head council (Geumla Association) and collect opinions on factory scale expansion, prioritizing safe environment, expanding local talent employment, and expanding support for underprivileged neighbors in the local community.
- Magok Business Site**  
We have established partnerships with the Korea Food for the Hungry International's social contribution team to operate various public offering projects and employee volunteer activities, and communicate regularly and directly/indirectly with local communities through meetings, business briefings, institutional monitoring visits, Green Classes, Junior Engineering Classrooms, and Upcycling Schools. Through this, we collect feedback on programs and seek improvement directions.

**Community-Related Goals and Programs**  
LG Chem seeks to create social value with local communities and realize sustainable management based on the Green Connector vision. To this end, we operate various programs including ESG education, marine ecosystem conservation, social economy enterprise support, and eco-friendly energy businesses, and annually select and implement social contribution priority tasks linked to business goals.

- Major Community Programs**
  - LG Chem Headquarters**
    - Green Education (Like Green): Climate crisis, environmental, social issue education and career education programs
    - Green Ecology: Marine ecosystem conservation (seagrass habitat restoration, Blue Forest project), Bamseom biodiversity conservation
    - Green Economy (LG Social Campus): Climate environment sector social economy enterprise support
    - Green Energy (Seoul Hope Green Power Plant): Installation of solar power plants on public land, donation of power generation profits
    - Employee participation CSR activities: Donation Week, Green Class employee volunteer activities
  - Yeosu Business Site**
    - Creating jobs for elderly through coffee grounds upcycling
    - River water quality purification
    - Support for hygiene products for vulnerable female youth
  - Cheongju Business Site**
    - Green Environment: Local river environment purification activities (4 or more times per year, since 2022)
    - Programs for future generations (youth)
      - School uniform sponsorship for low-income family youth (since 2018)
      - Self-reliance support fund sponsorship for sponsored children from low-income families (since 2005)
      - Daily necessities and love kimchi sponsorship for local childcare facilities (since 2016)
      - Career mentoring day for high school students in Cheongju area including Cheongju High School and Cheongwon High School (since 2022)
    - Sustainable community programs
      - Daily necessities and love kimchi sponsorship for disabled facilities (since 2022)
      - Love bread and briquette sponsorship for local marginalized groups (since 2011)
      - Used clothes donation campaign for local marginalized groups (twice a year, since 2023)
      - Selling local agricultural products event for regional coexistence (since 2024)
      - Year-end donation sponsorship for local marginalized groups (since 2021)

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- Naju Business Site**
- Support for local children (youth career experience, orphanage sponsorship)
  - Nearby village life support
- Magok Business Site (Partnership established with Korea Food for the Hungry International social contribution team)**
- Welfare institution public offering project: Operating public offering programs for welfare institutions in Gangseo-gu, Seoul, supporting institution-customized projects such as environmental improvement
  - Junior Engineering Classroom: Hands-on science kit education at children's centers in Gangseo-gu and employee mentor participation
  - Green Class: ESG topic-based employee education volunteering, sustainability awareness enhancement and career mentoring for children and youth, environmental education
  - Upcycling School: Delivering upcycled products made by employees to local children, spreading interest in sustainable society and environment

Community Impact Assessment and Performance Indicators

LG Chem continuously verifies the effectiveness of social contribution activities. Headquarters derives and manages performance indicators based on strategic tasks and measures and analyzes social impact through specialized institutional impact assessments for social contribution projects when necessary. The Yeosu business site uses four indicators to evaluate the effectiveness of CSR programs: corporate social contribution direction alignment, business contribution, positive impact on local community stakeholders, and overall local community impact. The Magok business site uses qualitative indicators (satisfaction surveys, beneficiary interviews, institutional feedback) and quantitative indicators (number of public offering project applications and selected institutions, number of education participants, employee volunteer rate, kit distribution quantity, etc.).

Performance Indicators by Major Program

- Like Green (Green Talk): Number of subscribers, content views, video uploads, promotion, social influence
- Like Green (Green Class): Number of participating institutions and beneficiary children, education satisfaction, ESG awareness change, promotion, credibility establishment
- Employee volunteer group: Participating institutions and beneficiary children, number of participating employees, education satisfaction
- Marine ecosystem conservation project (seagrass habitat restoration): Habitat area, monitoring and effectiveness analysis, awareness raising, promotion
- Bamseom biodiversity conservation program: Number of participants, completion rate, satisfaction, program effectiveness
- LG Social Campus: Number of participating companies, company survival and business maintenance, employment and sales increase, external investment attraction, awards and certifications, social impact measurement

Response System for Community Damage

LG Chem establishes systematic response systems to minimize environmental safety accidents and damage that may occur at business sites to further strengthen trust with local communities. The Yeosu business site has established emergency response guidelines to minimize damage through early response when environmental safety accidents occur, and operates regulations for complaint response and media management through the external cooperation team. In 2024, to minimize expected noise damage during NCC2 plant TA work, we informed residents in advance about the expected timing and scale of noise generation, and conducted stress relief activities for residents after work completion. The Cheongju business site prepares for the possibility of damage to local communities during business activities through company-wide crisis management regulations and environmental safety crisis response processes. The Naju and Magok business sites also have response systems in place for damage from business activities, but no damage cases have been reported to date.

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LOCAL ECOSYSTEM CONSERVATION PROJECT

Yeosu National Industrial Complex, where the Yeosu plant is located, is a region densely populated with chemical plants conducting large-scale industrial activities that receive an average of 540,000 tons of industrial water daily and use 43,267 MWh of electricity, requiring consideration of the impact of industrial activities on the local ecosystem. As part of efforts to fulfill corporate social and environmental responsibilities, LG Chem's Yeosu Hwachi plant achieved Zero Waste to Landfill Gold certification with a 96% waste recycling rate, accomplishing the feat of minimizing environmental impact and building a sustainable production system. Furthermore, beyond efforts for Net-Zero and resource circulation, we are expanding to more comprehensive environmental protection activities of marine ecosystem restoration that makes environmental protection and biodiversity conservation core values.

Marine Ecosystem Changes Due to Industrial Complex

Biodiversity Reduction Due to Pollution

Heavy metals, chemicals, and nutrients change the physical environment and chemical composition of marine ecosystems, reducing biodiversity

Habitat Destruction and Fragmentation

Hindering marine organism movement and reproduction, reducing species diversity and limiting genetic diversity

Physical Environment Changes

Temperature rise (thermal pollution), salinity changes, vibration and noise disturbing ecological balance of marine organisms

Seagrass Habitat Restoration and Biodiversity Conservation for Blue Carbon Expansion

LG Chem continues new challenges for biodiversity conservation and marine ecosystem restoration. At the center is seagrass, an important member of marine ecosystems and a key player in blue carbon. Blue carbon refers to carbon absorbed by marine ecosystems. Seagrass absorbs carbon up to 50 times faster than terrestrial green carbon and has excellent storage capacity. LG Chem focuses on the value of seagrass as a key marine ecosystem resource that can contribute to greenhouse gas reduction and started a restoration project in the second half of 2023, centered on the waters off Daekyeong Island in Yeosu City, to expand sustainable carbon sinks. LG Chem's seagrass restoration project goes beyond simple marine ecological restoration and positions itself as part of sustainability management practice.

Seagrass Restoration Project Process

- 1 Blue carbon candidate site suitability survey
- 2 Seagrass transplantation and management
- 3 Seagrass seed management
- 4 Monitoring and effectiveness analysis
- 5 Environmental management of seagrass transplantation sites (post-management)



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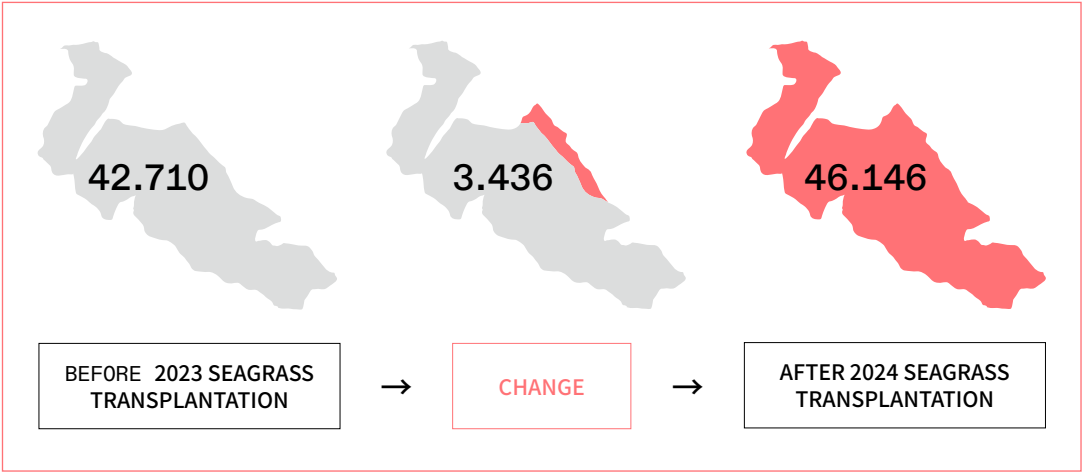
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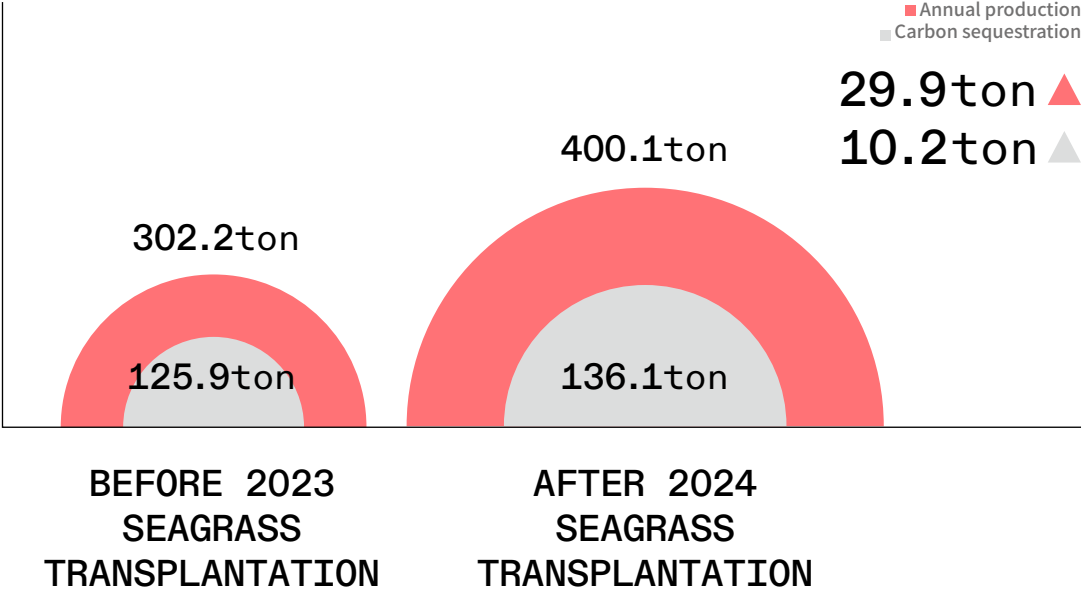
**Seagrass Transplantation Process and Advanced Technology Utilization**  
Seagrass transplantation proceeds by connecting to existing colonies. The process includes harvesting seagrass from waters around Soan-myeon, Wando-gun, transporting it to transplantation sites, processing it on land, and then transplanting it into sediment. A total of 70,000 seagrass shoots were transplanted over 2 years, increasing the seagrass habitat area by 3.436 ha. In particular, this project precisely surveyed seafloor topography through airborne bathymetric lidar and drone hyperspectral imaging techniques and precisely identified the health status and distribution of seagrass habitats. These advanced technologies play an important role in quantitatively analyzing restoration effects and establishing a foundation for long-term success through continuous monitoring.

**Ecological and Social Value Creation of Seagrass Transplantation**  
Seagrass colonies serve as habitats and food sources for marine life, greatly contributing to biodiversity enhancement. Marine ecosystem improvements are being confirmed, with various marine organisms observed in restored seagrass habitats. Additionally, as fishery resource habitats and juvenile fish nurseries, they have a positive impact on local fisheries, creating economic value. Marine debris collection activities conducted during the seagrass restoration process contribute to improving the local marine environment and help raise environmental awareness in local communities through citizen participation programs. Environmental education activities utilizing digital platforms such as ZEPETO Blue Forest also create educational value by informing youth and citizens about the importance of blue carbon and marine ecosystems. These activities promote coexistence with local communities and contribute to creating sustainable communities.

Seagrass Habitat Area Change (ha)



Changes in Seagrass Production and Carbon Sequestration





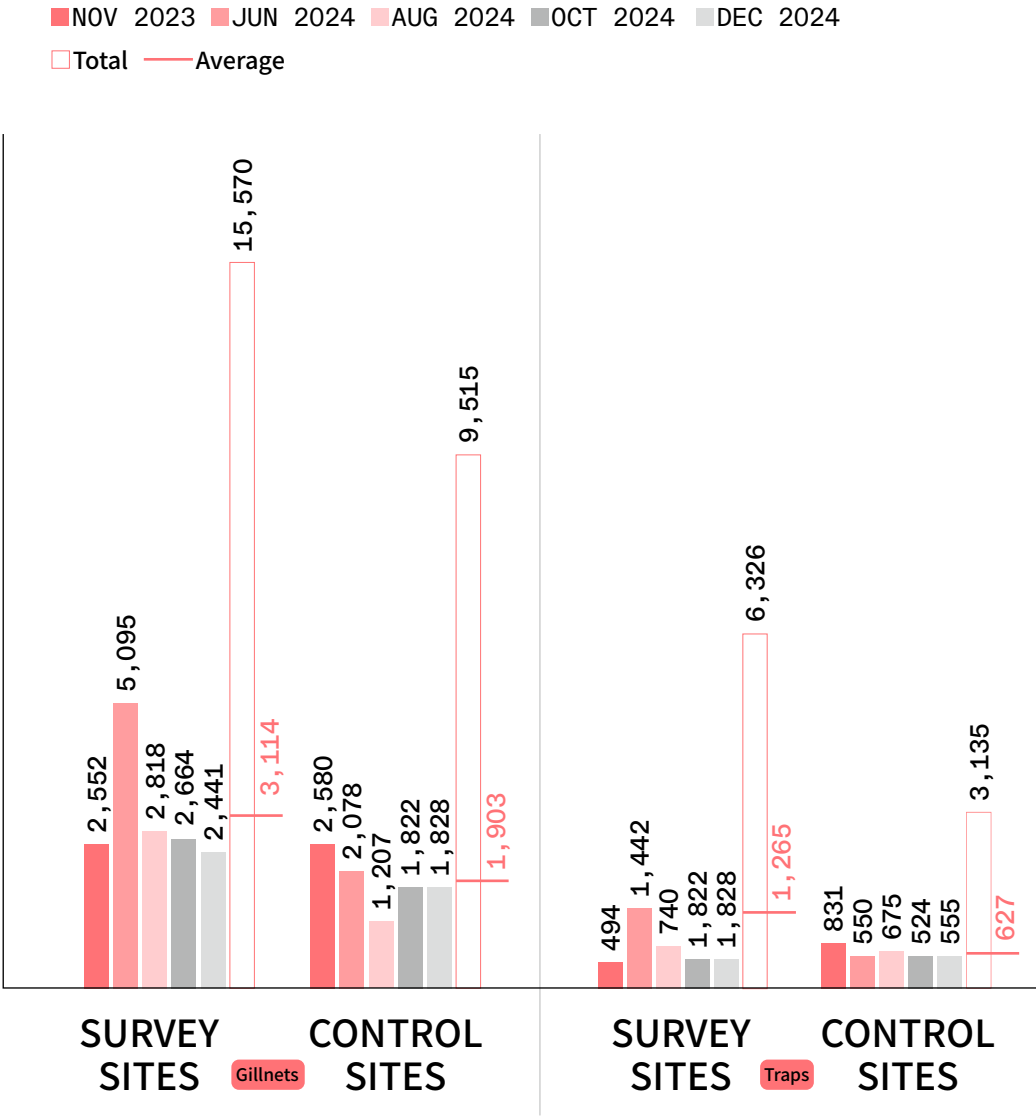
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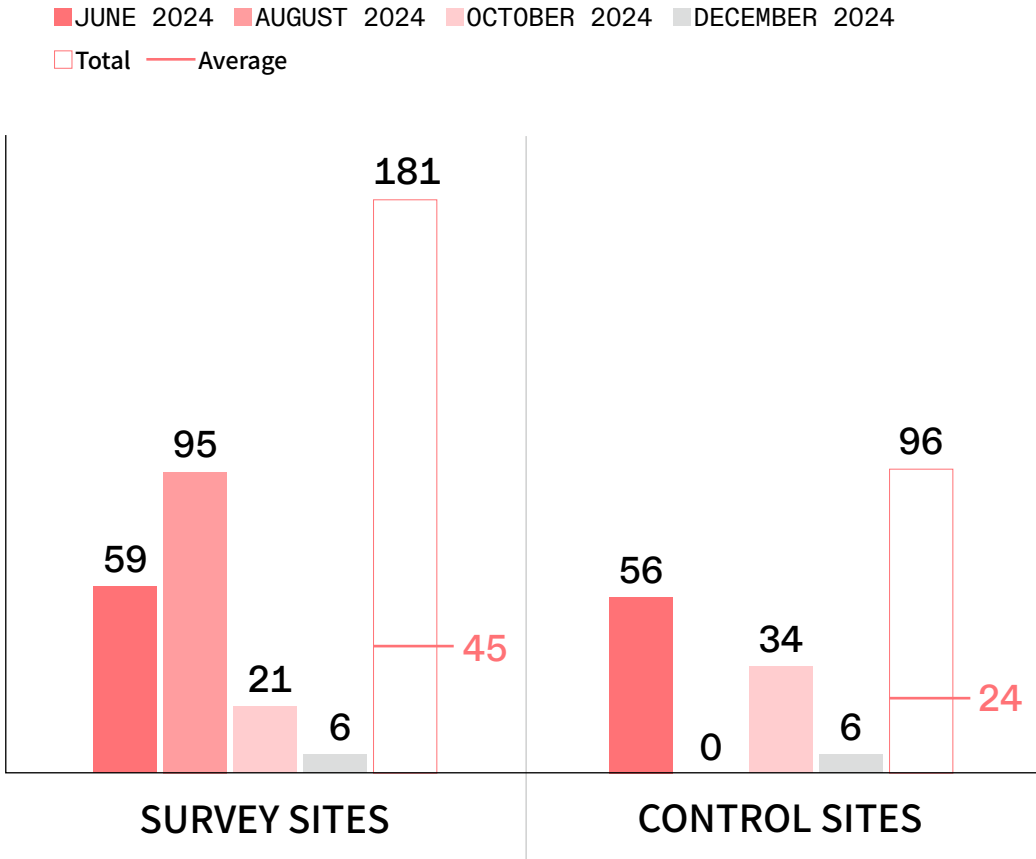
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**Swimming organisms<sup>①</sup> catch change (g)**  
Quarterly monitoring results found that most survey sites had higher gill net and trap catches compared to control sites.



<sup>①</sup> Swimming organisms: Animals that can move by swimming on their own. Fish, jellyfish, dolphins, etc.

**Juvenile fish<sup>②</sup> abundance (individuals/1,000 m<sup>3</sup>)**  
Quarterly monitoring results found that more than half of survey sites had higher juvenile fish abundance compared to control sites.



<sup>②</sup> Juvenile fish: Young fish or larvae that float and grow for a certain period after hatching from eggs.

Moving forward, LG Chem will continuously pursue effectiveness analysis through long-term monitoring and habitat expansion to further expand contributions to biodiversity conservation and carbon reduction. We will also manage dependence on ecosystem services in a balanced manner for sustainable industrial operations, minimize environmental pressure, and steadily continue efforts for biodiversity conservation and enhancement.

- ESG PERFORMANCE DATA
- GRI INDEX
- SASB INDEX
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# PERFORMANCE DATA

# ESG PERFORMANCE DATA

ESG PERFORMANCE DATA

Greenhouse gas emissions		Unit	2022	2023 ❶	2024 ❷
Scope 1+2 emissions	Global	tCO <sub>2</sub> e	9,561,674	9,036,425	9,351,641
	Domestic	tCO <sub>2</sub> e	8,567,697	8,072,360	8,310,445
	Overseas	tCO <sub>2</sub> e	993,977	964,065	1,041,196
	Emission intensity ❸	tCO <sub>2</sub> e / KRW 1M	0.3897	0.4349	0.4148
Scope 1 emissions	Global	tCO <sub>2</sub> e	5,628,898	5,176,533	5,653,173
	Domestic	tCO <sub>2</sub> e	5,489,586	5,031,867	5,492,228
	Overseas	tCO <sub>2</sub> e	139,312	144,665	160,945
	Emission intensity	tCO <sub>2</sub> e / KRW 1M	0.2294	0.2491	0.2507
Scope 2 emissions ❹	Global	tCO <sub>2</sub> e	3,932,776	3,859,892	3,698,468
	Korea (Market-based)	tCO <sub>2</sub> e	3,078,111	3,040,492	2,818,217
	Korea (Location-based)	tCO <sub>2</sub> e	3,129,840	3,119,902	2,883,465
	excl. Korea (Market-based)	tCO <sub>2</sub> e	854,664	819,400	880,251
	excl. Korea (Location-based)	tCO <sub>2</sub> e	1,279,330	1,284,497	1,286,900
	Emission intensity	tCO <sub>2</sub> e / KRW 1M	0.1603	0.1858	0.1640
Scope 3 emissions ❺	Domestic	tCO <sub>2</sub> e	1,227,864	11,471,953	19,382,867
Category	1. Purchased goods and services ❻	tCO <sub>2</sub> e	425,556	10,215,107	14,143,583
	2. Capital goods	tCO <sub>2</sub> e	83	245,912	162,883
	3. Fuel and energy-related activities (not included in Scope 1 or 2)	tCO <sub>2</sub> e	193,940	399,605	339,324
	4. Upstream transportation and distribution	tCO <sub>2</sub> e	124,744	611,329	637,713
	5. Waste generated in operations	tCO <sub>2</sub> e	61,972	-	131,531
	6. Business travel	tCO <sub>2</sub> e	621	-	4,330
	7. Employee commuting	tCO <sub>2</sub> e	10,474	-	10,307
	9. Downstream transportation and distribution	tCO <sub>2</sub> e	-	-	677,368
	11. Use of sold products	tCO <sub>2</sub> e	-	-	596,749
	12. End-of-life treatment of sold products	tCO <sub>2</sub> e	-	-	2,435,063
	15. Investments	tCO <sub>2</sub> e	400,000	-	244,016

❶ Figures for Scope 1 and Scope 2 emissions in Korea in 2023 have been partially revised based on the verification results of the Ministry of Environment.

❷ Figures for Scope 1 and Scope 2 emissions in Korea in 2024 are based on values reported to the Ministry of Environment. The above figures are subject to revision depending on the verification results.

LG Chem's Scope 3 Emissions Reporting

- With the increasing importance of Scope 3 carbon emissions management and growing sustainability disclosure and stakeholder demands, LG Chem reviewed global standards and the scope of calculations for Scope 3 carbon emissions. Based on this review, the company established its own calculation standards and applied them to estimate emissions for 11 categories at its domestic business sites.
- The calculation is based on the GHG Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011), using highly reliable databases to calculate emissions by category (Figures for 2022 and 2023 emissions calculations remain unchanged from last year and were not revised).
- LG Chem plans to expand the scope of Scope 3 carbon emissions calculation to its overseas business sites in the future to enhance completeness.
- Category 1: Calculated emissions based on the purchase statements of key material inputs (raw materials, products, semi-finished products, goods, etc.) of Petrochemicals and Advanced Materials businesses.
- Category 2: Calculated emissions based on asset statements of acquired/replaced tangible goods (buildings, structures, machinery, vehicles, tools, equipment, fixtures).
- Category 3: Calculated emissions based on external fuel and energy purchases on the Statement of Greenhouse Gas Emissions.
- Category 4: Transport-related emissions based on raw materials purchased by business sites (excluding emissions from warehouses and distribution centers during transportation).
- Category 5: Emissions from the treatment and disposal of waste generated at business sites in facilities owned by third parties.
- Category 6: Emissions from transportation and accommodation during domestic and overseas business trips by employees.
- Category 7: Emissions from transportation used by employees for commuting (utilizing statistical data related to worker commuting).
- Category 9: Transport-related emissions from products exported overseas from business sites (excluding emissions from warehouses and distribution centers during transportation).
- Category 11: Emissions from sold products that are used as fuel and directly released into the atmosphere.
- Category 12: Emissions from the waste treatment process at the end-of-life stage of sold products (utilizing statistical data on disposal scenarios).
- Category 15: Emissions from business activities of investees (affiliates, joint ventures) excluding subsidiaries among companies in the consolidated financial statements of the business report.

❸ Emission Intensity = Global GHG emissions / Revenues excluding LG Energy Solution, and Common and others.

❹ Starting this year, Scope 2 GHG emissions are disclosed separately as Market-based / Location-based. However, global total emissions are aggregated based on Market-based data.

❺ Calculation of Scope 3 emissions has been limited to select categories of the Greenhouse Gas (GHG) Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011). Categories 5, 6, 7, 9, 11, 12, and 15 have been newly established and calculated from 2024.

❻ The increase in Category 1 carbon emissions in 2024 is mainly due to increased naphtha purchases following the normal operation of Yeosu 2NCC (Yeosu 2NCC was shut down in 2023).

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Energy consumption		Unit	2022 ❶	2023	2024 ❷
Total energy consumption ❸	Global	TJ	145,779	133,424	143,863
	Korea	TJ	136,765	124,335	134,028
	excl. Korea	TJ	9,015	9,089	9,834
	Energy intensity ❹	TJ / KRW 1M	0.0059	0.0064	0.0064
Direct energy consumption (fuel)	Global	TJ	107,352	96,272	109,642
	Korea	TJ	104,876	93,692	106,570
	excl. Korea	TJ	2,476	2,580	3,072
	Energy intensity	TJ / KRW 1M	0.0044	0.0046	0.0049
Indirect energy consumption ❺ (steam, electricity)	Global	TJ	38,427	37,152	34,221
	Korea	TJ	31,888	30,643	27,458
	excl. Korea	TJ	6,539	6,509	6,763
	Energy intensity	TJ / KRW 1M	0.0016	0.0018	0.0016
Renewable energy consumption ❻	Global	MWh	740,791	876,843	835,370
	Korea	MWh	112,598	172,852	142,026
	excl. Korea	MWh	628,194	703,991	693,345
Self-generated and Consumed Solar Power ❼	Global	MW	1.9	4.8	4.8

❶ Figures for energy consumption in Korea in 2022 have been revised based on the verification results of the Ministry of Environment.

❷ Figures for energy consumption in Korea in 2024 (including renewable energy) may be revised in the future based on the verification results of the Ministry of Environment.

❸ Total energy consumption figures exclude self-generated and consumed energy (solar), which is reported separately.

❹ Energy Intensity = Global energy consumption / Revenues excluding LG Energy Solution, and Common and others.

❺ Indirect energy consumption does not include (deduct) renewable energy consumption.

❻ Renewable energy consumption includes REC (solar, wind) purchases and green premium. Renewable energy consumption for 2022-2023 has been revised to reflect partial business divestiture and changes in calculation criteria (excluding self-generated and consumed solar power).

❼ As of 2024, the company owns a total of 4.8 MW of self-consumed solar power generation facilities (1.9 MW in Korea, 2.9 MW overseas), which were previously disclosed as part of renewable energy consumption based on design capacity. To provide accurate data on actual renewable energy consumption, solar self-generation and consumption are excluded from the total renewable energy consumption and separately indicated.

Water resources management		Unit	2022	2023	2024
Water withdrawal	Total	m³	74,781,261	73,423,047	72,188,887
	Surface water	m³	-	-	-
	Groundwater	m³	440,512	464,569	410,739
	Seawater	m³	-	-	-
	Municipal water	m³	74,326,951	72,813,032	71,746,131
	Others ❶	m³	13,798	145,446	32,017
	Water withdrawal intensity	m³ / KRW 1M	2.9400	3.5336	3.2019
	Water Stress ❷ Water withdrawal in regions	m³	4,457,410	4,405,035	4,296,966
Wastewater discharge	Total	m³	21,190,129	22,543,478	21,917,739
	Emission intensity	m³ / KRW 1M	0.8831	1.0849	0.9721
	Water discharge in regions with water stress	m³	1,765,931	1,625,892	1,915,596
Water consumption	Total	m³	53,591,133	50,879,569	50,271,148
	Energy intensity	m³ / KRW 1M	2.1069	2.4486	2.2297
	Water consumption in regions with water stress	m³	2,691,479	2,779,143	2,381,370
Water reuse rate ❸		%	2.57	2.65	3.46

❶ Other water sources include rainwater collection and storage, etc.

❷ Water Stress regions: (Korea) Iksan, Magok, (Overseas) Tianjin and Wuxi in China.

❸ Calculation of water reuse rate includes the amount of recycled water within the operation and purchased reclaimed wastewater.

Water resources management (Major business sites)		Unit	2022	2023	2024
Yeosu	Water withdrawal	m³	48,143,272	43,611,260	41,666,050
	Municipal water ❶	m³	48,143,272	43,611,260	41,666,050
	Water consumption	m³	38,272,526	32,254,609	31,542,276
Daesan	Water withdrawal	m³	13,096,040	17,462,242	18,330,156
	Municipal water ❶	m³	13,096,040	17,462,242	18,330,156
	Water consumption	m³	7,967,640	12,039,271	12,373,821

❶ Yeosu and Daesan plants source 100% of water from municipal water (including industrial water).

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Water pollution management		Unit	2022	2023	2024
Water pollutant discharge	COD ❶	Metric tons	472	244	284
	Emission intensity	kg / KRW 1M	0.0186	0.0117	0.0126
	TOC ❶	Metric tons	457	381	460
	Emission intensity	kg / KRW 1M	0.0179	0.0183	0.0204
	SS	Metric tons	240	228	190
	Emission intensity	kg / KRW 1M	0.0094	0.0110	0.0084
	T-N	Metric tons	211	211	219
	Emission intensity	kg / KRW 1M	0.0083	0.0102	0.0097
	T-P	Metric tons	34	41	19
	Emission intensity	kg / KRW 1M	0.0013	0.0020	0.0008

❶ Reflects the gradual transition of reporting metrics from COD to TOC under the Korean Water Environment Conservation Act.

Air pollution management		Unit	2022	2023	2024
Air pollutant emissions	Dust	Metric tons	183	176	162
	Emission intensity	kg / KRW 1M	0.0072	0.0085	0.0072
	NOx	Metric tons	3,823	3,150	3,100
	Emission intensity	kg / KRW 1M	0.1503	0.1516	0.1375
	SOx	Metric tons	240	119	152
	Emission intensity	kg / KRW 1M	0.0094	0.0057	0.0067
	VOCs	Metric tons	1,206	151	134
	Emission intensity	kg / KRW 1M	0.0474	0.0073	0.0059
	HAPs	Metric tons	298	105	95
	Emission intensity	kg / KRW 1M	0.0117	0.0051	0.0042

Waste Management		Unit	2022	2023	2024
Total waste generated	Total	Metric tons	279,585	248,036	242,684
	Waste intensity	Metric tons / KRW 1M	0.0114	0.0119	0.0108
Non-hazardous waste discharged	Total	Metric tons	150,922	125,043	103,013
	Recycling	Metric tons	111,612	97,692	80,665
	Incineration (w/ heat recovery)	Metric tons	23,149	13,779	11,577
	Incineration	Metric tons	6,177	4,433	2,444
	Landfill	Metric tons	9,984	9,138	8,327
	Other	Metric tons	-	-	-
Hazardous waste discharged	Total	Metric tons	128,663	122,994	139,671
	Recycling	Metric tons	60,374	57,458	83,641
	Incineration (w/ heat recovery)	Metric tons	54,361	52,210	48,000
	Incineration	Metric tons	12,862	11,930	7,371
	Landfill	Metric tons	1,066	1,395	659
	Other	Metric tons	-	-	-
Waste recycling rate	incl. Incineration (w/ heat recovery)	%	89	89	92
	excl. Incineration (w/ heat recovery)	%	62	63	68
Zero Waste to Landfill (ZWTL)	Certifications ❶	Site	3	4	6

❶ Yeosu (Hwachi), Gimcheon, Cheongju (Separator), Guangzhou, Quzhou, Tianjin business sites.

Hazardous substances management ❶		Unit	2022 ❷	2023 ❷	2024
Proportion of sold products containing REACH ❸ Annex 17 substances		%	26.79	28.10	26.70
Proportion of sold products containing REACH SVHCs ❹ substances		%	7.96	12.35	12.90
Proportion of sold products containing CMR ❺ substances		%	11.48	9.35	8.32
Hazardous chemicals risk assessment ❻		%	26.33	26.64	25.38

❶ Calculated the proportion of products containing each substance relative to the number of products sold per year.

❷ As REACH Annex 17 restricted substances (41 types), SVHCs substances (45 types), and CMR substances (10 types) were newly added compared to 2023, data for 2022-2023 was recalculated applying the latest standards.

❸ REACH: Registration, Evaluation, Authorization and Restriction of Chemicals.

❹ SVHC: Substances of Very High Concern.

❺ CMR: Carcinogenic, Mutagenic and Reprotoxic chemicals.

❻ Proportion of substances that have completed or are exempt from substance registration among the constituent substances of the sold product.

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Reused/recycled materials		Unit	2022	2023	2024
Proportion of reused/recycled materials ❶ Input	PC (Polycarbonate) ❷	%	3.1	4.5	5.3
	ABS	%	0.12	0.19	0.31
	PO	%	0.05	0.18	0.09
	PVC	%	-	0.0010	0.0144
	Plasticizers	%	-	0.0019	0.0036

- ❶ Reused/recycled Materials refer to Post-Consumer Recycled (PCR) or Post-Industrial Recycled(PIR) products. The proportion of reused/recycled input is the amount of PCR or PIR material input relative to the total material input.
- ❷ An error was found and corrected where non-PC product groups were included in the total sales when calculating the proportion of reused/recycled materials for the existing PC product group.

Employee and process EH&S		Unit	2022 ❶	2023	2024
Employees	Fatality Rate ❷	Rate	-	-	-
	TRIR ❸	Rate	0.6079	0.8344	0.4404
	LTIR ❹	Rate	0.0968	0.1597	0.0989
Subcontractors	Fatality Rate	Rate	0.0104	-	-
	TRIR	Rate	1.1025	0.7816	0.6240
	LTIR	Rate	0.3640	0.1804	0.1899
Process safety ❺	PSE ❻	Event	1	-	-
	PSER ❼	Rate	0.0035	-	-
Transport incidents	Road	Event	1	-	-
	Rail	Event	-	-	-
	Ship	Event	-	-	-

- ❶ From 2022 onward, the accident rate is calculated by applying actual hours worked.
- ❷ Fatality rate: Total number of fatality cases × 200,000 / total hours worked.
- ❸ TRIR(Total Recordable Incident Rate): Total number of recordable incidents × 200,000 / total hours worked.
- ❹ LTIR (Lost Time Incident Rate): Total number of lost time incidents × 200,000 / total hours worked.
- ❺ Calculations for process safety events are based on the internal accident index standard which includes injuries, fires, leakages, amount of loss, etc.
- ❻ PSE (Process Safety Events).
- ❼ PSER (Process Safety Event Rate): Number of process safety events × 200,000 / total hours worked.

- ❶ Calculated based on the number of employees at the end of the fourth quarter of each year.
- ❷ Executives refer to executive officers and registered directors at the Vice President level and above.
- ❸ Revenue-related refers to departments directly related to goods and services, such as production, sales, etc.
- ❹ Leaders refer to employees at the positions of team leader and above, excluding executives.
- ❺ R&D refers to departments related to research & development, technology, etc.
- ❻ Gender pay gap is calculated by dividing the average remuneration of all women in a position by the average compensation of all men in the same position. There are no distinctions based on gender, while factors such as years of service contribute to the pay gap.
- ❼ Management refers to employees at the level of professionals/senior managers and above, excluding executives.

Employee DE&I		2022	2023	2024
No. of employees by region ❶	Total	19,627	19,218	18,543
	Korea	14,572	14,360	13,741
	China	3,705	3,488	3,234
	Asia-Pacific (excl. China)	578	513	485
	Europe	471	479	466
	Americas	301	378	617
No. of executives ❷	Total	113	113	115
	Male	103	105	103
	Female	10	8	12
No. of employees by employment contract (Korea)	Non-fixed term	14,249	14,029	13,451
	Fixed-term	323	331	290
No. of employees by gender (Korea)	Male	12,356	12,088	11,517
	Female	2,216	2,272	2,224
	Ratio of female employees (non-fixed term)	%15	16	16
	Ratio of female employees (incl. fixed term)	%15	16	16
No. of employees by age (Korea, non-fixed term employees)	Under 30	2,508	2,187	1,623
	30 to 49	9,110	9,275	9,280
	50 or above	2,631	2,567	2,548
No. of leaders in revenue-related ❸ departments (Korea)	Male leaders ❹	486	506	526
	Female leaders	23	28	31
	Ratio of female leaders	%5	5	6
No. of employees in R&D ❹ departments (Korea, non-fixed term)	Male	2,004	2,030	1,927
	Female	962	1,020	978
	Ratio of female employees	%32	33	34
Social minorities (Korea)	Persons with disabilities	250	251	233
	National Veterans	286	290	267
Gender pay gap ❺	Non-management level (base salary)	%80	84	84
	Management ❷ level (base salary)	%94	95	95
	Management level (base salary + cash incentives)	%94	95	95
	Executive level (base salary)	%86	91	90
Parental leave (Korea)	Total number of employees due to return to work after taking parental leave	157	90	201
	Male	60	41	89
	Female	97	49	112
	Total number of employees that did return to work after taking parental leave	157	84	189
	Male	60	39	84
	Female	97	45	105



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Employee hires		Unit	2022	2023	2024
New employee hires	Total	People	2,651	1,025	711
	Korea	People	1,431	662	178
	excl. Korea	People	1,220	363	533
No. of employees by employment contract (Korea)	Non-fixed term	People	1,261	922	111
	Fixed-term	People	170	103	67
No. of employees by gender (Korea)	Male	People	1,070	466	120
	Female	People	361	196	58
by Age (Korea)	Under 30	People	849	409	89
	30 to 49	People	469	201	63
	50 or above	People	113	52	26

Employee turnover		Unit	2022	2023	2024
No. of voluntary turnover (Korea)	Total	People	344	303	346
No. of employees by gender (Korea)	Male	People	257	225	283
	Female	People	87	78	63
by Age (Korea)	Under 30	People	161	100	87
	30 to 49	People	173	182	238
	50 or above	People	10	21	21

Training and Development		Unit	2022	2023	2024
Training hours (Korea, non-fixed term)	Total	Hour	506,803	373,011	220,588
	Male	Hour	412,266	300,215	179,221
	Female	Hour	94,537	72,796	41,367
	Average training hours per employee	Hour / Person	35.6	19.7	16.4
Mandatory training hours (Korea)	Total	Hour	95,990	62,048	49,769
	Male	Hour	86,004	56,723	43,284
	Female	Hour	9,986	5,325	6,485
Training cost (Korea)	Total	KRW 10K	2,139,966	2,219,761	1,061,434
	Average training cost per employee ❶	KRW 10K / Person	150	158	79

❶ Corrected error in average training cost per employee for 2023.

Labor and human rights		Unit	2022	2023	2024
Labor union (Korea)	No. of employees eligible to join	People	7,447	6,799	6,309
	No. of employees participating	People	5,410	5,279	5,037
	Percentage of employees participating	%	73	78	79.8
Collective Agreements (Korea)	Coverage rate	%	100	100	100

Supply chain management		Unit	2022	2023	2024
ESG self-assessment	Total number of suppliers ❶	Company	1,433	1,168	1,026
	Number of suppliers that have finished ESG self-assessment	Company	762	1,000	955
	Total number of core suppliers ❷	Company	178	118	152
	Number of core suppliers that have finished ESG self-assessment	Company	77	97	139
ESG on-site audit	Total number of high-risk suppliers ❸	Company	169	160 ❹	151
	Number of high-risk suppliers that have finished ESG on-site audit	Company	17	31 ❹	38
	Total number of high-risk core suppliers	Company	1	7 ❹	15
	Number of high-risk core suppliers that have finished ESG on-site audit	Company	-	1 ❹	3
ESG on-site audit findings and improvements	Number of findings ❹	Case	-	554 ❹	1,134
	Number of improvements	Case	-	99 ❹	604

❶ Suppliers refer to domestic and overseas suppliers with records of annual purchase amounts of KRW 100M or more, and three or more purchase orders.

❷ Core suppliers refer to suppliers in the top 90% of purchase amounts and include companies of all sizes.

❸ High-risk suppliers refer to suppliers who fall under a high-risk rating as a result of self-assessment or fall into the high-risk group due to findings of critical non-conformance items, etc.

❹ The increase in the number of findings is attributed to on-site audits focused on ESG risk monitoring and inspection after the supplier training and support period until 2022.

❺ 2023 data was found to be under-counted as cases meeting both conditions of ❶ high-risk group and ❷ High Risk rating in self-assessment results, and has been corrected.

Social contributions and community engagement		Unit	2022	2023	2024
Social Contribution Expenses	Total	KRW 1M	21,725	16,884	20,236
	Charitable donations	KRW 1M	17,760	13,101	7,284
	Community investments	KRW 1M	3,852	3,730	12,910
	Commercial initiatives	KRW 1M	113	53	42
Employee volunteer hours	Hour	Hour	3,371	2,993	3,541

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Ethics, anti-corruption, and fair trade		Unit	2022	2023	2024
Corruption and bribery	No. of investigated cases	Case	14	13	5
	No. of handled cases	Case	4	3	2
Unfair trade practices	No. of legal investigations	Case	-	-	-
	No. of legal actions	Case	-	-	-
Ethics training	No. of employees participating in ethics training ❶	People	15,159	15,068	14,163
	No. of employees participating in fair trade training ❷	People	15,191	15,298	16,094

❶ Includes contents on Jeong-Do management and the Code of Ethics.

❷ Includes contents related to subcontractors and compliance.

Information security and cybersecurity		Unit	2022	2023	2024
ISO 27001	Certified business sites	Site	16	16	15
Information security training	Awareness raising activities	Campaign	12	12	12
	Average training hours per employee	Minute / Person	30	10	6

Public policy and regulation		Unit	2022	2023	2024
Contributions to trade associations ❶		KRW 1M	2,497	3,076	3,701
Contributions to political campaigns ❷		KRW 1M	-	-	-

❶ In 2024, contributions have been made to the following top 5 organizations:

- Korea Enterprises Federation (KEF): 840,000 (KRW 1K)
- World Economic Forum (WEF): 469,605 (KRW 1K)
- Korea Employers Federation: 345,846 (KRW 1K)
- Korea Vinyl Environmental Council (KOVEC): 208,000 (KRW 1K)
- Korea Chemical Industry Association (formerly Korea Petrochemical Industry Association): 178,747 (KRW 1K)

❷ The Political Funds Act prohibits companies from sponsoring political organizations.

Tax reporting		Unit	2022	2023	2024
Reported taxes ❶	Total	KRW 1M	641,482	432,501	61,035
	Korea	KRW 1M	747,539	5,387	- 166,784
	Asia (excl. Korea)	KRW 1M	389,245	424,168	332,078
	Europe	KRW 1M	186,016	66,978	- 83,025
	Americas	KRW 1M	4,141	20,589	- 39,669
	Other	KRW 1M	247	642	2,430
	Consolidated adjustments	KRW 1M	-685,706	-85,264	16,005
Cash payment of corporate tax		KRW 1M	1,707,449	1,348,461	659,998

❶ Based on the consolidated financial statements of FY 2024.

Customer satisfaction		Unit	2022	2023	2024 ❷
Customer satisfaction survey	Scope ❶	%	100	100	-
	Score	Score	79	84	-

❶ Refers to the percentage of business divisions that have conducted customer satisfaction surveys.

❷ Customer satisfaction surveys were not conducted in 2024, but are planned to resume in the second half of 2025 after review.

Economic performances		Unit	2022	2023	2024
Revenues ❶	Total	KRW 1M	50,983,251	55,249,785	48,916,104
	Petrochemicals	KRW 1M	21,151,355	17,208,803	18,619,494
	Advanced Materials	KRW 1M	2,538,394	2,441,790	2,657,248
	Life Sciences	KRW 1M	849,289	1,128,075	1,269,051
	LG Energy Solution	KRW 1M	25,586,365	33,667,228	25,609,482
	Common and others	KRW 1M	857,848	803,889	760,829
Revenue excluding LG Energy Solution, and Common and others ❷		KRW 1M	24,539,038	20,778,668	22,545,793
R&D expenses	Total	KRW 1M	869,634	1,007,779	1,059,290
	Sustainable technology and product ❸	KRW 1M	143,604	178,401	170,249

❶ Based on the consolidated financial statements of FY 2024.

❷ Represents simple deductions of revenues of LG Energy Solution and Common and others from the total. Common and others includes revenue from FarmHannong. This figure has been used to calculate the intensity of environmental performance data. For details, please refer to the notes in the consolidated financial statements.

❸ Includes expenses for projects in the areas of bio materials, recycling, and Net-Zero.

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GRI 205	205-3	Confirmed incidents of corruption and actions taken	p.108	
GRI 206	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	-	Business Report-XI.-3.
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GRI 303	303-4	Water discharge	p.104	
GRI 303	303-5	Water consumption	p.104	
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		Description	Location	Notes
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GRI 407	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	p.88	
GRI 408	408-1	Operations and suppliers at significant risk for incidents of child labor	p.83, 107, 120-125	
GRI 409	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	p.83, 107, 120-125	
GRI 413	413-1	Operations with local community engagement, impact assessments, and development programs	p.95-100	
GRI 413	413-2	Operations with significant actual and potential negative impacts on local communities	p.95-100	
GRI 414	414-1	Operations with significant actual and potential negative impacts on local communities	p.82, 120-125	
GRI 414	414-2	Negative social impacts in the supply chain and actions taken	p.82-85, 107	
GRI 415	415-1	Political contributions	p.108	
GRI 416	416-1	Assessment of the health and safety impacts of product and service categories	p.77	
GRI 416	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	-	Business Report-XI-3.
GRI 417	417-1	Requirements for product and service information and labeling	-	Company website
GRI 417	417-2	Incidents of non-compliance concerning product and service information and labeling	-	Business Report-XI-3.
GRI 417	417-3	Incidents of non-compliance concerning marketing communications	-	Business Report-XI-3.

# SASB INDEX

SASB INDEX

Topic	Code	Accounting metric	Disclosures
Greenhouse Gas Emissions	RT-CH-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	5,653,173 tCO <sub>2</sub> e, 97% (emissions in Korea subject to K-ETS relative to global Scope 1 emissions)
	RT-CH-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	p.25, 49-51, 53-55
Air Quality	RT-CH-120a.1	Air emissions of the following pollutants: (1) NO <sub>x</sub> (excluding N <sub>2</sub> O), (2) SO <sub>x</sub> , (3) Volatile organic compounds (VOCs), (4) Hazardous air pollutants (HAPs)	(1) 3,100 tons (2) 152 tons (3) 134 tons (4) 95 tons
Energy Management	RT-CH-130a.1	(1) Total energy consumed (2) Percentage grid electricity (3) Percentage renewable (4) Total self-generated energy	(1) 143,863 TJ (2) Korea 13%, overseas 57% (3) Korea 3%, overseas 44% (4) 4.8 MWh ❶
Water Management	RT-CH-140a.1	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	(1) 4,296,966m3, 5.95% (Percentage of water withdrawn from regions with water stress) (2) 2,381,370 m3, 4.74% (Percentage of water consumption from regions with water stress)
	RT-CH-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	4
	RT-CH-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	Drought caused by climate change is intensifying water shortage. Based on close cooperation with local governments related to water resources, LG Chem manages water withdrawal and usage at all business sites including Water-Stress regions, and strives to optimize water usage by expanding water reuse rates.
Hazardous Waste Management	RT-CH-150a.1	Amount of hazardous waste generated, percentage recycled	(1) 139,671 tons (2) 92% (incl. incineration w/ heat recovery), 68% (excl. incineration w/ heat recovery)
Community Relations	RT-CH-210a.1	Discussion of engagement processes to manage risks and opportunities associated with community interests	p.14-15, 95-100

❶ As of 2024, the company owns a total of 4.8 MW of self-consumption solar power generation facilities (1.9 MW in Korea, 2.9 MW overseas), calculated based on design capacity.

Topic	Code	Accounting metric	Disclosures
All employees (workforce) Health and safety employees (workforce) Workforce Health & Safety	RT-CH-320a.1	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	(a) (1) 0.4404 (2) 0 (b) (1) 0.6240 (2) 0
	RT-CH-320a.2	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	p.74
Product Design for Use-phase Efficiency	RT-CH-410a.1	Revenue from products designed for use-phase resource efficiency	17% (Excluding revenues from LG Energy Solution, and Common and others)
Safety & Environmental Stewardship of Chemicals	RT-CH-410b.1	(1) Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances, (2) percentage of such products that have undergone a hazard assessment	(1) 32.19% (2) 74.11%
	RT-CH-410b.2	(1) Discussion of strategy to manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact	p.77
Genetically Modified Organisms	RT-CH-410c.1	Percentage of products by revenue that contain genetically modified organisms (GMOs)	N/A
Management of the Legal & Regulatory Environment	RT-CH-530a.1	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	LG Chem participates in policy proposals through its local public affairs networks at home and overseas and continuously monitor new legislation and regulations that may affect its global business. LG Chem also participates in the activities of industry associations that represent its business areas and collaborates with various stakeholders by engaging in professional networking activities like external seminars, forums, and conferences. LG Chem secures incentives related to major investments and conduct policy support activities.
Operational Safety, Emergency Preparedness & Response	RT-CH-540a.1	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	Number of Process Safety Events (PSE): 0 Process Safety Event Rate (PSER): 0
	RT-CH-540a.2	Number of transport incidents	0



# TCFD INDEX

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# TCFD INDEX

Category	Recommendations	Location
Governance	a. Describe the board's oversight of climate-related risks and opportunities.	p.22, 30, 33
	b. Describe management's role in assessing and managing climate-related risks and opportunities.	p.22, 34
Strategy	a. Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	p.17-21
	b. Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	p.17-21, 23, 50-51
	c. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	p.17-21, 50-56
Risk Management	a. Describe the organization's processes for identifying and assessing climate-related risks.	p.20
	b. Describe the organization's processes for managing climate-related risks.	p.50-51
	c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	p.30-34, 50-52
Metrics and Targets	a. Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	p.25
	b. Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	p.20-21, 103
	c. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	p.25

# ASSURANCE STATEMENT

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LRQA INDEPENDENT ASSURANCE STATEMENT



RELATING TO LG CHEM'S 2024 SUSTAINABILITY REPORT

This assurance statement has been prepared for the readers of LG Chem's sustainability report and was prepared in accordance with a mutual contract with LG Chem.

VERIFICATION STANDARDS AND SCOPE

Lloyd's Register Quality Assurance (LRQA) has received a request from LG Chem to provide independent verification of the LG Chem Sustainability Report 2024 (hereinafter "the report"). This verification was performed based on LG Chem's data management procedures using ISAE 3000 and ISAE 3410, with limited assurance level and the materiality of professional judgment as criteria.

The verification scope included the evaluation of accuracy and reliability of ESG performance data and information contained on CHAPTER 3 PERFORMANCE DATA of the report regarding LG Chem's domestic and overseas business site operations and activities from January 1, 2024 to December 31, 2024.

Data and information regarding LG Chem's suppliers, contractors, and other third parties were excluded from the verification scope.

LRQA's responsibility is limited only to LG Chem. LRQA does not assume any obligation or responsibility to other persons or organizations as explained in the final footnote. The responsibility for collecting, aggregating, analyzing and presenting all data and information within the report and maintaining effective internal controls over the report publishing system lies with LG Chem. Ultimately, the report has been approved by LG Chem and remains LG Chem's responsibility.

LRQA'S OPINION

Based on LRQA's approach, all errors found during the verification process have been corrected, and no matters have been found that would lead us to suspect that LG Chem has not disclosed accurate and reliable performance data and information.

This opinion is based on limited assurance level verification and is derived based on the professional judgment of the verification auditors as a materiality criterion.

**Note:** The scope of evidence gathering in limited assurance level verification is narrower than that of reasonable assurance level verification. Limited assurance level verification focuses on aggregated data rather than directly checking raw data at business sites. Consequently, limited assurance level verification has a significantly lower level of assurance than reasonable assurance level verification.

LRQA'S APPROACH

LRQA's verification is performed in accordance with LRQA's verification procedures. The following activities were performed as part of evidence gathering for this verification:

- LRQA audited LG Chem's data management systems to confirm that there were no significant errors, omissions or misstatements in the report. For this purpose, LRQA reviewed the effectiveness of data processing procedures, guidelines and systems, including internal verification. LRQA also interviewed key personnel responsible for aggregating and editing data and drafting the report.

① Energy consumption, direct and energy indirect greenhouse gas emissions of overseas business sites were excluded from the verification scope.

- LRQA confirmed that domestic direct (Scope 1) and indirect (Scope 2) greenhouse gas emissions and energy consumption data were consistent with results verified by other third parties.
- Other indirect (Scope 3) greenhouse gas emissions were verified under a separate contract with LRQA, and LRQA confirmed that the verification results were appropriately reflected.
- LRQA confirmed that financial data was consistent with the financial statements.
- LRQA visited the headquarters in Seoul and reviewed additional evidence provided by LG Chem.

LRQA'S STANDARDS, COMPETENCE AND INDEPENDENCE

LRQA implements and maintains a comprehensive management system that meets the accreditation requirements of ISO 14065 (Greenhouse gases - Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition) and ISO/IEC 17021 (Conformity assessment - Requirements for bodies providing audit and certification of management systems), and complies with the requirements of International Standard on Quality Control 1 (ISQC1) and the Code of Ethics for Professional Accountants of the International Ethics Standards Board for Accountants (IESBA).

LRQA ensures the selection of appropriately qualified verification auditors based on qualifications, training and experience. To ensure that the applied approach is strictly followed and transparent, the results of all verification and certification assessments are reviewed internally by management.

LRQA is the certification body for LG Chem's ISO 9001, ISO 14001, ISO 37001, and ISO 37301. Additionally, LRQA provides LG Chem with various training related to management systems. LRQA only provides verification and certification assessment, and training services to LG Chem, which does not compromise independence or impartiality.

Tae-Kyoung Kim  
Lead Verifier  
On behalf of LRQA  
2nd Floor, T Tower, 30, Sowol-ro 2-gil, Jung-gu, Seoul, Republic of Korea

Date: 23 June 2025

LRQA reference: SEO00000269

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LRQA INDEPENDENT ASSURANCE STATEMENT



RELATING TO LG CHEM'S 2024 GREENHOUSE GAS INVENTORY

This assurance statement has been prepared in accordance with a mutual contract with LG Chem.

VERIFICATION STANDARDS AND SCOPE

LRQA has received a request from LG Chem to provide independent verification of the 2024 greenhouse gas inventory (hereinafter "the report"). This verification was performed with limited assurance level and 5% materiality criteria, utilizing the verification procedures of ISO 14064-3:2019 Specification with guidance for the verification and validation of greenhouse gas statements according to the verification standards below.

The verification scope included LG Chem's domestic operations and activities, specifically including the following requirements:

- Compliance assessment of GHG Protocol, Corporate Value Chain (Scope 3) Accounting and Reporting Standard<sup>1</sup>
- Assessment of accuracy and reliability of data and information on other indirect greenhouse gas emissions (Scope 3)

LG Chem's main activities are the manufacture of petrochemical products and raw materials, battery materials, pharmaceuticals, etc., and greenhouse gas emissions were consolidated using the operational control approach.

LRQA's responsibility is limited only to LG Chem. LRQA does not assume any obligation or responsibility to other persons or organizations as explained in the final footnote. The responsibility for collecting, aggregating, analyzing and presenting the reporting data and information, and maintaining effective internal controls over the reporting system lies with LG Chem. Ultimately, the report has been approved by LG Chem and remains LG Chem's responsibility.

LRQA'S OPINION

Based on LRQA's approach, no matters have been found in all material aspects that would lead us to suspect that LG Chem has not implemented the following:

- Satisfaction of the above requirements
- Accuracy and reliability of data and information summarized in Table 1

This opinion is based on limited assurance level verification and was derived with a 5% materiality criterion.

**Note:** The scope of evidence gathering in limited assurance level verification is smaller than that of reasonable assurance level verification. Limited assurance level verification focuses on aggregated data rather than directly checking raw data at business sites. Consequently, limited assurance level verification has a significantly lower level of assurance than reasonable assurance level verification.

LRQA'S APPROACH

LRQA's verification is performed in accordance with LRQA's verification procedures. The following activities were performed as part of evidence gathering for this verification:

- LRQA interviewed key personnel responsible for greenhouse gas emission data and record management.
- LRQA reviewed whether the parameters used in greenhouse gas emission calculations were referenced from recognized sources.
- LRQA verified the 2024 greenhouse gas emission data and records at the aggregated level.
- LRQA visited LG Chem's headquarters and reviewed additional evidence provided by LG Chem.

LRQA'S STANDARDS, COMPETENCE AND INDEPENDENCE

LRQA implements and maintains a comprehensive management system that meets the accreditation requirements of ISO 14065 (Greenhouse gases - Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition) and ISO/IEC 17021 (Conformity assessment - Requirements for bodies providing audit and certification of management systems), and complies with the requirements of International Standard on Quality Control 1 (ISQC1: International Standard on Quality Control 1) and the International Ethics Standards Board for Accountants (IESBA: International Ethics Standards Board for Accountants) Code of Ethics for Professional Accountants.

LRQA ensures the selection of appropriately qualified verification auditors based on qualifications, training and experience. To ensure that the applied approach is strictly followed and transparent, the results of all verification and certification assessments are reviewed internally by management.

LRQA is the certification body for LG Chem's ISO 9001, ISO 14001, ISO 37001, and ISO 37301. Additionally, LRQA provides LG Chem with various training related to management systems. LRQA only provides verification and certification assessment, and training services to LG Chem, which does not compromise independence or impartiality.

Tae-Kyoung Kim  
Lead Verifier  
On behalf of LRQA  
2nd Floor, T Tower, 30, Sowol-ro 2-gil, Jung-gu, Seoul, Republic of Korea

Date: 23 June 2025

LRQA reference: SEO00001951

<sup>1</sup> <https://www.ghgprotocol.org>

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Table 1. Summary of LG Chem's Scope 3 Greenhouse Gas Emissions for 2024	
Greenhouse Gas Emission Reporting Scope	tCO <sub>2</sub> e
Other Indirect Greenhouse Gas Emissions (Scope 3)	19,382,867
Purchased goods and services – Raw materials purchased at domestic business sites	14,143,583
Capital goods – Tangible assets acquired at domestic business sites	162,883
Fuel and energy related activities – Upstream of fuel, electricity and steam purchased at domestic business sites	339,324
Upstream transportation and distribution – Transportation of raw materials purchased at domestic business sites	637,713
Waste generated in operations – Treatment of waste generated from domestic business site operations	131,531
Business travel – Domestic and international business trips by domestic employees	4,330
Employee commuting – Commuting of domestic employees	10,307
Downstream transportation and distribution – Export of products produced at domestic business sites	677,368
Use of sold products – Use of fuel products	596,749
End-of-life treatment of sold products – End-of-life treatment of non-fuel products	2,435,063
Investments – Companies in which LG Chem holds equity stakes	244,016

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- SUPPLY CHAIN STRATEGY &  
KEY ACTIVITIES
- CERTIFICATION  
IMPLEMENTATION &  
EXTERNAL VERIFICATION

# RESPONSIBLE MINERALS REPORT



# SUPPLY CHAIN STRATEGY & KEY ACTIVITIES

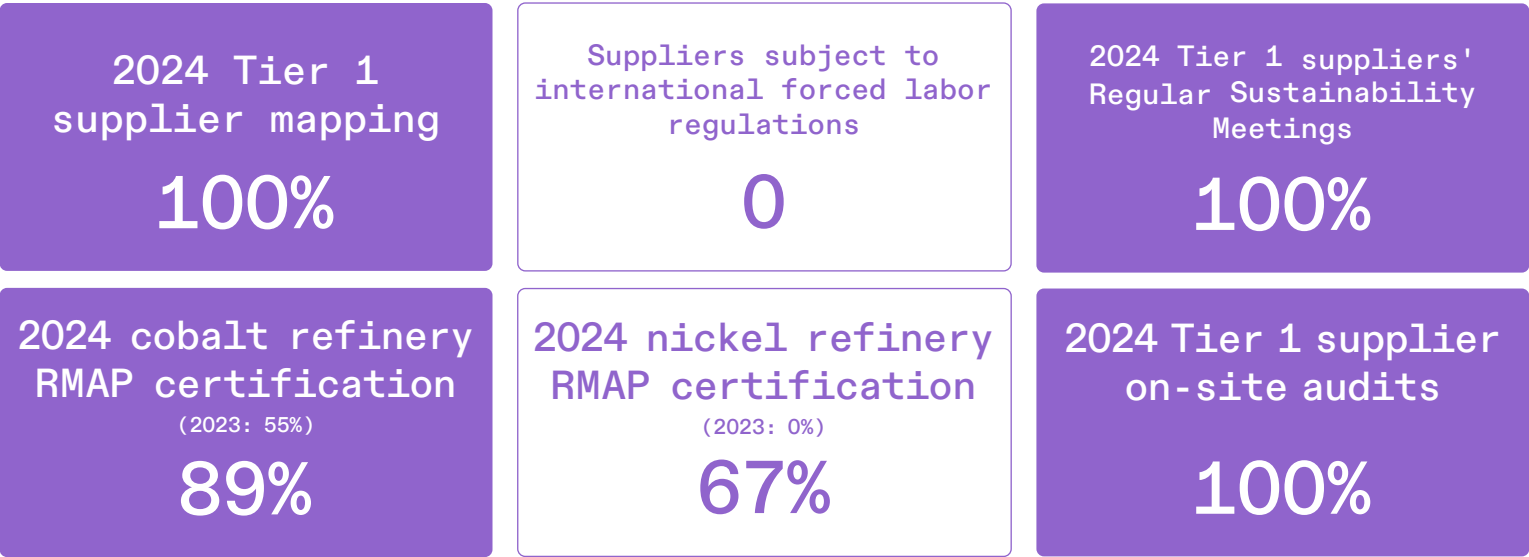
## CERTIFICATION IMPLEMENTATION & EXTERNAL VERIFICATION

### IMPORTANCE AND NECESSITY OF SUPPLY CHAIN MANAGEMENT

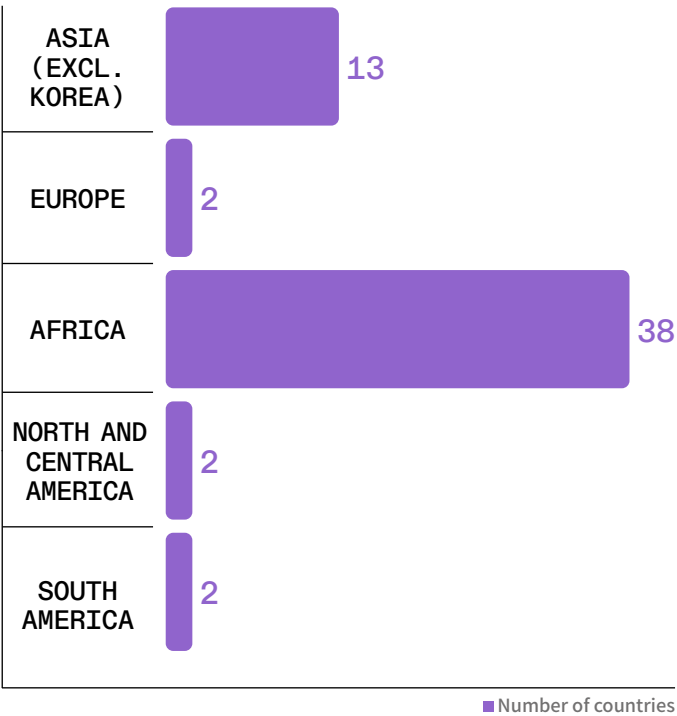
With rapidly strengthening global regulations, including EU battery regulations and European and US forced labor prevention regulations, corporate supply chain due diligence is transforming from an ethical task to a legal obligation. Amid these changes, the level of requirements from the international community, including customers and NGOs, is also rising. LG Chem actively responds to this and aims to lead responsible mineral procurement and systematic supply chain management.

LG Chem aims to meet legal requirements while contributing to the creation of an industrial ecosystem for a sustainable future. To this end, LG Chem is actively introducing a 5-step framework based on the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-risk Areas, and is proactively conducting risk management and due diligence activities. Beyond establishing transparent supply chains, LG Chem continues to implement practices to proactively lead the formation of sustainable industrial ecosystems.

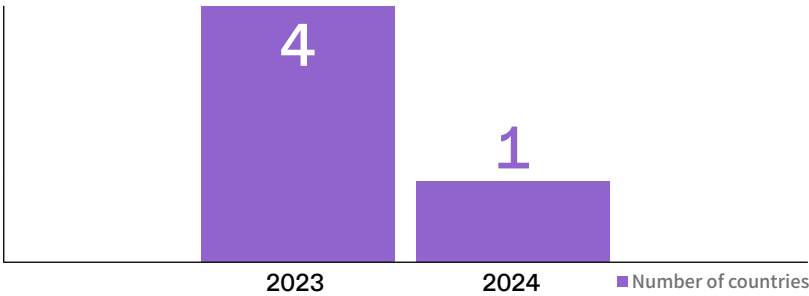
### GOALS AND PERFORMANCE



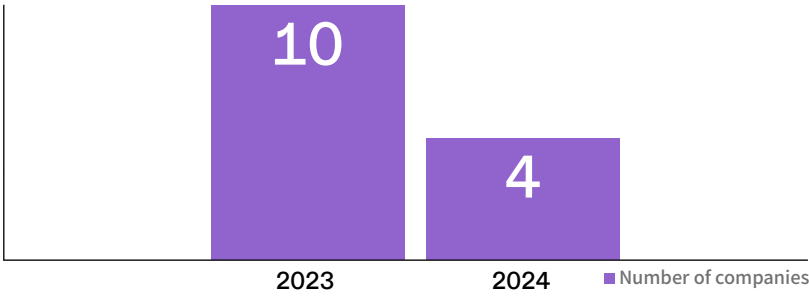
Total 57 countries identified as CAHRA in 2024



Countries with CAHRA in supply chain



Companies identified as high-risk due to CAHRA location in supply chain



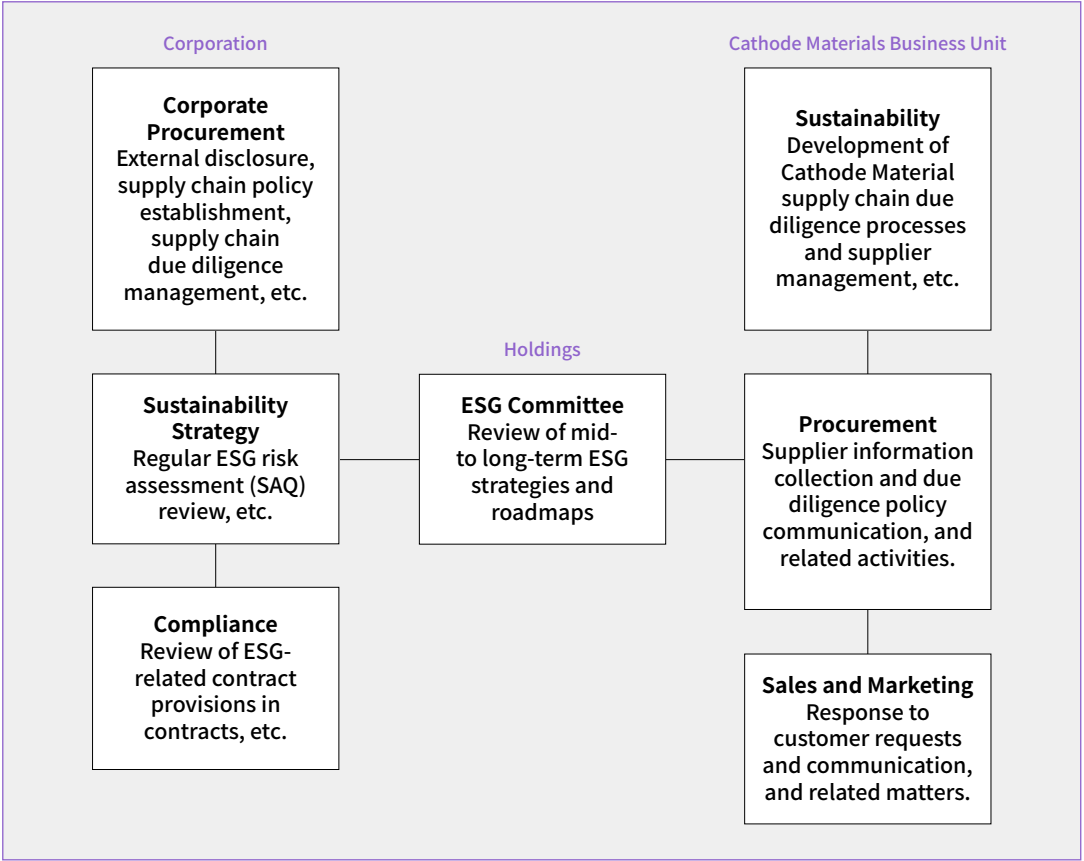
- SUPPLY CHAIN STRATEGY & KEY ACTIVITIES
- CERTIFICATION IMPLEMENTATION & EXTERNAL VERIFICATION

# SUPPLY CHAIN STRATEGY & KEY ACTIVITIES

The main raw materials used in LG Chem’s production of battery materials (Cathode Materials) include cobalt, nickel, and lithium, which are designated and managed as key minerals of concern. With the EU Battery Regulation that took effect in August 2023 calling for the designation of cobalt, nickel, lithium, and natural graphite as minerals subject to mandatory supply chain due diligence, LG Chem is focusing more on building stable supply chains for these minerals and compliance through due diligence.

## INTERNAL SYSTEM DEVELOPMENT

Organizational Structure  
LG Chem is building systematic governance through inter-departmental cooperation for responsible mineral procurement and supply chain risk management. In particular, to strengthen the sustainability of the Cathode Material supply chain, LG Chem has assigned a key role to the Cathode Materials Business Unit of the Advanced Materials Business Division and is establishing and implementing various due diligence tools and processes. LG Chem is also expanding and deploying supply chain due diligence through communication with suppliers.



Based on the governance system established as above, each department of LG Chem performs clear roles and cooperates organically for sustainable supply chain management.

SUPPLY CHAIN STRATEGY & KEY ACTIVITIES

CERTIFICATION IMPLEMENTATION & EXTERNAL VERIFICATION

Responsible Sourcing Policy

LG Chem strives to prevent and resolve various issues that may arise in the supply chain, including human rights, labor, environment, safety and health, and ethics. The company actively responds to human rights violations and environmental destruction issues that may arise during mineral mining processes. To this end, LG Chem complies with the due diligence guidelines for responsible business conduct and due diligence guidelines for responsible supply chains of minerals from conflict areas presented by the OECD, and applies consistent due diligence policies and frameworks across the entire supply chain.

ESG Training for Internal Employees

LG Chem conducts sustainable management and responsible supply chain training to enhance employees' ESG awareness and understanding of the importance of supply chain ESG risk management. As of 2024, approximately 202 people (81% of procurement organization employees) participated in training on the importance of ESG management and regulatory trends, responsible supply chains, and responsible mineral due diligence.

Dissemination of Supplier Code of Conduct

LG Chem is committed to working collaboratively with its suppliers to address social and environmental challenges while advancing a sustainable supply chain. Accordingly, LG Chem has established [Supplier Code of Conduct](#) based on global standards such as the RBA (Responsible Business Alliance) Code of Conduct, UN Guiding Principles on Business and Human Rights (UNGPR), and OECD Guidelines for Multinational Enterprises. This code, revised in January 2025, reflects the latest requirements from CSDDD and European Battery Regulation (EUBR).

Preparation of Human Rights and Labor Law Compliance Confirmation

For transparent and ethical supply chain management, LG Chem joined the UNGC (UN Global Compact) in 2014 and conducts business activities according to the UNGC's 10 principles, including human rights and labor standards. The company also requires suppliers to comply with human rights and labor laws to extend the principles of international standards and domestic and foreign legal compliance throughout the entire supply chain. Accordingly, suppliers pledge to uphold the human rights and dignity of all workers and not to be directly or indirectly involved in human rights violations such as forced labor and child labor.

Operation of Supplier Grievance Management System

Based on the UN Guiding Principles on Business and Human Rights (UNGPR), LG Chem has been operating a grievance management system since October 2023 where issues such as human rights violations, working environment, safety and health, environment, and ethics and compliance within the supply chain can be reported. Through this system, all supplier employees within the supply chain can report various issues through the supplier grievance window on the official website. Reported cases are investigated by the assigned responsible department. When the investigation is completed, the final results are communicated to the whistleblower. Throughout all processes, LG Chem thoroughly guarantees the anonymity and confidentiality of whistleblowers and maintains strict oversight to prevent any form of retaliation or disadvantage.

Establishment of Cathode Material Supply Chain Due Diligence Process

LG Chem's Cathode Materials Business Unit has established a due diligence process to proactively identify, prevent, and mitigate risks inherent in responsible mineral supply chains such as cobalt, nickel, and lithium. The due diligence process is managed based on the risk list defined in OECD's Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas Annex II and EU Battery Regulation Annex X.

SUPPLY CHAIN STRATEGY & KEY ACTIVITIES

CERTIFICATION IMPLEMENTATION & EXTERNAL VERIFICATION

RISK IDENTIFICATION AND ASSESSMENT

Regular Supply Chain Mapping

Supply chain mapping for responsible minerals, which are the main raw materials of Cathode Materials, is a fundamental step in securing supply chain transparency. LG Chem regularly updates supply chain information for Ni (nickel), Co (cobalt), and Li (lithium) using its own format and collects baseline data to identify potential risks.

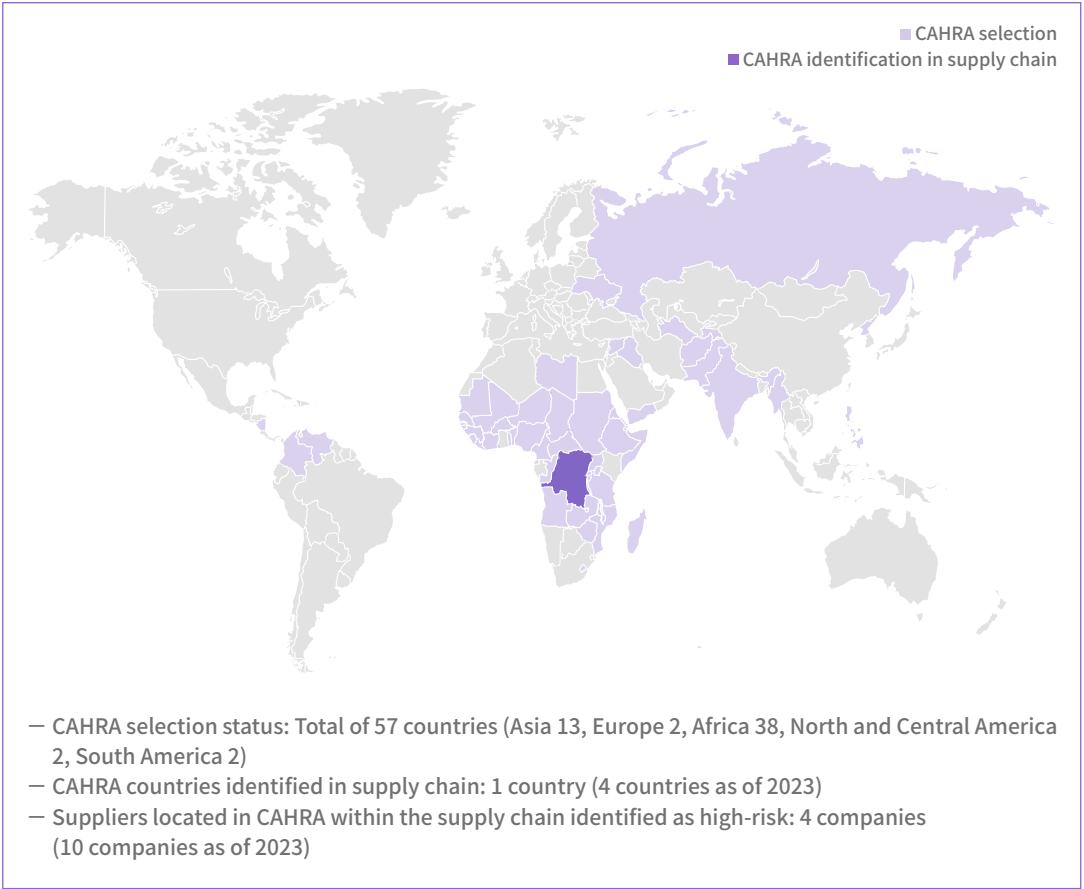
- Mapping response rate: 100%
- Suppliers subject to international forced labor regulations: None

Identification of CAHRA and High-Risk Groups in Supply Chain

CAHRA (Conflict Affected and High-risk Areas) refers to regions where high-risk factors such as armed conflict, violence, political instability, and human rights violations exist. LG Chem precisely filters suppliers in CAHRA regions based on credible indicators such as the EU CAHRA list, countries subject to Dodd-Frank Act regulations, and HDI (Human Development Index). Using the supply chain mapping data collected this way, LG Chem identifies companies located in CAHRA regions found in the origin of raw materials or trade routes as high-risk groups.

For companies identified as high-risk groups, LG Chem carefully verifies their risk management level and whether they have official certifications such as RMI (Responsible Minerals Initiative). If management levels are deemed insufficient during this process, the company minimizes risks through continuous improvement requests and evidence-based verification. This operates as an essential procedure in responsible mineral procurement and management and contributes to strengthening management systems to meet global standards.

CAHRA Identification Status



LG Chem continuously requires suppliers to comply with responsible mineral procurement policies and use globally certified refineries and smelters. High-risk companies numbered 10 as of 2023, but decreased to 4 in 2024, and all of them were confirmed to be companies that have obtained official certifications. Even for certified companies, LG Chem requires assurance of certification validity and continuous risk management. Supply chain due diligence information is collected through various channels such as supplier websites, due diligence reports, press releases, and reports from NGOs and academic institutions.

Request for Supplier ESG Self-Assessment

To identify risks in advance and build an effective response system, LG Chem annually requests ESG self-assessments (Self-Assessment Questionnaire, SAQ) from all company-wide Tier 1 suppliers. Through this, suppliers can self-check their compliance level with LG Chem's Supplier Code of Conduct, and the company can identify high-risk suppliers through result analysis.

SUPPLY CHAIN STRATEGY & KEY ACTIVITIES

CERTIFICATION IMPLEMENTATION & EXTERNAL VERIFICATION

RISK RESPONSE AND MITIGATION

Stipulation of Supply Chain ESG Risk Compliance Obligations in Contracts

Starting in 2024, LG Chem has added clauses to purchase contract forms with suppliers that mandate compliance with ESG-related laws, cooperation with LG Chem's ESG due diligence, and supply chain ESG management, which will be utilized when concluding new or renewed contracts. Based on these clauses, LG Chem aims to encourage suppliers' responsible supply chain management and ESG risk management.

Key Contents

- Compliance with domestic and international supply chain ESG laws
- Compliance with LG Chem Supplier Code of Conduct
- Cooperation with due diligence such as ESG audits
- ESG management including human rights and environmental due diligence by Tier 1 suppliers for sub-tier

Establishment of Risk Response Process

Global due diligence guidelines recommend establishing appropriate improvement plans when risks are identified within the supply chain and taking measures such as continuing, temporarily suspending, or terminating transactions based on improvement progress. LG Chem is also striving to establish a process that immediately requests fact confirmation and improvement plans from Tier 1 suppliers when risks occur, and determines whether to continue transactions through improvement verification.

Regular Sustainability Meetings with Suppliers

Close communication and cooperation with suppliers is essential for preventing and mitigating supply chain risks. LG Chem conducts regular meetings once every six months with Cathode Material Tier 1 suppliers handling responsible minerals, focusing on sustainability topics such as supply chain due diligence and carbon reduction. Additionally, LG Chem promotes continuous communication through various communication channels such as email and messaging. The company also conducts meetings with suppliers scheduled for mass production to check ESG response status in advance.

Regular Sustainability Meetings

- Sharing LG Chem's supply chain risk management strategies and ESG goals
- Information exchange on regulatory and industry trends, regulatory response training
- Requests for due diligence-related data or activities
- Risk identification and improvement assessment through ESG response status checks
- 2024 Tier 1 supplier coverage: 100%

ESG Training Support for Suppliers

LG Chem continuously provides educational support to suppliers for transparent and sustainable growth. The company requests suppliers to conduct ESG self-assessments (SAQ) and provide training on the importance and trends of ESG management and assessment items to help improve ESG awareness so that assessments can be conducted smoothly. In 2024, a total of 178 companies participated, and 234 people completed the training.

# CERTIFICATION IMPLEMENTATION & EXTERNAL VERIFICATION

## THIRD-PARTY GLOBAL CERTIFICATION RECOMMENDATION

LG Chem continuously tracks the status and validity of internationally recognized third-party certifications obtained by refineries, smelters, and mines identified through supply chain mapping. The company continuously recommends certification acquisition for uncertified suppliers and renewal for suppliers whose validity periods have expired. LG Chem aims to strengthen management standards for high-risk regions and minerals through global certification and continue responsible governance.

### Metal Supply Chain Supplier Official Recommendations

- RMAP (Responsible Minerals Assurance Process): For minerals with high child labor and conflict risks such as cobalt, LG Chem requests continuous improvement in refinery and smelter RMAP certification coverage
- Expansion of RMAP certification requests and certification rate management for Indonesian nickel supply chain management, where industry concerns have grown due to recent human rights and environmental risks

### Certification Types

Certification	Organization	Target	Contents
RMAP (Responsible Minerals Assurance Process)	RMI (Responsible Minerals Initiative)	Refineries Smelters	Prevent issues such as human rights violations, conflict involvement, and illegal financial flows linked to processed minerals by ensuring that internal systems are in place to manage these risks.
IRMA Assessment	IRMA (Initiative for Responsible Mining Assurance)	Mines	Assess risks of human rights violations, environmental destruction, and impacts on local communities throughout the entire lifecycle from mine development to closure.

\* The scope of recommended certifications may be expanded by reviewing the effectiveness and industry recognition of global certifications.

### Certification Rates

- 2024 cobalt refinery RMAP certification coverage: 89% (2023: 55%)
- 2024 nickel refinery RMAP certification coverage: 67% (2023: 0%)

LG Chem conducts ESG on-site audits through third-party organizations with qualified auditing personnel based on recognized standards to identify, assess, and improve potential risks within the Cathode Material supply chain. The audit standards are internationally recognized RBA standards that assess the management status and risks in labor, safety and health, environment, and ethics fields for each production site. LG Chem also checks RMAP key items to determine whether supply chain due diligence is being conducted.

### Company-Specific On-Site Audits

- First audit: Identify areas for improvement and high-risk areas based on audit standards.
- Suppliers submit improvement plans for any identified issues. Implementation is carried out once the plan is reviewed and approved as appropriate by a third-party organization.
- Second audit: Evidence verification of improvements after the improvement period agreed upon with suppliers has elapsed.

In 2024, LG Chem completed third-party ESG on-site audits for Tier 1 suppliers in mass production transactions, and plans to gradually expand the scope of audits in the future. Audits calculated scores according to the severity of identified risks. As a result, the average score per supplier improved by 32.5% in the second audit compared to the first. This is evaluated as a positive outcome considering that companies with already high ESG management levels had relatively little room for improvement and the actual improvement period was short. LG Chem will continue to closely manage the overall improvement status of suppliers and continuously strengthen risk response capabilities.

- Tier 1 supplier on-site audit coverage: 100%

LG Chem values input from all stakeholders. Please feel free to send questions, opinions, or suggestions about LG Chem’s sustainability report and performance at any time. LG Chem strives to provide better value through feedback from all stakeholders.

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- Corporate Governance Report** [↗](#)
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- LG Chem Compliance Guidelines** [↗](#)
- Responsible Sourcing Policy** [↗](#)
- Supplier Code of Conduct** [↗](#)
- Global Human Rights and Labor Policy** [↗](#)
- Win-Win Growth Report** [↗](#)
- 2024 LG Chem Social Contribution Introduction Material** [↗](#)
- LETZero Product Book** [↗](#)