

2024

LOTTE CHEMICAL ESG REPORT

EVERY STEP FOR GREEN

WE LEAD EVERY STEP FOR
A GREENER AND BETTER TOMORROW



INTERACTIVE PDF

This report is published in both Korea and English and is available in an interactive PDF format to facilitate effective communication with global stakeholders.

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Inquiries

LOTTE Chemical ESG Management Team
www.lottechem.com
esglottechem@lotte.net

ESG Report



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Overview

LOTTE Chemical has been publishing annual ESG Reports since 2007 to transparently share our sustainability management efforts and major achievements to the public and actively communicate with our stakeholders. In June 2025, we released our 18th report, titled the 2024 LOTTE Chemical ESG Report. We will continue to communicate our ESG management strategy and performance through the report, gather feedback from stakeholders, and reflect them in our management activities.

Reporting Period, Scope, and Boundaries

This report covers the period of January 1, 2024 through December 31, 2024, with some qualitative performances also including activities from the first half of 2025 to take into account the timeliness of information.

As for quantitative performance, the report includes data of the last three years to illustrate recent annual trends.

The main scope of the report is LOTTE Chemical's Seoul headquarters, Future Technology Institute, LOTTE Chemical R&D Center, Uiwang Office, Incheon Complex, Yeosu Complex (Basic Materials), Yeosu Complex (Advanced Materials), Ulsan Complex, Daesan Complex, and Daegu Water Treatment Plant. The activities and performances of subsidiaries are also included

in some categories. Any necessary information about the reporting scope and boundaries are provided in the footnotes.

Reporting Principles and Framework

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards 2021, which is a worldwide standard for publishing ESG reports. The report also takes into account the recommendation from the Task Force on Climate-related Financial Disclosure (TCFD) and the Sustainability Accounting Standards Board (SASB), particularly for the chemicals sector. The financial data presented in this report were prepared based on the Korean International Financial Reporting Standards (K-IFRS) using consolidated financial statements.

Data Assurance

This report is published after being reviewed by the ESG Committee under the Board of Directors of LOTTE Chemical. In addition, British Standards Institution (BSI), an independent verification agency, verified the reliability of the writing process, data, and contents to enhance the credibility of the report.

The third-party assurance statement is available in the Appendices section (p.152).

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June 2025
LOTTE Chemical CEO
Lee Young-jun

WE LEAD EVERY STEP FOR A GREENER AND BETTER TOMORROW

LOTTE CHEMICAL CREATES A BETTER WORLD AND SUSTAINABLE FUTURE THROUGH CHEMISTRY

Dear esteemed LOTTE Chemical stakeholders,

The year 2024 was marked by heightened uncertainty across the global business landscape, driven by rising geopolitical tensions, increasingly stringent regulations, and the growing tide of protectionism. The chemical industry, in particular, is faced with unprecedented challenges amid large-scale capacity expansions in China and bold capital investments from the Middle East. Despite such difficulties, LOTTE Chemical is actively pursuing new growth opportunities through business transformation, enhanced core competitiveness, synergy creation, expansion of future businesses, and strengthened R&D capabilities. At the same time, we remain steadfast in our commitment to building a sustainable future guided by our corporate vision of "Every Step for Green."

LOTTE Chemical will improve our corporate sustainability by strengthening a low-carbon business portfolio.

To join the global response to climate change, we are diligently advancing our carbon neutrality (net-zero) roadmap. Aligned with our long-term vision, we are reshaping our business portfolio to accelerate the development of sustainable businesses, while strategically allocating resources by phasing out high carbon, low-efficiency operations.

We will strive to achieve sustainable growth for both the company and society through our GREEN PROMISE 2030 strategy.

We have established a governance framework centered on our Board of Directors and top management, supported by various working-level councils that drive the implementation of our ESG strategy "GREEN PROMISE 2030" aligned with LOTTE Chemical's vision. Our efforts focus on the systematic management of key sustainability priorities in the chemical industry including carbon reduction, increased adoption of renewable energy, and promotion of a circular economy. In 2024, we also launched a company-wide ESG management system to provide more transparent and reliable data to our stakeholders.

We aim to maximize social value through shared growth and mutual success.

LOTTE Chemical recognizes the profound impact corporate activities have on the environment and society, and we are committed to achieving shared growth with all of our stakeholders. Guided by this responsibility, we strive to build business processes that benefit both people and the planet, foster mutual success with our partners, collaborate closely with local communities, and enhance customer satisfaction. We will continue to make investments in safety, our top priority, strengthen internal controls to uphold transparency and fair business management, and talent development.

Since our founding in 1976, LOTTE Chemical has continuously overcome challenges and crises through innovation and resilience. The mindset and momentum we have built over the years empower us to transform today's uncertainties into new opportunities to become a sustainable global leader. Thank you for your continued interest and warm support in our journey toward an innovative and sustainable future.



BUSINESS PORTFOLIO & VALUE-CHAIN

BUSINESS INTRODUCTION - VALUE CHAIN

LOTTE Chemical recorded approximately KRW 20.4304 trillion in revenues as of end-2024. Revenue by business division was comprised of 67.8% from Basic Chemicals, 26.8% from Advanced Materials, 8.2% from Fine Chemicals, and 4.4% from Battery Materials.

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BASIC CHEMICALS



BASIC CHEMICALS

LOTTE Chemical's Basic Chemicals Business, LOTTE Chemical Titan Holding Berhad (LC TITAN), LOTTE Chemical USA Corp. (LC USA), LOTTE-GS Chemical and 5 other subsidiary companies

The basic chemicals business involves the large-scale process industry that produces petrochemical products. We produce and sell basic chemicals such as ethylene, propylene, and xylene produced from naphtha cracking facilities, as well as monomer products such as polyethylene (PE) and polypropylene (PP). We also carry out research and development while exporting our products to China and various countries in Asia and Europe.

LOTTE Chemical has joint ventures with Hyundai Oil Bank and GS Energy and is sharpening our competitiveness through a new cracking business in Indonesia. We are also expanding our eco-friendly/specialty chemicals business that include organic solvents for batteries, the membrane material business, and hydrogen energy business.

ADVANCED MATERIALS

LOTTE Chemical's Advanced Materials Business, LOTTE Engineering Plastic, LOTTE Chemical Hungary Ltd., and 14 other subsidiary companies

Advanced materials is a capital and technology intensive industry that creates added value by offering additional functionality such as high heat resistance/rigidity/shock resistance to meet the demands of consumer goods (home appliances, IT, automotive, etc.) manufacturers. Leveraging, SM, BD, and MMA feedstock, LOTTE Chemical produces and sells ABS, PC, and construction materials, while also conducting related R&D activities. With business sites across the globe such as in China, Mexico, Hungary, and Vietnam, we offer various products that tailor to the needs of global end consumers. We are also expanding our portfolio of specialty materials for home appliances, IT, and automotive applications, with the vision of becoming a world-class leader in the global specialty materials industry.



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ADVANCED MATERIALS



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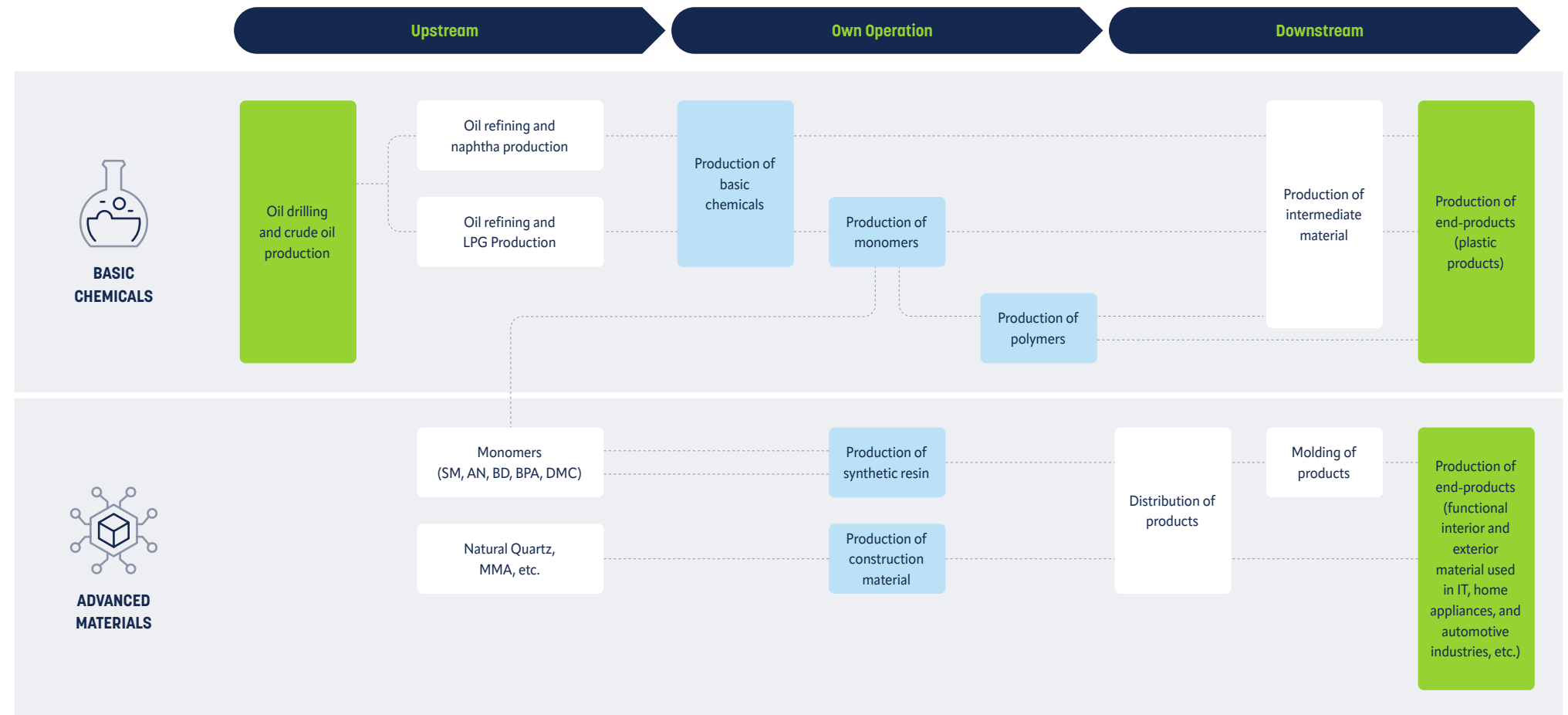
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Business Value Chain (Basic Chemicals, Advanced Materials)

LOTTE Chemical provides chemical products and advanced material solutions with a diverse product portfolio that ranges from common household products such as synthetic resin, basic petrochemicals, base chemicals, and construction/interior design material to applications for agriculture, industry, healthcare, automotive vehicles, and cutting-edge new materials. We are also continuously expanding to the hydrogen energy business, fine chemicals, and battery materials to secure sustainable growth engines.





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FINE CHEMICAL

LOTTE Fine Chemical

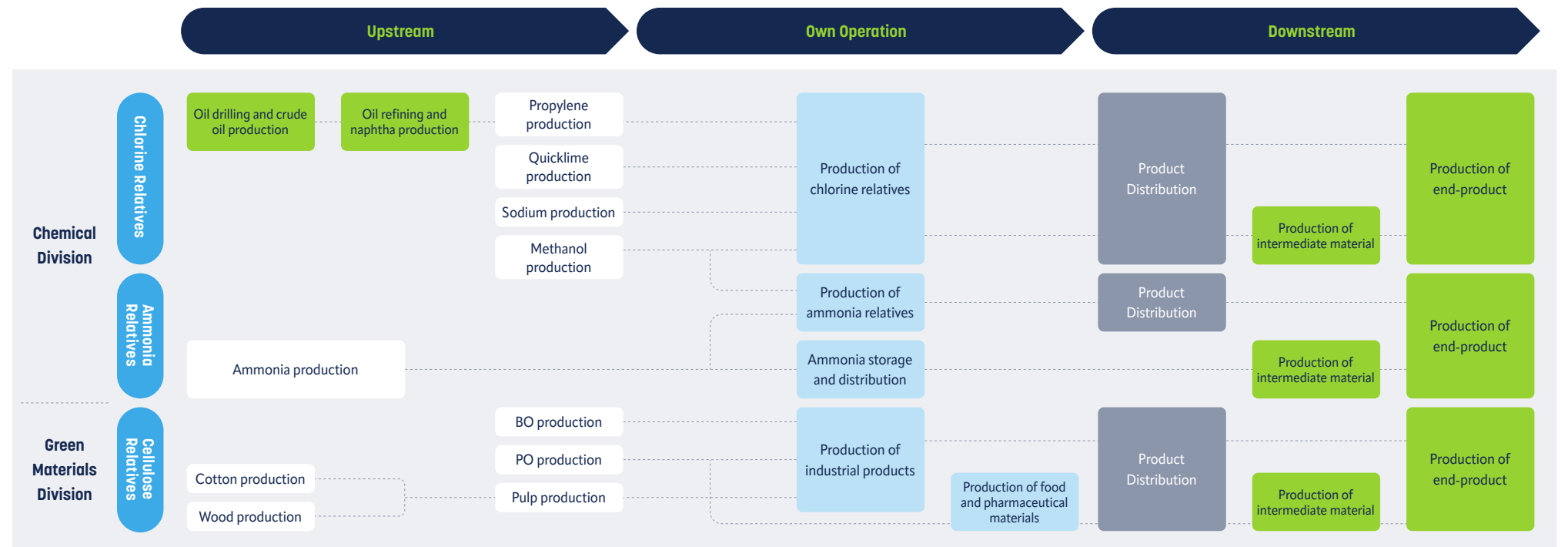
LOTTE Fine Chemical sells chlorine relatives, ammonia relatives, cellulose relatives, and related products. Among chlorine relatives, ECH is used as a feedstock resin for waterproof and anticorrosive paints while caustic soda is used as a basic material for various chemical products including textile, pharmaceuticals, paper, and surfactants. As for ammonia products under the ammonia relative category, widely-used applications include fertilizers, synthetic textiles, and ABS resin. LOTTE Fine Chemical currently operates the largest ammonia storage facility in Korea.

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FINE CHEMICALS



Business Value Chain (Fine Chemical)





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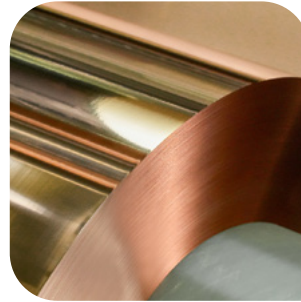
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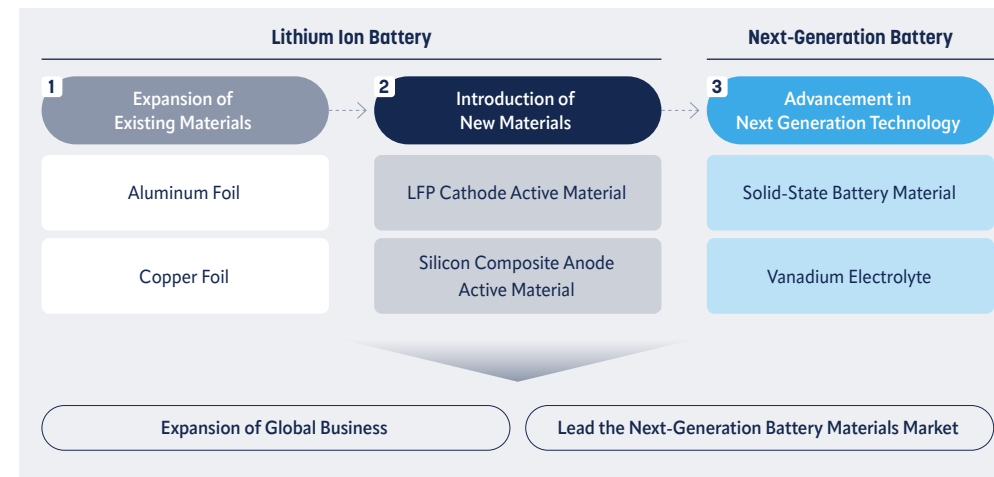
BATTERY MATERIALS



BATTERY MATERIALS

LOTTE Energy Materials,
LOTTE Battery Materials USA Corporation (LBM)

LOTTE Chemical has positioned the battery materials business as a key pillar for mid-to-long-term growth, guided by a phased roadmap aligned with evolving market dynamics. Our objective is to achieve KRW 3 trillion in revenue by 2030 by responding flexibly to shifts in industry trends. To this end, we are progressively establishing global production bases for aluminum foil and copper foil, while also building an integrated local supply chain network. In parallel, we are actively exploring joint development projects and strategic partnerships with leading Korean and international technology firms known for their cutting-edge battery material technology to address advanced trends in lithium-ion batteries and its next-generation technologies. We are also involved in technology developments and open innovation with various startups regarding next-generation battery material technologies applied to solid-state and vanadium-ion batteries to secure a leading position in the global battery materials market.



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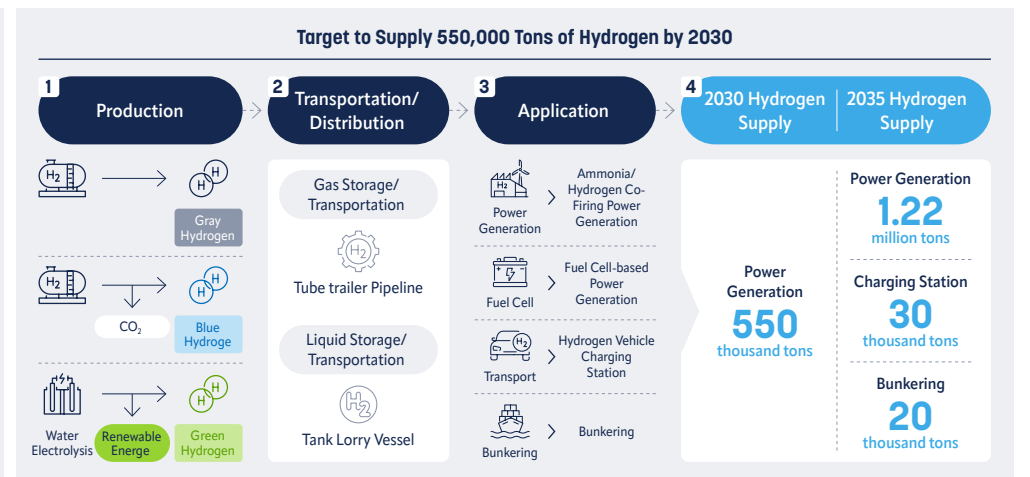
HYDROGEN ENERGY



HYDROGEN ENERGY BUSINESS

LOTTE SK Eneroot, LOTTE-Air Liquide Ener'Hy,
LOTTE Fine Chemical

LOTTE Chemical aims to seize business opportunities in responding to ESG trends by laying a foundation for future growth through leadership in the hydrogen market. Hydrogen energy is essential for expanding a carbon neutrality and eco-friendly energy market and a key factor in creating a shift in the energy paradigm. To this end, we plan to supply 550,000 tons of hydrogen by 2030 and 1.27 million tons by 2035 for various applications, while also developing infrastructure across the hydrogen value chain including hydrogen delivery centers and charging stations. Based on cumulative investments of KRW 1 trillion in diverse projects, our goal is to achieve KRW 3 trillion in revenues by 2030. In the longer-term, we aim to reach KRW 7 trillion in revenues by 2035 through business expansion supported by investments totaling KRW 3 trillion.





GLOBAL NETWORK

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Our network goes beyond Korea and spans across the globe including the Americas, Europe, China, and Southeast and Southwest Asia. This extensive business network allows us to improve our production efficiency, strengthen our strategic positions, and establish global partnerships to increase our corporate value.

● Corporation ● Branch

DOMESTIC

1. Seoul Headquarters
2. Future Technology Research Institute
3. LOTTE Chemical R&D Center
4. Uiwang Office
5. Incheon Complex
6. Daesan Complex
7. Daegu Water Treatment Plant
8. Ulsan Complex
9. Yeosu Complex (Basic Materials)
10. Yeosu Complex (Advanced Materials)

OVERSEAS

1. **United States** - La Palma, San Diego, Detroit, Alabama, Louisiana
2. **Mexico** - Tijuana
3. **Peru** - Lima
4. **Nigeria** - Lagos
5. **Germany** - Frankfurt
6. **Italy** - Milano
7. **Hungary** - Tatabanya
8. **Slovakia** - Bratislava
9. **Türkiye** - Manisa, Istanbul
10. **Russia** - Moscow
11. **UAE** - Dubai
12. **Uzbekistan** - Surgil
13. **Pakistan** - Karachi
14. **India** - Mumbai, Chennai, Gurgaon, Haryana
15. **Thailand** - Bangkok
16. **Vietnam** - Dong Nai, Bac Ninh, Hanoi, Ho Chi Minh
17. **Malaysia** - Kuala Lumpur, Johor
18. **Indonesia** - Jawa Barat, Jakarta
19. **China** - Shanghai, Tianjin, Shenzhen, Weihai, Suzhou, Qingdao, Dongguan, Jiaxing, Shenyang
20. **Japan** - Tokyo

Countries Entered

20



Export Destination Countries

120



LOTTE CHEMICAL GLOBAL NETWORK

Overseas Manufacturing
& Sales Corporation

Overseas Sales Offices

Overseas Branches

All Business Sites

15

6

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Basic Materials

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Advanced Materials

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Battery Materials

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(Based on subsidiaries subject to consolidated reporting as of end-2024)



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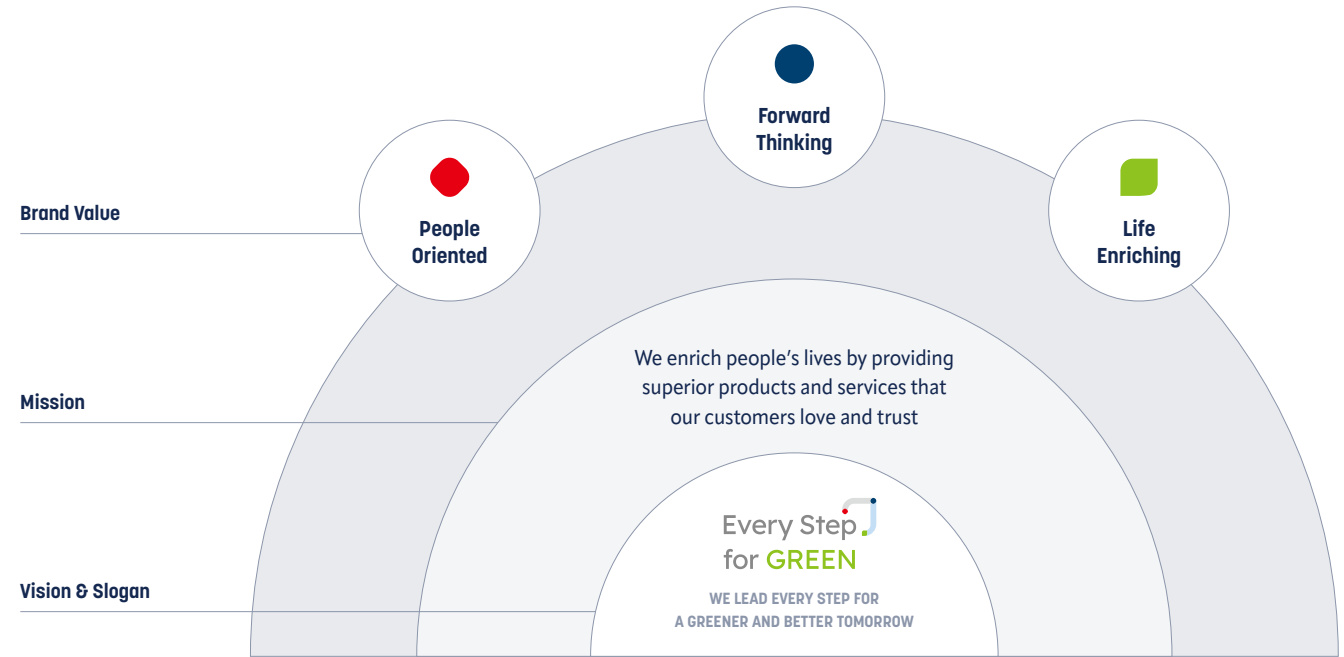
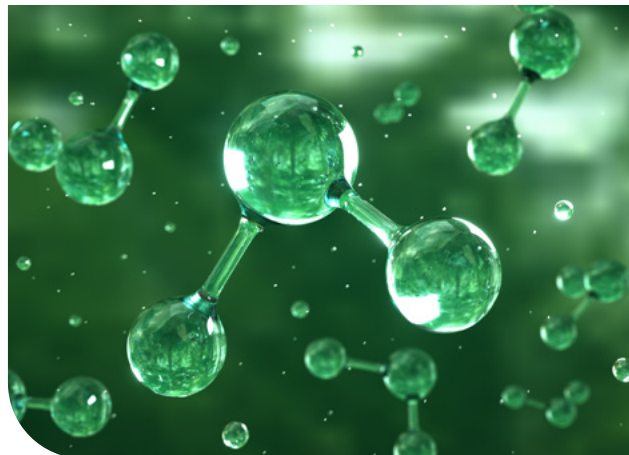
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VISION AND MISSION

Corporate Vision

A Company that Creates a Better World through Chemistry

Founded in 1976, LOTTE Chemical is a leading company in Korea that has secured outstanding competitiveness through continuous business expansion. Based on such growth, we are building a stable business operation and an efficient business portfolio. In 2022, with the encouragement and attention from our stakeholders, we established our 2030 vision, “Every Step for GREEN” to strive for an abundant and green world with leading technologies.



2030 Vision

Financial goal – KRW 50 trillion in sales

Non-financial goal – Carbon-reduced growth

Implementation Strategy

Leading the Future Industry

Strengthen existing business competitiveness

Strengthening core competencies

Creating Social Value

ESG Vision/Strategy

GREEN PROMISE 2030

NET-ZERO

CIRCULATION AND COEXISTENCE

GREEN INNOVATION

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Our Sustainable Management Strategy, "GREEN PROMISE 2030"

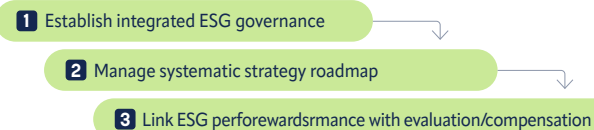
LOTTE Chemical's ESG Vision and Strategy

In 2022, LOTTE Chemical unveiled our ESG strategy, "GREEN PROMISE 2030." Over the years, we have strived to drive future-oriented value creation through carbon neutrality, eco-friendly management, the creation of circular and inclusive social value, and leadership in sustainable future industries. In 2025, we enhanced this strategy by developing an integrated ESG framework that encompasses all entities included in our consolidated financial statements. We are actively expanding the scope of our carbon neutrality and RE100 commitments, as well as our product sustainability strategy to include all consolidated entities. At the same time, we have refined our future leadership strategy to better reflect our evolving business environment. Going forward, we will communicate openly with stakeholders and closely collaborate with them to continuously upgrade and implement our ESG strategy.

Three Elements of GREEN PROMISE 2030



GREEN PROMISE 2030 Implementation System



GREEN PROMISE 2030



* Key Updates

- Chemical: Revised 2030 targets from ▲25% vs. 2019 → ▲20% vs. 2018 (same target 2030 emissions (5.01m tons/year)), aligning with baseline of the Nationally Determined Contributions (NDC)
- Joined RE100 (2023) → Implement RE100 commitments
- Sell 1 million tons of recycled plastic by 2030 → strengthen product sustainability (expand recycled and bio-based products, tighter disclosure standards for product environmental data) and scheduled to reset specific targets after monitoring regulatory and market changes
- Hydrogen energy, supply 1.8 million tons of hydrogen by 2035 (KRW 9 trillion in sales, KRW 6 trillion in cumulative investments) → supply 550,000 tons of hydrogen by 2030 (KRW 3 trillion in sales, KRW 1 trillion in cumulative investments)
- Enter battery materials and the four key lithium battery materials market (KRW 7 trillion in sales, KRW 7 trillion in cumulative investments) → focused on cathode/anode foil (copper foil) (KRW 3 trillion in sales, KRW 5 trillion in cumulative investments)

1) Based on domestic Scope 1&2 emissions

2) Chemical: ▲20% vs 2018 emissions, Fine Chemical/Battery Materials: ▲14.5% vs. 2018 emissions

3) Implement Life Cycle Assessment (LCA) framework for all products, transition/reduction of hazardous chemicals in products, etc.

4) Reflecting LOTTE Chemical and LOTTE Fine Chemical

5) Reduction of environmentally hazardous substances by 2030 (▲50% vs. 2019), recycle water 100% in 2050

6) Advance internal management system including carbon and energy management and safety management, implement ESG integrated information management and open system, and apply new IT technologies (artificial technology) to process innovations

7) Based on 2022~2030 cumulative investments, including LEM acquisition cost and excluding Infracell (based on consolidated statements)





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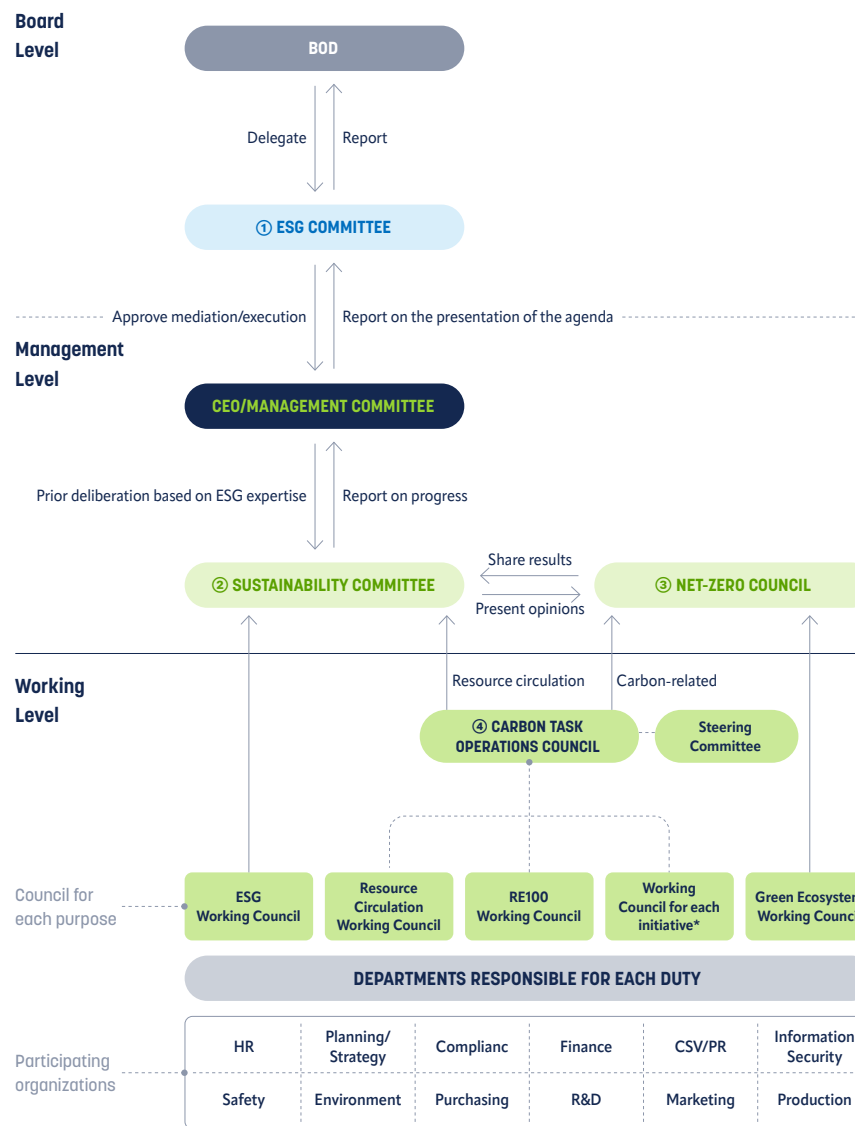
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GREEN PROMISE 2030 Implementation System

Establishing Integrated ESG Governance

In executing ESG strategies, clear and prompt decision-making and organic participation of all business units are required. Therefore, we have systematically established an integrated ESG governance at all levels of the BOD, management, and working-level organizations to achieve the “Green Promise 2030” goal. The BOD’s resolution in September 2021 led to the launch of the ESG Committee which supervises the direction and performance of sustainable management. Furthermore, in February 2023, we instituted the Sustainability Committee and the Net-Zero Council at the management level to guarantee continuous strategic-task management and monitor regular ESG risk management. In addition, we launched the Carbon Task Operations Council in March 2025, operating working councils under it to support higher level committees while facilitating internal open innovation through inter-departmental collaboration and exchanges.

LOTTE Chemical ESG Governance Structure



* R&D Working Council, Energy/Raw Material Council, Fuel Transition Council, CCUS Council

① ESG Committee

- Organization to supervise the direction and performance of sustainability management
- Key agenda: Approval of ESG management strategy, approval of ESG focus area goals and previous year's performance, monitoring critical ESG risks, reviewing materiality assessment, and approval of issuing ESG Report, etc.
- Frequency: At least every quarter
- Secretary/relevant working-level councils: ESG Management Division/ESG Working Council



② Sustainability Committee

- Organization led by management that reviews and supervises key sustainability management issues
- Key agenda: Review of annual ESG strategic initiative plan and implementation performance, regular monitoring of ESG risks, materiality assessment, identification of stakeholder trends and issues
- Frequency: Semi-annual (regular), small-scale occasional meetings by topic
- Secretary/relevant working-level councils: ESG Management Division's ESG Management Team/Carbon Task Operations Council, ESG Working Council



③ Net-Zero Council

- Organization to manage and supervise carbon neutrality and eco-management targets of the GREEN PROMISE 2030 strategy
- Key agenda: Management of net-zero roadmap, plan and review of annual strategic initiatives for carbon neutrality and creating a green ecosystem, sharing case studies on technology applications, and discussing issues
- Frequency: Semi-annual
- Secretary/relevant working-level councils: ESG Management Division's Environment Management Team/Carbon Task Operations Council, Green Ecosystem Working Council



④ Carbon Task Operations Council

- Monitoring and reviewing implementation of carbon neutrality initiatives and providing support to address issues
- Key agenda: Reviewing carbon neutrality initiatives and progress of RE100 commitments
- Frequency: Quarterly
- Secretary/relevant working-level councils: ESG Management Division's Environment Management Team/Resource Circulation, RE100, and individual initiative working councils





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Systematic ESG Strategy Roadmap Management

We have developed 20 strategic initiatives and a roadmap to step up our efforts in achieving LOTTE Chemical's ESG strategy, "GREEN PROMISE 2030." In addition, we instituted an annual ESG initiative management process, set clear R&Rs and specific goals for each initiative, and are managing our annual plans and performance in connection to the integrated ESG governance system and our evaluation/reward system.

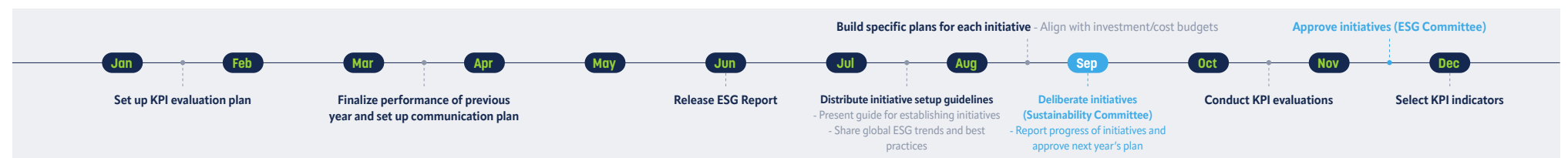
Aligning ESG Performance with Evaluation and Compensation

In 2024, the key performance indicators (KPIs) for LOTTE Chemical's CEO were comprised of 80% financial and strategy-related initiatives and 20% ESG-related initiatives. The evaluation covered areas such as the development and implementation of the net-zero roadmap, strategies and performance of key ESG indicators, and the strengthening of ethical management practices. Evaluation results were then reflected in the CEO's remuneration. Furthermore, we made it more systemized by aligning the CEO KPIs with those of relevant working-level management and organizational evaluations to ensure ESG goals are managed in an organic manner.

20 Key Strategic Initiatives to Achieve GREEN PROMISE 2030



Annual ESG Planning, Performance Management, and Evaluation Process





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May 2024

Conducted training to nurture environmental law and policy specialists



Roll over the Additional information

July 2024

Built a community resource circulation system, hosting a performance review for the 3rd term of the Project LOOP' Social



Roll over the Additional information

August 2024

Launched 'GiveOn,' a donation platform for employees in the Chemical Division



Roll over the Additional information

September 2024

Obtained integrated certifications for Compliance and Anti-Bribery Management Systems (ISO 37301, 37001)



Roll over the Additional information

October 2024

Awarded Top Excellence grade in the Win-win Growth Index



Roll over the Additional information



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October 2024

Signed a PPA for the Hapcheon Dam floating photovoltaic (FPV) project



예시조감도

Roll over the Additional information

November 2024

Carried out 'conservation action for the Korean dolphin, finless porpoise' as a social contribution program for marine biodiversity conservation



Roll over the Additional information

December 2024

Won Grand Prize in the 'Voluntary Agreement for Bridging Polarization' at Korea's Co-Growth Awards



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January 2025

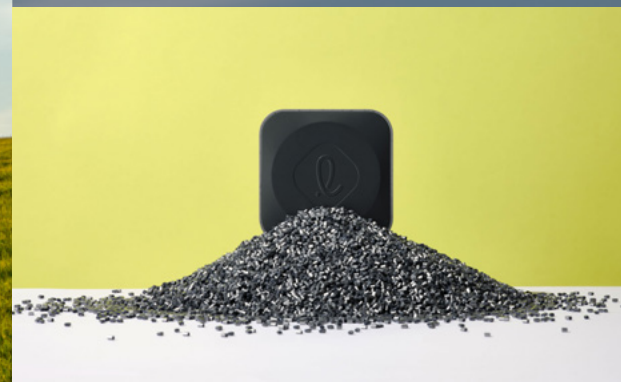
Partner with automotive OEMs on sustainable plastic solutions



Roll over the Additional information

March 2025

Supplying recycled material for smartphones, contributing to resource circulation



Roll over the Additional information



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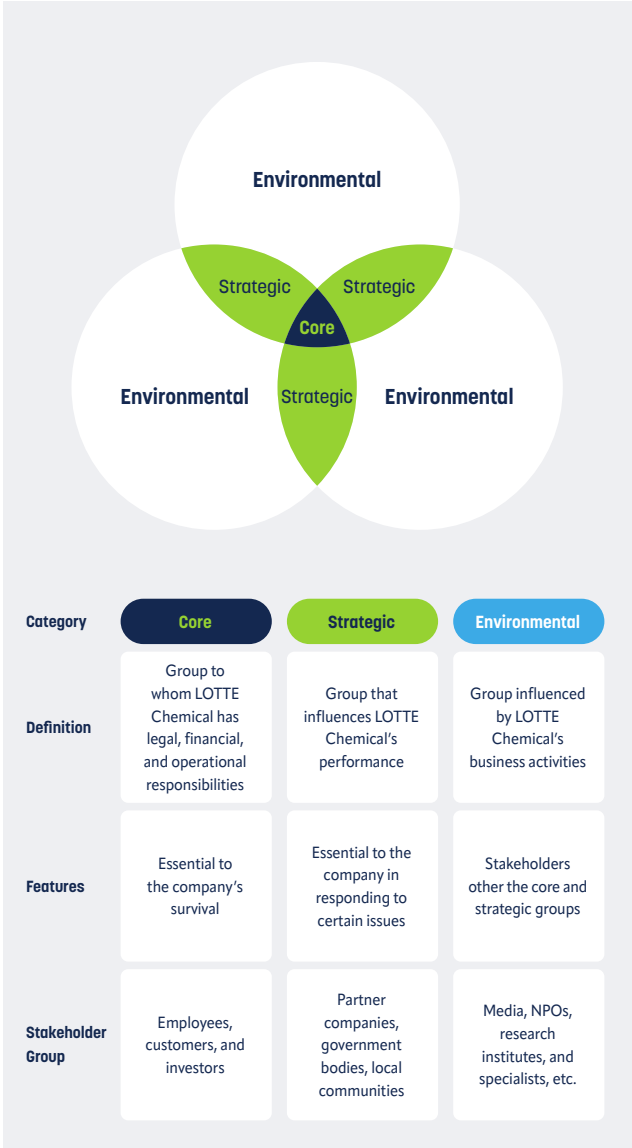
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Stakeholder Classification and Response Activities

At LOTTE Chemical, we have identified our employees, customers, shareholders, investors, partner companies, government and related agencies, and local communities as our key stakeholders who influence our business activities and corporate social responsibilities. Using criteria set forth by ISO 26000, we classified these stakeholders into the three groups of Core Stakeholders, Strategic Stakeholders, and Environmental Stakeholders based on their legal, financial, and operational

responsibilities and influence. We attentively listen to their needs and incorporate them into our business strategies and corporate decision-makings while operating various communication channels tailored to each group. With stricter government ESG regulations and growing interest from investors on ESG management, ESG requirements are also being strengthened through mutual influence among stakeholders. We will continue our commitment to fair management practices and enhance transparency by actively communicating with all stakeholders.

Stakeholder Mapping & Grouping



Communication Channels by Stakeholder Group

Category	Stakeholder	Issues of Interest	Demands	Communication Channel and Frequency	Our Activities
Internal	Employees	Promotion of employee health and safety / Work-Life balance	Improved working environment for work-life balance	- Employee Council (quarterly) - Grievance Committee (ongoing) - Organizational Culture TF (ongoing) - HR Presentation (ongoing) - Labor-Management Council (quarterly) - Newsletter (quarterly) - Company Culture Newsletter (monthly)	- Promoting work-life balance - Capability-building program - Employee welfare and benefit program - Work environment improvement activity - Health and Safety enhancement activity
	Customers	Product quality Supply chain stability R&D Provision of ESG management information	Improved quality Assessment of ESG risks in the supply chain Higher share of recycled raw material Carbon data and carbon reductions for each product Utilization of renewable energy, etc.	- Customer satisfaction survey (annual) - In-person visits (ad hoc) - Customer invitation program (ongoing) - Customer complaint handling process(ongoing) - Customer ESG survey, evaluation response, ESG management information provision (ongoing)	- Continued operation of a customer service digital platform (MaaS) - Prompt response to product quality and freight claims - Conducting customer satisfaction surveys - Conducting supply chain ESG risk assessments - Developing new products - Offering product LCA information - Introducing renewable energy
External	Government and related agencies	Compliance with environmental /human rights/safety legislations Strengthening ESG-related trade compliance	Increase in environmental/ human rights etc, regulations Increase in impact of overseas regulations such as the US and EU, etc	- National Assembly roundtable (ongoing) - Government hearings (ongoing) - Participation in other ESG councils (KEF, FK, KBCSD, etc.) (ongoing)	- Reporting key industry issues - Developing public-private cooperation projects - Reviewing participation in state projects - Identifying global ESG regulations and trends (ongoing)
	Shareholders and investors	Economic performance Sound governance ESG washing	ESG management activities and financial impact disclosure	- Shareholder meetings (at least once a year) - Non-deal roadshow (at least once a year) - Earnings release (quarterly) - Disclosures (ongoing) - IR conferences (ongoing) - Posting investment info on website (ongoing)	- Adopting electronic voting systems to shareholder meetings - Disclosing mid-term shareholder return policies - IR conferences and NDR - Operating BOD subcommittees - CEO IR Day - Disclosure in Korean and English
	Partner companies	Communication with partner companies Mutual growth	Increase in communication channels Increase in win-win programs	- Meetings with partner companies (at least once a year) - In-person visits to partner companies (ongoing) - Hotline channels (ongoing)	- ESG training support for partner companies - Recruitment support - Technical support and protection
	Local community	CSR activity	Communication facilitation with local communities	- Alliances (ongoing) - Meetings with local residents (ongoing) - Environmental clean-up (ongoing) - Charlotte Volunteer Group (ongoing)	- Financial welfare and productivity enhancement support - Communicating with local communities - CSR activities

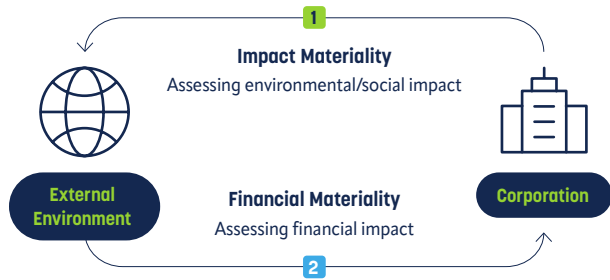




DOUBLE MATERIALITY ASSESSMENT

Overview

LOTTE Chemical uses the concept of double materiality for our materiality assessment, taking into account ① Financial Materiality and ② Impact Materiality. Double materiality encompasses both the outside-in and inside-out perspectives of ESG's impact on enterprise value. This approach recognizes the external environmental and social factors that influence a company's financial performance, as well as the outward effects of the company's business activities. Building on the outcome of our materiality assessment, we will enhance our ESG management by refining our ESG strategy and disclosing the assessment process and its results in our ESG Report.



1 Assessing social/environmental impact
Inside-out assessment on the material impact corporate activities have on the environment and society in terms of sustainability

2 Assessing financial impact
Outside-in assessment on the material financial impact ESG issues have on the company's growth, performance, and market position

Process

To identify ESG issues, we analyzed internal and external ESG trends and disclosure guidelines, benchmarked leading global players, reflected industry issues, and reviewed media research and internal issues to form a pool of 27 issues related to LOTTE Chemical in terms of ESG. Afterwards, 10 priority ESG issues were derived from the pool based on our internal direction for driving sustainability, requirements in the industry's disclosure/

evaluation initiatives, peer's material topics, and key Issues in each stage of the value chain. Among the priority ESG issues, environmental/social and financial impact on the company were identified and assessed to draw out material topics. We plan to expand this Double Materiality Assessment process to subsidiary companies in our consolidated financial statements to meet corporate sustainability reporting requirements.

1st Step	2nd Step	3rd Step	4th Step	5th Step
Understand business context and form ESG issue pool - Set boundary of the analysis - Identify the company's value chain - Including upstream, own operation, and downstream - Identify key stakeholder engagement plan - Form ESG issue pool (27 issues) - Based on ESRS topics and reflecting material topics of peer groups	Prioritize ESG issues - Analyze sector-specific ESG disclosure and assessment criteria - Analyze material topics of peer group - Analyze the company's ESG management data - Take into account previous year's materiality assessment and internal strategic initiatives - Select 10 priority issues	Identify environmental/ social and financial impacts - Identify environmental /social impact - Identify how the company's activities related to priority issues affect the environment and society - Identify financial impact - Identify how external factors related to priority issues affect the company's financials	Assess environmental/ social and financial impacts - Scoring mechanism - Environmental/social impact: Scale, scope, remediabile character, likelihood - Financial impact: Scale, likelihood - Select assessment target - Environmental/social impact: Employees, customer/partner companies, shareholders, government/related agencies, local communities, and third-party ESG experts - Financial impact: Employees (Executive level) - Conduct assessment	Determine material topics and report outcome - Prioritize issues and determine the top 6 material topics - Report the materiality assessment outcome to BOD
Draw out material topics through continuous advancement and integration of assessment methods into the organization				
Expand Analysis Scope Expand scope to upstream-own operation-downstream	In-depth Analysis of Impact Pathway Detail business activities, external factors, and impact pathways related to ESG issues	Reflecting Global ESG Disclosure Standards Design scoring mechanism based on methodologies set forth by EU ESRS*	Increased Stakeholder Engagement Increased engagement of internal and external stakeholders in the impact identification and assessment process	Embedding Assessments Conducted own assessments to integrate assessment methodologies into the organization

* EU ESRS : EU European Sustainability Reporting Standards





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Double Materiality Assessment Result

LOTTE Chemical reported issues derived from the double materiality assessment to the ESG Committee under the BOD for thorough review and determined the top 6 material topics based on their financial and impact materiality. The materiality of each topic was identified by looking at the impact on profits, costs, risks, and opportunities from a financial perspective, impacts within the value chain seen from an environmental and social perspective, and impact on stakeholder groups.

In the Environment Area, the result of the materiality assessment showed that the importance of ‘Climate Change,’ ‘Energy,’ and ‘Product Lifecycle Management’ increased compared to the previous year. In the Society Area, the importance of ‘Employee and Process Safety’ rose while the ‘Supply Chain’ topic was newly added due to the EU CSDDD (EU Corporate Sustainability Due Diligence Directive) and growing interest from stakeholders. Conversely, the relative materiality of ‘Pollutants and Waste’ and ‘Hazardous Chemicals’ decreased as their potential impact has been mitigated by meeting pollutant and waste reduction targets and maintaining zero incidents involving hazardous chemicals under our ESG strategy. We also provide reports on detailed analysis of material topics in connection to LOTTE Chemical’s key activities.

● (0-0.2), ●● (0.2-0.4), ●●● (0.4-0.6), ●●●● (0.6-0.8), ●●●●● (0.8-1.0)					
	ESG Issue	Impact Materiality	Degree of Impact	Financial Materiality	Degree of Impact
Material Topics	Climate Change	Climate change caused by GHG emissions generated during fuel and electricity consumption when operating production facilities	●●●●●	Extreme weather (heavy rain, heatwaves, typhoons, etc.) caused by climate change can undermine production stability and lower revenues due to unstable supply of raw material (naphtha, LPG, etc.) and plant operation setbacks	●●●
		Climate change caused by GHG emissions in the upstream value chain regarding raw material production/procurement, etc.	●●●●●	Larger markets for eco-friendly energy and the resulting increase in hydrogen energy/battery material business revenues in response to growing demand from external stakeholders (shareholders/investors, customers, etc.) for transition to a low-carbon portfolio	●●●●●
	Energy	Climate change caused by Scope 2 GHG emissions from using fossil fuel-based energy	●●●●●	Rise in costs to respond to enactment and stricter climate change legislations	●●●
		Increased instability in the company’s energy supply due to instability in the global energy supply which leads to higher costs for energy procurement and sourcing	●●●●●	Increased instability in the company’s energy supply due to instability in the global energy supply which leads to higher costs for energy procurement and sourcing	●●●●●
	Resource Circulation	Reduction of GHG emissions and expanding the recycled product bunitigation of climate change resulting from the disposal of single-use plastics when siness.	●●●	Growth of the resource circulation market and resulting increase in revenues of the recycled plastic business in connection to the rise in demands of external stakeholders (shareholders/investors/customers, etc.) for reduction in the amount of waste plastic generated	●●●
		Reduction of microplastics and biodiversity loss resulting from the production and disposal of single-use plastic products when expanding the recycled materials business	●●●		
	Product Lifecycle Management	Climate change triggered by GHG emissions along the product lifecycle from sourcing raw material and manufacturing to distribution, usage and disposal	●●●●	Sharpened market competitiveness of relevant products and resulting increase in revenues and capital inflow in line with rise in external demands for low carbon products and LCA products	●●●●
	Employee and Process Safety	Physical injury of employees/partner company workers or social losses incurred in the case of industrial accidents due to poor health and safety management	●●●	With stricter health and safety legislations, legal expenses (penalties and fines, etc.) and non-operating expenses (damage compensation costs, etc.) caused by setbacks in business operations in case of safety accidents at business sites of the company or within its supply chain	●●●●
	Supply Chain	Supply interruptions, legal liability for contractors, and social consequences when legal or ethical issues involving suppliers arise due to poor management of ESG risks in the supply chain	●●	Setbacks in business operations and rise in costs due to legal sanctions in case of poor management of ESG risks in the supply chain	●●●
	Hazardous Chemicals	Destruction of nearby ecosystems and health harms to local communities in case of accidents related to hazardous chemicals generated during the product production process	●●	Legal expenses in case of hazardous chemical leak incidents as a result of stringent domestic/overseas regulations on hazardous chemicals and rise in capital expenditures for safety facilities in line with stricter management of chemical substances	●●
General Topics	Water	Drop in revenue and capital inflow due to decline in product sales when failing to respond to external stakeholder (client, appraiser, etc.) demands on not using high-risk chemicals and transition to alternative material			●●
		Increased water stress and domestic water shortages in communities near business sites in case of lack of water sources due to water used in business operations	●		●
	Pollutants (air/water/soil) and waste	Pollution in nearby ecosystems and health harms to local communities when pollutant concentration levels* in the product production process exceed guidelines *Air pollutants (NOx, SOx, VOC, etc.), water pollutants (TOC, BOD, SS, etc.)	●●	Higher management and investment costs as pollution and waste management systems advance in response to stricter legislations and administrative actions on pollution and waste management	●●
		Health harms to local communities caused by GHG emissions and pollutants released in waste landfilling/incineration due to insufficient waste recycling practices	●		
	Ethical management/Compliance	Disturbances in the sound order of transactions across society caused by unethical/corruptive behavior such as unfair trade, embezzlement, and breach of trust	●●	Drop in revenues and capital inflow due to damaged company reputation and customer churn in the event of unethical/corruptive practices such as unfair trade, embezzlement, and breach of trust	●●
Marine resources, biodiversity, raw material, transition to low-carbon industry, employee working conditions, employee’s freedom of association and collective bargaining, employee human rights, employee diversity, employee capability-building, local community, customer privacy and information security, customer satisfaction, safety of products/services, product/service accessibility, governance, political participation, fair trade					



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Material Topic Management Activities and Performance

LOTTE Chemical specifically identifies and analyzes risks and opportunities by actively engaging with stakeholders on our six material topics. Based on this analysis, we define management

goals and systematically align them with Key Performance Indicators (KPIs).

Material Topic	Risk and Opportunity Management	Strategic Initiative	KPI	2024 Performance	2025 Target	2030 Target	Page
Climate Change	Collection and disclosure of GHG emissions to respond to climate change, analysis of climate risks, 2030 carbon-reduced growth, development of 2050 net-zero targets and roadmap, management of implementation (GHG mitigation initiatives)	Implement net-zero roadmap	Mitigation of GHG emissions Carbon-related	5.9 million tons/year (▲ 5.7% vs. 2018)	5.61 million tons/year (▲ 10.4% vs. 2018)	20% reduction vs. 2018 peak (5.01 million tons)	p.44, 46
Energy	Collection and disclosure of energy usage data, improvement in energy efficiency, joining RE100 and setting targets to increase renewable energy consumption, monitoring progress	Increase adoption of renewable energy	Increase of renewable energy adoption	Signed adoption contract (solar energy)	Continue adoption contract (solar power)Collaborate with renewable energy Group affiliates for energy supply	Implement RE100 commitments (60% renewable energy adoption rate by 2030, 100% by 2050)	p.35
Resource Circulation	Resource circulation system to reduce plastic and expansion of the recycled plastic business (mechanical recycling, chemical recycling, pyrolysis)	Set targets for the recycling business and execute	Achievement of sales target for recycled products	93,000 tons/year	110,000 tons/year	Sell 206,000 tons of recycled plastic by 2030 Increase sales of recycled/bio-based products	p.48, 50
Product Lifecycle Management	Product lifecycle assessment considering the internal supply chain and internal and external utilization measures, and measurement of product impact on the environment and resource and energy consumption, etc.	Strengthen strategies for eco-friendly product development, marketing, branding, and certification	Setup of LCA framework Increase in green certifications	Setup of product LCA assessment system (Basic Materials) Newly applied product carbon footprint (PCF)	Advancing LCA management and assessment system Standardize ISCC Plus certification	Strengthen strategy for eco-friendly product developments, marketing, branding, and certification	p.51
Employee and Process Safety	Development of a health and safety management system, and overall activities related to creating a safe working environment and organizational culture by preventing industrial accidents through discovery and management of hazardous and harmful factors at business sites	Plan and drive safety innovation initiativesIncrease investments to reinforce health and safety	Executions of investments in health and safety	KRW 26.1 billion/year	KRW 27.2 billion/year	Strengthen health and safety practices to meet global standards (LTIR 0.065)	p.63
Supply Chain	Setup of a supply chain ESG risk management framework and evaluation management methods	Supply chain ESG risks	Supply chain ESG risk management	ESG risk assessment carried out across 80 companies (including third-party assurance) Taskforce to address EU CSDDD	Build screen tools for partner companies, conduct self-diagnosis Carry out in-depth assessment to identify high-risk groups Develop plan for corrective measures, evaluate, and report outcome	Set up supply chain management system to o prepare against domestic and overseas legal frameworks	p.84~89

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LOTTE Chemical continues to carry out eco-friendly management for the future of our planet. We are striving to build sound and sustainable management through various programs such as curbing carbon emissions to strengthen our business fundamentals and implementing a resource circulation system along with citizens. Creating harmony with nature, we are making endless efforts to ensure a clean and health Earth for future generations. We believe that our small actions towards the environment will make a big difference.



ECO-FRIENDLY
MANAGEMENT



CREATION OF
GREEN ECOSYSTEM



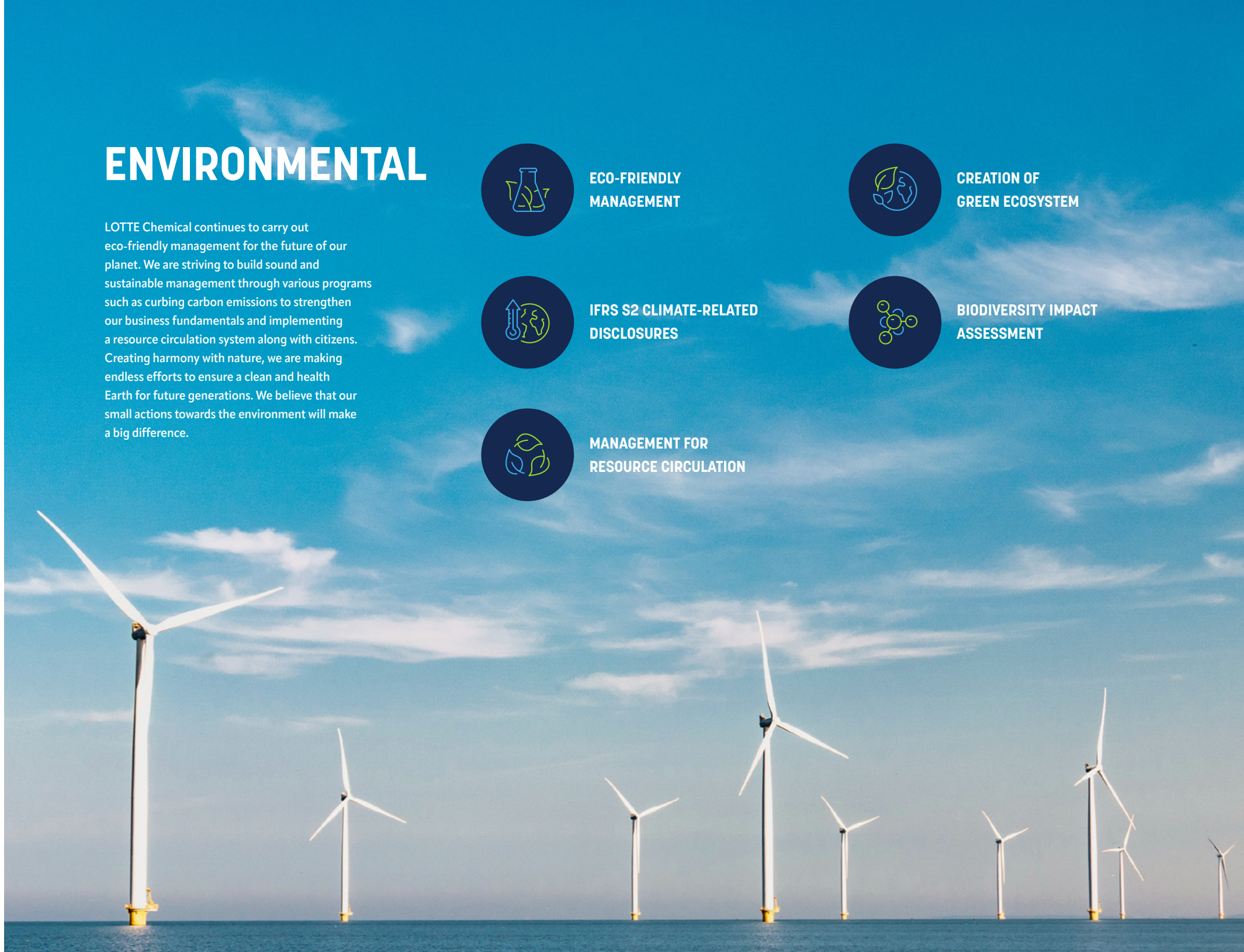
IFRS S2 CLIMATE-RELATED
DISCLOSURES



BIODIVERSITY IMPACT
ASSESSMENT



MANAGEMENT FOR
RESOURCE CIRCULATION





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Governance for Eco-friendly Management

LOTTE Chemical integrates our governance for eco-friendly management and ESG management, and also operates different working councils for specialized management of key environmental issues such as responding to climate change, creating a green ecosystem, adopting of renewable energy, and strengthening product sustainability, etc. The BOD's ESG Committee makes decisions on major ESG strategies and target/performance management including environmental issues, and regularly reports the results to the Board of Directors. In addition, monitoring initiatives across ESG management and stakeholder risks are the key agenda of the Sustainability Committee composed of executives. In particular, a separate Net-Zero Council was launched with members with relevant expertise to promote efforts on carbon neutrality and creation of the green ecosystem. Semi-annual meetings are held to discuss relevant issues and manage targets, serving as a window for environmental management by sharing know-how among business sites to strengthen capabilities and encourage prompt decision-making among executives. In 2025, the Carbon Task Operations Council was launched to drive efforts to achieve carbon neutrality goals with four supporting working councils set up for Energy/Raw Material, Fuel Transition, CCUS, and R&D. Along with the RE100 and Resource Circulation Working Councils, these are part of the collaborative system we operate for identifying and implementing carbon reduction initiatives.

STRATEGY

Environmental Management Strategy and Guidelines

We manage the performance of our environmental management efforts not only based on compliance with legal requirements and regulations, but also by devising an eco-friendly strategy in line with "GREEN PROMISE 2030" to achieve 2030 carbon-reduced growth (20% reduction compared to 2018), 2050

net-zero, and our goal to reduce environmentally hazardous materials by 50% by 2030 to create a green ecosystem at all our business sites. Moreover, we are carrying out sales of recycled plastic through a resource circulation system. We are also aiming to make a transition to 60% renewable energy by 2030 and 100% by 2050 after joining RE100 in 2023.

 Environmental Management Policy

 Environmental-Quality Guidelines

Eco-friendly Strategy Direction and Environmental Guidelines





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Implementation and Operation of an Environmental Management System (ISO14001)

LOTTE Chemical conducts rigorous monitoring to support various government-led inspections to ensure compliance with environmental regulations and prevent violations. Accordingly, all o four business sites carry out environmental impact assessments and compliance evaluations regularly in line with ISO 14001 requirements and report the results. The Environment Management Team at our headquarters works along with external environmental specialists and our own monitoring group to regularly diagnose environmental compliance and support rigorous management of our business site environments. The environment teams at each individual business site are also doing their utmost to enhance compliance with environmental regulations. In this process, we not only prepare against potential risks, but also contribute to internal and externally promoting a culture of environmental awareness through system improvement. LOTTE Chemical's PDCA* for the environmental impact assessment can be verified through the third-party assurance and ISO 14001 certification.

* PDCA (Plan-Do-Check-Action): An interactive process by organizations to achieve continuous improvement by planning, doing, checking, acting and then planning improved goals again

Advancement of the Environmental Management System

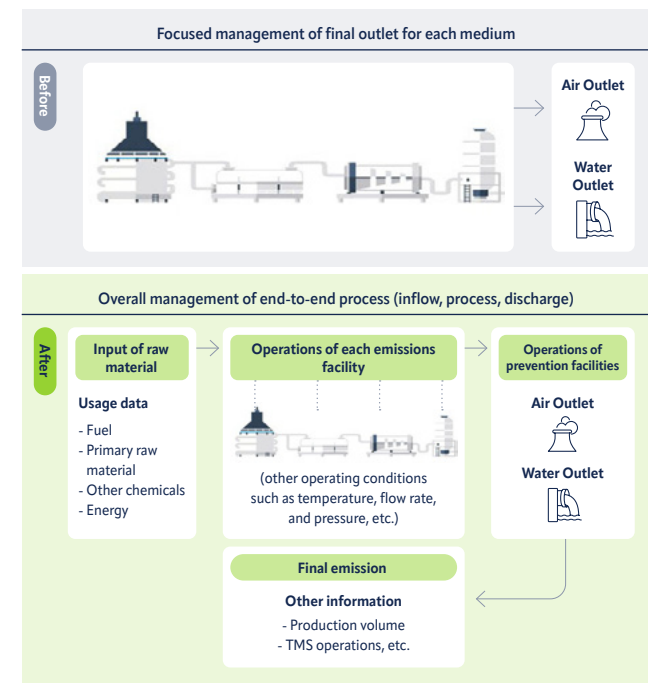
LOTTE Chemical implemented the Environment Management System in 2024 to respond to global ESG disclosure requirements by unifying various environment related data. By adopting this approach, we ensure compliance with the mandate to maintain records as outlined in the Act on the Integrated Control of Pollutant-Discharging Facilities while managing the full lifecycle of operations at business sites spanning inflow, processes, and discharge. Through this system, basic data such as release of environmentally hazardous substances and fuel/ raw material/energy usage, as well as information on facility operations can be secured. Based on this information, we review the internal and external environment and and utilize it to make key decisions such as on environmental investments.

Group Environmental Management Checklist

No.		Checklist Item
1	Operation Management	Operation of specialized environmental management organization
2		Availability and operation of an environmental management process
3		Employee training on environmental management
4		Availability of a climate change risk management system
5		Internal environmental audits
6		Regular reporting on environmental management (regarding climate change)
7		Regular reporting on environmental management (waste, water, water quality, air)
8		Global environmental management process
9	Performance Management	Improvement (%) in carbon intensity (based on carbon emissions) vs. previous year
10		Achievement rate (%) of GHG reduction target based on the net-zero roadmap
11		Net-zero roadmap investment execution (%)
12		GHG reduction compared to GHG emissions (%)
13		YoY improvement rate (%) in energy usage
14		YoY improvement rate (%) in waste generation
15		YoY improvement rate (%) in water consumption
16		Green purchase performance management
17		Management of other environmental data
18		- Track record in water reuse - Track record in recycling waste - Management of water quality data and meeting compliance targets - Management of air data and meeting compliance targets
19	Stakeholder Relations	Disclosure of environmental information
20		Internal/external environmental preservation activities
21		Environmental law/regulation violations
22		Participation in initiative activities Sharing internal/external ESG best practices

Effect of Implementing the Environmental Management System*

Item	Estimated Effect
Improved work convenience	Enhancing efficiency in preparing and managing record preservation documents through an automated system
Reduced compliance risks	Reduced risks such as human errors/mistakes in history management with a prior verification system
Advanced management of integrated permits	Easy to respond to government inspections with collective management of massive data regarding permits
Unified company-wide environment management	System-based unified environment management across the company
Response to new environment management system	Easy to build environment management policies based on statistics/analyses



* Current target sites: LOTTE Chemical [Basic Chemicals] Yeosu, Daesan, Ulsan



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Environment Management System

Acknowledging the need to enhance employee understanding of environmental laws and regulations, we have been partnering with a professional environmental consulting firm since 2022. Through this partnership, we provide four types of environment management support services (training, diagnosis, training material, advisory), along with timely policies based on identified annual focuses and specialized items.



RISK MANAGEMENT

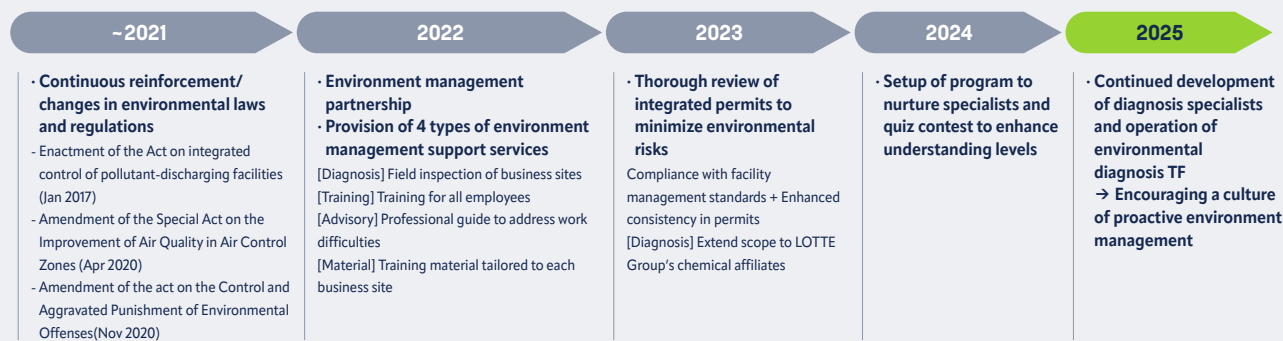
Environmental Risk Management

LOTTE Chemical regularly monitors the enactment and amendments of environmental laws and regulations, as well as relevant social issues, to understand the impact on our business and proactively address possible risks. Through the environmental management inspection of the Group's Eco-friendly Management Task Force, environmental risk assessments are carried out each year. We also operate a practical environment management system that includes risk management and a string of procedures for making improvements regarding identified risks. In addition, we review potential environment/safety/health related risks when pursuing mergers and acquisitions and manage identified environment-related material issues and regulations starting in the review stage of new investments.

Environmental Performance Evaluation

LOTTE Chemical selects various metrics to evaluate the environmental performance of the organization and operates a compensation system based on the evaluation. This way, we encourage voluntary motivation from our employees for them to come together to work towards protecting the environment.

Environmental Management Roadmap



M&A Due Dilegence Questions



* REACH(Registration, Evaluation, Authorization and Restriction of Chemical) : 화학물질의 등록, 평가, 제한에 관한 제도

Operation of Compensation System

Target KPI Management by Business Site	Department KPI Evaluation	Rewarding Outperformers
Evaluation criteria Pollutant reduction targets and sum of actual reduction performance Evaluator HQ Environment Management Team Evaluatee Production plant* Compensation cycle Once a year	Evaluation criteria Comprehensive evaluation of environmental activities (proactiveness/performance, etc.) Evaluator Business Site Environment Team Evaluatee Production/Support departments Compensation cycle Once a year	Evaluation criteria Input to environment performance (prevention of environmental incidents, etc.) Evaluator Business Site Environment Team Evaluatee Employees Compensation cycle Once a year

* Production plant: Basic Materials (Yeosu/Daesan/Ulsan), Advanced Materials (Yeosu)





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METRICS AND TARGETS

ESG Fund Performance and Plan

1 Formation of ESG Fund

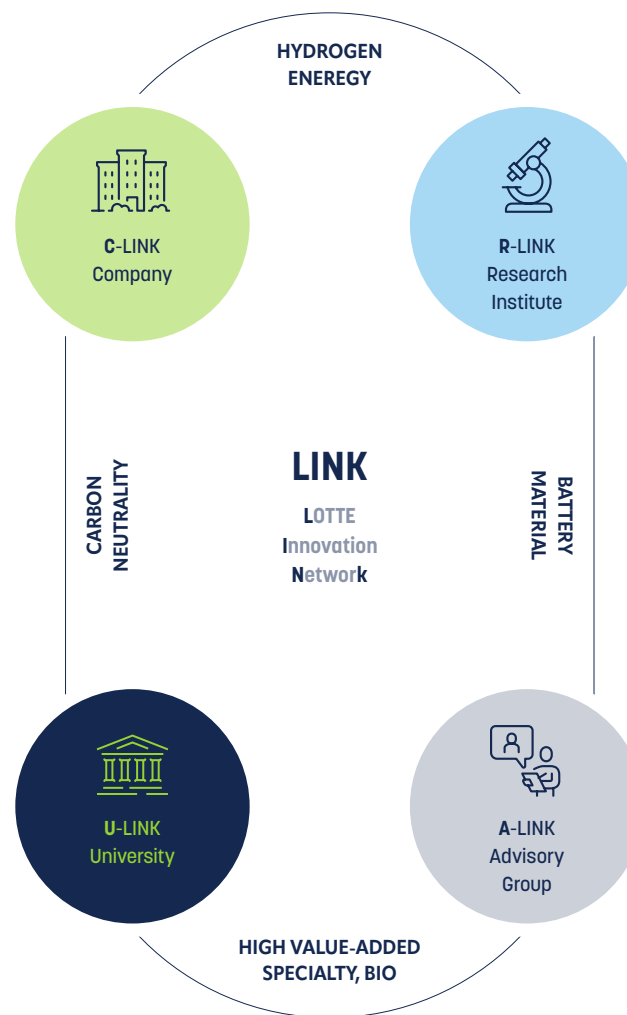
We formed and have been operating a KRW 50 billion ESG Fund since September 2021 to achieve our GREEN PROMISE 2030 vision. The purpose of the ESG Fund is to secure core carbon neutrality technologies related to hydrogen, CCUS (Carbon Capture Utilization and Storage), transition of waste plastic into raw material, and energy efficiency ahead of others. We were the first chemical company in Korea to create a dedicated fund for meeting carbon neutral targets and are looking forward to its role in improving our corporate image, as well.

2 ESG Fund Investment Cases

Around KRW 14 billion worth of investments have been made until now from the ESG Fund to 7 promising companies. The invested companies have either direct or indirect collaborative ties with LOTTE Chemical. Airrane, a company with gas separation membrane technology, installed carbon capture facilities and carried out a pilot project at our Yeosu Complex. Also, Eco Marine, an inhouse venture spin-off, is building eco-friendly ships using LOTTE Chemical's HDPE products.

3 Overview of ESG Fund Investments

LOTTE Chemical has been executing investments each year through our ESG Fund. We will continue to use our ESG Funds to secure new technologies related to carbon neutrality and take the lead in ESG activities.



LINK (LOTTE Innovation Network) Project

In August 2022, LOTTE Chemical launched the LINK (LOTTE Innovation Network) project to secure core technologies and facilitate early commercialization in order to achieve "GREEN PROMISE 2030." The project was organized to proactively secure future technologies needed for our business and spread the technologies by cooperating with non-adjacent industries through open innovation research activities with universities (U-LINK), research institutes (R-LINK), companies (C-LINK), and advisory groups (A-LINK). In U-LINK, we are working with KAIST Carbon Neutral Research Center. From 2022 to May 2025, eight R&D projects have been carried out to develop advanced technologies for carbon neutrality and hydrogen/batteries, as well as conduct research on source technologies with seven projects currently completed. One project is still underway, and we continue to develop new projects. In C-LINK, we are striving to secure world-class technologies and develop domestic CO₂ capture and utilization processes. We have formed a consortium with Hyundai E&C and the Korea Institute of Energy Research (KIER) for government initiatives where we are in charge of the development of membrane technology to capture CO₂. We look forward to such developments to lead to the production of blue hydrogen, GHG mitigations, and development of next-generation materials.



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Eco-friendly Research and Development

Under our GREEN PROMISE 2030 strategy, LOTTE Chemical is making endeavors in the field of research and development for carbon neutrality, product sustainability, and clean energy. First, we plan to expand our recycling business to create a sustainable plastic industry. In the short-term, we will increase mechanical recycling of materials for electronics/automotive vehicles/home appliances while in the mid/long-term, collecting plastic waste from the ocean to carry out chemical recycling and conducting R&D to commercialize pyrolysis technologies. Moreover, we are carrying out CCUS technology developments and research on process efficiency to achieve our 2050 Net-Zero targets.

We are also researching clean hydrogen production technology for global widespread use of clean energy. We are focusing on securing core technology to adopt clean ammonia in Korea by developing ammonia pyrolysis/photodissociation technologies and electrolysis technology to build competitive domestic clean hydrogen production infrastructure in the mid/long-term.

Environmental Training

In addition to compulsory legal training, LOTTE Chemical operates an environmental training program that reflects the needs of different functions, staff levels, and responsibilities to offer all of our employees the opportunity to grow as an environmental specialist. Our training covers the enactment and amendments of key environmental laws and regulations and shares inappropriate practices of other companies. In addition, we are expanding both online and offline training to meet the needs of our employees and raise environmental awareness.

Environmental Training

	Category	2024		
		Training Topic	Participants	Performance
Company-wide Environmental Training	Strengthening business site response to stricter environmental laws and regulations	(1H) Raise awareness on the environment and key issues in legislations for each environmental medium (2H) Share recent diagnosis case studies	Business site executives and managers	7 sessions
	Environmental training tailored to field engineers	(1H) Case studies of inappropriate facility management and site management best practices (2H) Share recent diagnosis case studies	Field engineers	7 sessions
	Intensive training on environmental management	(1H) Intensive training on waste (2H) Key trends and responses regarding environmental legislations	Working-level managed at the Environment Team of each business site	2 sessions
	Key trends and responses in environmental laws and regulations	Raise environmental awareness and key issues in Acts on Environmental Media	Head of the Environment Team at each business site	1 session
	Environment management video training and environment quiz contest	Inappropriate and best management practices by facility	All employees	3 sessions
	Seminar for partner companies	PART1. Environmental legislations for sustainable supply chain management PART2. Supply chain trends seen from an ESG perspective	81 employees from partner companies (total 68 partner companies participated)	1 session



IFRS S2* CLIMATE-RELATED REPORT

* Climate-related disclosure standard issued by the International Sustainability Standards Board under the International Financial Reporting Standards

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OVERVIEW

General

(A) Report Overview

LOTTE Chemical (hereinafter “we”) is committed to sustainability by minimizing the negative impacts of our business activities on the environment and society and ensuring strong governance practices. While our ESG Report is composed of our key achievements and plans across the areas of Environment (E), Society (S), and Governance (G), this report has been prepared in alignment with the IFRS S2 Climate-related Disclosures to voluntarily disclose our current response to climate change. It covers activities carried out during the reporting period including some key achievements from the first half of this year.

(B) Reporting Entity and Scope

This report provides climate-related financial information of LOTTE Chemical. As this is a voluntary disclosure, the report does not fully align with the consolidation requirements outlined in IFRS S2 but follows separate standards.

(C) Reporting Framework

This report has been prepared by the requirements of the IFRS S2 Climate-related Disclosures of the International Sustainability Standards Board (ISSB). Financial data presented in this report were prepared based on the Korean International Financial Reporting Standards (K-IFRS) using LOTTE Chemical’s separate financial statements and our Annual Report. Some information, including GHG emissions disclosure data that includes key subsidiaries in which case it is explained in detail in the footnotes.

(D) Reporting Period

This report covers our climate-related activities and achievements for the period of January 1, 2024 through December 31, 2024 which is the same reporting period for our separate financial statements.

(E) Presentation Currency

The presentation currency used in this report is Korean Won (KRW) and is the same currency used in our separate financial statements.

(F) Connected Information

The data and assumptions used in preparing our climate-related financial data are consistent with the data and assumptions used in the separate financial statements prepared based on K-IFRS requirements.

(G) Sources of Guidance

In preparing our climate-related disclosures, we considered the industry-based guidance provided for the application of IFRS S2. We determined that our business model and activities align with the ‘Resource Transformation Sector - Chemicals’ industry and referred to the relevant industry-specific guidance.

(H) Comparative Information

Disclosure of comparative information for the preceding period is required in accordance with sustainability disclosure standards. However, this report does not disclose comparative information by applying the transitional provision that allows comparative information to be omitted in the initial year of reporting. However, for GHG emissions, two years of comparative information is provided.

(I) Limitations

This report contains climate-related financial data based on forward-looking projections and internal assumptions. These projections rely on various hypotheses with the underlying assumptions qualitatively disclosed in this report. This report was prepared solely on facts, condition, and assumptions available as of the reporting date. As such, information in the report are subject to change based on future developments. We undertake no obligations to update or revise these projections to reflect events or circumstances arising after the date of this report. Consolidated entities shall neither be held accountable for any costs, losses, or damages incurred from changes in the information contained in this report resulting from unforeseen events.

Judgements, Uncertainties, and Errors

(A) Significant Judgements

Where judgements have been made on specific situations in preparing climate-related financial data, we disclose relevant information to support user understanding.

1 Identifying Climate-related Risks and Opportunities

Climate-related risks and opportunities may arise through our interactions with nature, society, the economy, and stakeholders across our entire value chain. We define the scope of our value chain to identify climate-related risks and opportunities. We reasonably estimate climate-related risks and opportunities that can impact a company’s financial state, financial performance, and cash flow in the short, medium, and long-term, incorporating management’s judgement to manage climate-related risks and opportunities such as access to financing.

2 Identifying Material Information

The company has assessed whether the information identified by the IFRS S2 ‘Climate-Related Disclosures’ requirements issued by the ISSB is material in the context of our climate-related financial disclosures.

3 Reassessing the Scope of Climate-related Risks and Opportunities across the Value Chain

In the event of significant changes such as changes to our value chain, business model, corporate structure, or the degree of exposure to sustainability-related risks and opportunities, we conduct a reassessment of all impacted sustainability-related risks and opportunities across our value chain.

(B) Measurement Uncertainty

Measurement uncertainty arises when climate-related financial disclosure values cannot be directly measured and must be estimated instead. In some cases, these estimations rely on assumptions of future events which may lead to uncertain outcomes. Such assumptions and estimates are based on data available at the time of preparing the disclosures. These assumptions on current conditions and future developments may change due to factors beyond our control such as market fluctuations. Below, we outline the items



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regarding climate-related financial data subject to significant measurement uncertainty along with the cause of uncertainty.

1 Estimated Impact of Climate-related Risks and Opportunities on Financial Data in the Short, Medium, and Long-term

We disclose information on climate-related risks and opportunities that may affect the company's financial state, financial performance, and cash flows over the short, medium, and long-term. In measuring such data, we utilize all reasonably available data that can be obtained without incurring excessive cost or effort as of the reporting date. However, both quantitative and qualitative data used accompany assumptions on future events and may be subject to significant uncertainties.

2 Estimations of Scope 3 GHG Emissions

We measure Scope 3 GHG emissions in accordance with the 'Corporate Value Chain (Scope 3) Accounting and Reporting Standard.' The measurement of Scope 3 emissions is influenced by the availability and quality of data across our value chain and includes the use of estimates. We apply input variables and assumptions using reasonable and supporting information at the reporting date that can be obtained without incurring excessive cost or effort to measure Scope 3 emissions. In prioritizing input variables and assumptions, we comprehensively consider factors such as the availability of direct measurements, the scope and granularity of data, its timeliness, and reliability. This requires management's judgement and may involve significant uncertainties.

3 Drawing Out Financial Losses from Climate-related Physical Risks

We utilize the Climate Impact Platform (CIP) tool by inputting data on our corporate assets to identify physical risks and estimate associated financial losses. This physical risk analysis is conducted using all reasonably available and supporting information at the reporting date, providing it can be obtained without incurring excessive cost or effort. However, the financial loss estimates from the CIP tool are based on embedded assumption including projections on future events. As these estimates do not account for future changes to corporate assets, the given information is subject to significant uncertainty.

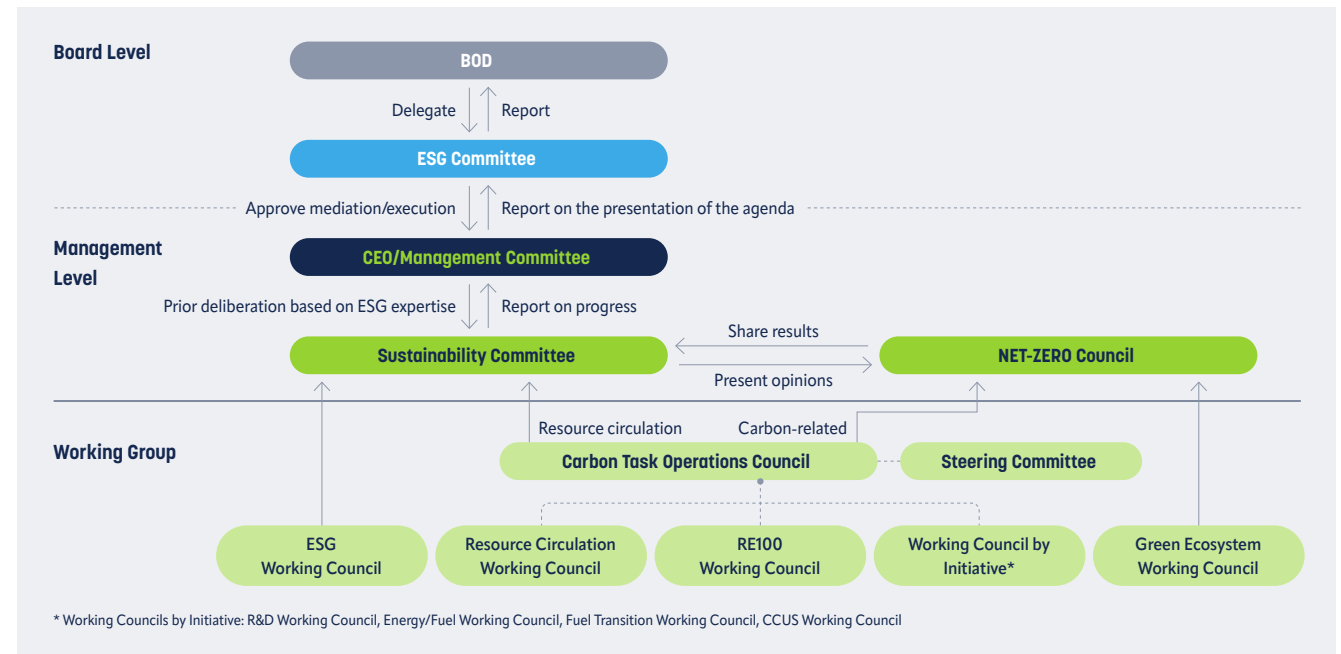
GOVERNANCE

Governance Body Responsible for Oversight of Risk and Opportunity

LOTTE Chemical's Board of Directors (BOD) serves as the highest decision-making body for the company's mid-to-long-term strategy.

It holds responsibility for overseeing and managing the strategy, goals, performance regarding climate-related risks and opportunities. To ensure effective strategy implementation, we have established a governance framework that consists of the BOD, management, and relevant working-level teams.

LOTTE Chemical's Governance Structure for Climate Change Response



Council	Role	Council	Role
Board of Directors	Highest decision-making body regarding climate-related risks and opportunities	Steering Committee	Management-led supports addressing key issues in carbon neutrality initiatives
ESG Committee	Oversees the direction of sustainable management and its implementation progress	Working Council by Initiative	Reviews and develops initiatives to achieve carbon neutrality targets and discusses implementation (R&D, energy/raw material, fuel transition, CCUS)
Sustainability Committee	Management-led body that reviews and oversees key issues regarding sustainable management	Green Ecosystem Working Council	Review strategy and discuss issues to reduce release of pollutants
Net-Zero Council	Field-based management and oversight body that manages carbon neutrality and eco-management targets in the GREEN PROMISE strategy	Resource Circulation Working Council	Implements company-wide cooperation to expand sales of recycled/bio-based plastic
Carbon Task Operations Council	Monitors and reviews progress of carbon neutrality initiatives and supports addressing issues	RE100 Working Council	Promotes interaction among LOTTE Group chemical affiliates for the effective adoption of renewable energy





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(A) Policy on Decision-Making Body and Its Responsibilities

1 Board of Directors

The Board of Directors (BOD) is the highest decision-making body regarding climate - related risks and opportunities. Its roles and responsibilities include the ESG strategy and targets related to climate change. The ESG Committee also reports its agenda to the BOD at least twice a year.

2 ESG Committee under the Board of Directors

The Board of Directors (BOD) has established an ESG Committee to ensure more professional and systematic oversight of climate-related risks and opportunities. The committee is responsible for reviewing the strategic approach and implementation plans of environmental management, approves internal policies and strategies to response to climate change and monitors the establishment and progress of carbon reduction targets. Additionally, the ESG Committee oversees financial decisions related to carbon mitigation efforts including the transition to renewable energy. Its roles and responsibilities are defined in Article 3 of the ESG Committee Operating Policy.

(B) Judgment and Development of Capabilities for Oversight

1 Judgment on Climate-related Capabilities

LOTTE Chemical forms an ESG Committee with a focus on expertise and diversity. Seven key skill indicators, including ESG-related competencies, have been identified as essential capabilities for our members and are disclosed in the Board Skills Matrix. Further details on the BOD's skills can be found on p.104 of this report.

2 Development of Climate-related Capabilities

LOTTE Chemical provides training on climate change to enhance the capacity of ESG Committee members to manage and oversee responses to climate-related risks and opportunities.

Date	Training Course	Details	Participation Rate
May 7, 2024 (3rd Committee)	LOTTE Chemical ESG Management	✓ LOTTE Chemical ESG Strategy (GREEN PROMISE 2030) ✓ LOTTE Chemical ESG Management/ Governance Framework	100%

(C) Risk and Opportunity Information Collection Method and Frequency

The ESG Committee receives reports from the CEO and Management Committee regarding information necessary to manage and oversee climate change-related risks and opportunities. The CEO and the Management Committee review annual ESG strategic initiative plans, their implementation status, and the Net-Zero Roadmap, drawing on their ESG expertise and report progress to the BOD's ESG Committee at least twice a year. Below is the climate agenda for the current term.

Date	Report To	Agenda
Feb 6, 2024	ESG Committee	(Report) Progress and proposed plan on renewable energy adoption
Sep 3, 2024	ESG Committee	Resolution) Approval of 2024 ESG target goals and previous year's performance
Mar 5, 2024	ESG Committee	(Report) Performance of 2024 ESG Target Goals (Report) Progress and proposed plan on renewable energy adoption

(D) How Climate-related Risks and Opportunities are Accounted for in Key Decision-makings

The ESG Committee considers climate-related risks and opportunities when reviewing strategies, goals, and policies to ensure sustainability is integrated into the company's overall business management strategy. In the first half of 2025, we introduced an Internal Carbon Pricing (ICP)* scheme to support strategic decision-making in business and investment planning based on climate-related risks and opportunities. By adopting ICP, we aim to comprehensively consider the economic impact of carbon emissions into our investment evaluations. We set carbon prices by country and timeframe (short-, and mid/long-term) based on a combination of carbon price projections, benchmarks from domestic and global companies, and regional differences in emissions trading schemes. We plan to apply carbon prices flexibly and reasonably each year, taking into account evolving carbon price trends and relevant internal and external issues.

* Internal Carbon Price (ICP): A mechanism by which companies assign an internally set value to carbon emissions to reflect their economic cost

Investment Review Process Using Internal Carbon Prices (ICP)





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(E) Management and Oversight of Target-Setting and Progress

① Management and Oversight of Target-Setting and Progress

LOTTE Chemical manages and oversees target-setting and monitors progress to respond to climate-related risks and opportunities through the ESG Committee. The ESG Committee is responsible for developing internal policies and goals to achieve our carbon neutrality strategy and RE100 Roadmap. The committee regularly receives reports on progress of climate change response at least twice a year. In 2024, progress on the introduction of renewable energy was reported as part of our climate-related goals.

② Setting Climate – related KPIs for Management

To strengthen accountability in the implementation of climate-related targets, LOTTE Chemical links the performance to remuneration of senior management including the CEO. Among the CEO's Key Performance Indicators (KPIs), 20% is allocated to ESG initiatives, particularly focusing on progress against annual targets and initiatives related to the Net-zero Roadmap. Specific initiatives include reduction of GHG emissions, increased adoption of renewable energy, and setting and achieving sales targets for recycled products. To ensure systematic KPI management, performance outcomes are also incorporated into the evaluations of relevant working-level management, the ESG Management Division responsible for implementation, and the Environment Management Team.

Role of Management

(A) Delegation and Oversight of Management Roles

To support cohesive and effective decision-making across the organization, LOTTE Chemical operates a management-level decision-making structure. The Sustainability Committee composed of executives, functions as an oversight body guiding the direction and implementation of our sustainable management practices including climate actions. It also reviews progress of carbon neutrality initiatives and oversees the work of the Net-Zero Council, a dedicated body responsible for field-level performance management, quarterly target tracking, discussing issues, and sharing best practices. We also launched a new Carbon Task Operations Council chaired by the head of the ESG Management Division, with six specialized working councils established under the Council.

The Carbon Task Operations Council convenes on a quarterly basis to review and monitor progress of initiatives aimed at achieving carbon reduction targets and to address any issues that arise during implementation. In addition, the CEO is supported by the ESG Management Division which is dedicated to overseeing ESG activities including those related to environmental and climate risks. Within this division, the Environment Management Team develops overall climate change response strategies including GHG reduction strategies, collecting/analyzing energy usage data from each facility, analyzing climate risks and opportunities, and formulating the company's plan in participating in the emissions trading scheme. Key metrics such as carbon emissions and energy consumption are reported monthly to key executives including the CEO while changes in climate risks are promptly communicated through various internal meetings.

(B) Management Control and Procedures

The management's role of overseeing sustainability-related risks and opportunities is carried out by the Management Committee. The committee provides strong support for risks and opportunities including activities such as developing climate strategies and policies, monitoring performance of relevant activities and plans, establishing targets and metrics, and tracking their progress. We also operate a Greenhouse Gas & Energy Management System (GEMS) for the comprehensive management of energy and GHG emissions. GEMS collects and analyzes GHG emissions data across all unit processes to be utilized for developing appropriate climate actions. Key executives including the CEO, receive monthly reports on carbon emissions and energy consumption and strive to effectively manage climate risks and opportunities. In addition, all LOTTE Chemical business sites are certified under ISO 14001 (Environmental Management System), operating environmental management systems that incorporate climate issues. In accordance with regulatory requirements, we comply with laws and regulations, declare our commitment to environmental management, implemented an environmental management system and monitoring mechanisms, and conduct and report on regular environmental impact assessments and compliance evaluations. The HQ Environment Management Team collaborates closely with external environmental specialists and an internal inspection group to conduct regular environmental compliance diagnostics. This supports robust environmental management across all our business sites. In parallel, environment teams at each site work to continuously improve compliance with applicable environmental laws and regulations. Through this process, we not only prepare against possible risks, but also contribute to internally and externally promoting an environmentally responsible culture.



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STRATEGY

Climate-related Risks and Opportunities

(A) Expected Types of Risks, Opportunities, and Impact

The following are LOTTE Chemical's climate-related risks and opportunities.

Risks and Opportunities		Description	Material RO*	Estimated Time Horizon		
				Short-term (~2025)	Mid-term (2026~2029)	Long-term (2030~)
Physical Risks	Acute	Damages to facilities caused by physical risks such as acute storm events, floods, or wildfires, etc.			●	●
		Revenue decline resulting from plant operation disruptions caused by acute physical risks	●		●	●
	Chronic	Lower productivity and higher air conditioning costs caused by chronic physical risks such as increase in number of heatwave days				●
Transition Risks	Policy and regulations	Increased regulatory compliance costs due to the implementation of GHG regulations such as ETS or carbon tax	●		●	●
		Rise in sourcing price of primary raw material due to burden of carbon regulations and carbon tax throughout the supply chain				●
		Higher GHG management process/system operation costs in the value chain due to increased carbon regulations in the supply chain		●	●	●
	Technology	Increased regulatory compliance costs due to stricter regulations on eco-friendly products and packaging			●	●
		Increased burden of product R&D costs to address demand for low-carbon/eco-friendly products	●	●	●	●
		Increased electricity costs due to the pass-through of decarbonization and energy transition costs in the power sector.	●	●	●	●
		Increased costs for obtaining certifications to meet consumer demand for eco-friendly certified products			●	●
Opportunities	Products /Services	Increase in revenues for recycled and bio-based products in line with growing demand for low-carbon products	●		●	●
	Market	Increase in revenues by pursuing clean energy new businesses			●	●
		Increase in revenues from the introduction and expansion of the renewable energy intermediary business (PPA and REC sales)	●	●	●	●

* Material Risk and Opportunities (Ros) were assessed based on scale and likelihood with further details on the assessment described on page 37 of this report.

(B) Alignment Across Planning Time Horizons for Strategic

Decision-Making

Based on the 2030 ESG Strategy and Net-zero Roadmap, LOTTE Chemical categorizes time horizons as short-term (2025), mid-term (2026~'29), and long-term (2030~). Our general strategic decision-making operates on short-term (~1 year) and mid/long-term (~5 year) cycles which differ from the time horizons used for assessing the impact of climate-related risks and opportunities. The distinction appears because our climate action strategies are designed to contribute to achieving net-zero targets by 2050, whereas our business strategy planning must reflect uncertainties in the business environment. For strategies related to climate risks and opportunities, decisions are made aligned to the mid-term (2026~'29) and long-term (2030~). These decisions include the development and implementation of the ESG management strategy that contains the net-zero roadmap and adoption of renewable energy.

Business Model and Value Chain

(A) Current and Anticipated Effects on the Business Model and Value Chain

1 Business Model and Value Chain

LOTTE Chemical operates distinct business models for its Basic Materials and Advanced Materials businesses. The Basic Materials business plays a core role in petrochemicals, producing and selling base chemicals such as ethylene and propylene through naphtha cracking facilities, as well as monomer products including polyethylene (PE) and polypropylene (PP). The Advanced Materials business focuses on developing functional materials with properties such as high heat resistance, rigidity, and impact strength to meet the needs of end-user industries including home appliances, IT, and automotive sectors. Detailed information on the value





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chains for both businesses is provided on page 7 of this report. Climate risks in LOTTE Chemical's business model and value chain are concentrated at the Yeosu Complex (Basic Materials/ Advanced Materials), being particularly vulnerable to physical risks such as extreme heat and thunderstorms. Such events can lead to facility damage, resulting in repair costs, disruptions to plant operations, or reduced productivity. Further details can be found under 'Strategy: Climate Resilience (A) Climate Resilience Assessment (38p).' When other adaptation measures are not taken, the current and anticipated effects on our business model include increased regulatory compliance costs driven by stricter policies and legislations and higher energy sourcing costs.

Strategy and Decision-making

(A) Current Response and Plans

① Current and Anticipated Changes to Business Model

LOTTE Chemical is expanding its green business to enhance resilience to risks associated with GHG emissions and respond to growing demand for eco-friendly products and services. In 2023, we launched ECOSEED, an integrated brand for mechanically and chemically recycled materials and bio plastic materials (Bio-PET, biodegradable plastic). Recycled plastic can be divided again into mechanically recycling and chemical recycling with r-PET and r-PP from the Basic Materials business and r-ABS and r-PC from the Advanced Materials business being our key products. Bio-plastics are produced using bio-MEG, a raw material derived from feed made from sugarcane. We plan to expand our green business based on the ECOSEED brand through plastic recycling and carbon mitigations.

② Current and Anticipated Measures for Direct Mitigation and Adaptation

Identified Material Risks and Opportunities		Current and Anticipated Measures
Physical Risks	Acute	Damages to facilities caused by physical risks such as acute storm events, floods, or wildfires, etc.
		Revenue decline resulting from plant operation disruptions caused by acute physical risks
Transition Risks	Chronic	Lower productivity and higher air conditioning costs caused by chronic physical risks such as increase in number of heatwave days
	Policy and Regulations	Increased regulatory compliance costs due to the implementation of GHG regulations such as ETS or carbon tax
		Rise in sourcing price of primary raw material due to burden of carbon regulations and carbon tax throughout the supply chain
		Higher GHG management process/system operation costs in the value chain due to increased carbon regulations in the supply chain
		Increased regulatory compliance costs due to stricter regulations on eco-friendly products and packaging
	Technology	Increased burden of product R&D costs to address demand for low-carbon/ eco-friendly products
	Market	Increased electricity costs due to the pass-through of decarbonization and energy transition costs in the power sector.
Opportunities	Products/ Services	Increase in revenues for recycled and bio-based products in line with growing demand for low-carbon products
	Market	Increase in revenues by pursuing clean energy new businesses
		Increase in revenues from the introduction and expansion of the renewable energy intermediary business



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3 Current and Anticipated Measures for Indirect Mitigation and Adaptation

Identified Risks and Opportunities		Current and Anticipated Measures
Transition Risk	Policy and Regulations	-(Current): Engagement in climate actions to respond to the ETS (Emission Trading System) [Key Strategy ②] -(Current-Anticipated): Carry out impact analysis of global carbon regulations and develop marketing strategy -(Current-Anticipated): Build decision-making system for internal carbon price -(Current) Practice energy conservation in the company through carbon neutrality training to employees [Key Strategy ⑥]
	Market	-(Current-Anticipated): Strengthen eco-friendly product development/marketing/branding/certification strategies -(Current-Anticipated): Increase eco-friendly certifications (ISCC Plus, UL EPD, Eco-labeling)
Opportunity		

4 Climate-related Transition Plan, Key Assumptions, Key Dependencies, and Company Plan to Meet Targets

LOTTE Chemical has a transition plan to reduce Scope 1 and Scope 2 emissions by 20% compared to 2018 levels by 2030 and to achieve carbon neutrality by lowering 8.73 million tons of carbon emissions compared to the BAU* by 2050. Our transition plan depends on enhanced energy efficiency through process improvements and zero-energy buildings, conversion to low-carbon fuel (LPG**) and eco-friendly engine fuel (LNG***), and development of PV power generation facilities and hydrogen fuel cells.

* BAU(Business as Usual)

** LPG(Liquefied Petroleum Gas)

*** LNG(Liquefied Natural Gas)

Details on the transition plan are as follows.

[Key Strategy ①] Increase Use of Renewable Energy to 60% by 2030 through Adoption of Solar Power Facilities at Sites, and PPA and REC Purchases

To increase use of renewable energy, LOTTE Chemical reduced around 3,020 tCO₂ in GHG emissions in 2024 by signing a long-term supply agreement for solar RECs and a 5MW solar power plant in 2023. Through such efforts, our Jamsil office

and processes for EC (Ethylene Carbonate) products at the ES (Electrolyte Solvent) plant at the Daesan Complex have been replaced with 100% renewable energy*.

In addition, we are installing solar power facilities on building rooftops or idle parking space at four of our domestic business sites. Currently, solar power facilities with a total capacity of 1.1MW have completed installation at LOTTE Chemical R&D Center, Basic Chemical's Daesan Complex and Yeosu Complex, scheduled to replace power with renewable energy. In 2025, an ESS** was also installed to optimize the use of renewable solar energy along with the power generation facilities. At our overseas sites, we are also reviewing adoption of renewable energy at each country to achieve global RE100. In April 2024, we signed an MOU with local solar developers and PLN, Indonesia's state-owned power provider, to adopt renewable energy at our business sites in Indonesia by reviewing deployment of floating solar panels worth 100MW. In January 2024, 0.9MW capacity solar power generation facilities were installed at LC TITAN in empty space on the roof of the Indonesia business site to replace 0.7% of the site's total electricity consumption with renewable energy. At the Advanced Materials Business compound manufacturing corporation in Vietnam, an agreement was signed with a renewable energy power generation company and installed

0.9MW capacity solar power facilities in April 2022. This is equivalent to an annual 1,300MWh in electricity generated from renewable energy and 17% of the site's total power consumption.

* Power used for the given process is replaced with renewable energy

(excluding electricity consumption for shared facilities such as air/water pollution prevention facilities at the site)

** ESS: Energy Storage System

[Key Strategy ②] GHG Reduction through Conversion

LOTTE Chemical introduced GEMS* in 2010 as the industry's first system for managing greenhouse gases and energy. Since then, it has undergone system upgrades in 2013 and 2020 and is in operation following updates in 2024. GEMS analyzes data from each GHG emissions activity from each manufacturing process to manage energy and GHG emissions. In 2024, 84 reduction items were identified including 7 investments as part of initiatives to improve energy efficiency, reducing approximately 230,000 tons of GHG. Key mitigation efforts include switching primary feedstock from naphtha to LPG at the Daesan and Yeosu Complexes for Basic Chemicals, GTG** fuel conversion, reducing fuel consumption at Basic Chemical's Ulsan Complex through process optimization, and waste heat recovery through MVR*** operations at Advanced Materials' Yeosu Complex.

* GEMS: Greenhouse Gas & Energy Management System for efficient management of meeting targets

** GTG (Gas Turbine Generator)

*** MVR (Mechanical Vapor Recompression): A mechanical vapor recompression system that maximizes energy recovery by exchanging low-temperature waste heat generated in the production process (tower, reactor) with low-pressure steam or waste low-pressure steam generated by heat exchange through an evaporator, and using it by increasing the pressure to the required pressure for the process through MVR

[Key Strategy ③] Adopt CCUS Technology

LOTTE Chemical has completed a pilot project on Carbon Capture Utilization (CCU) facilities that use gas separator membranes and is in the process of commercialization. CCUS is a technology that captures CO₂ from the atmosphere or from exhaust gases and stores it safely for long periods to be used for industrial purposes. The captured CO₂ will be used to make high-purity ethylene carbonate (EC) for organic solvents in



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electrolytes for electric vehicle batteries, dimethyl carbonate (DMC), and polycarbonate (PC) plastics. We plan to sell the captured CO₂ for use in dry ice and semiconductor cleaning solutions. Upon confirmation of business feasibility, CCU technology will also be applied to expanding our Yeosu Plant and production of green methanol. This way, we will increase our CO₂ capture and utilization scale to an annual 500,000 tons by 2030 and 2.61 million tons by 2050. Meanwhile, we have partnered with 10 global companies to conduct a business feasibility study since 2023 on capturing CO₂ in Korea and transporting it overseas for an offshore carbon capture and storage (CCS) business.

[Key Strategy ④] Introduction and Expansion of Zero-Emission Vehicles

LOTTE Chemical joined the Ministry of Trade, Industry, and Energy's Vehicle Purchase Target Management initiative to increase share of eco-friendly electric, hydrogen, and hybrid vehicles. We are also participating in the K-EV100 campaign led by the Ministry of Environment, striving to transition to 100% emission-free vehicles by 2030 and building relevant infrastructure including charging stations for electric and hydrogen-fueled vehicles.

[Key Strategy ⑤] Voluntary Mitigation and Increased Carbon Credits for Carbon Offsetting

LOTTE Chemical is making voluntary endeavors to reduce carbon footprint, both domestically and globally. In 2022, we participated in a national initiative (Korea Forest Service) that conducted a REDD+(Reducing Emissions from Deforestation and forest Degradation plus) feasibility study focused on rainforests in Indonesia. Through GHG reduction activities such as deforestation prevention, as well as other REDD+ activities including forest conservation, sustainable forest management, and enhancement of carbon stocks, we deepened our

understanding of the voluntary carbon market and continue to monitor project implementation.

In 2023, we purchased Korean Offset Credits (KOCs)* through the overseas cookstove offset program. The completed purchases of 347,000 tCO₂eq over the course of 4 rounds can be converted to Korea Credit Union (KCU) emission allowances by 2028 based on domestic emission trading guidelines and will be used according to the company's strategy.

* Carbon Offset Credits : A scheme where Korean Offset Credits (KOC), greenhouse gas offsets for external businesses approved by the Korean government, are earned and can be converted to Korea Credit Union (KCU) emission allowances to be used by controlled entities under the emissions trading system or traded in the emissions trading market.

[Key Strategy ⑥] Implement a Renewable Energy Power Supply Platform for REC, PPA Sales

Based on our plans to secure renewable energy, LOTTE Chemical intends to serve as an intermediary in supplying renewable energy to our consolidated companies, domestic subsidiaries, affiliates within the Chemical Division, and other Group affiliates that are working toward achieving net-zero and RE100 commitments. To facilitate this role, we obtained a license as a renewable energy electricity provider in March 2024. As a first step, we are supplying 14GWh of renewable energy annually to LOTTE Fine Chemical through a direct PPA starting in August 2024.

[Key Strategy ⑦] Engagement in Climate Action to Respond to ETS

In response to the Emissions Trading Scheme (ETS), LOTTE Chemical participated in a policy meeting with the Ministry of Environment in 2024 to provide input on regulations concerning additional allocation and the cancellation of emission allowances in relation to increased emissions. Our feedback is expected to be reflected in the 4th Basic Plan for Emissions Trading. As part of our commitment to environmental responsibility and

the transition to a low-carbon economy, we also contributed perspectives on the phased adjustment of the free allocation ration and enhancements to the cost unit methodology for calculating fuel benchmarking (BM).

[Key Strategy ⑧] Practice Energy Conservation through Carbon Neutrality Training to Employees

After announcing our ESG Strategy, 'GREEN PROMISE 2030,' LOTTE Chemical has been conducting carbon neutrality training to employees including an ESG campaign titled 'Let's Make a Better World Together!' In addition, initiatives such as zero lunch leftovers, go paperless, energy conservation, and using reusable cups are being implemented.

(B) Resource Sourcing Plan

LOTTE Chemical establishes carbon reduction initiatives aligned with our carbon neutrality targets. To support these initiatives, we plan to secure necessary funds through existing internal reserves and the operation of an ESG fund. As part of our efforts to transition to low-carbon fuels, a key strategy for carbon mitigation, we issued bonds worth KRW 1.3 billion in 2024, bringing our cumulative ESG-related investments to KRW 128.7 billion as of 2024.



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Financial State, Financial Performance, and Cash Flow

(A) Impact on Financial State, Financial Performance, and Cash Flow across the Reporting Period, Short/Medium/Long-Term

The financial impacts from climate-related risks and opportunities anticipated for the reporting period and short-, medium-, and long-terms are as follows.

(Unit: KRW million)

Climate Risks and Opportunities		Impact Pathway to Financial State, Financial Performance, and Cash Flow	Financial Impact for the Current Term		Anticipated Financial Impact
	Category		Relevant Item	Value	
Physical Risk	ACUTE Revenue losses resulting from plant operation disruptions caused by acute physical risks	Increase in Repair and Maintenance Expenses due to inspection activities to prepare against acute physical risks	Increase in Repair and Maintenance Expenses	-	LOTTE Chemical conducts inspections and maintenance activities regarding its facilities and equipment to proactively respond to acute physical risks. However, since the frequency or scale of such activities are currently not systemized, it is deemed that there are limitations in reliably estimating the anticipated financial impact. Therefore, quantitative information related to these activities has been excluded.
	POLICY AND REGULATIONS Increased regulatory compliance costs due to the implementation of GHG regulations such as ETS or carbon tax	Increase in costs for purchasing emission permits or gains from selling allowances as a company subject to allocations under ETS	Decrease in Cost of Sales	2,481*	LOTTE Chemical is subject to ETS and incurs costs for purchasing emission permits when GHG emissions exceed the free allocation allowances. For the current reporting period, our GHG emissions were below the allocated allowance, allowing us to sell surplus permits. This resulted in profit generation and is expected to continue in the short-term (2025) with anticipated gains of approximately KRW 3 billion from permit sales. However, if emissions increase, permit prices are expected to rise, leading to higher costs in acquiring additional allowances. Based on current forecasts, average annual costs are expected to reach KRW 66.4 billion in the mid-term (2026-2029) and KRW 463.3 billion in the long-term (2030-2050).
Transition Risk	MARKET Increased electricity costs due to the pass-through of decarbonization and energy transition costs in the power sector.	Increase in costs for sourcing renewable energy certificates (REC)	Increase in Operating Expenses	150	LOTTE Chemical plans to expand our REC purchasing to source renewable energy. However, this has been excluded from calculating quantitative financial impact projections as specific purchasing plans or contract details have not been finalized as of the end of the reporting term.
		Capital expenditure (CAPEX) increase due to renovating and upgrading existing facilities for energy efficiency improvement	Increase in Property, Plant, and Equipment	17,770	LOTTE Chemical is replacing outdated facilities and conducting waste heat recovery to improve energy efficiency. Approximately KRW 1 billion in investments will be assigned to the next term for energy efficiency enhancement initiatives such as installing inverters which is expected to increase our tangible assets (property, plant, and equipment) and operating expenses.
		Increase in property, plant, and equipment due to CAPEX for installing green hydrogen facilities	Increase in Property, Plant, and Equipment	49	LOTTE Chemical is expanding power generation facilities using green hydrogen for a 100% shift to renewable energy by 2050. We plan to continue increasing our capital investments which is expected to increase our tangible assets (property, plant, and equipment), but this has been excluded from calculating quantitative financial impact projections as specific investment plans have not been finalized.
	TECHNOLOGY Increase of product R&D costs to address demand for low-carbon/ eco-friendly products	Increase in relevant operating expenses in line with the rise in R&D activities for low-carbon products to address growing demand	Increase in R&D Expenses	10,216	LOTTE Chemical carries out research and development to develop eco-friendly and low-carbon products, creating financial impact. In the short-term (2025), approximately KRW 5.92 billion of investments are expected to be made in the development of eco-friendly products with expectations for further increase in the future.
Opportunity	PRODUCT/SERVICES Increase in revenues for recycled products in line with growing demand for low-carbon products	Increase in revenue for recycled and bio-based products**	Increase in Sales	379,080	In line with growing demand for low-carbon products and our Recycled/Bio-based product strategy, average annual revenue from the ECOSEED brand and eco-friendly material sales is anticipated to record approximately KRW 376.2 billion in the short-term (2025), KRW 483.3 billion in the mid-term (2026~2029), and KRW 962.4 billion in the long-term (2030~2050).
	MARKET Increase in revenues from the introduction and expansion of the renewable energy intermediary business (PPA, REC)	Increase in commission income from intermediary services for renewable energy supply (e.g., PPA contracts for subsidiary companies)	Increase in Sales	715	LOTTE Chemical obtained qualification as a renewable energy electricity provider, selling RECs and PPAs to its subsidiaries. The scale of REC and PPA sales will be expanded continuously, with resulting sales expected to also increase in the future.

* Approximately KRW 2.5 billion in profits from selling excess permits during the current reporting term

** Financial impact for the current term is calculated based on the sum of revenues from Recycled/Bio-based products of the Basic Materials and Advanced Materials businesses, however anticipated financial impact is calculated only based on resource circulation revenues of the Advanced Materials business





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(B) Impact on Financial Statements in the Following Fiscal Year

Among the identified climate-related risks and opportunities, LOTTE Chemical reviewed items that could trigger material adjustments to assets and liabilities in the upcoming reporting period. We plan to invest approximately KRW 1 billion in the installation of heat exchangers to reduce GHG emissions and inverters to improve energy efficiency through reduced power consumption. This is expected to bring material adjustments to the book value of Property, Land, and Equipment in the next fiscal year. In addition, sales of resource circulation products (ABS, PC, PP, etc.), as well as products manufactured using pyrolysis oil-based naphtha from waste plastic, are expected to continue, with anticipated revenues reaching approximately KRW 370 billion. As a result, significant adjustments to the carrying amount of accounts receivable are expected to occur in the next fiscal year.

Climate Resilience

(A) Climate Resilience Assessment

LOTTE Chemical carried out scenario-based analysis to assess resilience to the identified climate risks and opportunities.

[Physical Risks]

1 Implications of Assessment of Strategy and Business Model

Using the IPCC SSP** scenario, LOTTE Chemical carried out a physical risk assessment on 9 climate drivers*** at the domestic and overseas business sites. The risk assessment found heatwaves and water shortages as high-priority risks. The following shows the financial impact from the two climate drivers.

* LOTTE Chemical's 30 business sites (7 in Korea, 3 LEP (Lotte Engineering Plastics) and 20 overseas)

** SSP: Shared Socioeconomic Pathways

*** Climate driver categories recommended by the UN Climate Risk Landscape Report and the IPCC Report: Heatwaves, extreme cold, landslides, wildfires, heavy rainfall, river floods, coastal floods, rain-related flooding, water stress and droughts

(Unit: KRW 100million)

Category		Scenarios	
Risk	Period	SSP1 – 2.6	SSP 5 – 8.5
Heatwave	2030	440	480
	2050	610	970
Water shortage (Water stress and droughts)	2030	20	20
	2050	20	20

The financial impact pathway for each climate driver are as follows.

Category		Financial Impact Pathway
Acute	Heatwaves	Electricity consumption × electricity rate × increase rate in cooling degree days × resilience factor*
Chronic	Water Shortage (Water stress and droughts)	No. days of operation suspension due to water stress × daily revenues × resilience factor*

* Resilience factors (0~1) were assigned following qualitative assessment resilience levels considering measures for addressing climate related physical risks

2 Significant Areas of Uncertainty considered in the Assessment

Category		Description of Uncertainty
Physical Risks	Scenario Uncertainty	Inherent uncertainty in the climate change pathway and impact of the IPCC scenario due to limitations in forecasting caused by complexity of the climate system
	Model Uncertainty	Discrepancies with actual financial impact due to simplifications and assumptions applied to the financial modeling process

3 Assessment of Resilience Levels

The Yeosu Complex was identified as having the highest exposure to physical climate risks in our scenario analysis. Located on the coast, the site faces potential impacts such as facility damage, flooding, and power outages, driven by natural disasters including heatwaves. To mitigate heat-related risks, we have installed air conditioning in worker rest areas, introduced flexible working hours during heatwave periods, and conducted thermal imaging inspections of substations and electrical rooms. Additionally, increasing frequency and severity of droughts and water shortages in the Yeosu region pose operational challenges. In response, we are maintaining maximum water levels in reserve tanks, cooling towers, and water storage systems, as well as expanding water reuse within the plant.

Category		Response
Physical Risks	Heatwaves	· Supplied water and glucose supplements · Installed air conditioners in rest area for workers · Flexible workhours during heatwaves · Installed canopies and tarps · Build employee health management response process for different levels of heatwaves · Provided training material on how to prevent heat related illnesses
	Water Shortage (Water stress and droughts)	· Reviewed thermal imaging of equipment inside substations and electrical rooms (monthly) · Filled reserve water tanks/cooling towers/tanks at maximum levels to prepare for droughts · Reviewed plants where operations are partially discontinued to prepare for limited water situations · Reduced unnecessary water use in the event of industrial water restraining measures · Minimized the amount of cooling tower blow downs · Examined fire extinguishing pipes for leaks and reviewed maintenance plans · Increased water reuse within plants

The company's specific strategy reflecting implications from the analysis can be found under 'Strategy: Strategy and Decision-making, (A) Current Response and Plans (34p.)' Based on such findings, the company is considered to be implementing systems and initiatives to respond to physical risks.





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[Transition Risk]

1 Implications of Assessment of Strategy and Business Model

With the implementation of stricter domestic and international GHG reduction targets, including rising emissions permit prices, companies subject to ETS are expected to face increased costs for purchasing allowances to cover emissions that exceed their allocated limits. As LOTTE Chemical is subject to the K-ETS, we have identified rising carbon pricing as a material risk and conducted a financial impact analysis to assess its potential effects. Our analysis is based on the Stated Policies Scenario (STEPS), the Announced Pledges Scenario (APS), and the Net Zero Emissions by 2050 Scenario (NZE) set forth by the International Energy Agency (IEA). The assumed auctioning ratio used in our assessment reflects the Nationally Determined Contribution (NDC) industry mitigation targets, while free allocation levels were calculated using average GHG emissions from the three years preceding the designated allocation year in accordance with the Act on the Allocation and Trading of GHG Emissions.

Our climate change scenario analysis of transition risks indicates that while short-term gains may be realized through the sale of excess emissions permits, cost burdens associated with purchasing additional permits is anticipated for the mid-term (1~5 years) and long-term (5+ years ~ 2050) as the ratio of free allowances decreases and carbon permit prices rise. Under the NZE scenario, which projects the highest carbon price at USD \$250, these costs are expected to escalate significantly.

2 Significant Areas of Uncertainty considered in the Assessment

Category		Description of Uncertainty
Transition Risk	Scenario Uncertainty	Uncertainties in fluctuating carbon prices of each country that are considered in the future carbon price calculations of the IEA scenarios
	Model Uncertainty	Discrepancies with actual financial impact due to simplifications and assumptions applied to the financial modeling process
	Auctioning Ratio	Uncertainties exist as emission permit auctioning is determined by law and affected by political and environmental factors

3 Assessment of Resilience Levels

To proactively respond to tightening climate regulations both domestically and internationally such as rising carbon prices and adjustments in free emission allowances, LOTTE Chemical has established carbon neutrality targets and developed an RE100 roadmap. We plan to secure renewable energy through PPAs and REC purchases. This way, we aim to increase the share of renewable energy use to 60% of total operations by 2030 and achieve 100% renewable energy use by 2050. The company's specific strategy based on the analysis implications can be found under 'Strategy: Strategy and Decision-Making, (A) Current Response and Plans (34p.)' Based on these findings, the company is considered to have the strategy and capabilities to respond to transition risks. When 2.97 million tCO₂eq is effectively reduced compared to BAU levels by 2030, the company will be able to generate financial benefits from excess permit sales, with an anticipated financial impact of approximately 75.8 ~ 182.6 billion KRW (annual average) can be saved during the mid-term period (2026~2029).

(Based on annual average, Unit: KRW million)

Category	Mid-term (2026 ~ 2029)			Long-term (2030 ~ 2050)		
	STEPS	APS	NZE	STEPS	APS	NZE
BAU*	91,041	210,746	218,323	540,784	1,264,941	1,504,931
Following strategy implementation**	15,203	34,437	35,655	63,612	150,941	178,109
Cost-savings***	75,838	176,309	182,668	477,171	1,114,000	1,326,822

* If the company does not implement reduction measures, the anticipated financial cost (allowance purchase cost) under each scenario is calculated by multiplying the carbon price per year by the shortfall in allowances, where Lotte Chemical's Scope 1 and 2 emissions exceed the allocated portion under the industrial sector reduction target.

** Financial losses or gains (profits from trading surplus permits) calculated by multiplying the annual carbon price by the expected surplus or deficit of permits resulting from implementing a GHG reduction strategy.

*** Represented as the difference between the estimated financial loss without a reduction strategy (*) and the financial outcome when the strategy is implemented (**).

[Opportunity]

1 Implications of Assessment of Strategy and Business Model

With growing global demand for low-carbon materials, we have identified increased revenues from the sales of recycled products as a key climate-related opportunity and have estimated the anticipated financial impact based on the circular resource products in the advanced material business. For our analysis, we focused on synthetic resin (ABS) and engineering plastic (PC) of the Advanced Materials business. Using projections aligned with the IEA Net Zero Emissions (NZE) scenario, we estimate that the low-carbon product market will expand significantly. Based on these assumptions, LOTTE Chemical's circular resource product sales are anticipated to reach approximately KRW 10 trillion by 2050. PC products are expected to account for 10% of the total market ABS products are expected to account for 5% based on our estimated sales plans. In response, we are actively investing in recycling technologies and R&D initiatives to develop a recycling ecosystem, encompassing raw material sourcing (waste plastic), production of recycled materials, and consumption through recycled end products. Our specific strategy to address the growing demand for low-carbon materials from clients such as EVs and home appliance manufacturers can be found under 'Resource Circulation Strategy Development and Management (47p.)' of this report. Based on these findings, the company is considered to have the strategy and capabilities to adapt to climate opportunities. However, we acknowledge that there is some uncertainty, particularly around the potential misalignment between anticipated and actual market demand for eco-friendly products and services.





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(B) Climate-related Scenario Analysis Methodology and Timing

1 Information on Input Variables Used by the Company

	Category	Details
Physical Risks	Scenario and Source	· SSP1-2.6 (<2°C) - Definition: Scenario that limits global warming to below 2 degrees to achieve 2050 Net Zero goals. · SSP 3-7.0 (>3°C) - Definition: Mid-high level carbon emission scenario, assuming no additional climate policies · SSP5-8.5 (>4°C) - Definition: Worse-case scenario where temperatures rise more than 4 degrees due to GHG emissions · Common - Source: IPCC (Intergovernmental Panel on Climate Change) 6th Assessment Report
	Alignment with the Latest International Agreements	· Aligns with the latest international conventions (UNFCCC and Paris Agreement).
	Relevance with Resilience Assessment	· Please refer to the interpretation on the scenario analysis outcome within the Resilience Assessment section of this report.
	Time Horizon	· The period is set from the current term to 2050 when climate change trends can be identified.
	Scope of Operations	· 30 Business sites in Korea and overseas - Domestic: 7 sites - LEP (Lotte Engineering Plastics): 3 sites - Overseas: 20 sites
Transition Risk / Opportunity	Scenario and Source	· NZE (Net Zero Emission by 2050) - Definition: Assuming the pathway to achieving '0' carbon emissions in global energy by 2050 - Source: IEA World Energy Outlook 2023 · STEPS (Stated Policy Scenarios) - Definition: Assuming policies are implemented based on current policies of countries around the world and assessments made on the policies announced by each country - Source: IEA World Energy Outlook 2023
	Alignment with the latest international agreements	· Aligns with the latest international agreements (UNFCCC and Paris Agreement).
	Relevance with Resilience Assessment	· Please refer to the interpretation on the scenario analysis outcome within the Resilience Assessment section of this report.
	Time Horizon	· Period until 2050
	Scope of Operations	· (Transition Risk) Based on LOTTE Chemicals which is subject to ETS · (Opportunity) Based on LOTTE Chemicals which conducts the Basic Materials and advanced materials businesses

2 Company Key Assumptions Applied to Analysis*

Climate Policies in the Jurisdiction

- Assuming a steady increase in auctioning within the domestic Emissions Trading Scheme (ETS): Assuming auctioning ratios based on cumulative emissions reduction performance of each sector

Country-level or Region-al-level Variables

- Outlook on Korea's carbon pricing in the scenario (Unit: USD/tCO₂)

Category	2030	2050
STEPS	56	89
NZE	140	250

- Applies 2024 average exchange rate of KRW 1,363/USD

* Investments to mitigate emissions to achieve carbon neutrality are not taken into account in the resilience analysis

(C) Reporting Period for the Climate Scenario Analysis

LOTTE Chemical conducted the climate-related scenario analysis during the reporting period for this term.



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RISK MANAGEMENT

Climate-related Risks and Opportunities Management Process

(A) Climate Risks and Opportunity Management Process and Policy

LOTTE Chemical operates a process of identifying, assessing, prioritizing, and monitoring risks and opportunities related to climate change to identify and respond to climate-related risks.

1 Identification

LOTTE Chemical composes a standardized pool of climate-related risks and opportunities based on key risk and opportunity categories used in the TCFD Framework and CDP Climate Change questionnaire.

2 Assessment

LOTTE Chemical assesses the materiality of climate-related risks and opportunities through scenario analysis, evaluating both financial materiality and impact materiality. For physical risks, we leverage SSP scenarios to conduct risk assessment across 30 of our business sites. This analysis considered each site's geographical location and business significance and covered nine climate drivers over the short-term (~2025), mid-term (~2030), and long-term (~2050). For transition risks and opportunities, we used the Net-zero 2050 (Below 1.5°C) scenario* to assess business impacts and likelihoods.

In addition, a climate materiality assessment was conducted on the identified pool of risks and opportunities, evaluating their magnitude and likelihood to select those most critical to our operations. Afterwards, internal stakeholders were interviewed to evaluate how these climate factors affect our current financial statements and review development of short-/medium-/long-term strategies to calculate the current and anticipated financial impacts of climate change.

* Scenario that turns CO₂ emissions in 2050 to zero to deter global warming to below 1.5°C

3 Prioritization

LOTTE Chemical carries out materiality assessments each year to select sustainability topics that are material to the company. In this year's materiality assessment, climate-related risks such as climate change and energy were found to have higher risk than other sustainability risks and opportunities. Specific management measures for the selected material topics are reported to the ESG Committee which oversees ESG risks.

4 Monitoring

LOTTE Chemical identifies and assesses climate-related risks and opportunities each year to monitor changes such as new risks and impact materiality. Further details can be found under the 'Governance: Risk and Opportunity Oversight, Management, and Decision-making Body, (E) Management and Oversight of Target-setting and Progress (32p.)' section of this report.

5 Input Variables and Parameters

LOTTE Chemical utilizes the following data for identifying and assessing climate-related physical and transition risks.

Category	Input Variable and Parameter	Data Source
Physical Risk	Physical scenario	IPCC 6th Report
Transition Risk/ Opportunities	GHG emission trends	Company internal data
	Transition scenario	IEA World Energy Outlook 2023 IEA Net – Zero 2050 (Below 1.5)
	Outlook on GHG emission permit price	2024 K-ETS (KAU24) average permit price, IEA World Energy Outlook 2024

Integration with Overall Risk Management System

LOTTE Chemical operates an integrated risk management system to manage operational risks, financial risks, and non-financial risks that may arise across the business efficiently and identify potential risk factors. In addition, we develop measures to deter recurrence of risks including non-financial risks across the business while building a preventing system to strengthen our response against risks. Depending on the level of materiality, risks are distinguished between daily risks that are addressed by the Management Committee and CEO/Management Council and specialized risks that are addressed by BOD committees with members that hold relevant legal/technical expertise for systematic management.



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METRICS AND TARGETS

Climate related Metrics

(A) Greenhouse Gases (GHG)

1 Total GHG Emissions

LOTTE Chemical's Scope 1, 2, and 3 emissions are as follows.

(Unit: tCO₂eq)

Category		2022*	2023	2024
Scope 1	Parent company and the consolidated subsidiary companies	4,187,396	5,977,499	5,853,287
Scope 2 (region-based)	Parent company and the consolidated subsidiary comapanies	2,027,266	3,828,638	3,862,060
Subtotal (Scope 1, Scope 2)		6,214,656	9,806,130	9,715,338
Scope 3**	C1 Purchased goods and services	8,647,375	6,919,193	11,095,217
	C2 Capital goods	94	238	40
	C3 Fuel and energy related activities	103,702	108,609	185,279
	C4 Upstream transportation and distribution	268,001	245,302	271,012
	C5 Waste generated in operations	29,168	34,798	28,117
	C6 Business travel	854	1,953	1,476
	C7 Employee commuting	3,516	5,560	2,550
	C8 Upstream leased assets	57	160	171
	C9 Downstream transportation and distribution	104,761	149,071	75,186
	C13 Downstream leased assets	6	12,071	11,736
	C15 Investments***	2,421,878	601,230	1,560,272
Subtotal (Scope 3)		11,579,412	8,078,185	13,231,056
Total		17,794,068	17,884,315	22,946,394

* Scope 1 and 2 emissions for 2022 is based on LOTTE Chemical's separate standard; consolidated emissions are calculated starting in 2023

** Scope 3 GHG emissions were calculated based on the separate standard and only for key categories

*** Includes Scope 1 and Scope 2 emissions of joint ventures, affiliates, and non-consolidated subsidiary companies

2 Approach for Measuring GHG Emissions

Measuring Approach

Scope 1,2

- IPCC Guidelines for National Greenhouse Gas Inventories, 2006
- Guidelines for Reporting and Certification of Emissions in the GHG Emissions Trading Scheme
- The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

Scope 3

- The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard

Inputs and Assumptions

We calculated Scope 3 emissions under the key Scope 3 categories managed by LOTTE Chemical. Category 10 (Processing of Sold Products), Category 11 (Use of Sold Products), Category 12 (End-of-life Treatment of Sold Products), and Category 14 (Franchises) were not included. We have continued to calculate carbon emissions for Category 12 (End-of-life Treatment of Sold Products) since first initiating this in 2022. However, we plan to disclose the figures only after further refining our calculations as data consistency regarding country-specific treatment rates and emission factors has not yet been secured.



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	Category	Inputs		Key Assumption and Rationale
		Activity Data	Parameter	
Scope 1	Stationary Combustion	Fuel consumption (e.g., propane, LNG, methane) and process emissions	IPCC emission factors according to the emissions trading scheme guidelines and facility-specific emission factors	Application of greenhouse gas emission calculation methods for each emission activity according to national emissions trading scheme guidelines
	Mobile Combustion	Fuel consumption (e.g., gasoline, diesel)	IPCC emission factors according to the emissions trading scheme guidelines	Application of greenhouse gas emission calculation methods for each emission activity according to national emissions trading scheme guidelines
Scope 2	Purchased Electricity	Electricity consumption	National grid emission factor according to the emissions trading scheme guidelines.	Electricity consumption × carbon emission factor (excluding self-generated electricity)
	Purchased Steam	Steam consumption	National steam emission factor and externally purchased emission factor	Steam consumption × carbon emission factor (excluding self-generated steam)
Scope 3	Category 1 (Purchased Goods and Services)	2024 SAP material purchase volume, naphtha purchase volume, water withdrawals	Ecoinvent	Extract material purchase data from SAP and calculate emission volume by multiplying Ecoinvent factor of each material, cutting off at cumulative 90% for items that can be converted to mass units
	Category 2 (Capital Goods)	8 product categories with EL-certified capital goods purchased in 2023 that were viewed in SAP	Environmental Product Declaration (EPD) certified carbon footprint	Classify new fixed assets acquired in the reporting year, Quantity of each capital good purchased × carbon footprint of each product
	Category 3 (Fuel and Energy related Activities)	Fuel consumption volume recorded on statements	Evaluation factors for the Environmental Product Declaration (EPD) by KEITI (Korea Environmental Industry & Technology Institute) LCI DB Electricity Factor – Scope2 Electricity Emission Factor	Fuel consumption × carbon emission factor
	Category 4 (Upstream Transportation and Distribution)	Data managed by the department in charge of transportation (including internally managed file and SAP system)	Evaluation factors for EPD by KEITI	Define departure and arrival destinations for each transport modes such as ship, air, or truck, etc. c., Weight of goods transported × distance (from departure to arrival) × carbon emission factor
	Category 5 (Waste Generated in Operations)	Waste volume in the Albaro System, the PSHE information system	Evaluation factors for EPD by KEITI	Waste treated × EL (Environmental Labeling) evaluation factor by waste treatment method
	Category 6 (Business Travel)	Domestic and overseas business travels in the payment portal	Evaluation factors for EPD by KEITI	Distance of business travel × emission factor of each transportation means
	Category 7 (Employee Commuting)	Transport modes identified through survey and commuting distance according to data from the field	Ministry of Environment's low-carbon green event guidelines	Total number of employees × annual average number of working days × average commute distance of sample × emission factor
	Category 8 (Upstream Leased Assets)	Leased assets of each business site	Statistics from the Green Building Portal (Green Together) 2024 Korea Emissions Trading Scheme emission factor	Area of leased asset x emission factor
	Category 9 (Downstream Transportation and Distribution)	Data managed by the department in charge of transportation (including internally managed file and SAP system)	Evaluation factors for EPD by KEITI	Define departure and arrival destinations for each transport modes such as ship, air, or truck, etc., Weight × distance (from departure to arrival) × carbon emission factor
	Category 13 (Downstream Leased Assets)	Leased assets of each business site	Statistics from the Green Building Portal (Green Together) 2024 Korea Emissions Trading Scheme emission factor	Area of leased asset × emission factor
	Category 15 (Investments)	Statements of companies subject to K-ETS based on equity investment rates in the business report of the current term and GHG emissions calculated internally by key overseas subsidiaries	2024 statement 2024 Korea Emissions Trading Scheme emission factor (based on emission permits submitted)	Determine qualifying entities among subsidiaries, affiliates, and joint ventures in the business report of the reporting year (Hanju, HD Hyundai Chemical, SEETEC, etc.), Equity share × GHG emissions in the reporting year

Changes in Measurement Methodology and Reason

LOTTE Chemical reviews our organizational boundaries and emission activities each year to reassess the scope to be included in measuring our emissions. The changes made in our GHG emissions measurement approach for the current reporting period compared to the previous period are as follows.

Organizational Boundaries

- Cat 15: Emissions from 2 affiliated entities were added in accordance with equity share disclosed in the business report

Emission Activities

- Cat 1: Calculated based on the latest emission factor
- Cat 7: Reflected number of employees per business site when conducting survey to calculate emissions from employee commuting

3 Contracts related to Scope 2 GHG Emissions

LOTTE Chemical purchased RECs through a REC long-term supply agreement and signed renewable energy agreements to mitigate Scope 2 GHG emissions such as through PPAs with various solar energy power plants.

Contract Means	Contract Means	Amount Used (MWh)
Purchase RECs	Solar Power	5MW



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(B) Assets and Business Activities Vulnerable to

Climate-related Transition/Physical Risks

LOTTE Chemical identifies assets and business activities with a high likelihood of physical damage from natural disasters triggered by climate change as being vulnerable to climate-related physical risks. Among our domestic sites, the Yeosu business site has the highest exposure to such risks including heatwaves, water shortages, storms, and floods. To mitigate potential damage, facilities managed by the Yeosu site have been designated as vulnerable assets and are shown below.

Category		2024		
Vulnerable assets or business activities	Item	Value (KRW million)	Percentage (%)	
Assets at the Yeosu Business Site	Property, plant, and equipment*	1,193,345	5.8	

* Property, plant, and equipment excluding land

(C) Assets or Business Activities Aligned with

Climate Opportunities

LOTTE Chemical has identified the following assets and business activities as aligned with climate-related opportunities.

Category		2024		
Opportunity	Aligned Business Activity	Item	Value (KRW million)	Percentage (%)
Sell low—carbon products	Increase supply of recycled products	Sales	379,080	2.8

(D) Capital Allocation

For details on capital allocation in preparation against climate risks and opportunities, please refer to the 'Strategy: Financial State, Financial Performance, and Cash Flow (37-38p.)' section of this report.

(E) Compensation (Management)

For information on climate factors related to management compensation, please refer to the 'Governance: Risks and Opportunities Management and Oversight Decision-making Body (E) Management and Oversight of Target-setting and Progress (32p.)' of this report.

(F) Industry-based Standards (refer to the Chemicals

Sector Standards under the 'Industry-based Guidance on Implementing IFRS S2')

For more information on industry-based standards, please refer to the 'SASB Index (148p.)' section of this report.

Climate-related Targets

(A) Data for Metrics Used in Setting Targets

(Target Metric, Objective, Scope, etc.)

LOTTE Chemical set reducing carbon emissions by 20% compared to 2018 levels by 2030 as our carbon reduction target. This target is higher than the government's sector target (11.4% reduction vs. 2018) and is equivalent to a 2.97 million ton-mitigation from 2030 BAU emission levels (798 million tons). In addition, we have set a long-term target to achieve Net-Zero by 2050. Our 2050 carbon neutrality targets are based on net emissions, encompassing both direct and indirect (Scope 1, 2) emissions. We recognize the importance of addressing emissions across the entire value chain and are currently reviewing the inclusion of Scope 3 emissions.

Metric	Scope	Emissions			
		2018	2024	2030	2050
Scope 1, 2 GHG Emissions	LOTTE Chemical (separate)	6,262,670 tCO ₂ eq	5,903,386 tCO ₂ eq	20% reduction vs. baseline*	100% reduction vs. baseline
Scope 1, 2 GHG Reductions (absolute target)		(baseline)	6% reduction		

* The baseline for the GHG reduction target disclosed in the previous reporting period has been revised (but the target reduction amount by 2030 remains unchanged).

Metric	Scope	Performance	Interim Target	Final Target
		2024	2030	2050
Share of renewable energy usage**	LOTTE Chemical (including consolidated entities and subsidiaries)	71%	60%	100%

** Target and performance regarding share of renewable energy usage are set and managed based on LOTTE Chemical consolidated statements

(Unit: tCO₂eq)

Initiative	Details	Interim Target Reductions		Final Target Reductions	
		2030		2050	
Improve energy efficiency	Process improvement, zero-energy buildings (Daejeon, Uiwang)		39		330
CCUS	CO ₂ capturing membranes, adoption of carbonization processes, etc.		50		261
Raw material, fuel replacement	Low Carbon raw material (LPG), eco-friendly engine fuel (LNG) conversion etc.		28		43
Renewable energy	Installation of solar power plants and hydrogen fuel cell facilities, etc.		180		239
Total	Total		297		873



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To support these targets, LOTTE Chemical has established eco-friendly policies and goals, as well as a plan to increase the use of renewable energy across not only all of our businesses, but also subsidiaries in which we hold a 50% or greater stake. Based on such initiatives, we formally joined the global RE100 initiative in 2023. As a first step, we aim to raise the share of renewable energy use at our domestic business sites to 60% by 2030 through securing both Power Purchasing Agreements (PPAs) and Renewable Energy Certificates (RECs) at the same time. By 2050, we plan to reach a 100% transition to renewable energy through the deployment of power generation facilities that use green hydrogen.

In addition, LOTTE Chemical is subject to ETS and conducts annual GHG emissions calculations for each business site followed by third-party verification.

(B) Review of Targets

1 Third-party Assurance of Targets

LOTTE Chemical receives third-party assurance regarding Scope 1 and Scope 2 GHG emissions, but we do not receive separate assurance regarding GHG reduction targets.

2 Target Review Process

LOTTE Chemical has a process for reviewing climate change response targets to systematically manage our performance. The ESG Committee approves climate targets and reviews progress of meeting climate targets through our annual ESG performance reports. Details on the highest decision-making body's management and oversight of climate targets can be found

under the 'Governance: Risk and Opportunity Management, Oversight, and Decision-Making Body (E) Management and Oversight of Target-setting and Progress (32p.)' section of this report.

3 Target Revision and Rationale

There are no revisions to the target in the 2024 reporting period.

(C) Analysis of Performance Against Targets

LOTTE Chemical continues to make efforts at the corporate-level to reduce emissions in line with our GHG emission reduction targets. Performance of reporting year for targets are shown below.

Category	2021	2022	2023	2024	2025(projected)
Scope 1, 2 GHG Emissions	6,559,675	6,218,651	6,158,540	5,903,386	5,612,564
Scope 1, 2 GHG Reductions (absolute target)	126,001	118,700	106,450	113,076	102,439

(D) Data on GHG Emission Targets

Type of GHG and Scope included in Targets

Category	Type of GHG						
Scope	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	NF ₃
Scope 1	○	○	○	N/A	N/A	N/A	N/A
Scope 2*	○	○	○	N/A	N/A	N/A	N/A

* Scope 2: Targets are based on location-based measurements



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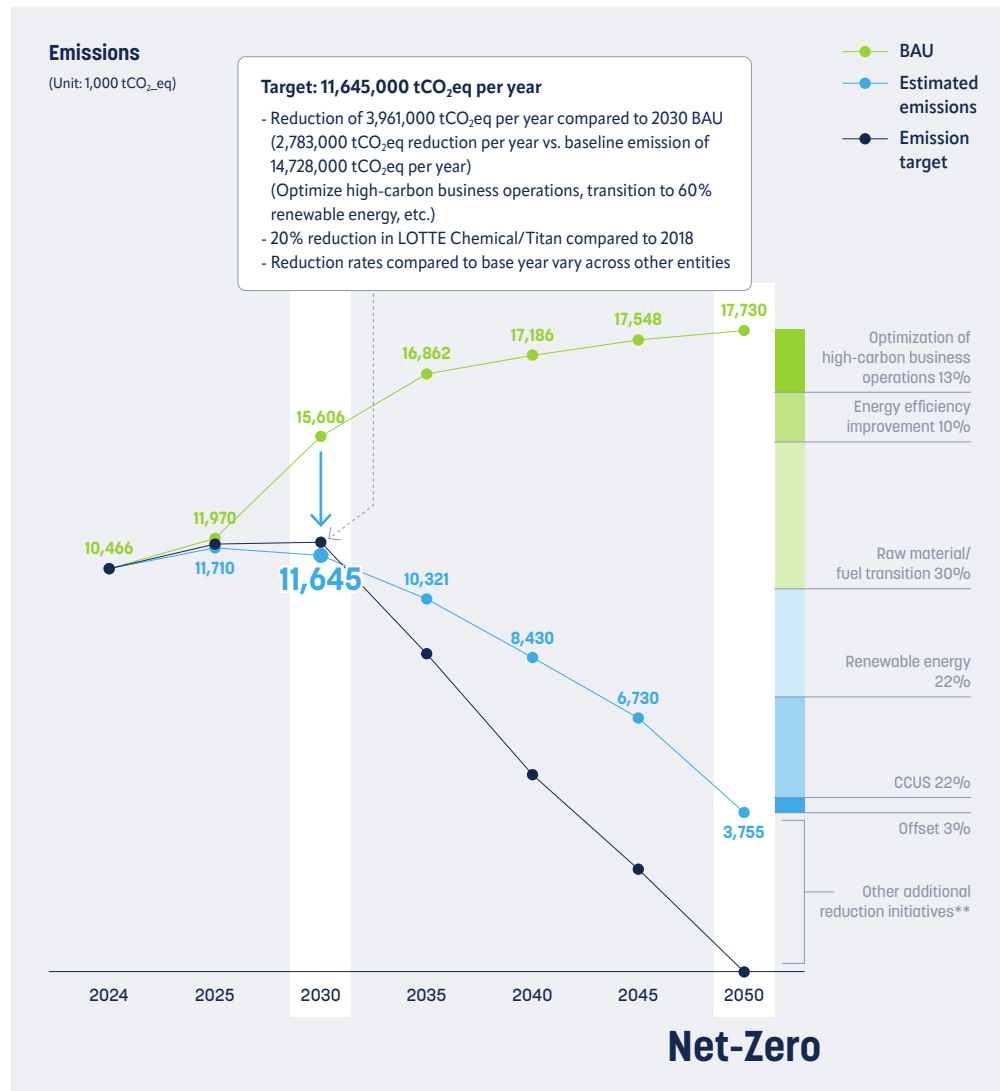
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Chemical Division's 2050 Net-Zero Roadmap

(29 companies, including companies in Chemical's consolidated statements and major joint ventures)*



* (25 consolidated entities) Chemical, Fine Chemical, LEM, LTGS, LEP, LCI, LC TITAN, LC USA, and Basic Chemicals/Advanced Materials overseas entities (17 entities) (4 major joint ventures) INEOS Chemical, LVE, MCC, Aluminium

** Operation of a Consultative Body for Greenhouse Gas Reduction and Promotion of Joint Response within the Chemical Industry Group (Sharing of individual company energy-saving best practices and reviewing their applicability, introduction of renewable energy, joint response at the chemical industry level such as using externally purchased steam and low-carbon fuels)

(Unit: tCO₂-eq)

Category	No.	Company Name	Direct GHG Emissions (Scope 1)	Indirect GHG Emissions (Scope 2)	Total GHG Emissions (Scope 1 + Scope 2)
Entity in Consolidated Financial Accounting	1	LOTTE Chemical	3,808,952	2,094,441	5,903,386
	2	LOTTE Fine Chemical Co., Ltd.*	60,685	616,192	676,874
	3	LOTTE Energy Materials Co., Ltd.*	5,484	173,962	179,446
	4	LOTTE GS Chemical Co., Ltd.	36,218	93,311	129,529
	5	LOTTE Chemical Titan Holding Berhad	1,240,757	464,182	1,704,939
	6	LOTTE Chemical USA Corp.	532,492	341,038	873,530
	7	LOTTE Engineering Plastics	981	7,086	8,067
	8	LOTTE Chemical Engineering Plastics (Dongguan) Co., Ltd.	587	9,120	9,708
	9	LOTTE Chemical Engineering Plastics (Tianjin) Co., Ltd.	51	7,088	7,139
	10	LOTTE Chemical Engineering Plastics (Jiaxing) Co., Ltd.	31	2,324	2,355
	11	LOTTE Chemical Engineering Plastics (Shenyang) Co., Ltd.	260	1,792	2,053
	12	LOTTE Chemical Engineering Plastics (Haryana) Pvt., Ltd.	39	6,588	6,626
	13	PT LOTTE Chemical Engineering Plastics Indonesia	65	6,977	7,043
	14	LOTTE Chemical Vietnam Co., Ltd	64	10,723	10,787
	15	LOTTE Chemical Hungary Ltd.	677	4,640	5,317
	16	Peker Surface Designs Industry and Trade Joint Stock Company	1,506	9,426	10,932
	17	LOTTE Chemical Alabama Corp.	137	4,192	4,329
	18	LOTTE Chemical Mexico S.A. de C.V.	269	5,215	5,484
	19	LOTTE Chemical Nigeria Limited	16	5	21
	20	LOTTE Chemical Trading (Shanghai) Corp.	-	49	49
	21	LOTTE Chemical (Thailand) Co., Ltd.	143	66	209
	22	LOTTE Chemical Japan Co., Ltd.	1	6	7
	23	LOTTE Chemical Deutschland GMBH	148	39	187
	24	LOTTE Chemical California, Inc.	26	35	60
	25	LOTTE Chemical Pakistan Limited**	163,697	3,565	167,262
Other Investees	Subtotal		5,853,287	3,862,060	9,715,338
	26	LOTTE Versalis Elastomers Co., Ltd.	4,143	139,063	143,205
	27	LOTTE MCC Co., Ltd.	130,268	119,942	250,209
	28	LOTTE INEOS Chemical	163,376	121,735	285,110
	29	LOTTE AluminiumSubtotal	21,789	50,233	72,019
Subtotal			319,576	430,973	750,543
Total			6,172,863	4,293,034	10,465,881

* As for LOTTE Fine Chemical and LOTTE Energy Materials, emissions data excludes subsidiary companies

** Entity scheduled for divestment and excluded from verification

*** Among the non-consolidated subsidiary companies, data for four entities that are subject to domestic GHG emissions trading schemes are disclosed in this 2024 ESG Report

※ Final verified emissions based on the Emissions Trading Scheme Guidelines are scheduled to be reported at the end of July 2025, which may result in some discrepancies with the figures above





MANAGEMENT FOR RESOURCE CIRCULATION

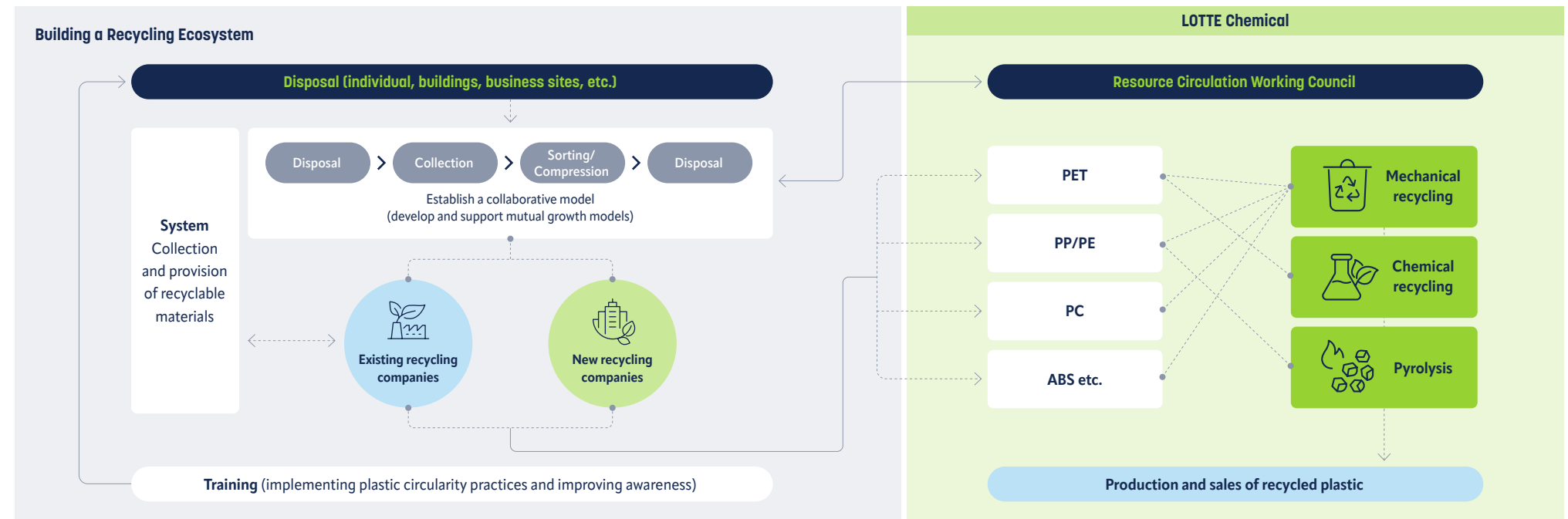
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Resource Circulation Strategy

Plastic has contributed to enhancing quality of life for humans and preserving earth's resources. However, it has also triggered serious environmental issues due to low recycling rates after use. As it is difficult to substitute plastic completely in today's modern society, we must seek a fundamental solution to address the issue of plastic usage. The most effective solution to this challenge is building a sustainable plastic recycling loop. As a company primarily engaged in the production of feedstock for plastic, LOTTE Chemical supports and strengthens the

establishment of a recycling ecosystem for sustainable business operations and growth. Sustainability of the plastic recycling loop depends on how effectively plastic can be separated and processed. As this is a complex issue that cannot be tackled alone, we are partnering with various stakeholders to build such an ecosystem in Korea through the Project LOOP strategy. Project LOOP develops innovative solutions through the LOOP Cluster, LOOP LOTTE, LOOP Alliance, and LOOP Social strategies, sharing the outcome of each strategy to make continuous improvements.

The plastic recycling loop can be divided largely into three parts: feed sourcing (waste plastic), production (recycled material), and consumption (recycled product). We continue to invest in R&D for optimal recycling technology for the waste plastic we collect. For these efforts to yield results and sharpen our national competitiveness, active collaborative models are needed in each stage from sourcing feedstock to consumption. With this in mind, we will be at the center of building a sustainable plastic recycling ecosystem by cooperating closely with various stakeholders.





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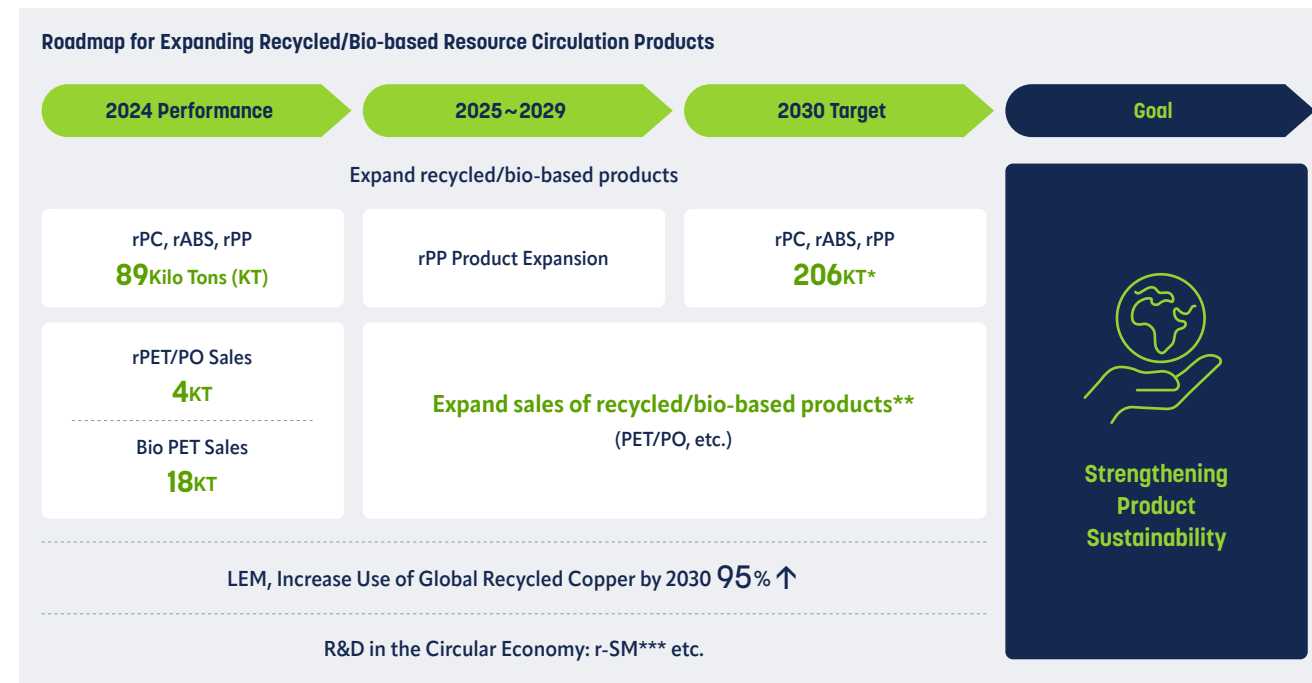
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Roadmap for Expansion of Recycled/Bio-based Resource Circulation Products

As advanced countries around the world mandate the use of recycled material and global companies accelerate the adoption of sustainable practices, demand for recycled materials is continuously increasing, particularly across the electronics, automotive, and home appliance sectors. However, economic risks are growing due to difficulty in securing cost-effective raw material and the rise in production costs which are further compounded by tightening regulations, both domestically and

internationally (e.g., domestic mandate of using recycled material in PET, UN Global Plastic Treaty, EU Eco Design Regulation, etc.). In response to such changes, we set 'Strengthening Product Sustainability' as a key goal and renewed our strategic roadmap to expand recycled/bio-based products. This way, we aim to proactively address customer demands for low-carbon products and strengthen implementation of the resource circulation strategy. Key initiatives include ▲expanding sales of recycled/bio-based products, ▲enhancing usage rate of recycled copper, and ▲reinforcing R&D for the circular economy, etc.



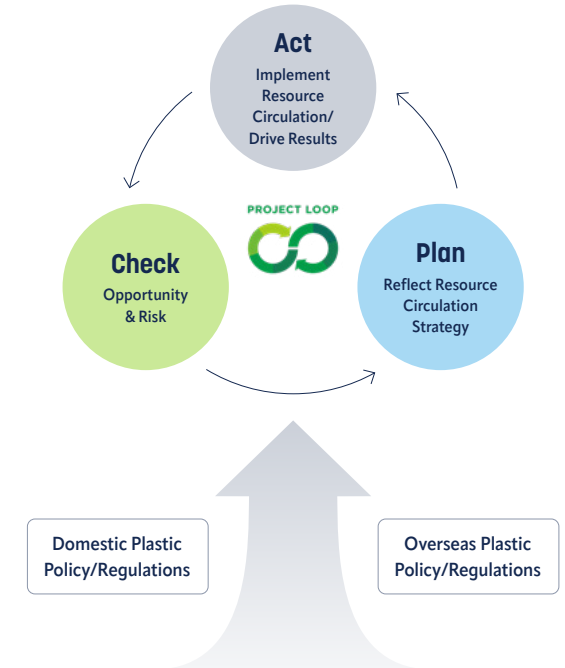
* Revision of mid/long-term plans due to decline in downstream demand from key clients/applications

** Monitoring regulatory expansion and market shifts → To reset specific execution targets

*** Target early implementation of C-rSM business initiatives (pilot project and securing ISCC-certified products)

RISK MANAGEMENT

Risk Management Process



Treaty on Plastic Pollution

In March 2022, a resolution was adopted at the 5th session of the UN Environment Assembly (UNEA) to develop a legally binding instrument as part of global efforts to end plastic pollution. It was followed by five rounds of discussions by the INC*, but a consensus has not yet been reached with follow-up discussions expected to continue. The plastic treaty will be an international treaty with legal force, expected to have far-reaching implications across all industries involved in the plastic value chain.

* INC (Intergovernmental Negotiating Committee): Convenes meetings where participating countries collaborate to draft treaties by negotiating based on their respective interests and policy positions.



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EU Packaging and Packaging Waste Regulation (PPWR)

The PPWR entered into force on February 11, 2025 and will be applicable from August 12, 2026. While this is a regulation for the EU, its implications are expected to potentially reshape the entire plastic industry. Among its key provisions, stricter recycling targets for packaging and the mandated use of recycled material are anticipated to serve as critical guidelines for the plastic industry in the long-term. Accordingly, LOTTE Chemical implements the following strategies for sustainable growth.

* PPWR (Packaging and Packaging Waste Regulation)

- **Continuous Monitoring:**
Identifying policy and regulatory trends through various channels
- **Communicating with Stakeholders:**
Communicating actively with internal/external stakeholders
- **Strategic Approach to Opportunities:**
Turning risks into opportunities for innovation and growth

Through such efforts, we are proactively responding to rapidly evolving environmental regulations while seeking sustainable growth.

Performance of Resource Circulation Initiatives

1 LOOP Alliance

Logistics represent the largest cost in the process of converting plastic waste into reusable resources. To reduce such costs, we are in the second year of operating a small compressor pilot project with participation from the Kokkiri-gongjang, a social venture, in Ulsan and Busan, and Soongsil University and LOTTE Chilsung Gangnam Logistics Center in Seoul. This project involves the transport and compression of disposed PET bottles to plants that process them into recycled raw materials to lower transport costs and addresses various issues that arise in the process. To promote plastic recycling, inefficiencies in the plastic recycling value chain must be removed, and the price

competitiveness of recycled raw material strengthened. Through the small compressor pilot project, we hope to contribute to the recycling ecosystem by sharing how we achieved stability and cost-savings in operating compressors.

2 LOOP LOTTE

At LOTTE Chemical, we are committed to building a resource circulation system by working closely with Group affiliates to develop products made from recycled plastic materials. As part of this effort, we partnered with LOTTE Hotel to launch a project that applies recycled material to the containers of the hotel's bath amenities (shampoo, bodywash, and body lotion, etc.). Following over a year of collaborative product development and discussions, the newly designed amenity containers feature the ECOSEED brand mark and the following message on its labels: "This container was made with ECOSEED r-PP, a mechanically recycled material (contains 30% recycled material)."
Moving forward, we will continue to expand collaborations to incorporate recycled material into a wider range of containers.



PP Recycling Process





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Sales of Recycled/Bio-based Products

Under our ESG vision of GREEN PROMISE 2030, LOTTE Chemical devised a roadmap to expand recycled/bio-based products to expand our green business for carbon neutrality and create social value based on circulation and coexistence. In addition, we aim to become a global leader in resource circulation technology to obtain technology licenses and secure a premium on recycled/bio-based products.

Sales Performance of Recycled/Bio-based Products

(Unit: Tons)

Category	2022	2023	2024	K-Taxonomy-aligned Economic Activities
r-PO	437	2,154	3,342	4. Shift to Circular Economy
r-PET	65	285	882	A. Production-(2): Production of products that use recycled material and circular resources
r-PC	39,426	68,606	72,255	D. Recycled-(4): Chemical recycling of waste
r-ABS	2,603	5,033	12,068	
r-PP	2,492	1,572	4,820	
Subtotal	45,023	77,650	93,367	
Bio-PET	13,912	13,350	17,975	
Sales Total	58,935	91,000	111,342	
Revenue Total	KRW 227.6 billion	KRW 312.6 billion	KRW 379.1 billion	

Launch of ECOSEED Brand

In 2023, LOTTE Chemical launched “ECOSEED,” an integrated brand for mechanically and chemically recycled materials and bio plastic materials. With the launch of the ECOSEED brand, we plan to expand our plastic recycling and low-carbon business.



"ECOSEED" means thinking about the environment starting from the smallest element for a future green earth, using a design that combines the infinite symbol with the initial 'e' that visualizes the shape of a seed to symbolize the circular economy.

Brand Category

RECYCLED PLASTICS



MECHANICAL RECYCLING

Raw plastic material that is mechanically recycled from plastic discarded from common everyday products.

KEY MATERIALS

r-PC, r-ABS, r-PE, r-PP

CHEMICAL RECYCLING

Raw plastic material with enhanced purity and utility by chemically recycling plastic.

KEY MATERIALS

Depolymerization: r-PET, r-ABS

Solvent Purification: r-SAN, r-ABS

Pyrolysis : r-ABS, r-PC, r-PP, r-PE, r-BD, r-SM. r-MMA

BIO PLASTICS



BIO-BASED

ECOSEED Bio-PET is produced using Bio-MEG material extracted from sugarcane.



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Product LCA (Life Cycle Assessment)

Global customers have been requesting LCA data for each product to obtain quantitative figures on the environmental impact, resource use, and energy consumption across the production process. In 2024, LOTTE Chemical calculated and provided LCA data for 397 products which is approximately 15.6% of our total products (2,538 product types sold in 2024), a 71.9% increase compared to the previous year. LCA results inform our response to client demands and support green product certifications. They also have implications for conducting internal impact analyses, integrating environmental considerations early in product development, and guiding continuous improvement efforts. and guide internal environmental impact assessments. We are actively advancing our internal LCA framework to improve data quality and ensure greater reliability. Additionally, we are committed to systematically managing all of our products and expanding the use of assessment methodologies that meet international standards. Within the Chemical Division, LOTTE Fine Chemical has currently completed implementing the LCA system with similar efforts underway at other key chemical affiliates.

ISCC Plus Certification

LOTTE Chemical received and renewed our ISCC Plus certification, an international green product certification, for synthetic resin products produced using pyrolysis oil naphtha obtained from chemical recycling of waste plastic and bio-based recycled naphtha sourced from waste biomass. Including renewed certifications, certification was acquired for 48 products such as ABS, PC, and PP. We will continue to increase certification for eco-friendly green products going forward.

 ISCC Plus Certificate

Environmental Product Declaration (EPD) and Eco-Label Certification

LOTTE Chemical has established a lifecycle assessment (LCA) framework for all of our products, obtaining UL EPD* and UL PCF** certification for PC compound products using recycled PC (PolyCarbonate). In addition, our engineered stone, acrylic artificial marble products used in construction/interior design acquired SCS EPD*** certification. We are actively responding to requests for environmental information based on LCA and continuously expanding eco-friendly product certifications.



* UL EPD : EPD issued by Underwriters Laboratories (UL), a US-based global product safety certification organization



** UL PCF: Product Carbon Footprint (PCF) verification by UL (Underwriters Laboratories), a US-based global safety science company

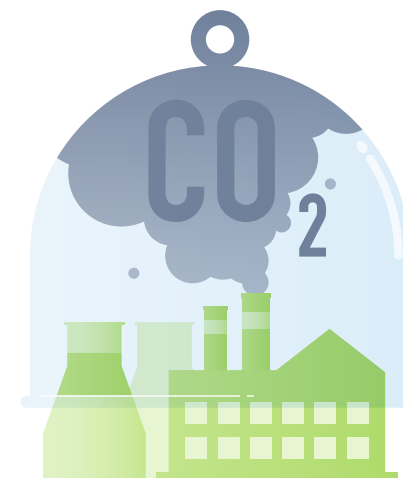


*** SCS EPD : EPD issued by Scientific Certification Systems (SCS), a US-based sustainability and third-party certification organization

Contributing to Social Carbon Reduction through Resource Circulation

The carbon (GHG) market is divided into a Compliance Carbon Market that is strictly controlled under mandatory mitigation obligations and a Voluntary Carbon Market where parties voluntarily take part in carbon reduction projects and make credits that can be traded. The carbon regulation market is enforced on companies that are mandated to curb carbon emissions under the 'Act on Allocation and Trading of GHG Emission Permits,' but the voluntary carbon market is one in which companies, institutions, and individuals voluntarily take part to fulfill their social responsibilities and contribute to environmental protection. Voluntary carbon reduction credits can also be applied to carbon mitigation through plastic recycling for a circular economy. LOTTE Chemical leverages POPLÉ*, a voluntary carbon trading platform in Korea, to quantify the impact of our carbon reductions through recycled products and vitalize related markets. In addition, we have been reviewing data sophistication to meet requirements of the POPLÉ's voluntary reduction market since 2023.

* Domestic voluntary carbon reduction credit trading platform





CREATION OF GREEN ECOSYSTEM

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STRATEGY

Management of Air Pollutants

LOTTE Chemical assigns numbers to the vents of each facility to manage the release of air pollutants. We apply stricter standards than legal requirements to manage the concentration level of pollutants and have built internal guidelines to ensure higher standards are met than what is demanded by law when making investments in environmental facilities to lower the release of pollutants. The LDAR (Leak Detection & Repair)* system we have put in place to manage air pollutants across all of our plants to strengthen monitoring and maintenance of pollutants is also an example of our efforts to reduce air pollutants. In addition, we are taking part in a wide range of activities to achieve the common goal of improving the nation's air quality through agreements (Voluntary Agreement on Emission Caps for Air Pollution Control etc.) and MOUs (participation in government research initiatives etc.) with government agencies. In relation to the Green Ecosystem, we set inhouse targets to decrease air pollutants by 50% by 2030 compared to 2019 levels and achieved this 2030 target early through ongoing mitigation efforts and investments.

Water Resource Management

1 Water Use and Recycling

LOTTE Chemical responds to the global water resource issues by building an efficient water resource management system to reduce wastewater discharge and water inflow. For example, we have implemented a system for retrieving coolants that can be reused with relatively little treatment to be reused and recycled for cooling systems while reusing gathered rainwater and cooling tower discharge as fire extinguishing water for the company.

2 Community Partnerships

LOTTE Chemical is actively participating in the Gwangyang Industrial Waterworks project to help ensure a stable supply of industrial water to the Yeosu National Industrial Complex where demand is expected to rise continuously with possible water shortages. We signed an agreement for responding to risks related to the water supply system and are working closely with the community by offering technical support and data sharing.

3 Consistent Water Resource Management Policies

Through the following processes, LOTTE Chemical is working to ensure that direct and indirect activities which affect water resources management policies are in line with our water policies and commitment. We work closely with policymakers to analyze how water related policies impact society and business operations and help shape appropriate policies. At LOTTE Chemical, the ESG Management Division reports directly to the CEO to strengthen our compliance with water resource management policies and we operate our organization and councils to make sure our policy engagement goals are in line with the overall water strategies defined by the CEO, BOD, and ESG Committee. Policy engagement goals are designed with consideration of the company-wide organization including each business unit to highlight its corporate significance. When discrepancies are found, internal processes and policies are reviewed and revised to confirm alignment with our water commitment with such changes being reviewed and approved by the BOD.

Management of Water Pollutants

LOTTE Chemical manages natural rainwater and wastewater generated from plant production activities through separate systems. We directly discharge uncontaminated rainwater, but this process is monitored by installing pH sensors and oil detectors on rain drainages with an emergency shutdown system to prevent water pollutants from leaking when unexpected situations where anomalies are detected. As for wastewater from our plant processes, bumps and dikes are set up on concrete pavements to block water pollutants from spilling outside or into groundwater. Wastewater gathered here is treated through our own wastewater treatment plant, and internal standards that are stricter than legal requirements are applied for when treated water is discharged. Our Yeosu and Ulsan Complexes send wastewater to final wastewater treatment facilities only after they qualify for discharge conditions. Moreover, our system prevents environmental accidents caused by wastewater by immediately blocking discharge when there is possibility of water pollutant concentrations exceeding permitted levels and retrieving it to be retreated.

Noise and Odor Management

We install soundproof covers over relatively loud equipment to prevent and manage noise and set up soundproof fences along the outline of our business sites. We also survey nearby communities and measure noise levels annually at points where noise impact is expected to be the greatest to minimize consequences on areas near our business sites. To reduce odors, we operate stationary odor meters at production plants for real-time monitoring and also use handheld meters to measure odor levels at worksites. When odors are expected such as during regular maintenance periods, we plan ahead and prepare deodorizers/waste containers etc. and handle waste promptly to minimize odor emissions.



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Waste Management

1 Current Waste Management

LOTTE Chemical has strict management practices for waste generated from our business, tracking and analyzing the entire process of waste from its source to disposal. We conduct regular inspections on waste treatment companies to check if waste treatment is being carried out appropriately. In addition, we continue to make process improvements to minimize waste generation and develop recycling partners to convert waste that goes to incinerators and landfills to be recycled to promote green management through strict waste sorting and recycling.

Through our 'Allbaro System,' waste discharge and waste volume are managed and reported regularly to the Korea Environment Corporation. Meanwhile, we are also striving to increase resource circulation rates by closely managing whether waste from our company is being recycled through the 'Resource Circulation Information System.' With regard to the Green Ecosystem, we have set standards and targets to reduce waste sent to incinerators and landfills by 50% by 2030 compared to 2019 levels.

2 Recognition of Waste as Circulated Resource

LOTTE Chemical actively participates in the Ministry of Environment's Circular Resource Recognition Program* to promote the circular economy through our key business sites (Yeosu, Daesan, Ulsan). We have achieved our goal of having at least one circulated resource recognized at each of our business sites with five cases certified in 2023 and three in 2024. Upon being recognized, we continue to review various measures for utilizing recycled material to build a resource circulation system.

* Circular Resource Recognition Program: Waste that has usage value and is not harmful to the human body and environment are recognized as circular resources and exempt from regulations under the Waste Management Act for unrestricted disposal/transport/storage and charging them for sales. (List of items subject to circular resources (8 types): PE Scrap, PP Scarp-1, PP Scarp-2, PC Scrap-1, PC Scrap-2, PET Scrap-1, PET Scrap-2, sludge)

Category	2019	2024				2025		2030
		Annual Target	Performance	Achievement Rate	Cause of Increase/Decrease	Annual Target	Reduction Measure	Annual Target
Air	13,175	5,274	3,071	172%	• Active investment in pollutant reduction facilities - Reduction of NOX emissions by installing ULTRA-LOW-NOX burners - Reduction of pollutant emissions by installing catalytic thermal oxidizers (CTO)	3,117	• Investing in pollutant reduction facilities - Investing in ULTRA-LOW-NOX burners to reduce NOX emissions	6,588
Waste	23,349	13,811	12,613	109%	• Active waste recycling practices - Converting incinerated waste to recycling, etc. • Addressing source of waste generation - Waste → Completed conversion to 8 circulated resources	12,215	• Continuously driving waste recycling - Continues to develop measures to convert incinerated/landfill waste for recycling	11,675
Water	1,072	1,002	898	112%	• Installation of new wastewater treatment plants • Driving wastewater recycling	882	• Mitigating water pollutants/wastewater - Managing monthly generated volume, etc.	536
Waste water	14,300	12,123	11,479	105%	- Installation and operation of low-concentration wastewater recycling facilities	11,118	• Reviewing expansion of wastewater recycling applications - Developing additional applications for low-concentration wastewater	7,150

* Achievement rate (%) = Annual target/Performance * 100

** Air pollutant and waste targets and performance figures include data from LOTTE Engineering Plastic's Yeosu Complex





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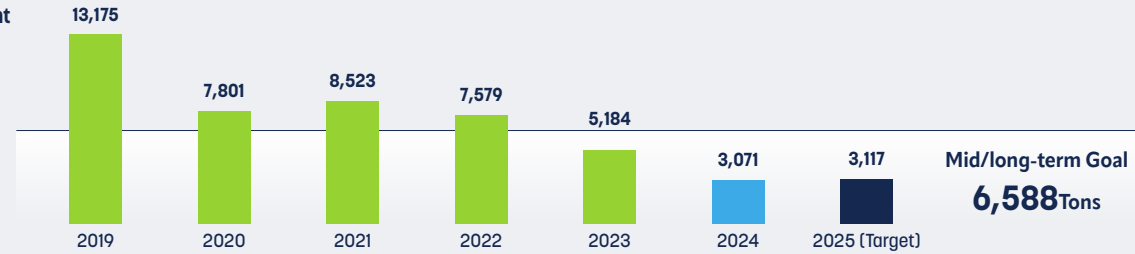
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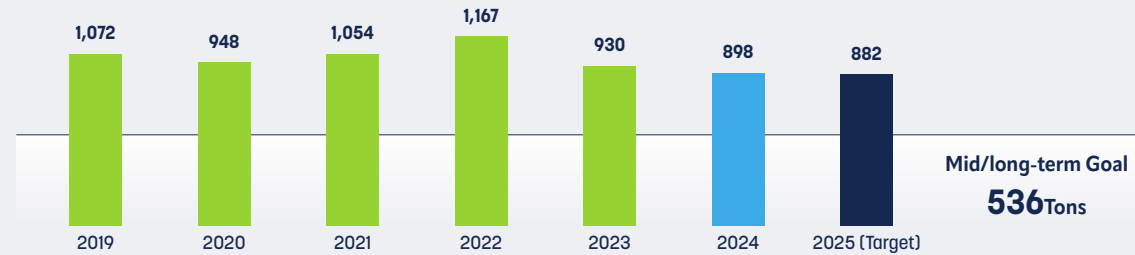
Air Pollutant Emissions

(Unit: Tons)



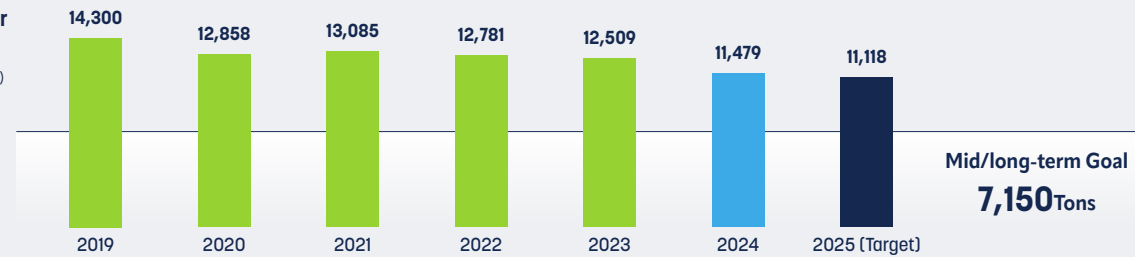
Water Pollutant Discharge

(Unit: Tons)



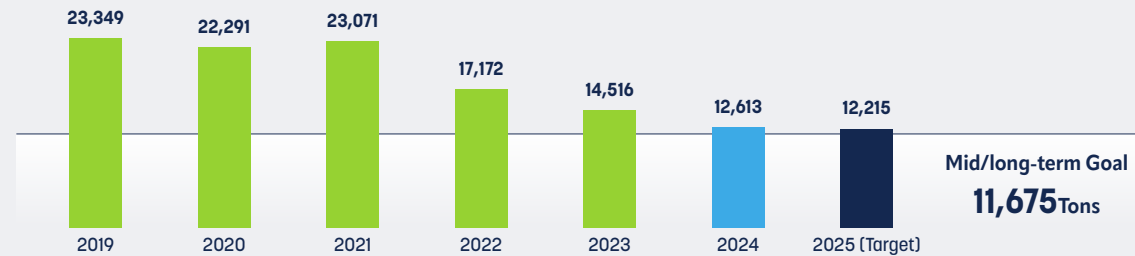
Wastewater Volume

(Unit: 1,000 Tons)



Waste Volume

(Unit: Tons)



METRICS AND TARGETS

LOTTE Chemical has set a target to reduce four types of environmentally hazardous substances (air pollutants, waste, water pollutants, and wastewater) by 50% compared to 2019 levels to create a green ecosystem. To this end, we are continuously monitoring pollutants and expanding the development of mitigation technologies. We plan to continue investing reducing air pollutants by installing ultra-low-NOx burners and catalytic facilities. We are committed to reducing waste through active recycling initiatives and are continuously exploring and implementing measures to support transitioning to resource circulation and a circular economy. In addition, we are installing new wastewater treatment plants and facilities for recycling low-concentration wastewater, as well as developing applications for reuse of wastewater. Through such ongoing investments and technology developments, we aim to achieve the goal of reducing pollutants by 50% compared to 2019 by 2030.



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Data on Pollutants Discharged by Key Subsidiaries

To support the development of a green ecosystem, LOTTE Chemical has established plans to reduce environmental pollutants including air pollutants, water pollutants, waste, and wastewater to 50% of 2019 levels. We disclose emissions not only for the company, but also for key consolidated subsidiaries (six entities) in Korea and abroad to expand our reporting scope. This is to prepare us in anticipation of regulatory mandates requiring environmental disclosures for all entities included in consolidated financial statements.



1 Air Pollutant Emissions

(Unit: tons)

Category	LOTTE Fine Chemical	LOTTE Energy Materials	LOTTE-GS Chemical	LOTTE Engineering Plastics	LOTTE Chemical Titan Holding Berhad	LOTTE Chemical USA Corp.
NOx	9	0	9	6	2,126	543
SOx	1	0	0	2	316	4
Dust	4	17	0	7	136	33
Total	14	17	10	15	2,578	580

2 Water Pollutant Discharge

(Unit: tons)

Category	LOTTE Fine Chemical	LOTTE Energy Materials	LOTTE-GS Chemical	LOTTE Engineering Plastics	LOTTE Chemical Titan Holding Berhad	LOTTE Chemical USA Corp.
TOC	199	25	11	170	54	62
BOD	30	32	14	340	138	23
SS	120	13	1	157	380	22
Total	349	69	26	668	571	107

3 Waste Volume

(Unit: tons)

Category		LOTTE Fine Chemical	LOTTE Energy Materials	LOTTE-GS Chemical	LOTTE Engineering Plastics	LOTTE Chemical Titan Holding Berhad	LOTTE Chemical USA Corp.
General Waste	Incineration	431	4	20	789	0	0
	Landfill	3,784	28	10	805	154	2,740
	Recycled	93,059	3,997	46	18,831	1,744	212
	Other	0	15	0	0	0	120
Designated Waste	Incineration	768	19	15	896	9,451	3
	Landfill	0	581	0	0	1	52
	Recycled	68	53	1,479	76	12,226	0
	Other	446	0	0	0	0	13
Total		98,556	4,698	1,570	21,397	23,576	3,139

4 Wastewater Volume

(Unit: 1,000 tons)

Category	LOTTE Fine Chemical	LOTTE Energy Materials	LOTTE-GS Chemical	LOTTE Engineering Plastics	LOTTE Chemical Titan Holding Berhad	LOTTE Chemical USA Corp.
Wastewater discharge volume	9,311	1,725	106	1,508	782	1,842

* Emissions excluding subsidiary companies



BIODIVERSITY IMPACT ASSESSMENT

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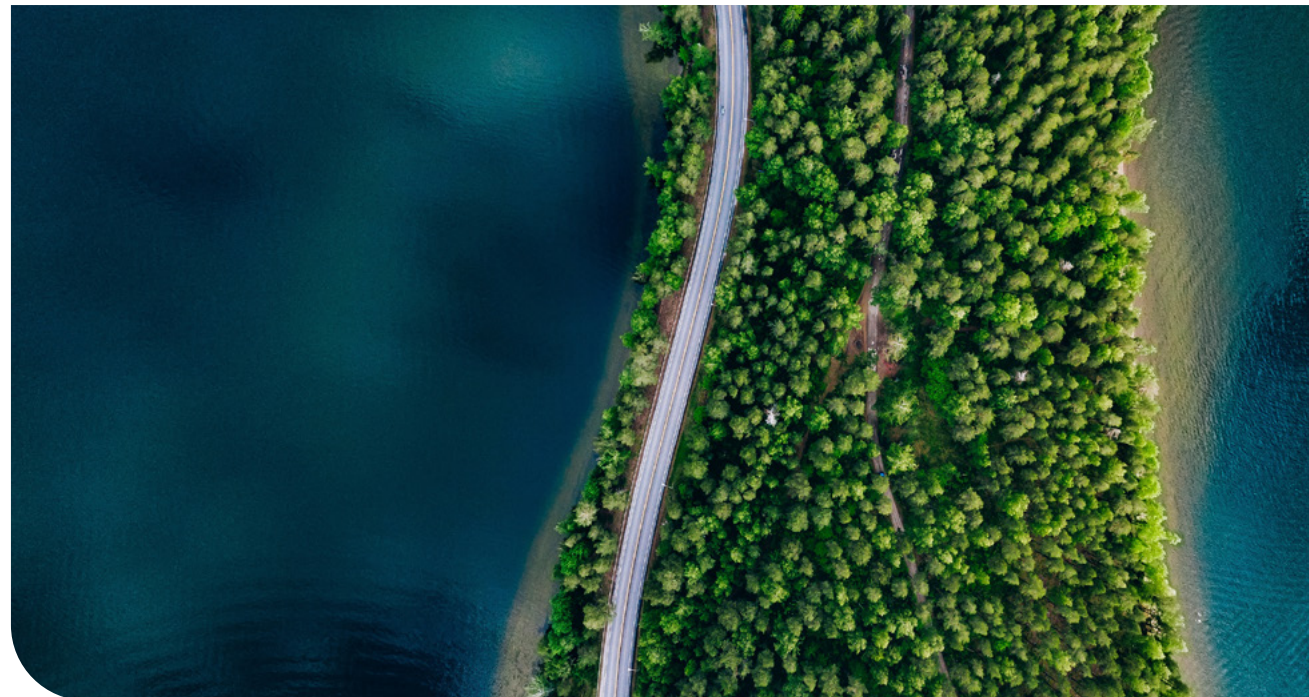
Biodiversity

As concerns over climate change have intensified in recent years, the preservation of biodiversity has attracted global attention. All human economic activities ultimately depend on the Earth's natural capital, which is why climate change, ecosystem degradation, and the depletion of natural resources such as clean water and minerals have significant consequences to our business. Recognizing the urgency of these challenges, LOTTE Chemical supports the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD), a global biodiversity framework. Accordingly, we aim to share LOTTE Chemical's efforts to address biodiversity issues with our internal and external stakeholders through this report.

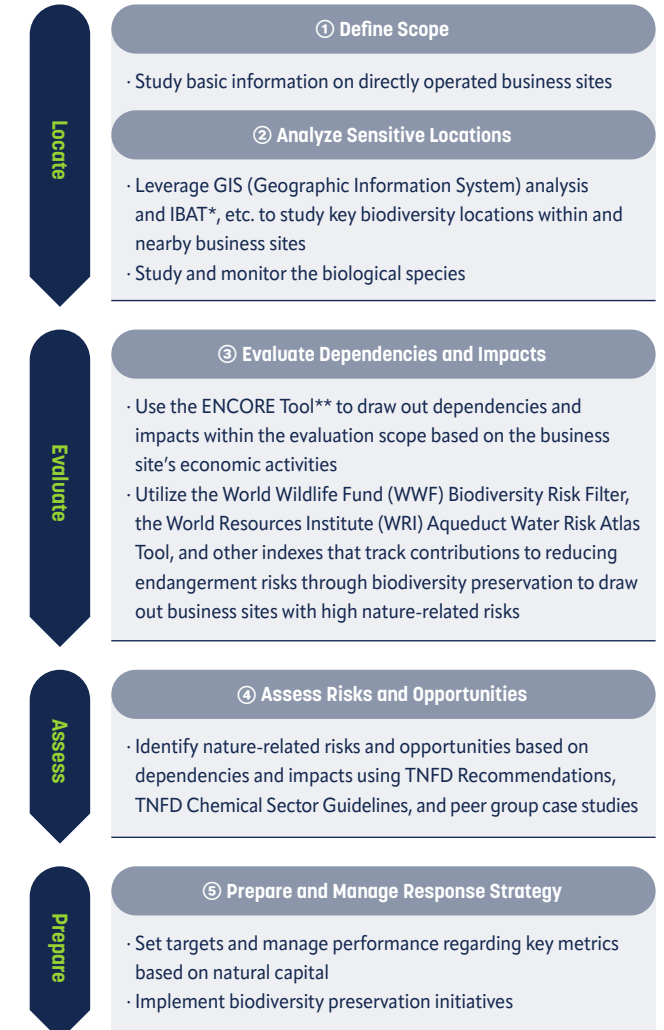
LEAP Approach

As LOTTE Chemical's business is related to petrochemicals, managing the impacts of our business activities on local communities and the environment is critical. To address this, we assessed our dependencies and impacts on natural capital and analyzed key nature-related risks and opportunities using the LEAP Approach* recommended by TNFD. Through this process, we are advancing strategies to mitigate our negative impacts on Mother Nature.

* LEAP Approach: Locate (L) sensitive areas, Evaluate (E) dependencies and impacts, Assess (A) risks and opportunities, and Prepare (P) to respond and manage



LEAP Approach Process



* IBAT: Integrated Biodiversity Assessment Tool

** ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure), a tool used to evaluate natural capital dependencies and impacts



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LOCATE

Identifying Sensitive Locations

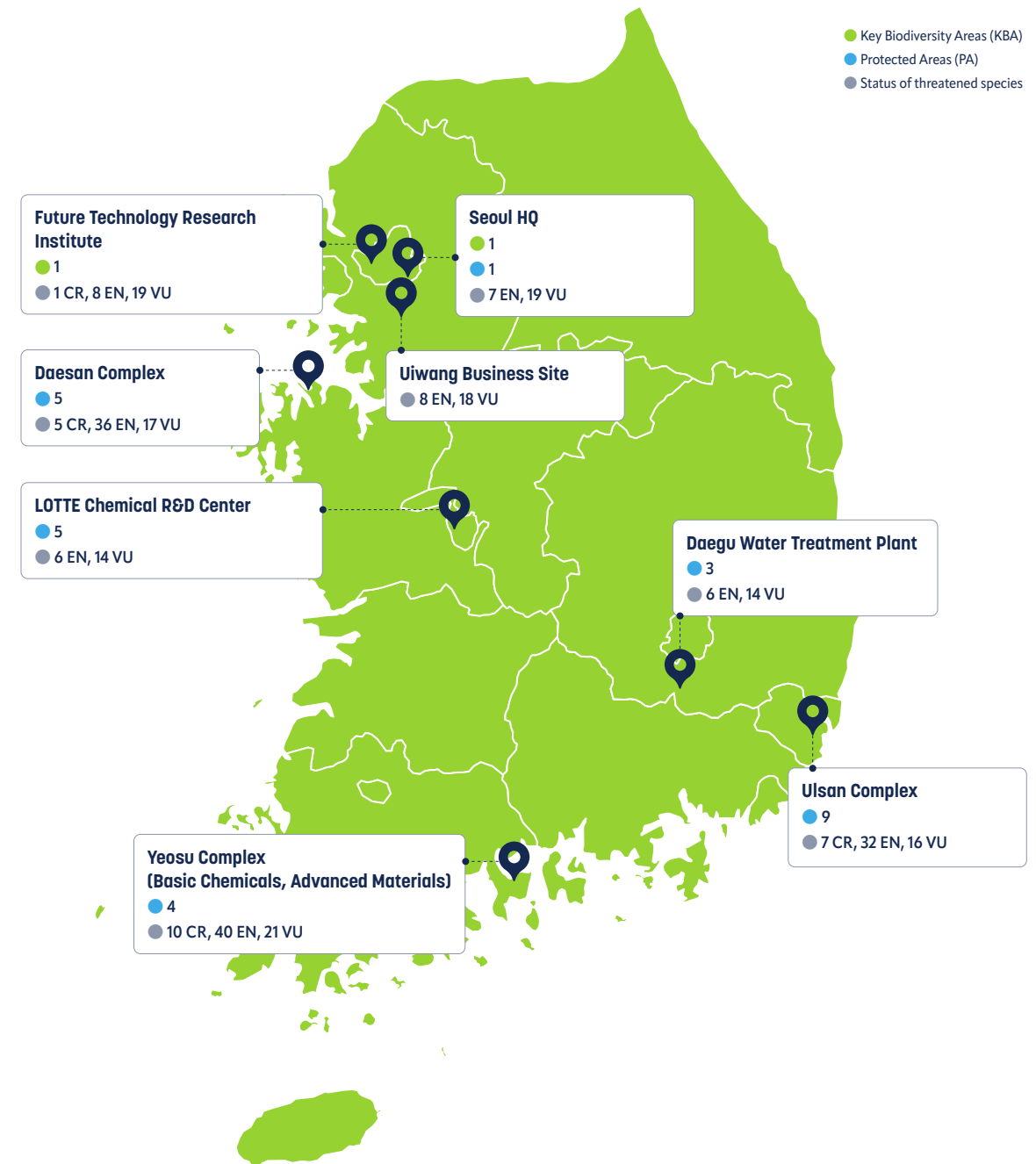
LOTTE Chemical identified sensitive locations as recommended by TNFD through review of eight domestic regions where we operate owned business sites. Using the Integrated Biodiversity Assessment Tool (IBAT) and other global databases, we evaluated each site in relation to Key Biodiversity Areas (KBA), Protected Areas (PA), and the presence of endangered species near the given business site. In the Seoul metropolitan area, KBAs and PAs are managed within a 2km radius of our business sites and extended to 10km in non-metropolitan areas. For endangered species, a 5km radius was used for headquarters, research centers, and the Uiwang business site, and a 20km radius for our plants. Based on this review, all business sites were classified as sensitive locations requiring proactive management in accordance with international standards.

Biodiversity Preservation Near Business Sites

(Unit: No. of species)

Business Site	Key Biodiversity Area (KBA)	Protected Area (PA)	IUCN Threatened Species*		
			CR	EN	VU
Seoul HQ	1	1	-	7	19
Future Technology Institute	1	-	1	8	19
Uiwang Business Site	-	-	-	8	18
LOTTE Chemical R&D Center	-	5	-	6	14
Daesan Complex	-	5	5	36	17
Ulsan Complex	-	9	7	32	16
Daegu Water Treatment Plant	-	3	-	6	14
Yeosu Complex (basic chemicals, advanced materials)	-	4	10	40	21

* IUCN (International Union for Conservation of Nature) classification of endangered species
- CR (Critically Endangered): Extremely high risk of extinction in the immediate future without urgent action
- EN (Endangered): Very high risk of extinction in the near future
- VU (Vulnerable): High risk of extinction in the relatively near future





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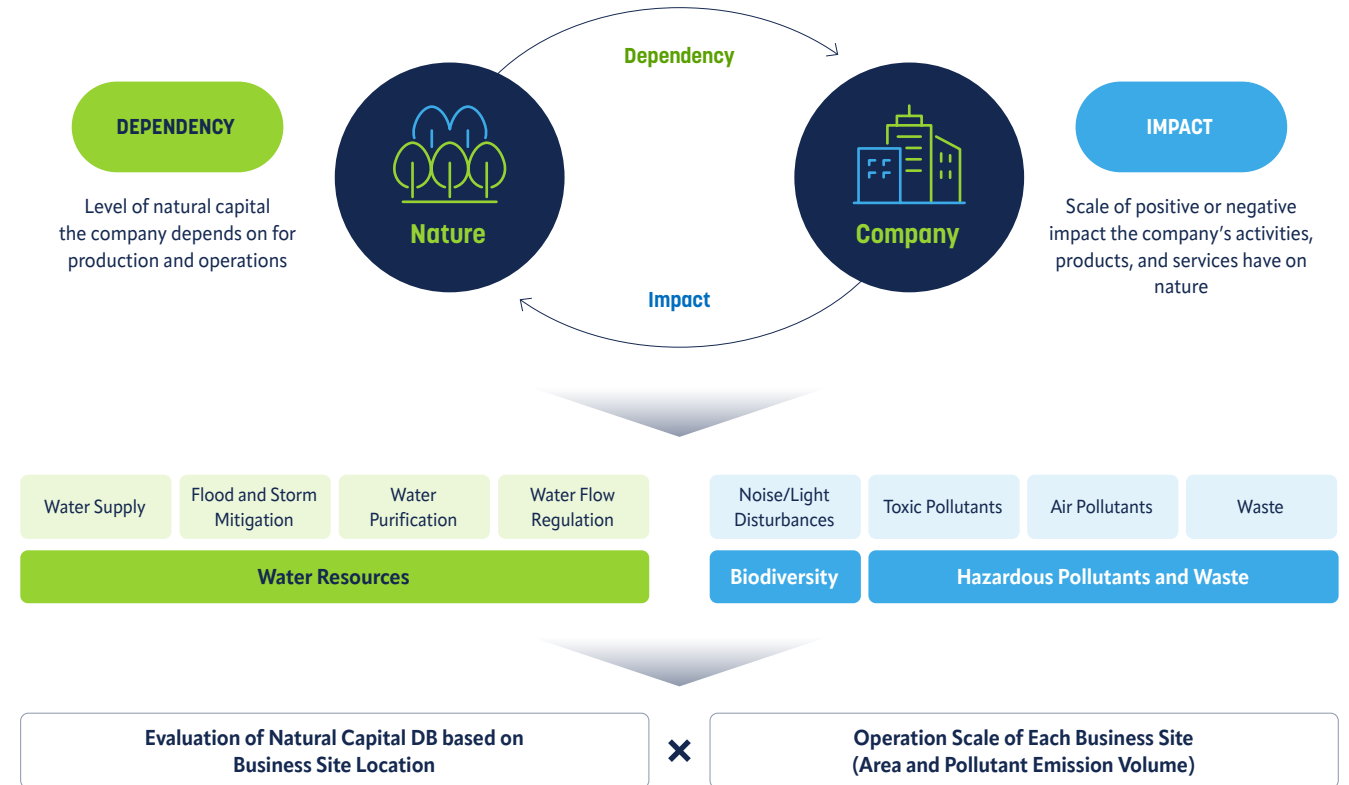
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EVALUATE

Evaluation of Dependencies and Impacts

LOTTE Chemical used ENCORE (Exploring Natural Capital Opportunities, Risks, and Exposure), an online tool recommended by the TNFD, to evaluate the dependency and impact of our economic activities on ecosystem services. The evaluation revealed that our operations have a high dependency on water supply, flood and storm mitigation, water purification, and water flow regulation. At the same time, our activities were found to have a high impact on nature through noise and light disturbance, emissions of toxic and air pollutants, and waste generation. Taking these results into account, LOTTE Chemical selected water resources, biodiversity, and hazardous materials and waste as the three core natural capital topics that must be strategically managed. Based on these three topics, priority business sites were identified for focused management through natural capital DB assessments based on their location and the operation scale of each business site. As a result, Yeosu, Daesan, and Ulsan were identified as priority business sites for management of natural capital.

Identification Process for Core Natural Capital Topics and Priority Management Business Sites



Outcome of Evaluation of Dependencies and Impacts of Economic Activities (Using ENCORE)

● Very Low ● Low ● Medium ● High ● Very High

Economic Activities	Dependency of Ecosystem Services					Impact Drivers			
	Provisioning	Regulating and Maintenance							
	Water Supply	Flood Control	Storm Mitigation	Water Purification	Water Flow Regulation	Noise/Light Disturbances	Toxic Pollutants	Non-GHG Air Pollutants	Waste Discharge
Manufacturing Basic Chemicals	M	M	M	M	M	VH	VH	M	M
Manufacturing Other Chemicals	M	M	M	M	M	VH	VH	M	M
Manufacturing Plastic and Synthetic Rubber	M	M	M	M	M	VH	VH	M	M





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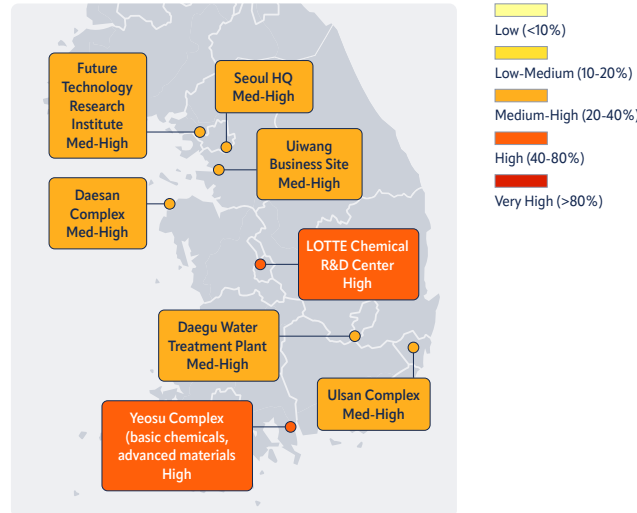
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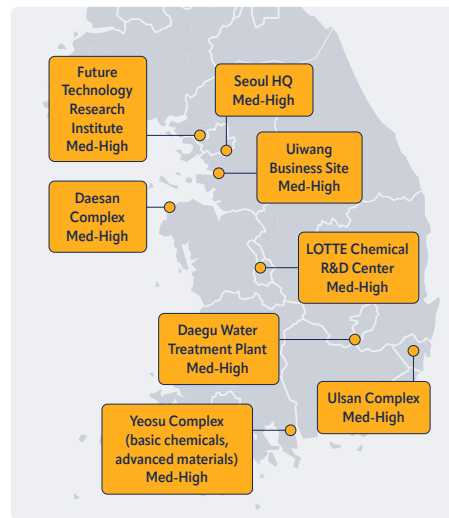
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2025



2030, 2050*



* Analyses for 2030 and 2050 are based on pessimistic scenarios. These scenarios follow the assumptions of the WRI Aqueduct Water Risk Atlas 4.0 under the SSP5-RCP8.5 scenario, which reflects a high-emissions, fossil fuel-intensive development trajectory and projects average global temperatures to rise by 3.3°C to as much as 5.7°C by 2100 compared to pre-industrial levels (1850–1900).

Evaluate Impact of Water Resources

Understanding the sensitivity of water resource risks, LOTTE continues to monitor them through water stress evaluations.** In 2025, we conducted a water risk assessment across eight of our domestic business sites using the World Resources Institute’s (WRI) Aqueduct 4.0 Water Risk Atlas tool. This evaluation focused on analyzing the water stress index and anticipated mid-to-long-term water stress risks for 2030 and 2050. As of May 2025, the evaluation showed that the LOTTE Chemical R&D Center in Daejeon and the Yeosu Complex experienced ‘High (40-80%)’ water stress levels while the remaining six sites were categorized as ‘Med-High (20- 40%)’. Taking mid-to-long-term water stress impact into consideration using the SSP5 RCP8.5 scenario, projections indicate that all eight sites will maintain ‘Med-High (20-40%)’ water stress levels in 2030 and 2050.

** Business sites with ‘Med-High (20-40%)’ or higher water stress index levels are managed as water stress locations

ASSESS

Assess Risks and Opportunities

To identify risks and opportunities related to core natural capital topics, LOTTE Chemical reviewed TNFD recommendations, natural capital disclosures from peer groups, and pending environmental legislation bills. Based on this review, LOTTE Chemical’s material risks and opportunities were identified for management through further internal discussions. We are closely monitoring changes in physical risks stemming from deterioration of ecosystem services, as well as transition risks driven by both market and non-market forces. In response, we are developing a flexible strategy aimed at preventing natural capital risks while enhancing opportunities.

		Core Natural Capital Topic	Drivers	Business Impact	Risk and Opportunity Horizon		
					Short-term (~2025)	Mid-term (~2030)	Long-term (~2050)
Risk	Physical	① Chronic Water Resources	· Depletion of groundwater and reduced access to water resources due to prolonged droughts and excessive water use	· Intensified competition to secure water resources due to water shortages, and the resulting rise in operating costs and production delays		●	●
		② Policy Water Resources	· Stricter wastewater discharge and water quality standards in line with strengthened laws and regulations regarding water resources	· Expansion of wastewater treatment facilities and rise in facility/operating costs to respond to regulations	●	●	●
	Transition	③ Policy Hazardous Pollutants & Waste	· Stricter waste intake and pollutant discharge/ treatment standards aligned with reinforced legal and institutional frameworks	· Higher operating and environmental risk management costs driven by rise in unit cost for handling waste and pollutants		●	●
		④ Policy Hazardous Pollutants	· Stricter oversight and rising pressure to comply with more rigorous domestic and international chemical regulations.	· Increase in operating and maintenance costs to comply with regulatory requirements		●	●
		⑤ Reputation Hazardous Pollutants	· Higher possibility of serious environmental incidents such as leaks of environmentally hazardous substances, etc.	· Heightened risk of reputational damage and brand devaluation in the event of incidents			●
Opportunity	⑥ Market Waste		· Growing market demand for recycling waste plastic and higher requirement levels regarding the circular economy	· Secure business opportunity regarding resource circulation		●	●
	⑦ Reputation Biodiversity		· Increased social interest in the need to preserve endangered species in key biodiversity areas and near business sites	· Improved sustainability ratings and strengthened trust with local community stakeholders through biodiversity preservation efforts		●	●





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PREPARE

Response and Disclosures

LOTTE Chemical supports the biodiversity preservation targets set out in the Global Biodiversity Framework (GBF) adopted at the 15th Conference of the Parties to the United Nations Convention on Biological Diversity (COP15). In alignment with these goals, we are committed to reducing the negative impacts of our business activities on biodiversity. To the end, we are engaging in various initiatives and partnerships to minimize our environmental footprint and contribute to biodiversity, particularly in areas of high ecological value. We also plan to conduct regular assessments of natural capital risks across our business sites and actively engage with local communities and stakeholders to gather feedback and develop appropriate measures for improvement.

Governance for Driving Biodiversity

As part of our environmental management, LOTTE Chemical is working toward the creation of a green ecosystem. To support this effort, we have established the Green Ecosystem Working Council which is responsible for reviewing pollutant mitigation strategies and identifying improvement measures to help achieve our 2030 target of reducing environmentally hazardous substances by 50%.

Through the Council, we aim not only to minimize the environmental impact of our business sites, but also to strengthen our commitment to biodiversity. This includes developing strategies and discussing concrete measures to preserve biodiversity. Furthermore, we seek to contribute to the health and balance of ecosystems and creating a sustainable environment by actively engaging in biodiversity-focused domestic committees.*

* Participating in the Business and Biodiversity Platform (BMBP) and the Korea Natural Capital Disclosures Support Network

Natural Capital Metrics and Targets

LOTTE Chemical sets targets for each key metric and is monitoring performance to ensure the risks and opportunities related to the core natural capital topics of water resources, hazardous pollutants and waste, and biodiversity are managed well.



Category	Response Activity	Key Management Metric	Relevant GBF Target	Page
Risk	① • Reduce water withdrawal through water recycling	• Water reused	Target 10) Maintain continuity in production activities through sustainable use of biodiversity	p.125
	② • Aim to lower the 4 environmentally hazardous substances (air pollutants, waste, water pollutants, wastewater) to 50% of 2019 levels	• Total wastewater discharge	Target 7) Reduce pollution to levels that are not harmful to biodiversity	p.52~54
	③	• Waste emissions • Emissions of air/water pollutants	Target 11) Restore, maintain, and enhance nature's contributions to people, including ecosystem services	
	④ • Company-wide project for transition to alternative material	• Consumption/emissions of hazardous chemical substances • Products that contain	Target 7) Reduce pollution to levels that are not harmful to biodiversity	p.93~95 p.129 p.130
	⑤ • Enhance facility management compliance with relevant laws and regulations and strengthen monitoring	-	Target 7) Reduce pollution to levels that are not harmful to biodiversity	p.93~95
	⑥ • Increase amount of waste recycling • Increase recycled products	• Total waste recycling rate • Sales volume of recycled plastic products	Target 16) Enable sustainable consumption choices to reduce waste and overconsumption	p.47~50 p.128
Opportunity	⑦ • Environmental cleanup activities for biodiversity conservation and other biodiversity preservation activities	-	Target 4) Halt species extinction, and manage human-wildlife conflicts	p.97~98

* For items without key management indicators, further enhancement is planned through internal review in the future.



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SOCIAL

Pondering the social responsibility of businesses, LOTTE Chemical has continuously evolved to create social value. We are committed to driving sustainable growth by creating a safer and sound working environment for employees, talent development for the future, and pursuing mutual growth with our partners and communities to build a future where we can grow together based on strong trust from various stakeholders by setting forth strategic directions that consider social value and expanding our business model.



ENHANCE SAFETY AND HEALTH



MUTUAL GROWTH WITHIN SUPPLY CHAIN



HUMAN RESOURCES MANAGEMENT



PRODUCT RESPONSIBILITY MANAGEMENT



HUMAN RIGHTS MANAGEMENT SYSTEM



LOCAL COMMUNITY IMPACT



ESG RISK MANAGEMENT OF SUPPLY CHAIN



REINFORCE INFORMATION SECURITY



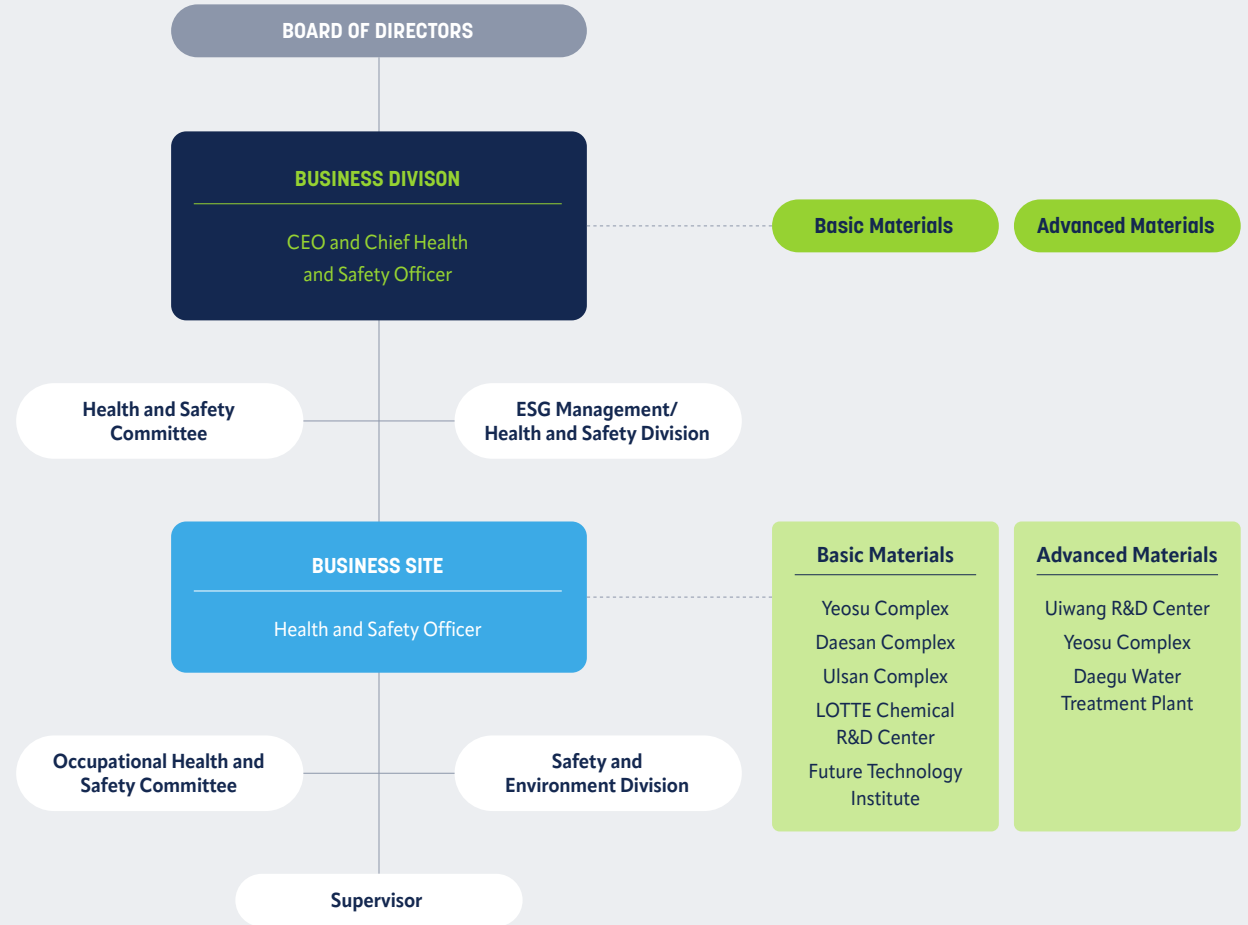
ENHANCES SAFETY AND HEALTH

GOVERNANCE

Health and Safety Management System

LOTTE Chemical built our health and safety management system with the vision to become the healthiest and safest company in the world. The CEO of each business division who are responsible for business management also serve as the chief health and safety officers, overseeing all areas related to the health and safety of the company. Organizations dedicated to health and safety are positioned directly under the CEO within the ESG Management and Health and Safety Divisions. At each business site, health and safety organizations are also in place within the Safety and Environment Divisions directly supervised by the Health and Safety Officers of each respective site. Deliberation and resolutions on health and safety guidelines, management organizations, budget, facilities, relevant activities, and key plans are carried out each year by the BOD. Meanwhile, the Health and Safety Committee that supports management in fulfilling their health and safety obligations and making decisions regarding health and safety are held quarterly along with the Occupational Health and Safety Committee where labor and management discuss and decide on health and safety matters at each business site.

LOTTE Chemical's Health and Safety Management System





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Health and Safety Committee Led by CEO

LOTTE Chemical formed the Health and Safety Committee, which convenes each quarter, to support the CEO in making decisions to practice its health and safety obligations. The committee appoints CEO as chair and health and safety officers from each business site as its members to deliberate and make decisions on key health and safety agenda including relevant guidelines, workforce, and budget, etc.

Occupational Health and Safety Committee

LOTTE Chemical holds quarterly meetings of its Occupational Health and Safety Committee in order to deliberate and make decisions on health and safety matters at business sites to prevent risks and health hazards for our workers. The committee is composed of the same number of employer and employee members for effective communication between labor and management of each business site. Employee representatives actively engage in communications as they are involved in making decisions related to occupational health and safety while also voicing opinions on work-related accidents and responses. Outcomes of committee meetings are shared with all employees while deliberations, resolutions, and other proposals made to improve health and safety are continuously managed and monitored.

Items for Deliberation and Resolution by the Health and Safety Committee

1 Health and Safety Plan (report to BOD)

2 Health and Safety Guidelines- Organization-Workforce- Investments

3 Outcome of Practicing Obligation of Securing Health and Safety

4 Health and Safety Risks and Responses

5 Internal Health and Safety Regulations and Revisions

Items for Deliberation and Resolution by the Occupational Health and Safety Committee

1 Industrial Accident Prevention Plan

2 Preparations and Amendments to the Health and Safety Management Regulations

3 Employee (Worker) Training on Health and Safety

4 Review and Improvement of Work Environment by Measuring Work Environments, etc.

5 Health Management including Worker Health Examinations

6 Investigation on Cause of Serious Accidents and Development of Prevention Measures

7 Recording and Managing Statistics on Industrial Accidents

8 Health and Safety Measures when Introducing Harmful or Dangerous Machinery, Equipment or Facilities

9 Other Matters Necessary to Maintain and Promote the Health and Safety of Workers at the Workplace

Health and Safety Consultation Activities

Name	Target	Cycle
Health and Safety Committee	Management/Health and Safety Officers	Quarterly
Health and Safety Steering Committee	Heads of the ESG Management and Safety and Environment Divisions	Bimonthly
Occupational Health and Safety Committee	Employer/Worker representatives	Quarterly
Partner Companies Council	LOTTE Chemical and partner companies	Monthly
Health and Safety Councils by purpose (Central Safety Committee, Team Safety Committee, PSM Subcommittee, etc)	Health and Safety Officers/ Department Heads/ Health and Safety Departments, etc.	Monthly

* PSM: Program designed for business owners to identify and eliminate potential accident risks in advance to systematically prevent serious industrial accidents for the systematic and continuous management of processes and facilities that could potentially cause serious occupational incidents.

STRATEGY

Health and Safety Management Strategy

Recognizing that a safe environment is essential to the petrochemical industry, LOTTE Chemical devised our health and safety vision in 2021 to become ‘the Safest and Healthiest Company in the World.’ As a bridge to achieve our ESG management mid-to-long-term quantitative targets to lower LTIR* to below 0.060, we developed health & safety management/technology/culture strategies and initiatives in 2024 to reach zero serious accidents and reduce LTIR to below 0.07 for prevention and active improvements. We are committed to creating a working environment where safety always comes first and contributing to improved safety across our industry.

* LTIR (Lost Time Injury Rate): Measures annual number of incidents per 100 employees that result in lost time (fatality, 1 full-day or more away from work)



- 1 Health and Safety Guidelines
- 2 Safety Code of Conduct
- 3 Mandatory Safety Rules



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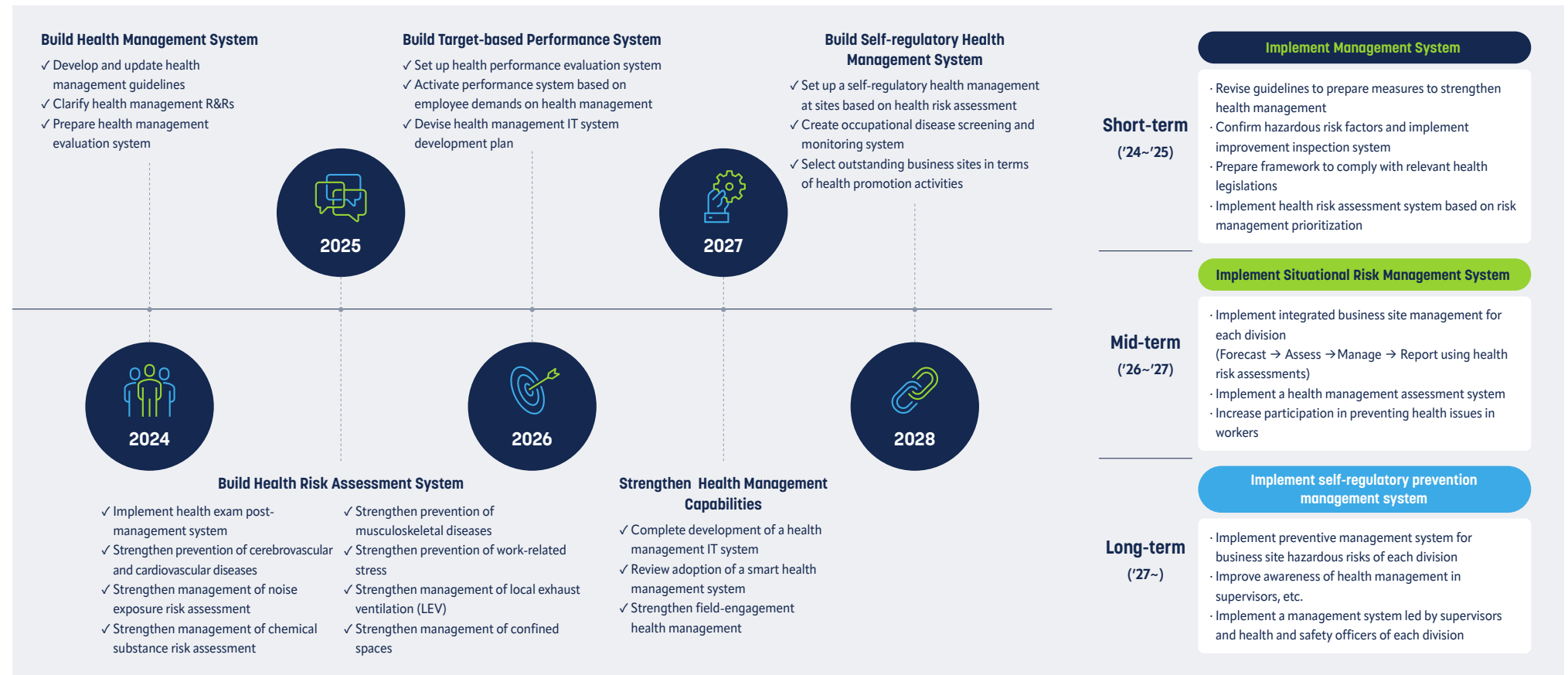
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Health Management System Mid-to-long-term Roadmap

As part of Green Promise 2030 and our mid-to-long-term ESG strategic initiatives, LOTTE Chemical carried out a consulting project with a group of professionals to advance our current health management system and take preemptive measures against health risks to improve the health of our employees. Through internal and external surveys and a SWOT analysis* over the course of 3 months, we developed a mid-to-long-term

* SWOT Analysis : A marketing method that analyzes Strengths, Weaknesses, Opportunities, and Threats based on the internal and external environment

health roadmap until 2028 along with relevant initiatives to focus on building a strong self-regulatory prevention management system in health management. In 2024, we developed new guidelines for implementing a health management system with clearly defined roles and responsibilities, as well as a health management assessment system to be adopted going forward.





Risk Assessment

Risk Assessment





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METRICS AND TARGETS

Emergency Response and Accident Investigations

LOTTE Chemical responds systematically to accidents based on predetermined principles by operating an emergency response process that is divided based on type and materiality of the accident such as safety accidents, environmental accidents, and process accidents to quickly form Accident Investigation Teams when accidents occur. We have established a cascading system where when an employee (initial reporter) perceives an emergency situation and contacts the Emergency Operations Center, the Center leverages Xroshot* to send messages to those within the system including business representatives within 15 minutes depending on the materiality level (accident level). Afterwards,

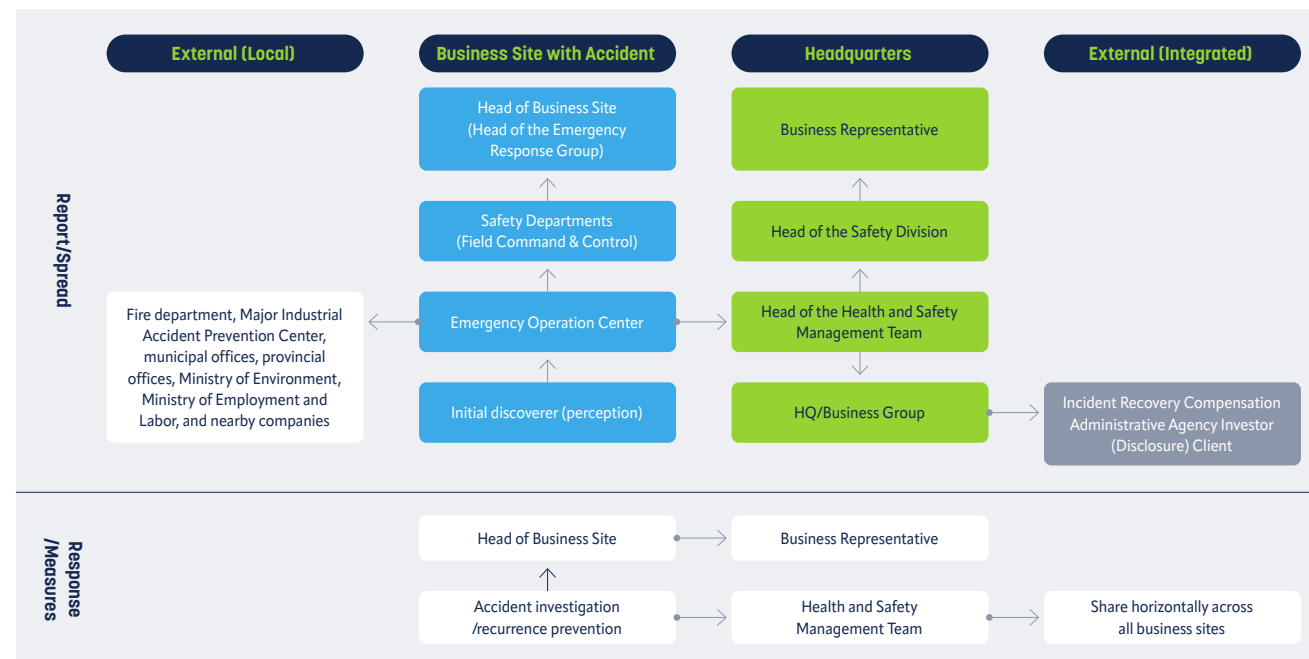
* Xroshot: Delivery function that sends the same message to multiple recipients at once

initial and response measures are taken in line with the emergency response procedures. Moreover, processes are prepared at each business site that for each stage of handling accidents including initial response immediately following breakout of accidents and execution of necessary measures to prepare against chemical spills. Based on internal materiality standards (accident level), the business site where accident broke out forms its own accident investigation team to carry out investigations and report the outcome to business representatives. For low-level accidents, departments where accident broke out investigates the accident and reports to the head of the business site. Results of accident investigations are spread horizontally across all business sites to prevent similar accidents from recurring.

Strengthen Emergency Response Capabilities

To ensure that all employees can respond quickly and safely in emergencies, we conduct regular emergency training and drill. These cover various scenarios including fires, explosions, and chemical spills that are reviewed and updated annually. Employees are equipped to take immediate response measures, provide victim assistance, and prevent additional damage through actions such as work suspension, emergency evacuation, and risk elimination. To enhance effectiveness, we conduct realistic drills that simulate actual incidents. These include both internal exercises and joint drills with external organizations, such as local governments, the Ministry of Employment and Labor, fire departments, police, and military units, to reinforce our coordination.

At headquarters which mainly consists of office workers, evacuation drills are carried out for natural disasters and fires. Each floor designates evacuation leaders responsible for guiding employees to safety. These leaders also receive CPR training to further strengthen their emergency response capabilities.



Response to Emergencies

- Responds to process/safety/environmental accidents in accordance with a segmented emergency response plan based on field and severity
- Makes prompt reports on accidents based on the cascading system (Xroshot/ fixed and mobile lines)
- Takes measures to inform stakeholders through headquarters and business groups when an accident shared with headquarters is found to cause property damages expected to have material impact on the company or our customers

Immediate Reporting Principle to Emergencies (Accident)

- All employees shall report accidents immediately upon perception to the Emergency Operations Center or to the lead organization of the given accident and their senior managers
- The Emergency Operations Center (Safety Department) shall give reports on given areas 15 minutes within the breakout of the accident
- Basic guidelines of the accident report must be abided by, and when in violation, possible disciplinary actions based on mandatory safety rules may follow

Green Keeper Drill

Emergency Response Joint Drill

HQ Relief and First Aid Training





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Criteria for Emergency Xroshot



Preventive Health and Safety Programs

1 Safety Management at Worksites

LOTTE Chemical conducts regular preventive inspections, as part of our on-site safety management, to ensure the soundness of our chemical facilities and auxiliary systems. Inspections were carried out across all business sites for falls, entrapments, and struck-by incidents, which are the three most common types of serious accidents, identifying risk factors and implementing corrective actions. Findings and safety best practices were shared across sites via horizontal expansion, amplifying the impact of improvement efforts. In alignment with these themes, each business site also performs its own safety inspection, incorporating other incidents, as well, to prevent accidents. All employees strive to carry out 'fundamental accident prevention and management' by identifying and analyzing near-miss accidents and potential risks to apply preventive measures and participate in a safety behavior observation program to identify root cause of accidents, reinforce safety practices, and replace unsafe actions with safe ones through dialogue. In 2024, we introduced the Job Safety Observation (JSO) program, targeting high-risk routine tasks, to promote a culture of compliance with work procedures at work sites, and even including activities to uncover additional risk factors.

2 Regular Maintenance of Safety Management

The Ulsan Complex underwent regular maintenance for 64 days from September 12 to November 14, 2024. Regular maintenance calls for a high level of safety management as it involves more work than usual. We built Health and Safety Management Regulations for Regular Maintenance and Safety Management Plans prior to regular maintenance to concentrate on strengthening safety training and safety management capabilities. Prior to the job, we prepared the Health and Safety Management Regulations and Safety Management Plan, not to mention a Safety Guidebook that was distributed to all employees

and partner companies to strengthen safety training and safety management. In addition, we conducted an accident prevention and safety campaign to raise awareness on safety, sending earmuffs and protective equipment to partner companies, and putting up a banner around the complex to promote safety during the maintenance period that was selected from a safety slogan contest. We positioned Safety Team managers and safety supervisors at each of our plants to focus management of blind spots and key work areas while reinforcing safety management through site inspections during vulnerable work hours. Wireless smart gas monitoring systems were also adopted for real-time management of closed spaces along with mobile CCTV systems for enhanced efficiency in safety management.

3 Provision of Safety Gear/Protective Equipment

LOTTE Chemical supplies personal protective equipment (PPE) such as safety helmets and safety joggers to our business sites for employee safety with gear needed for different work tasks available on site for provision. Personal safety gear such as helmets and joggers are immediately replaced when requested due to wear and tear, damages, or when lost. Managers are assigned for regular inspection of respirators, airline masks, and heat-resistant clothing to manage them to make them available for immediate use. We inform employees on what safety gear/protective equipment can be requested and offer guides and training on what safety/protective equipment are needed for each task and chemical substance to block external hazardous risks and protect our workers. We also introduced an unmanned smart dispenser for personal safety gear to address difficulties in providing supplies during holidays and nighttime. It is equipped with personal protective equipment including various safety gloves such as cut-resistant gloves, goggles, gas mask filters, respirators, and safety belts, improving access and efficient inventory management through enhanced efficiency for provision managers and streamlined provision processes.

⊕ PPE by task and substance



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4 Smart Wireless Gas Monitoring Systems

LOTTE Chemical actively invests in emerging IT/DT technologies to achieve on-site safety management and zero accidents. As part of our efforts, we implemented a smart wireless gas monitoring system to enhance safety management and supervision during high-risk tasks. The system enables real-time gas measurement and monitoring and contributed to creating a safe work environment, reducing the risk of suffocation accidents in confined spaces, which is classified as a high-risk environment, while also preventing acute chemical exposure and explosion incidents. The multi-point monitoring system allows gas concentration levels of worksites to be monitored through consoles in the control room, the Production Team's PCs, and smartphones using DT technology. Furthermore, safety management levels are being improved through horizontal expansion, spreading the use of the system across other business sites, as well.

Monitoring System

5 Strengthening Fire Safety and Management of Hazardous Substances

Given the characteristics of petrochemical plants with tall production facilities (fractionating columns and reactors), we expanded our water-based fire suppression systems to prepare against fires in elevated areas. This includes extending pipelines and installing specialized nozzles capable of spraying water up to 70 meters high. We also introduced a tower fire truck equipped with high-reach ladders, enabling rapid response to fires in elevated zones. In recognition of our continuous efforts in managing hazardous substances, LOTTE Chemical was commended by the Minister of Interior and Safety. This acknowledgement was part of an initiative to promote voluntary safety leadership in the private sector by identifying and sharing best practices across the industry.

Commendation from the Minister of Interior and Safety

6 Hearing Preservation Program

To actively prevent noise-induced hearing loss among employees, we operate a comprehensive hearing preservation program that builds on preventive measures such as measuring noise levels in the work environment and conducting special health exams. Activities include assessments of noise exposure, engineering controls, provision and mandatory use of hearing protection equipment, preventing education and training on the harmful effect of noise exposure, regular hearing tests, development and implementation of a hearing preservation program, and a comprehensive management system that includes record management. We conduct semiannual noise level measurements for each work unit with results showing levels below regulatory limits. Given the nature of the equipment-intensive industry, most noise originates from machinery. Therefore, we make continuous improvements to processes to reduce noise at its source to maintain low levels of noise. We also enforce compliance with procedures on using hearing protection in high-noise areas. Regular hearing tests are conducted for workers in processes with noise exposure that are subject to special health exams as part of our effort to manage occupational hearing-related illnesses and to prevent at-risk individuals. We have a noise MAP* in place for prevention management and conduct engineering improvements based on noise source evaluations to implement strict access control and mandates for wearing protective gear in high-noise areas. As part of our mid-to-long-term health management roadmap, we plan to introduce a noise risk assessment and analyze noise exposure durations for workers to evaluate frequency and intensity of exposure along with work environment measurements and determine overall level of risk. With plans to build and implement risk mitigation measures, we look forward to fostering a pleasant working environment and more effective health management.

* Noise MAP: A visual management tool that maps noise levels across different areas of the worksite for targeted control and monitoring

7 Health and Safety Communication

LOTTE Chemical provides information on harmful risk factors at worksites through postings and training. We operate Tool Box Meetings* before work to communicate directly with workers on the risks involved in the given work process and have procedures in place to suspend work in case of imminent dangers to prevent safety incidents for workers including our partner companies. Moreover, we built principles to ensure there are no disadvantages when having to evacuate due to a reasonable cause. A corporate health and safety online e-suggestion box using QR codes and offline suggestion boxes at each business site are being operated to serve as a window for employees and partner companies to voice their opinions freely on health and safety matters. In- stead of waiting for workers to come to us, we also go and regularly visit each business site to listen to the difficulties faced by the field in terms of health and safety and take measures for necessary improvements.

* Tool Box Meeting: Workers discuss the work schedule, procedures, safety checks, precautions, etc. before working on site

Health and Safety e-Suggestion Box



1 TBM activities of partner companies
2 Mobile Health and Safety Services



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8 Employee Health Improvement Program

LOTTE Chemical strives to be the safest and healthiest company in the world. To this end, we operate employee health examinations and health improvement programs. Certified healthcare professionals are appointed as health managers and separately manage employees in need of observations and those with findings of disease while other various health improvement programs are carried out at each business. Moreover, we encourage participation from our employees and partner companies by providing incentives when targets are met. This way, we improve the organization's productivity through enhanced health management and satisfaction among employees, allowing them to work longer, as well as promote a healthy work culture and contribute to the company's sustainable growth.

Internalization of a Health and Safety Culture

1 Improving Safety Leadership

LOTTE Chemical conducts regular inspections of our health and safety management processes to comply with legal regulations, prevent industrial accidents, ensure continuity of our health and safety operations, and foster a strong safety culture. These inspections include evaluating the core competencies of safety activities and integrating them into our performance management systems (KPI, MBO). Following the results of the Safety Leadership Coaching in April 2023, we established evaluation indicators for the activities (safety leadership coaching, S-Patrol*, CTO**, health and safety investments) each staff level must carry out, reflecting them in performance reviews with a weighted scope of 10-20%. In 2024, such efforts were expanded to the heads of overseas subsidiaries, strengthening safety management not only in Korea, but also across our global operations.

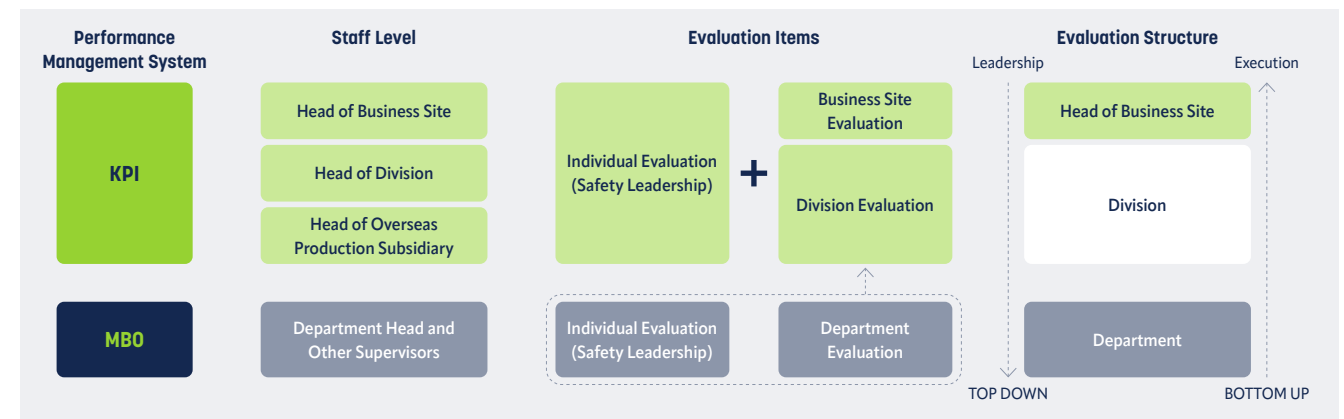
* S-Patrol (Safety-Patrol): Behavior-based safety management activity that manages unsafe behavior and state of workers

** CTO (Critical Task Observation): Activity where managers and workers visit sites for high-risk tasks together, to observe and discuss raising awareness on risks surrounding the critical task and developing improvement measures

Employee Health Improvement Program

Health Management	Program	Details
Regular Health Exams	General health exams, special health exams	Regular health exams for all workers and workers exposed to harmful factors and subject to special health exams
Health Training	Healthy Workplace	Training on musculoskeletal disease prevention, responsible drinking, smoking cessation, weight-gain prevention, and nutrition
	Mobile healthcare services	Field-based health management support by nurses and health officers
	Relief and first-aid training	Practice course for cardiopulmonary resuscitation (CPR) and using automated external defibrillators (AED)
Health Improvement Programs	Programs for weight-loss, smoking cessation, metabolic syndromes	Improvement in personal health management at both personal levels and at the business site level by enhancing awareness on health and switching to health habits
	Health management programs tailored to those with abnormal findings	Personal health consultations and guides, health check-ups, etc.
	Hands-on training for health enhancement	Tests by category (nutrition, physical activity, alcohol consumption, smoking, cardio-cerebrovascular health, oral health), consultation and training, distribution of awareness material, joint campaigns, and training on dementia, etc.
	Health management program for partner companies	Health consultations and measurements for interested participants after being selected as a risk group, and continuous management for high-risk groups
Stress Management Programs	Mobile counseling services	Specialists from an external counseling center visits and assists management of work-related stress through weekly consultations

Performance Management System





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2 Custom Safety Training

LOTTE Chemical offers continuous training to strengthen health and safety capabilities of our employees. We conduct safety training for each function and special training for new joiners, transferred employees, and employees involved in hazardous and harmful work. In accordance with the Health and Safety Management System, we offer not only job training for health and safety management leads and individual health and safety managers, but also regular training for supervisors. Various training programs are also operated to strengthen health and safety capabilities, as well as form a safety culture. We offer curriculums that range from introductory to intensive courses for each staff level that help employees gain better understanding of legislations and technologies related to process safety, PSM and SMS* while also improving safety at the individual and business site levels. LOTTE Chemical carries out regular training on our Safety Code of Conduct to build our own unique advanced safety culture, offering essential parts of our training in Korean, English, and Chinese for distribution. We share safety accident case studies and key trends with safety leaders and spread our safety culture through special training on safety mindsets. Moreover, we

offer support for external training that meet the different needs of employees of each of our business sites with the company covering all expenses related to the training.

* SMS(Safety Management System): System that improves efficiency of safety management based on qualitative and quantitative safety evaluation of gas facilities for the fundamental prevention of gas accidents and analysis of the safety management work process

Reinforcement of Health and Safety at Partner Companies

1 Mutual Growth Programs to Support Health and Safety

LOTTE Chemical operates support programs for mutual growth with our partner companies. After selecting partner companies without ISO45001 and KOSHA MS*-certified systems, we support them with diagnosis, training, and follow-up consulting to acquire certified health and safety management systems. The 2nd round of this project ended in success with three partner companies obtaining certification in July 2023 and recording high satisfaction levels from our partner companies. Recognizing that mutual growth between conglomerates and partner companies is fundamental to continuous growth in the petrochemical industry, LOTTE Chemical Division

took a groundbreaking step in 2023 by becoming the first in the industry to issue a joint statement and establish a Mutual Growth Council. This initiative is aimed at building practical agreements that incorporate diverse voices from the field. LOTTE Chemical and the wider LOTTE Chemical Division are committed to developing and implementing reasonable measures to actively support improvements in key areas such as employee working conditions, worker safety, welfare benefits, talent development, productivity, and technical expertise, as well as partner self-sufficiency. Partner companies will also conduct training programs designed to drive mutual growth and shared development. Furthermore, the Ministry of Employment and Labor will actively support these voluntary, industry-led efforts spearheaded by LOTTE Chemical, our partners, and other players in the petrochemical sector.

* KOSHA MS : * KOSHA MS: Occupational Health and Safety Management System jointly announced by the Korea Occupational Health and Safety Agency (KOSHA) and International Organization for Standardization (ISO)

2 Operation of Partner Council

LOTTE Chemical operates a monthly Partner Council where we support health and safety training and efforts to promote safety awareness while also making improvements based on issues raised by our partner companies regarding health and safety issues. We also share case studies on accidents and near losses while providing guidance and information to our partner companies through accident prevention training. Regular joint emergency response trainings with partner companies are carried out to upgrade their capacity to respond to emergencies.

3 Regular Diagnosis of Partners in Our Supply Chain

LOTTE Chemical encourages improvement in safety capabilities and safety levels of our partner companies through regular safety diagnoses of partners in our supply chain. 357 companies related to chemical substances, construction, manufacturing, services, and land transportation were evaluated in 2024 and supported with health and safety advisory services. Such support helped strengthen our partnership for mutual safety and brought about effective disaster prevention to improve the overall safety management level across our business sites.

Key Health and Safety Training (Occupational safety and health Act)

Category	Course Title	Audience	Cycle
Statutory Training	Regular training	All employees	Quarterly
	Regular training for supervisor	Supervisors	Quarterly, on-demand
	Training for new recruits	New recruits	At time of recruitment
	Training for changes in work	Relevant persons regarding work changes	At time of work changes
	Special training	Workers involved in hazardous/harmful work	Prior to work
	MSDS training	Workers that handle MSDS substances	Prior to handling
	Training for health and safety manager	New	Within 3 months of appointment
		Follow-up	Within 6 months after 2 years of training completion
	Training for safety manager/health manager/health and safety manager	New	Within 3 months of appointment
		Follow-up	Within 6 months after 2 years of training completion
Inhouse training	Training on safety mindset	All employees	Once a year
	PSM introductory training	New joiners	Once a year
	PSM training (regular evaluations/reviews/audits, etc.)	Departments subject to PSM	At least once a year
	Training on near misses/accident case studies	All departments	When incidents occur
	Specialization training	Target for each training	On demand
	Training on Safety Code of Conduct	All employees	Once a year
	Training on accident case studies	All employees	When incidents occur





HUMAN RESOURCE MANAGEMENT

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STRATEGY

Human Resources Management Policy

LOTTE Chemical puts more weight on future potential and actively supports our employees through talent development programs where employees can grow along with the company. The company and our leaders strive to provide a systematic growth guideline and continuous feedback, so employees can

take the initiative in setting their own career goals and achieving them. We plan to continue to work on employee capability-building and create results such as improvement in HCROI* through enhanced engagement and satisfaction levels based on our self-directed talent development system.

* HCROI (Human Capital Return on Investment): Added-value created by employees in relation to investments made to employees

Desired Qualities in Our Employees

Top Talents Driving Execution Top talent in their field who take on new opportunities and tough challenges with drive and passion	Harmonious Talent who Respect Diversity Talent who recognize the value of different perspectives and cultures in the organization and collaborates with a balanced outlook
Attracts Top Talent	Action Oriented
Collaborates	Values Differences
CHALLENGER	HARMONIZER
EXPERT	MOTIVATOR
Talent with Business Insight and Strategic Mindsets Talent who anticipate future possibilities and build strategies based on marketplace and business knowledge to reach organizational goals	Talent who are Responsible, Self-motivated, and Self-developing Talent who do their best to achieve organizational goals based on a sense of ownership and accountability
Strategic Mindset	Business Insight
Drives Engagement	Ensures Accountability



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Talent Development System

	Leadership	Job Skills/Career	Core Talent	Global	Lifelong Education
GOAL	Building leadership in each stage	Nurturing professional experts and supporting career development	Fostering Next-generation Leaders	Increasing Global Role	Developing Second Career
PROCESS	New Joiners - Onboarding course - Onboarding mentoring Courses by Level - Executive capability-building (New CEO, promoted executives, newly appointed executives) - Executive leadership coaching program, Leaders Forum - S/M/SA Grade courses, S/M Grade promotion eligibility courses - Professional internship/promotion course	Developing Job Skills - Production process technology course - Functional training for each business site - Information security and data specialist course - Finance, HR, compliance capability-building course Support for acquiring job certifications Career Certification - Communicator, Coach, Job Interviewer, PM certification course	Fostering Business Leaders - Hi-Potential Leader course - Hi-T and Successor mentoring Specialized Training Support - Support for LOTTE/external MBA programs - Support for academic training and professional graduate schools	Expatriate Program - Course for new/returning expatriates, expatriate safety management course, global school - Platform for sharing knowledge/ knowhows regarding expatriate life Global Capability-building - Support for internal/external language courses	Reemployment Assistance Services - Career planning and job referrals for retirees Career Consulting - Courses on money management, starting businesses, and obtaining certified licenses
Online/Mobile Training Infrastructure: LOTTE Group LMS (Learning Management System) Platform and EDRC (Engineering Development Research Center)					



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Talent Development Programs

LOTTE Chemical is developing various programs to cultivate human resources in effective and innovative ways and encouraging active participation from our employees. We operate courses based on staff level for tailored capability-building, courses on job skills to foster professional experts, core

talent and leadership courses, and support learning to nurture global talent. We also leverage LEP, a learning experience point system, to motivate self-directed learning while offering various types of contents for learning through our education platform EZ Learning.

1 Key Capability-building Programs

Category	Key Program	Description	Training Type	Number of Completions (2024, persons)
Common	EZ Learning	LOTTE Group's online training platform that supports tailored ongoing learning by allowing employees to choose and sign up for courses regarding job skill development or self-development among over 2,000 courses under various categories including business management, DT, humanities, literature, and phone-based language learning	Voluntary	4,395
	LMS			
	Acropolis	LOTTE Group's online training website where Group issues are shared and employees can broaden their horizon through lectures on insight and business issues, etc.	Voluntary	981
	LEP (Learning Experience Point)	LOTTE Group's learning point system where points are acquired based on learning time to encourage and foster self-directed learning through feedback on the growth process and efforts of employees	Voluntary	3,524
	EDRC	Online learning support for users to complete the DT-based technology convergence training program (for process design, plant design, and project management, etc.) operated by 5 universities including Seoul National University without constraints in time and space	Voluntary	237
Job Skills	Smart Chemicals	Program that supports work efficiency through training on generative AI, fostering a culture that actively attempts/ shares process automation	Voluntary	629
	Financial Qualifications Certification	Course for developing financial talent for the mid-to-long-term, offering practical, in-depth, and strategy courses on topics such as basic financial accounting, risk management, ethical management and compliance, and the new role of CFOs	Mandatory	5
	Capability-building in Labor Affairs	Course that develops specialists equipped with key labor management and problem-solving capabilities	Mandatory	10

Category	Key Program	Description	Training Type	Number of Completions (2024, persons)
Job Skills	Support for Obtaining Certifications	Provides programs and supports expenses for employees who need to obtain or maintain certifications for their jobs in production, technology, safety, environment, business management, and DT	Voluntary	145
Leader Development	Capability-building for Executive	Program that fosters CREATORS with comparative advantage that develop strategies to identify growth drivers and strategy executors who create optimal results from the business environment	Mandatory	162
	Leadership Course	Training program that improves leadership for employees in leadership positions or who have been promoted	Mandatory	144
Core Talent	External MBA/LOTTE MBA	Provides in-depth training on overall management capabilities in strategy, finance, marketing, and HR to sharpen strategic thinking and business management capabilities for prospective leaders, and supports internal and external MBA programs for networking and synergy creation among outstanding talent	Voluntary	9
Global	Training for New and Returning Expatriates/ Buddy Program	Training for newly appointed expatriates before departure to understand the role of expatriates and receive support on how to adjust, and training for returning expatriates to assist them in readapting to the Korean working environment along with a 'Buddy Program' to support quick adjustment	Mandatory/ Voluntary	17
	Inhouse Language Course	Languages courses to cultivate global competency in employees that include not only English, Chinese, and Japanese, but also various strategic languages such as Indonesian, Russian, Spanish, and French	Voluntary	302
	Language Course	Support for External Courses	Voluntary	38





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2 Self-directed Career Development

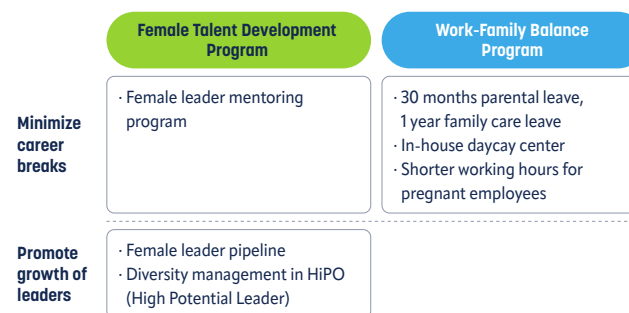
The IN Career system is an internal talent transfer system between LOTTE Group affiliates that offers an opportunity for self-directed career development through a simple process where employees can apply for jobs of their choice. The process is held frequently through the Group's internal system when there are job openings at a Group affiliate and contributes not only to active career development of individuals who transfer to different jobs or affiliates through IN Career, but also to Group affiliates securing outstanding talent. The Career Registration system is a 1:1 online communication channel with HR where employees can organize their work history in the system and design career plans so that they can explore their directions in terms of growth and develop their career. Registered data is used in connection to various talent development programs such as for transfers within the organization, forming expatriate pools, building development strategies, providing education and training, and improving the corporate culture to build an environment that can drive personal growth of each of our employees.

3 Reemployment Assistance Services

LOTTE Chemical offers reemployment services to employees scheduled to leave the company due to non-voluntary reasons (fill/early retirement, etc.) These reemployment services consist of career designing, training, and job referrals. Based on a contract with an agency specializing in job training and career transition support services, we identify the reemployment needs of individuals and provide timely recruiting information to assist job seeking activities. We strive to extend practical assistance such as recruiting information tailored to individual demands identified through in-person interviews with professional consultants. When necessary, the number of consultation sessions can be increased to ensure sufficient assistance is provided. A total 46 people took part in the reemployment assistance services in 2024.

4 Strengthening Female Talent

LOTTE Chemical makes strong efforts to create working conditions and a corporate culture where all employees, regardless of their gender, can fully demonstrate their capabilities. Not only do we make improvements to policies and programs regarding female talent, but we are also increasing the recruiting and capability-building of female talent and operating female leadership programs to support female talent from a mid-to-long-term perspective, so they can achieve stable growth in our organization. We have a low ratio of female employees due to the nature of the chemical business, but we continue to make efforts in securing and developing female talent such as increasing female employment and offering manager cultivation programs which have been acknowledged in the affirmative action evaluation.



METRICS AND TARGETS

Talent Recruitment

1 Talent Recruitment Policy and Process

LOTTE Chemical is strengthening our systematic and reliable recruiting process that leverages diverse channels for the timely attraction of talent who can drive new growth engines.

Transparent and Fair Recruiting

LOTTE Chemical introduced on-demand recruitment to create an environment where outstanding talent can be recruited when needed by being flexible in when recruiting is held (time/frequency) and leveraging various recruiting channels such as recent college graduates, professional internships, industry-sponsored scholarship programs, and Target Lab, etc. In addition, we are breaking away from one-size-fits-all recruiting and taking advantage of various evaluation tools to verify job skills and enhance fairness in our job-based recruitment process. In addition to adopting AI-based testing to assess capabilities for some job positions, we are enhancing transparency in the recruiting process through blind hiring where basic information on applicants such as their educational and regional backgrounds are not provided to interviewers for objective and effective capability verification. We are also making endeavors to increase the satisfaction of applicants such as operating Interviewer certification at the Group level to improve interviewing capabilities of interviewers to provide fair and objective evaluations. To ensure our interviewers remain effective, we conduct periodic recertification for those who completed training earlier. We also provide video training to reinforce key guidelines prior to interviews. In particular, internal audits are carried out to monitor all hiring processes, and processes are updated regularly to ensure fair and transparent recruiting.

Gen MZ Interviewers

In 2023, LOTTE Chemical started nurturing so-called 'Gen. MZ interviewers,' who are staff and associate level employees, to carry out culture-fit interviews on fellow Gen. MZ new joiner applicants to embrace diverse perspectives in recruiting talent fit for our organization. Piloted in the second half of 2023 for annual recruiting of new joiners, the program is also being actively utilized to help talent adjust to the organization.



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Providing Transparent Recruiting Information

LOTTE Chemical provides timely recruiting information and has been operating a separate recruitment website that contains various contents related to our business since 2023 to enhance convenience for applicants. In addition to the LOTTE Group's Job Café, we are actively participating in job fairs and briefing sessions at universities, academic societies, and employment centers to reach out to prospects. We are especially supporting career development in R&D by inviting R&D specialists to the R&D Conference held in 2023 to promote our vision for research and provide employment consultation. In 2024, we introduced an AI-powered chatbot via our KakaoTalk Recruiting Q&A channel by integrating ChatGPT API. Trained on recruitment-related datasets including frequently asked questions, the chatbot delivered accurate responses throughout the hiring process, offering real-time support by being available 24/7, including weekends.

Recruiting People with Disabilities

LOTTE Chemical employs people with disabilities to work from home and perform roles such as business support, data management, and inhouse web design. In 2023, we opened in-house cafés at our headquarters and LOTTE Chemical R&D Center in Daejeon where the entire barista staff are made up of people with severe disabilities. We have continued to explore and develop jobs where people with disabilities can be hired to further promote inclusive employment. In 2024, our hiring efforts have continued with ongoing recruitment of baristas with disabilities, maintaining an employment rate that exceeds the mandated 3.1% requirement.

Recruiting Local Talent

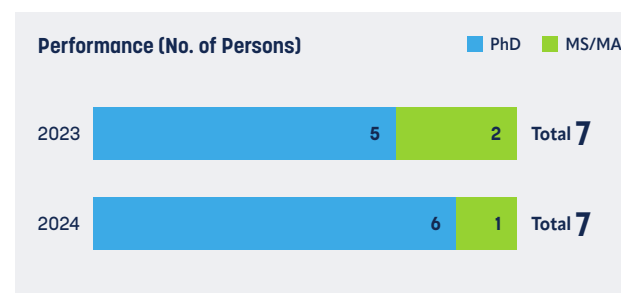
LOTTE Chemical has been operating a local talent recruitment program for talent in Seosan where our Daesan Plant is located since 2022 to strengthen partnership for win-win growth with

local communities. We also signed an MOU with the City of Yeosu in 2023 to promote the recruitment of local talent.

2 Performance of Development/Training Programs

Academic Training Programs

Since 1994, we have been continuously offering academic training programs to support employees in obtaining master's and doctorate degrees. We foster core talent and sharpen our R&D through these programs to nurture skilled experts with both experience and theory.



Measuring Impact of Capability-building Programs

LOTTE Chemical diagnoses employee satisfaction and accomplishment rates regarding capability-building programs to check on its effectiveness and make continuous improvements. A key area of focus is AI training for our entire workforce through which we aim to improve work efficiency, promote automation, and foster a culture of knowledge-sharing across the organization. In 2024, 357 employees participated in our AI training program which is structured in multiple stages to accommodate varying levels of AI proficiency. (Courses: Prompt Engineering Practical Course Basic/Intensive/Smart Work with AI)

Performance Evaluation and Compensation

1 Fair Evaluations

LOTTE Chemical supports the personal growth and development of our employees and carries out performance management through MBO-based performance evaluations, 360 degree evaluations, and ongoing feedback between leaders and team members to ensure fair and objective evaluations.

Achievement Evaluation and Ongoing Performance Management

LOTTE Chemical implements ongoing performance management where individuals set MBO-based work targets at the beginning of each year and receive feedback on their progress continuously throughout the year. Team members and leaders are on the same page in terms of performance progress through 1:1 meetings while support and development plans are shared to strengthen competency through interactive performance management for talent development. An initial mid-year evaluation is done for the first half of the year followed by a final year-end evaluation where final grades are given after reviewing how effectively team members have met targets. This process involves in-depth interviews between the field and HR which enables comprehensive and fair evaluation that reflects various perspectives.



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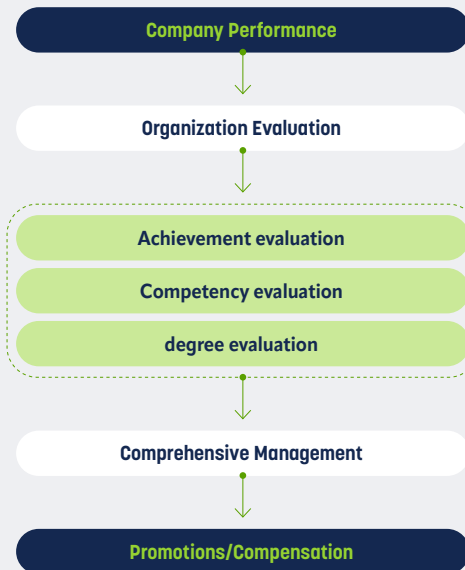
Competency Evaluation

Competency evaluation consists of the Group's core values and job specific competencies. Employees are evaluated based on how much they meet the competency level expectations for each job function. The results are used as standards for further developing talent into tomorrow's leaders.

360 Degree Evaluation (by Leaders/Peers)

To compensate for top-down vertical evaluation between leaders and team members, we incorporate various opinions on specific areas related to leadership and collaboration in our evaluations. This enhances fairness in the evaluation process with results being used as reference for HR appointments and promotions.

Performance Management



2 Reasonable Compensation

LOTTE Chemical strives to operate a reasonable compensation system in line with the roles of each individual and their personal and organizational performance based on transparent and fair evaluations.

Employee Welfare Programs

1 Work & Life Balance

LOTTE Chemical operates various programs that support self-directed working environments to allow employees to focus on their personal lives after work.

2 Welfare Programs for a Family-friendly Work Environment

LOTTE Chemical believes that our employees and their families must be happy for the company to grow. Based on this belief, we operate welfare programs tailored to each stage of employee lifecycles from recruitment to retirement to boost their happiness.



Personalized Salary Scheme

Performance based compensation where individual salary raises are determined in connection to personal evaluations which are also used for providing other compensation such as bonuses



PS (Profit Share)

Performance-based profit-sharing program where the company's excess earnings from business management are distributed to members each year



Position-based Allowance

As managers in the organization are assigned authority and responsibilities, compensation is given equivalent to the respective roles



LOTTE Chemical Awards

Best practices are selected and officially awarded to provide clear compensation and motivation to employees to contribute to the company's performance



Core Talent Compensation

Outstanding talent are selected and actively supported in terms of capacity-building and creating results through monetary and non-monetary compensation

Smart Work: Working Hours and Methods

Flexible Working Hours

Flexible working hours where employees can decide when to begin and end work and plan daily working hours within the scope of total monthly work hours to allow employees to manage work hours to meet their needs

Creates a flexible working environment and contributes to improving productivity through autonomous schedule management taking into account individual workloads

PC OFF Program

PCs are shut down after an automatic reminder pops up when reaching end of the workday preset by individuals to promote flexible working hours and a culture where employees can get off work on time



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Family-friendly Management: Employee Family Care and Maternity Protection Programs

Life Cycle Welfare	· Lifecycle welfare program offers welfare benefits tailored to the needs of employees in each lifecycle stage to improve quality of life and work satisfaction · Manuals are posted on the internal HR system to make it convenient for employees to look up · Welfare programs are offered, tailored to continuous years at the company and employee lifecycles - Early Stage at the Company (first 10 years) is focused on self-development and career development - Middle Stage at the Company (10~20 years) is focused on family-friendly benefits - Late Stage at the Company (20 years or more) is focused on family-friendly benefits and retirement preparations
Max. 30-Month Parental Leave	· Automatic Parental leave following childbirth without having to separately apply for leave to support work-family balance for female talents. · Parental leave is extended to maximum 2 years and 6 months
Mandatory Paternal Leave	· Minimum 1-month mandatory parental leave (Group-level program and the first of its kind in Korea)
Tuition Support for Children	· Relieves financial burden related to educating children to enhance work engagement · Tuition aid for children under school age (3 years-old ~ before entering school) and college students
Inhouse Daycare Center	· Company daycare center with high quality faculty and facilities
Family Medical Expense Support	· Subscribes to collective accident insurance and covers medical expenses for employees, their spouse, parents, and children · Supports fees for comprehensive health examinations for employees and their families (spouse, parents)
Various Maternal Protection Leaves and Work Programs	· Shorter work hours during pregnancy and childcare period to ease the burden of pregnancy, birth, and parenting · Childcare leave when children reach school age and when balancing work and parenting become challenging · Pregnancy leave (10 months), infertility leave (1 year), and gifts for pregnancies and childbirth
Support for Family Affairs	· Congratulatory allowance and leave to celebrate special family events · Company housing for eSupport for weddings/childbirth/70th birthday/deaths/funeral services
Living Support	· ach business site and support for mortgage loans (ceiling of KRW 100 million) · Company housing/accommodation support for single employees · Support for personal pension plans
ESOP	· Employee Stock Ownership Plan (ESOP)

Various Welfare and Benefit Programs

Housing/Living Support

Mortgage loans
Company housing/accommodation for single employees
Support for personal pension plans
Support for family affairs

Childcare/Education Support

Parental leave
Company daycare center
Tuition aid for employee children
Cultural arts activities for employee families

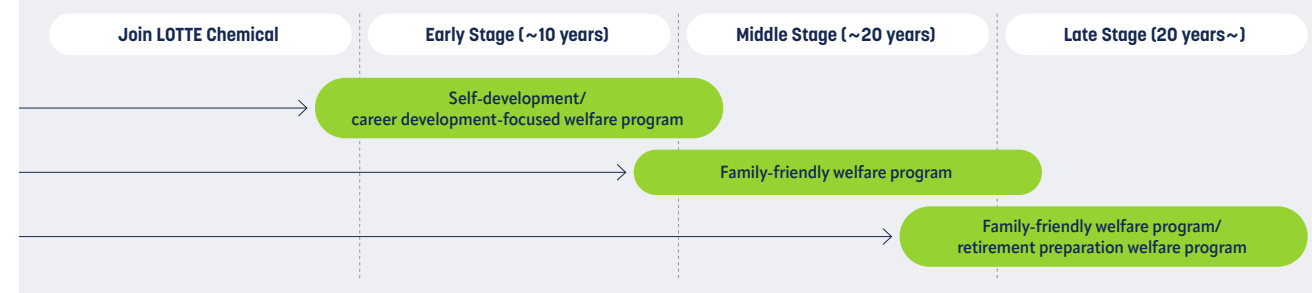
Healthcare

Comprehensive health examinations
Regular health checkups
Group accident insurance
Medical expenses support
Support for infertility care (leaves a and treatment expenses)

Self-development/Leisure Support

Support for inhouse club activities
Support for external language courses
Support for condo/resort reservations
Welfare b benefit points
LOTTE Group affiliate credit card (W Card)
Refresh leave
Sabbatical leave (executives)
Summer leave

Life Cycle Welfare Program





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Family-friendly Programs – Employee Family Day

LOTTE Chemical hosts events inviting employee families (children) to business sites during the family month of May to build a family-friendly culture and boost company pride.

 Family-friendly Corporation Certificate

Mental Well-being Management

LOTTE Chemical operates an inhouse counseling office to assist employees in their mental health based on work-life balance and a healthy and happy work life. A professional counselor is present at the office to help with concerns regarding work and personal life and address conflict situations in relationships. Employees at other business sites and expatriates are also using the services through video counseling. In addition, we operate department workshops for psychological tests and mindful meditation programs for stress management along with special events and lunch programs to make it easier for employees to open the doors to the office and regular newsletters called healing letters that provide psychological information.

Personal Pension and Retirement Pensions: Post-retirement Support

Personal Pension Scheme

Subscribes to personal pensions as part of long-term welfare benefits to support stability in the latter years of employees with the company matching the monthly contributions being made as a 1:1 matching grant

Retirement Pension Scheme

Retirement benefit plan where retirement allowances are reserved at outside financial institutions to be received as pension or as a lump sum upon retirement. LOTTE Chemical employees are all subscribed to defined benefit plans (DB), defined contribution (DC), or combo plans, reserving and managing 100% of estimated retirement benefits at outside financial institutions and guaranteed rights to receive stable benefits.



Culture based on Mutual Respect and Consideration

LOTTE Chemical pursues active communication between labor and management based on trust and consideration to establish an interactive culture where we can, together, create greater value.

1 Labor-Management Relations based on Mutual Cooperation

LOTTE Chemical pursues the vision of fostering a culture where labor and management go together to realize higher corporate value. We promote employees' sense of belonging through interactive communication and strengthening a horizontal organization culture based on mutual trust. We will continue to share important matters through regular discussions leveraging various channels to enhance mutual understanding between labor and management.

Labor-Management Council

Recognizing that mutual respect between labor and management is at the foundation of creating sustainable value, LOTTE Chemical utilizes various channels to provide regular communication between the two parties. We have an active communication system in place that supports improving work conditions at our business sites in Yeosu, Daesan, and Ulsan through wage negotiations and collective bargaining, as well as discussing key business and system changes beforehand to enhance each other's understanding on matters. Employee briefing sessions are also held when new programs and changes are introduced to the organization to build consensus among

employees and help reach necessary agreements.

We operate the Labor-Management Council/Employee Council which are held regularly at least once every quarter for important decision-makings. These regular councils play a critical role in communication between labor and management, serving as a representative body for employees. Through Labor-Management Councils at each business site, which serve as channels for ongoing communication and discussions, we deliberate on improvements and changes to working conditions and HR systems and continue to listen attentively to our employees to identify their needs and incorporate their feedback into the company's policies.

Declaration on Mutual Cooperation between Labor-Management in ESG Practices

In September 2023, labor and management representatives from LOTTE Chemical gathered and held a ceremony declaring mutual cooperation between labor and management for ESG practices. Representatives from our Yeosu, Daesan, and Ulsan business sites attended and shared their joint commitment to building a sustainable business and happy company based on a creative labor and management culture. The declaration includes labor and management's promise to work together in achieving carbon neutrality, practicing eco-friendly management, creating the social value of coexistence, and driving environment-friendly future businesses. The declaration will serve as a key milestone in LOTTE Chemical's journey towards sustainable development and bears great meaning in displaying the strong determination of labor and management to cooperate in practicing ESG values.

2024 Labor-Management Council's Key Agenda (Business Site)

1Q	2Q	3Q	4Q
ESOP Support	Improving the equipment safety diagnosis	Improving work conditions	4-team, 2-shift rotation pilot project
Closing of internal welfare funds	Improving the work environment at plants	Providing winter work uniforms (parka) for field managers	Installing EV charging stations at company housing quarters
Improving work conditions such as improving commuter bus routes and safety helmets, etc.			





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2 Flexible Communication Culture

LOTTE Chemical fosters communication among our employees to create a flexible corporate culture. We have created an advanced work environment and operate various programs to enable employees to communicate openly with each other. We are building an active and voluntary work atmosphere based on a workplace and open culture without barriers between groups and departments. We are also striving to serve as a stable internal window for communication through various programs.

Driving Corporate Culture Activities: Corporate Culture TFT

LOTTE Chemical's Corporate Culture Taskforce is a corporate culture activity organization composed of change leaders (CL) from each business site. CLs are chosen through voluntary nominations and applications, and actively listen to suggestions and improvement ideas, as well as challenges voiced by the field to advance our corporate culture. They take the initiative in exploring improvement ideas and activities and communicates these ideas candidly to HR and Management. Launched in 2021, the taskforce has continuously contributed to creating a sound corporate culture. In 2024, 15 CLs from headquarters, Yeosu, Daesan, Ulsan, and LOTTE Chemical R&D Center served in the taskforce, conducting employee interviews, awareness campaigns, and Great Work Place (GWP*) programs at the department level.

* GWP (Great Work Place): Program that aims to creating a great workplace for employees

Corporate Culture Newsletter: DANKE Magazine and Cheommundae

To expand communication channels with our employees and create a reliable and healthy organizational culture, LOTTE Chemical publishes monthly newsletters on our corporate culture. The newsletter contains messages from management, notices on internal programs, introductions to GWP programs from our business sites, issues from in and outside the company, and news about our respect and consideration campaign to build trust and a sense of unity with our employees.

Corporate Culture of Communication and Respect:

CEO-Employee Communication Program

LOTTE Chemical operates regular communication programs between the CEO and employees. In May, a company-wide townhall was held at the Jamsil Headquarters, led by the Head of the Chemical Division. Executives and team leaders from across the organization attended the session where the company's business strategy and future vision were shared. The Basic Materials Business has hosted annual Chemi-Talks, direct dialogue forums with the CEO, at headquarters and business sites in Yeosu, Daesan, Ulsan, and the Daejeon Research Institute from 2021 to 2024. During these in-person visits, the CEO shared employee interests such as business performance updates and future vision. The sessions also provided the opportunity for active exchanges with the field on the company's HR system, welfare programs, and work environment. The Advanced Materials Business organized 'Change Leadership Workshops' where the CEO delivered special lectures and engaged in discussions with department leaders on the company's strategic direction. We will continue to operate these direct communication channels between management and employees to cultivate a horizontal corporate culture based on mutual respect and open communication.

Improving Corporate Culture:

LOTTE Group Organizational Culture Diagnosis

LOTTE Group's Organizational Culture Diagnosis surveys employees across all subsidiaries of the LOTTE Group each year. The survey is designed to capture employees' perceptions and assess the current state of our 'ways of working' and 'support systems.' The insights gathered serve as a foundational resource to help us cultivate a work environment centered on innovation, embracing challenges, and driving performance. In 2024, a total 3,538 (77.3%) of LOTTE Chemical's total 4,577 employees participated in the diagnosis. Based on the analysis, we continue to draw out areas for enhancement and implement tangible improvements.

Diagnosis Framework

An organization's culture is fundamentally built on the common values and behaviors shared between the organization and its employees, and the frameworks and systems that support them. Based on these two aspects, the diagnosis examines the ideal organization by looking at the company's Way of Working (values/behavior) and Support Systems (frameworks/systems) to review employee satisfaction.



Company Atmosphere

Employee Satisfaction



HUMAN RIGHTS MANAGEMENT SYSTEM

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COMMITMENT TO HUMAN RIGHTS

LOTTE Chemical seeks to practice 'human rights management' to drive positive change across the lives of our customers and society and create a better future for humanity. We established a Statement on LOTTE Chemical's Human Rights Management which sets the standard for behavior and value judgement that all employees must comply with in carrying out business activities and tasks as part of our commitment to protecting human rights. The statement is based on international principles and conventions on human rights including the UN Universal Declaration of Human Rights, UN Guiding Principles on Business and Human Rights, OECD Guidelines for Multinational Enterprises, and the UN Convention on the Rights of the Child. In addition, we specified our commitments in our ESG Policy Book. Based on our Statement on Human Rights Management and our ESG Policy Book, we will respect the human rights of all our stakeholders and contribute to creating a better society.

 Statement on Human Rights  ESG Policy Book

GOVERNANCE

We operate the ESG Committee under our BOD and the Labor-Management Council to blend the human rights agenda into our business. In addition, the HR Division and relevant field organizations design and implement human rights systems together, carrying out quarterly initiatives determined by the Labor-Management Council through active engagement with field departments. The ESG Committee leads the corporate effort in practicing human rights management by setting the paradigm for ESG policies and priorities, including labor-related human rights, and monitors their performance.

The Labor-Management Council is composed of representatives from each business site, conducting quarterly meetings to oversee various issues related to the labor environment and human rights. Not only, HR and labor related managers, but representatives of field workers also actively participate to develop practice improvement measures and seek agreement between labor and management.

STRATEGY

HUMAN RIGHTS MANAGEMENT MID-TO-LONG-TERM ROADMAP

2021
~
2022

Set target and direction

July 2021 LOTTE Group ESG Management Declaration
May 2022 Set up dedicated ESG organization
June 2022 Enact Statement on Human Rights Management

2023
~
2024

Implement system and Human Rights Impact Assessment

2023. Understand and review human rights related systems at domestic and overseas business sites
2023~2025. Implement system and redefine roles and responsibilities
2023~2024. Introduce Human Rights Impact Assessment (HRIA) and corporate-wide human rights training, etc.

2025
~
2027

Stabilize and prepare for advancement

2025. Stabilize new frameworks such as HRIA
2026~2027. Analyze 3 years of HRIA results and make improvements
2027. Review governance upgrade (scheduled)

RISK MANAGEMENT

Human Rights Impact Review and Assessment

LOTTE Chemical carried out our own assessment on the advancement of human rights at our business sites to ensure systematic implementation of human rights management. The assessment was conducted to 21 key departments of the Basic Chemicals and Advanced Materials businesses with focus on 10 categories including creating a stable work environment, making non-discrimination efforts, improving employee awareness, and support for communicating with stakeholders. Consisting of 156 questions, assessments were made by field departments and verified by HR. As 2024 was the first year for the assessment, priority was placed on developing effective assessment metrics, exploring potential risks, and building practical improvement measures with continuous enhancement to be made through regular annual assessments.

The human rights impact assessment found that there were no stakeholder groups vulnerable to human right risks. However, based on the assessment outcome, improvement plans were built and implemented for each area. Moreover, implementation of an integrated management system and standardized operation measures are underway for more structured and strategic human rights management. In 2025, we plan to further reinforce objectiveness and reliability in this area through third-party assurance and verification.

Scope of Applying Human Rights Risk Improvement Measures

LOTTE Chemical conducted an inspection of human rights risks at not only at all our domestic business sites, but also key overseas sites including in the U.S. and China, with plans to expand to all overseas subsidiaries and branches in the future.



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Outcome of the Human Rights Impact Assessment (HRIA)

Implementation of HRIA system 4.2

- ✓ Declare human rights protection policy and prepare remedy measures
- ✓ Regular implementation and management of human rights performance needed

Improvement Plan ✓ Annual HRIA/Training and Risk Improvement/Management

Non-discrimination in employment 5.0

- ✓ No discrimination in employment based on gender/employment status (permanent vs. non-permanent)/nationality

Freedom of association and collective bargaining 5.0

- ✓ Free to exercise right to freedom of association and collective bargaining

Ban on forced labor 5.0

- ✓ LOTTE Chemical/Subsidiaries/Partner Companies implement prohibition of forced or compulsory labor

Ban on child labor 4.7

- ✓ Implements ban on employment of minors and complies with relevant legislations

Improvement Plan ✓ Measures and guidelines in place for addressing employment of minors

Guaranteed occupational safety 5.0

- ✓ Operate a health and safety management system
- ✓ Implement workplace safety, protection of pregnant/disabled workers, safety training, and support for industrial accident victims

Responsible supply chain management 3.0

- ✓ Preventing human rights violations by security officers
- ✓ Improvements needed such as monitoring partners, etc.

Improvement Plan ✓ Improve e-system purchasing orders
✓ Supply chain due diligence response TFT
✓ Add items to audit list

Protection of community members human rights 4.8

- ✓ Implements initiatives to protect the human rights and intellectual property rights of local community members

Guaranteed environmental rights 5.0

- ✓ Operates an environment management system, develops an emergency response plan, and discloses environmental data

Protection of customer human rights 5.0

- ✓ Complies with customer protection legislations and practices customer privacy

* Each category uses a 5-point scale

METRICS AND TARGETS

Creating a Stable Working Environment

1 Guaranteed Stable Living for Workers

We operate working hours, wage levels, and welfare benefits to guarantee a stable standard of living and promote work-family balance for our employees. We have a PC-Off system to observe weekly standard workhours and minimize overtime, helping employees fully exercise their right to rest. In addition, employees are given the option of flexible workhours where they can select their daily work schedules. These systems are monitored periodically to ensure they are implemented well. We also calculate wage levels based on inflation rates, economic growth rates, and raises applied at peer companies and affiliates. Beyond salaries, we provide a wide range of welfare benefits to employees and their families to assist them in sustaining an appropriate level of living. As part of our family-friendly programs, we offer up to 30 months of parental leave for mothers and mandatory parental leave for fathers, as well as family care leave, support for pregnant and infertile employees, and medical expense and tuition coverages for employees and their family members. Other programs we offer include support for mortgage loans and interest payments regarding stable housing, water park and accommodation costs for recharging, and sponsoring in-house club activities.

2 Guaranteed Labor Rights

LOTTE Chemical guarantees the labor rights of workers. We established and practice internal regulations that guarantee the right to organize, the right to collective bargaining, and the right to collective action covered by the Constitution. We are devoted to building sound labor and management relations by working with a professional labor law firm to continuously inspect the risk of unfair labor practices and make necessary improvements. Moreover, we have labor-management councils and corporate culture TFTs at each of our business sites to listen to the different voices of the field and improve working conditions through ongoing communication

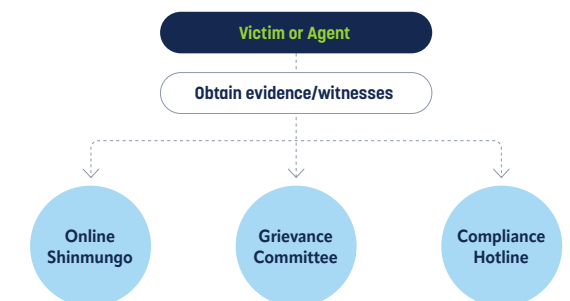
between labor and management. We also implement safety regulations, sponsor health examinations, and operate a counseling office to provide a safe working environment for our employees while improving their physical and mental well-being.

Non-discrimination Programs

1 Use of Grievance Mechanisms (Gender, Job Title, etc.)

LOTTE Chemical operate grievance mechanisms and a relief system related to human rights to ensure all of our employees work in a safe environment free from discrimination. We operate a specialized Grievance Committee that offers various reporting channels to restore the rights of victims who have undergone physical or mental damage due to reasons to their gender, staff level, or age. Victims can choose appropriate channels for filing grievances through options including the Online Shinmungo, members of the Grievance Committee, and external law firms. Cases are immediately and thoroughly investigated upon being filed and handled through a fair process to ensure appropriate measures are taken to restore the victim's rights. Complaints filed through each reporting channel in 2024 were fully investigated and handled with severity through the Grievance Committee and Disciplinary Committee. We will continue to reinforce prevention initiatives and carry out objective and fair investigations on incidents to create a healthy organizational culture ensure all members of the organization can work without discrimination.

Human Rights Violation Report Channel





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2 Gender Equality and Family-friendly Programs (Gender)

We operate various programs that support childbirth and childcare to build an equal and fair work environment where employees can strike a balance between work and family. Female workers can use up to 30 months of parental leave, and male workers are mandated to use a minimum 1-month leave for taking care of their children. These periods are recognized as part of the employee's tenure to ensure there are no disadvantages in terms of pro- motions. We also operate various programs to encourage employees to have children and spread a culture of shared parenting such as shorter workhours for pregnant employees and employees with young children, support and leaves for infertility treatment, and family care vacations and leaves for employees who need to take care of family members. Furthermore, we have been continuously increasing our programs regarding hiring and developing female talent since 2011. We increased the ratio of promotions for female employees to secure more female talent and adopt gender equality principles to new hires. We also operate practical programs to develop our female talent such as the LOTTE female leadership program where outstanding female executives and members of management take part in mentoring and complete individually tailored capability-building training based on the outcome of leadership diagnosis.

3 Development of Jobs for People with Disabilities and Support for Self-reliance (Disabilities)

We strive to go beyond achieving quantitative targets in disability employment rates and support employees with disabilities to assist them in building self-reliance to carry out tasks without discrimination. We improved the job system and work process for our entire employees with disabilities to ensure they are assigned appropriate responsibilities online and offline to achieve professional growth. We develop and offer jobs fit for disabled employees such as baristas, web designers, and inhouse instructors and support them in getting involved in company orientation sessions, job training and manuals, and company events to increase their loyalty towards the company and adjust to work smoothly.

Activities to Improve Awareness on Diversity

1 Employee Training on Human Rights

LOTTE Chemical identifies human rights violation risks at worksites and educates our employees on areas related to human rights for proactive actions to strengthen employee capabilities regarding human rights protection and internalize a culture of human rights management. In 2024, we conducted training on preventing sexual harassment and improving the perception of people with disabilities to all employees including new joiners. To improve awareness, we introduced an engaging online training program featuring a Q&A session with a professional MC and a labor attorney to make the content easier to understand. Additionally, we used AI technology to produce a video that educates all employees on company policies and showcases real-life case studies of employees with disabilities in various roles throughout the company. We also developed a lesson plan based on which a human rights training program was conducted for all employees.

Human Rights Management Training Lesson Plan

Category	Details
Commitment to Human Rights	Direction of LOTTE Chemical's human rights management
Statement on Human Rights	Provisions in the Statement on Human Rights Management
Human Rights Management Governance	Human rights related organizations (ESG Committee, relevant departments, councils)
Human Rights Management Strategy	Human rights management mid-to-long-term roadmap
Human Rights Policy	Human rights management key policies
Human Rights Risk Management	Progress of the Human Rights Impact Assessment
Human Rights Management Metrics and Initiatives	Human rights management key metrics and initiatives

Human Rights Training Lesson Plan

2 In-house Café Staffed by Baristas with Disabilities

In connection with our social enterprise project, LOTTE Chemical opened in-company cafés called 'Chemi Story' where baristas with disabilities prepare food and beverages at our headquarters in Seoul and R&D Center for basic chemicals. We actively support these employees with disabilities with job training and adaptation programs to help them build a sense of belonging and improve their barista skills. We seek to build an inclusive culture based on respect by conducting various campaigns and regularly events such as Day of People with Disability to improve the perception of people with disabilities.

3 LOTTE Diversity Forum

Every year, LOTTE Chemical participates in LOTTE Group's annual LOTTE Diversity Forum which is held with the aim of building an inclusive and diverse culture that does not discriminate against female leaders, generations, disabilities, or nations. In 2024, the forum was held under the theme of 'Be in Harmony: Inclusion' and discussed the need to promote and integrate a culture of diversity and inclusion to achieve sustainable growth. Various members from the field who represent diversity from Group affiliates, as well as LOTTE Chemical, took part in the 2024 Forum including female leaders, Gen. MZ leaders, employees with disabilities, and global talent. Participants enhanced their understanding of the Group's diversity policy through lectures, debates, and performances and shared each company's best practices to reaffirm the meaning of inclusion and diversity at the workplace.

4 LOTTE Super Blue Marathon

Started in 2015, this was the ninth year for the LOTTE Super Blue Marathon, one of LOTTE Group's most well-known campaigns to improve awareness of people with disabilities. The event where people with and without disabilities run a marathon together wearing shoes with blue laces that represent hope and self-reliance, was planned to bring down the walls of misconception surrounding disabilities. LOTTE Chemical encourages active participation from our employees to promote the purpose of the event of improving perception of people with disabilities and lowering mutual walls.





ESG RISK MANAGEMENT OF SUPPLY CHAIN

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Partner ESG Management System

LOTTE Chemical reports risks and improvement measures regarding ESG at our partner companies' ESG to the BOD's ESG Committee each year. We also set up a cooperative system led by the Purchasing Team where key execution departments such as the ESG Management and CSV Team work with the Safety, Compliance, and Environment Management Teams to internalize a supply chain risk management system. The ESG Committee's agenda in 2024 included the outcome of the ESG assessment of LOTTE Chemical's partner companies, future goals, and discussions on how to review risk management in our partner companies.

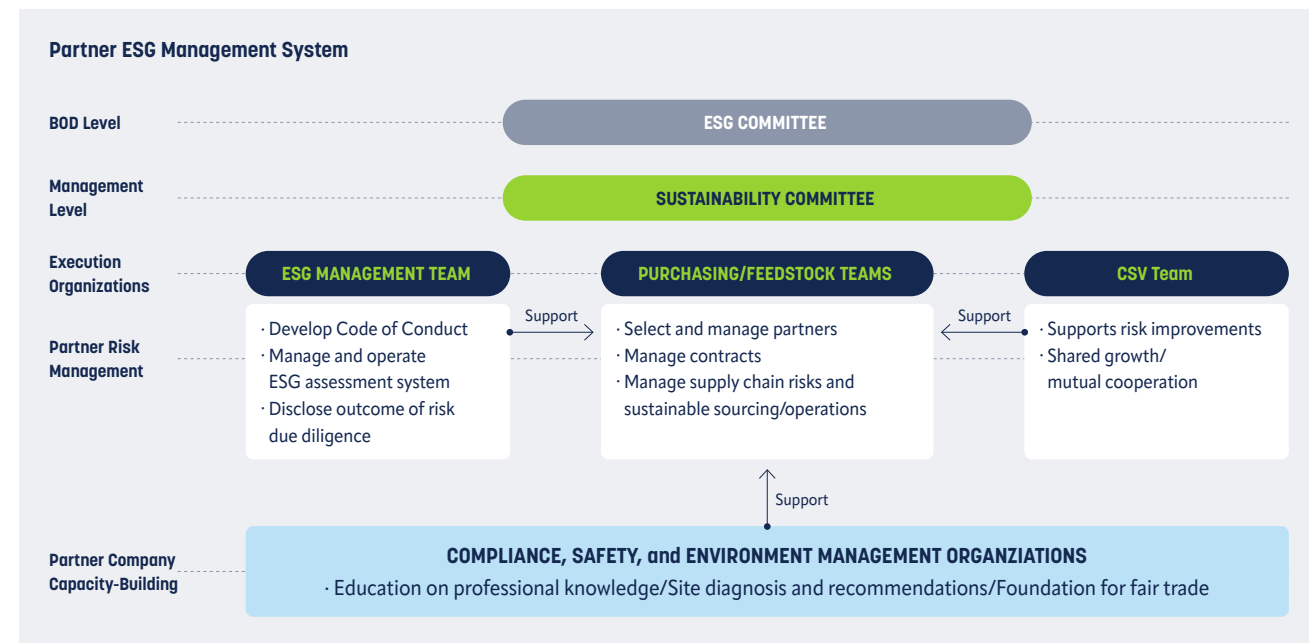
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Partner ESG Management Policy

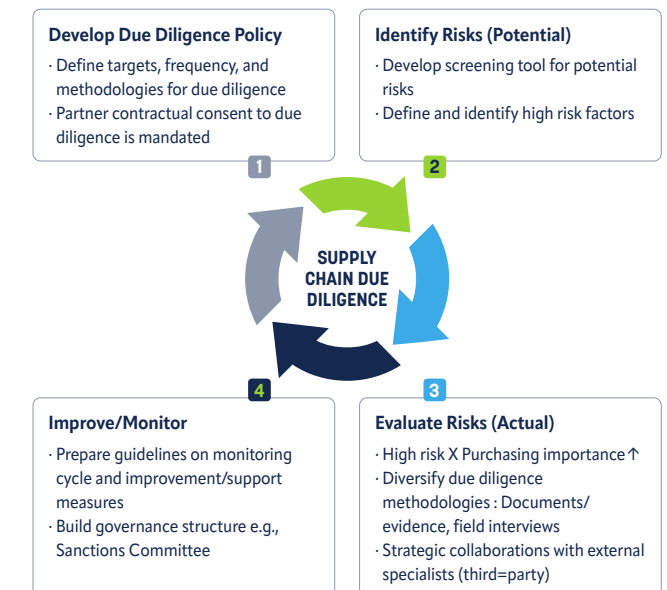
1 ESG Risk Management Policy

LOTTE Chemical is committed to upholding our corporate social responsibility by implementing an ESG Risk Management Policy that focuses on the negative impacts on human rights and the environment by our company, subsidiaries, and/or partner companies that may arise through our business activities. Our ESG Risk Management Policy is aligned with internationally recognized standards, including the UN Guiding Principles on Business and Human Rights, the OECD Guidelines

for Multinational Enterprises, and is updated regularly based on relevant domestic and international legislation. LOTTE Chemical's ESG Risk Management Policy includes (i) identifying and assessing actual and potential impacts that may adversely affect human rights and the environment, and (ii) taking measures to address, mitigate, and prevent these impacts, while documenting the progress of our response actions. The policy also outlines procedures for engaging with stakeholders and for stakeholders to voice their opinions. LOTTE Chemical integrates ESG risk management into our decision-making processes and organizational systems, and, when necessary, develop internal rules and provide employee training to embed ESG principles into our organizational culture.



Partner ESG Risk Due Diligence Process





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2 Purchasing Management Regulations

LOTTE Chemical has procedures in place for fair trade with our partners and discloses relevant principles transparently. All orders and contracts are managed through the purchasing system, and partner selection methods and processes are defined in our bid evaluation guide to internalize fair trade principles based on a consistent and transparent purchasing process. In addition, we manage our partner management regulations through continuous amendments.

Contracts for Mutual Cooperation

LOTTE Chemical enacts and operates guidelines for the company to carry out fair and reasonable discussions and contracts with our partner companies. We have an infrastructure for signing contracts, guaranteeing autonomy rights for partners in contracting, and documenting items that transaction parties must be in compliance with to faithfully carry out contracts in accordance with relevant legislations.

Fair Selection and Management of Partner Companies

LOTTE Chemical establishes fair practices in the selection and management of partner companies to ensure there are no violations of relevant legislations such as the Fair Trade Act. We disclose the specific criteria, process, and results to guarantee fairness in our selection process.

Establishment and Operation of Internal Review Committee for Subcontracting

We set up an Internal Review Committee to review the fairness and legitimacy of key transactions that either are of certain scale or deemed necessary to maintain a fair-trading order. We designate the chairperson, committee members, and secretary to incorporate the opinions of our partner companies.

Proper Issuing and Storage of Documents

We set forth clauses on issuing and storing documents in the contracting and transaction process to build a fair subcontracting and trading order through the execution of rights and performance of duty. Documents that must be issued in accordance with relevant legislations are made clear along with items LOTTE Chemical and our partner companies must abide by to make sure they are understood. This way, we seek to maintain fairness for subcontracting based on execution of rights and performance of duties.

3 ESG Code of Conduct for Partner Companies

LOTTE Chemical developed the 'ESG Code of Conduct for Partner Companies' that outlines our expectations for partner companies in terms of environmental protection, respect for human rights, and safety management, etc, and has been delivered to partner companies in request of ethical corporate practices. We are working to ensure the practical application of our ESG Code of Conduct for Partner Companies in 2025. This revision is being carried out in response to demands from external stakeholders and the evolving ESG management landscape. Our aim is to promote sustainable development by ensuring that these updates are effectively communicated not only to our direct partners, but also throughout the sub-supply chains of our partner companies.

ESG Code of Conduct for Partner Companies



Environmental Protection

Partner companies shall make efforts to follow LOTTE Chemical's environment management policy. They are expected to participate in the improvement actions based on the environmental management assessment and actively cooperate to establish a data-driven environmental management system.



Respect for Human Rights

Partner companies shall endorse and respect the UN Principles on Business and Human Rights at all business premises and guarantee the protection of human rights for all stakeholders.



Safety Management

Partner companies shall make efforts to ensure the safety of employees throughout all stages of product manufacturing, distribution, and service provision. They shall establish a management system to prevent safety accidents and actively collaborate in LOTTE Chemical's workplace safety assessment.



Legal Compliance and Ethical Management

Partner companies shall enhance management transparency, comply with laws and regulations, and maintain the highest ethical standards. They shall also implement an internal compliance system and provide relevant education to employees.



Prohibition on Use of Conflict Minerals

Use of minerals mined in conflict zones and acquired through methods that are illegal, unethical, or that pose a risk to the environment and safety is prohibited.



Business Management System

Partner companies shall acknowledge the significance of sustainable management and implement a management system to achieve this objective. They shall set goals and conduct regular performance evaluations and improvements.



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RISK MANAGEMENT

Partner ESG Risk Assessment and Management

1 Partner Classification for the ESG Risk Assessment

LOTTE Chemical classifies our partner companies into 3 groups (Tier 1, 2, 3) based on their share and type of purchase, strategic risks, and ESG risks. Based on this classification system, assessment cycles and methods are applied to each group. In 2023, the ESG supply chain assessment was conducted for the first time for 49 key partners and increased its target to 80 companies in 2024. Instead of simply carrying out routine inspections and assigning grades, professional assessment accompanied with training and reliable third-party verification was conducted. Since 2024, we have been updating our Partner ESG Risk Assessment system through the Partner ESG Risk Management Taskforce. In 2025, we further expanded the scope of assessment by incorporating requirements from the EU Corporate Sustainability Due Diligence Directive (EU CSDDD), resulting in a significantly broader evaluation framework than the year before. Going forward, we will continue to enhance the Partner ESG Risk Assessment system to ensure it remains aligned with the evolving ESG management landscape.

2 Partner ESG Risk Assessment

ESG Risk Assessment Metrics for Partner Companies

LOTTE Chemical evaluates possible ESG risks and the management systems of partner companies based on 66 specific metrics that can be classified into three areas (Environment, Society, Governance) and 22 sub-categories including climate action, environmental management, human capital, and communities, etc. In 2024, we adopted the Global Industry Classification Standard (GICS), added weight to specific industries, and refined our segmentation framework, expanding from 158 sectors across 59 industries to 163 sectors across 74 industries. This allowed for more precise classification, enabling broader exemptions and the integration of business-specific metrics. Additionally, we incorporated our partner ESG Code of Conduct and global supply chain assessment guidelines into our key evaluation processes.

Partner Company ESG Risk Assessment Metrics

Area	Sub-category		
Environment (26 metrics)	Environmental management	Eco-friendly product	Energy consumption
	Primary raw material	Waste management	Hazardous chemicals
	Natural capital	Water resources	GHG emissions
	Air pollutants		
Society (27 metrics)	Human rights	Information security	Health and Safety
	Conflict minerals	Fair trade	CSR activity
	Employment	Work environment	
Governance (13 metrics)	Information disclosure	Management system	Audit
	Ethical management		

Breakdown of Partner Companies in 2024

Category	Classification Criteria	Assessment Cycle	Assessment Method	No. of Partners	Share of Purchasing
Tier 1	High level purchasing importance (10 billion >)	2 years	Self and third-party diagnosis/ verification	78	89.9%
	Long-term/exclusive supply of primary raw materials				
Tier 2	- High stakeholder influence	3 years	Written self-diagnosis (third-party diagnosis and verification when risks are identified)	262	7.7%
	- Largest scale of damage to the company in the event of a risk				
Tier 3	All purchases (1 billion >)	New entries and at contract renewal	Pledge to Code of Conduct for Partner Companies	1,895	2.4%
	2 times or more supply				
	- Stakeholder influence exists				
	- In the event of a risk, there is somewhat damage				
	All purchases (1 billion <)				
	One-time supply				
	- Low stakeholder influence such as multiple suppliers				
	- Little damage to the company in the event of a risk				



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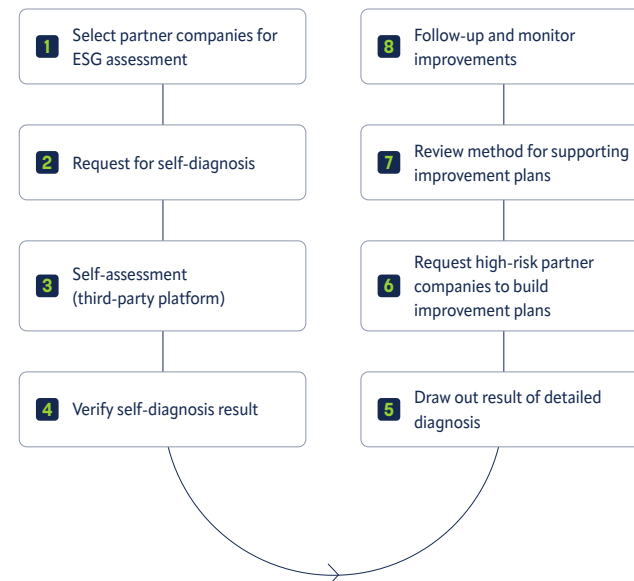
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Partner Company Assessment and Management Process

LOTTE Chemical operates an assessment and follow-up management process to manage ESG risks for partner companies selected based on our classification system. We rely on a third-party platform for systematic and fair assessment and actively share the objectives, methods, and use of the results of the assessment with our partner companies through briefing sessions prior to the assessment. We provide third-party assured assessment reports to our partner companies along with improvement measures for the short, mid, and long-term based on the resulting level of risks identified. In addition, consulting services are offered for proactively monitor the process following assessment to until the improvement of the given risks are completed.

Partner Company Assessment and Management Process



3 Partner Company ESG Risk Assessment Result (2024)

A total 80 companies took part in the annual partner ESG risk diagnosis in 2024 with 56% of the companies found to have high ESG risks. Compliance rates were found to be relatively low in the environment area (eco-friendly products in the supply chain, natural capital, etc.) and governance area (management systems, etc.) while tending to be high in the society area (human rights, health and safety, employment, work environment, etc.). In accordance with the results, the governance area was found to be in need of more focused improvement efforts based on the importance and risk level of associated with each area. To manage the ESG risks of our partner companies efficiently, we provide data to each partner for devising improvement plans including prioritization of metrics and phased improvement simulations. We informed partners on which metrics can be addressed in the short-term along with the estimated impact of such improvements. Through such efforts, LOTTE Chemical reduced risks in our supply chain, and partner companies were able to revamp their overall risk management by making early improvements.



Partner Company ESG Risk Assessment Result

Risk Level of Partner Companies

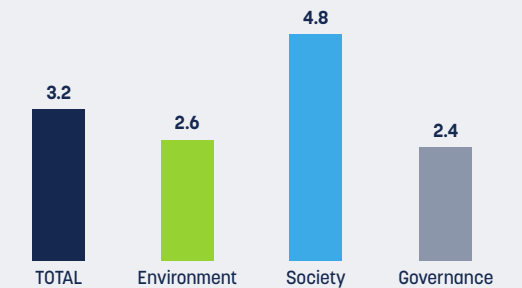
(Unit: Number of companies)



* Grouping of partner companies into 3 risk levels:

High Risk (56%, RM-Level 6~7), Mid Risk (38%, RM-Level 3~5), Low Risk (6%, RM Level - 1~2)

Average Score by Area Across All Partner Companies (10-Point Scale)



* The detailed assessment of each area found that scores were relatively low in the Environment and Governance categories, implying high risk levels, with 70% of targets grouped in the high-risk category under the Governance area.

Key Areas for Improvement

Environment	Development of environment policies
Society	Development of fair trade policy, CSR activity plans, and information security policies, etc.
Governance	Disclosure of business performance and development of internal audit regulations, policies for reporting unethical behavior, and ethical management policies, etc.



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4 Due Diligence of ESG Risks at Partner Company

LOTTE Chemical plans to conduct third-party due diligence on high-risk partners in 2025, focusing on those identified through ESG Risk Self-Assessment Surveys carried out in 2023 and 2024. Based on these assessments, 15 high-risk partners have been selected for the on-site inspections, taking into account their business scale, geographic location, and industry sector. Additionally, the ESG Risk Self-Assessment Survey was carried out for all partner companies in 2025. Out of the total 2,235 partners, 808 were evaluated, excluding those with transaction volumes below KRW 100 million or those with only a single transaction. Of the 808 partner companies, 626 or approximately 77% participated in the self-assessment survey and 265 were identified as high-risk partners. From this high-risk group, 50 companies were selected for third-party on-site due diligence based on criteria such as industry sector, transaction volume, and assessment scores. Therefore, in total, we plan to conduct third-party due diligence on a total 65 companies in 2025. Based on the outcomes, we will provide targeted support and monitoring to help our partners mitigate and overcome ESG related risks.



Assessment Metric/Mid-to-long-term Target (2030)

ESG risk assessment and due diligence of all partner companies to improve risks

2022 PERFORMANCE

- Develop and disclose the Code of Conduct for partner companies

2023 PERFORMANCE

- ESG risk assessment of key partner companies and cascading the Code of Conduct for partner companies (49 companies)
- Request compliance agreement from partner companies (138 companies)

2024 PERFORMANCE

- ESG risk self-assessment survey by partner companies (80 companies)

2025 PLAN

- ESG risk self-assessment survey to partner companies (all partner companies)
- Third-party on-site due diligence at high-risk partner companies (65 companies)

5 Post-management of Partner Company ESG Risk Assessment

LOTTE Chemical issues reports on the ESG risk assessments of partner companies and provide feedback on the strengths and weaknesses of partners along with specific improvement measures based on practical conditions and capabilities for timely improvements to be made where needed. LOTTE Chemical conducts risk assessments to diagnose ESG practices at partner companies and links it to our support to lead mutual cooperation and shared growth with our partners. To ensure practical assistance for our partner companies, we offer one-stop consulting services which cover the assessment, on-site due diligence, and improvement process for selected partners. In addition, we carried out an ESG Support Program, together with the Korea Commission for Corporate Partnership, to upgrade the ESG capabilities of partner companies to global levels. We devised an ESG Guideline for LOTTE Chemical partner companies aligned with global ESG metrics and domestic law and supported 20 partner companies in their effort to improve ESG management through training and consulting.

6 Grievance Mechanism for Partner Companies

LOTTE Chemical operates an exclusive 'grievance consultation and inquiry channel' for our partner companies in addition to our Online Shinmungo and hotline to secure a channel for efficient communication and sustainable relations with our partners. Grievance consultation emails are forwarded to relevant departments, and confidentiality of the matter and its informant are guaranteed. Moreover, in line with the company's guidelines on prohibition of retaliatory measures, we ensure informants do not face disadvantages of any kind. Matters received investigated by relevant departments, and follow-up measures are taken based on its findings with transparent sharing of the out- comes through briefing sessions.



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Partner Company Performance Management

Starting with the enactment of the Code of Conduct for partner companies in 2022, ESG risk self-assessment surveys were completed by key partner companies in 2023 and 2024. In the mid-to-long-term, we plan to carry out ESG risk self-assessment surveys and third-party site due diligences at all our partner companies while continuously monitoring compliance of areas related to regulations on supply chain due diligence scheduled to be implemented in the future to be ready for appropriate disclosure of diagnosis and inspection results.

Purchasing Sustainable Raw Materials

1 Green Procurement Policy

LOTTE Chemical seeks to prevent waste of resources, prevent environmental pollution, and contribute to GHG abatement by promoting and spreading the use and consumption of products that minimize the input of energy and resources and output of greenhouse gases and pollutants.

2 Sourcing Eco-friendly Raw Material

We are actively promoting green procurement policies that minimize impact on the environment and use resources efficiently to ensure sustainable living for humanity. LOTTE Chemical developed and applies Green Procurement Guidelines, placing priority on purchasing eco-friendly products when they are available. The Green Procurement Guidelines are applied to the raw material, office supplies, and consumables used in the products produced and sold by our company, as well as the products and packaging material of domestic and overseas suppliers that carry out green procurement. In addition, the performance of green procurement is measured and reported annually.

3 Raw Material Sourcing Risk Management

As LOTTE Chemical has a high percentage of exclusive suppliers for raw materials, it is essential to minimize these risks in the sourcing process and establish a stable supply chain management (SCM) system. Due to the nature of raw materials, we continue to pursue dualization and localization of areas where the percentage of sole suppliers is high in relation to quality and licensor to steadily reduce the percentage exclusive suppliers purchases and contribute to cost savings. Going forward, LOTTE Chemical will continue to make ongoing efforts for the stable supply of raw materials and risk management.

4 Stable Sourcing of Raw Material Utilizing RPA (Robotic Process Automation)

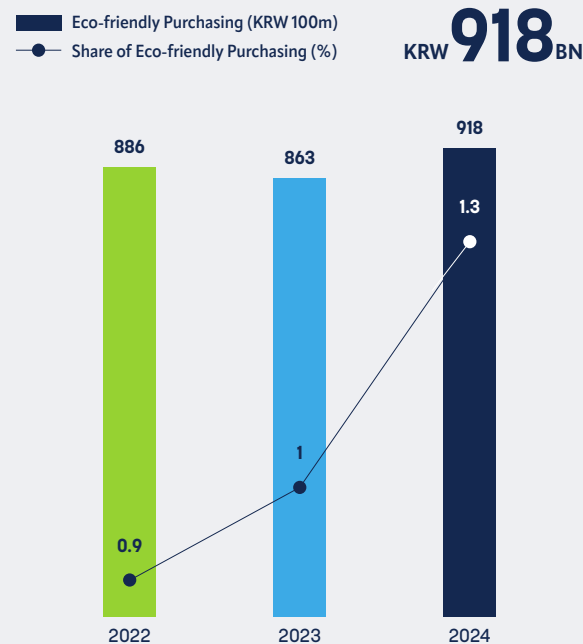
As AI applications increase across various areas including clerical, administrative, and managerial work, LOTTE Chemical has been realizing automation for repetitive and regular contracts, material purchases, and ordering tasks by applying RPA based on business scenarios since the end of 2019. Through such efforts, we are trying to improve work productivity by minimizing human errors. We are automating around 20% of total purchasing tasks through an optimized working environment using RPA to focus on supply chain management for additional sourcing of raw material.

Compliance with Responsible Minerals Regulations

Recognizing that human rights violations and environmental destruction caused by mining in conflict and high-risk areas imposes a serious problem, LOTTE Chemical does not use conflict minerals such as tin, tantalum, tungsten, and gold, and responsible minerals such as cobalt and mica that are illegally mined. We investigate supplier compliance with regulations on 6 types of conflict minerals when sourcing raw material and issue CMRT*(Tantalum, Tin, Gold, Tungsten) and EMRT** (Cobalt, Mica) Certifications upon request from customers. Currently, we procure some raw materials that contain tin, and mica and cobalt compounds and uses CMRT and EMRT, etc. to obtain and manage information on the current status of conflict minerals and tin at refineries (country, refinery name, refinery ID, etc.) in the supplier supply chains.

* CMRT : Conflict Minerals Reporting Template
** EMRT : Extended Minerals Reporting Template

Purchasing Eco-friendly Products



· Figures were reassessed after including purchases of eco-friendly (pyrolysis, bio-based) raw material (naphtha and MX-Mixed Xylene) in eco-friendly purchasing items





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MUTUAL GROWTH WITHIN SUPPLY CHAIN

GOVERNANCE

Mutual Growth Implementation System

LOTTE Chemical communicates and cooperates closely with various departments as part of our pursuits for mutual growth. Our CSV Team, dedicated to mutual growth activities, is in charge of developing, planning, operating, and endorsing various programs to support partners, while Procurement is in charge of identifying areas where we can support our partners and make improvements in transaction policies. The Compliance Team is responsible for improving fair trade systems and setting a standard guide for strengthening fair trade, and the Finance Team operates payment policies that take the interests of both parties into consideration. We are also working with other relevant departments such as Production and R&D to carry out our mutual growth efforts.



STRATEGY

Mutual Growth Strategy

LOTTE Chemical drives mutual growth activities based on the three strategic focuses of strong partnerships, mutual cooperation, and reinforced communication. We strive to improve account partnerships by observing fair trade guidelines, signing fair trade agreements, and conducting relevant training. In addition, we offer various mutual cooperation programs for partner companies such as financial and recruitment support, as well as ESG support to strengthen ESG capabilities in our supply chain. We aim to continue to operate quality support programs to extend practical assistance to our partner companies and reinforce communication with them to build long-lasting relationships with our partners.





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RISK MANAGEMENT

Fair Trade

Preventive and post-surveillance systems are operated to prevent legal violations and promote legal compliance.

Prevention Systems

LOTTE Chemical set up a department in charge of fair trade to manage violation risks regarding internal decisions and their execution. We also put in place a Subcontract Review Committee as the internal review committee for fair trade and is composed of chairperson, review members, and a secretary officer. The committee holds monthly meetings and reports its results. In 2024, 12 review committee meetings were convened where the legitimacy of large-scale contracts, trade suspensions of partner companies, and procedural issues were deliberated. In addition, we adopted and abide by 4 key guidelines to prevent legal violations and ensure fair trade opportunities and fair contracts are offered to our partner companies.

Post-monitoring System

LOTTE Chemical carries our inspections regularly to prevent unfair trade. We introduced an IT monitoring system and operate a pre-screening system for possible unfair practices, not to mention offer regular training to employees at headquarters and each plant site that meet ISO 37001 system standards. Our internal fair trade policies include clauses on disciplinary actions that go as far as dismissal for those performing unfair trade. In addition, we have been operating an executive and organization evaluation system since 2017 where disadvantages shall be imposed to the department where unfair trade practices took place.

METRICS AND TARGETS

ESG Support Program for Partner Companies

We conduct ESG support programs for our partner companies, helping them upgrade their ESG capabilities to meet global standards. The ESG Support Program supports partner companies in education and dispatches specialists to provide on-site diagnoses and consulting services. Each year, we make a contribution of KRW 100 million to the Mutual Cooperation Fund to help develop ESG metrics suitable for each partner company's given sector and scale, offering detailed guidelines

on how to upgrade their management standards for ESG to meet global levels and respond to various domestic laws and regulations. Through such efforts, we are striving to secure a sound supply chain and sharpen sustainable competitiveness. Moreover, we provided a total KRW 20 million in incentives through a performance sharing system to 20 partners with outstanding ESG to enhance continuous participation in the program and to further spread the ESG culture. We also continue to extend additional support to our partners such as in preparing Sustainability Reports.

SME ESG Support Program Process



Global ESG Metrics

Analyze global metrics to draw out common topics such as human rights, labor, environment, safety, and ethics



Development Direction

Analyze effectiveness of metrics identified through the SME ESG Support Program organized by the Korea Commission for Corporate Partnership Develop universal and effective metrics based on analysis of global ESG standards and evaluation criteria used for partner companies by global corporations

E (Environment)

Climate change response, energy reduction, environmental targets

S (Society)

Labor relations, human rights, safety, intellectual property, fair trade

G (Governance)

Board of Directors, ethical management, management system, stakeholders

Consideration of Domestic Situations

Consideration of the latest laws and regulations and the nature of the manufacturing sector

Draw out tailored metrics for LOTTE Chemical partner companies and develop guidelines that SMEs can use to make practical on-site improvements



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Mutual Cooperation

Mutual Growth Programs

Category	Program	Description	2024 Performance
Financial Support	Mutual Growth Fund	We formed a KRW 135 billion Mutual Growth Fund by making a KRW 67.5 billion contribution to IBK to offer partners loans at rates lower than the market. As of December 31, 2024, we have executed KRW 115.5 billion in loans to 149 partner companies.	149 companies / KRW 115.5 billion
	Credit Guarantee Fund	We made contributions to a Credit Guarantee Fund to support guarantees worth KRW 105 billion to facilitate financing and support partner companies. The Fund uses our contributions to extend additional guarantees to SMEs without collateral or that have exceeded guarantee ceilings.	-
Productivity Improvement	Consulting Support	LOTTE Chemical operates a consulting support program to assist partner companies in sharpening their competitiveness. Partner companies are free to choose consulting areas and consulting providers to offer consulting that can offer practical assistance. In 2024, we supported consulting to eight companies in the areas of labor affairs and quality control, etc.	8 companies / KRW 16.45 million
	Safety Management Diagnosis	Prevention of on-site safety accidents is a critical issue considering the nature of the chemicals industry. LOTTE Chemical actively encourages partner companies to obtain ISO 45001 certification for health and safety management systems to improve their level of safety management. When desired by partner companies, we dispatch external specialists to measure the work environment, conduct health and safety consulting, and support improvement of the management system through various safety inspections and risk assessments.	395 companies/ 443 cases/ KRW 4.03 million
	Education Support	We operate seminars on a variety of topics including technology/environment/economy to improve the capabilities of employees at our partners. In 2024, we held an environmental seminar for 58 partner companies that covered the latest environmental regulatory trends and improvement of ESG capabilities. In addition, we continuously offer safety/health training with 2,635 partner employees having participated in our site safety training.	ESG support for 20 companies/443 cases of occupational safety training for 395 companies (2,635 persons), KRW 24 million
Recruitment Support	Recruit-ment/ Long Tenures	We support partners in recruitment and retention for long tenures through the Youth Tomorrow Savings Program. We support partners which participated in the program with part of their contributions to increase efficiency in talent operations. In 2024, we sponsored part of the company's contributions to the long tenure of 76 core talent at 24 partner companies.	24 companies / 76 persons
	Support for Youth Recruitment	To promote youth employment and talent acquisition at partner companies, we support companies that recruit youth talent with incentives. In 2024, we promoted youth employment at 13 partner companies.	13 companies
	Online recruiter for partner companies	Through an MOU with IBK, LOTTE Chemical operates a LOTTE Chemical partner company recruiter section within i-One Job, an online recruitment site. Through the online recruiter, we support partner companies in securing youth talent.	2 companies / 15 persons

Category	Program	Description	2024 Performance
Recruitment Support	Job Fair Support	LOTTE Chemical supports partner companies in recruiting to ease the burden hiring talent. Information on recruiting and job fairs is frequently provided to encourage participation, offering KRW 500,000 in incentives to participating companies.	-
Market Expansion	Overseas Market Entry	As a fundamental element in LOTTE Chemical's overseas entry strategy, we actively pursue joint entry with our partner companies. We support partner companies to expand markets by connecting LOTTE Chemical overseas subsidiaries in Malaysia, Uzbekistan, Vietnam, China, and Mexico with SME partners in Korea, and recorded KRW 12.1 billion in transactions in 2024.	KRW 12.1 billion
R&D Support	Technical Support	We operate a program where LOTTE Chemical specialists are dispatched to offer quality guidance to our partners. In 2024, research specialists were dispatched to 83 partner companies, supporting them in quality guidance. In addition, LOTTE Chemical research facilities are utilized to carry out analysis on the properties of material inquired by partner companies, carrying out 486 cases of property analysis for a total 160 partners.	160 companies / 486 cases
	Joint Research	Joint research projects are carried out to strengthen technology competitiveness of partner companies. In 2024, 22 joint research projects were conducted in eco-friendly areas with small/medium-sized partner companies.	22 cases
Welfare Benefit Support	Welfare Benefits	LOTTE Chemical leverages the Group's infrastructure to consistently provide employees of our partner companies with the opportunity to enjoy various cultural performances. We also offer direct welfare support, such as holiday gifts, to support partner companies in their business management.	KRW 163 million
	Vacation Support	LOTTE Chemical sponsors national tourism vouchers issued by the Korea Tourism Association to partner companies to enhance the quality of life and satisfaction of their workers.	KRW 28 million
Business Management Support	Start-up & Venture Company Support	LOTTE Chemical supports innovative technology start-ups through LOTTE Ventures. In 2024, we invested KRW 800 million in four companies through the LOTTE Chemical ESG Fund to seek shared growth with start-ups and venture companies.	4 companies / KRW 800 million
	Win-win Nuri	LOTTE Chemical actively utilizes Win-Win Nuri, an open platform for win-win growth. We open training and consulting support programs for all SMEs to take part in, regardless of having a relationship with us. In 2024, 28 new programs were listed to support strengthening the competitiveness of our partner companies.	28 programs





PRODUCT RESPONSIBILITY MANAGEMENT

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Chemical Substance Introduction and Handling System

LOTTE Chemical works closely with partner companies and clients in producing high value-added products and providing transparent information. We communicate and cooperate with our partner companies and clients to achieve our goal of creating value through the production of sustainable products. The following shows our management system for introducing and handling chemical substances.

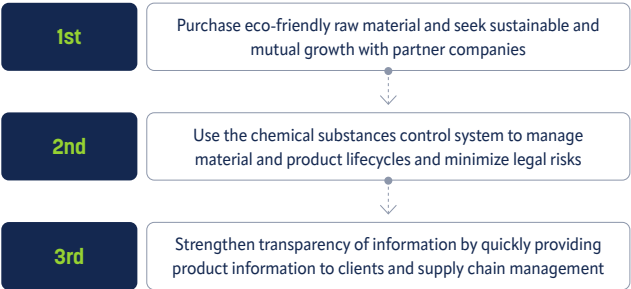
LOTTE Chemical continuously identifies regulatory trends regarding products and chemical substances to determine the direction and level of product design and make sure that raw material purchases and product sales are made after registration and compliance checks. In addition, by reducing hazardous chemicals and developing alternative products, we are committed to reducing regulatory risks in advance, increasing product stability and transparency, and enhancing customer confidence, through lifecycle management from raw materials to production to disposal.

We have an established system and process in place for handling Voice of Customer (VoC*) feedback, managed by a dedicated customer support organization which oversees the entire workflow from receiving to resolving VoC cases. Upon receiving feedback, the process involves prompt review of the entire product lifecycle, including production, packaging, and shipment, to identify and address issues. When the cause comes from the company, it is continuously monitored through various councils to prevent recurrence.

In addition, we disclose information on the harmfulness of chemical substances through the Material Safety Data Sheet (MSDS). For our EU clients, this is further expanded into an extended Safety Data Sheet (eSDS) to provide customized and detailed information. We are also working toward using safer chemicals by reducing the content of hazardous substances and developing alternative materials through the LOTTE Chemical Management System (LCMS**).

* VoC(Voice of Customer)
** LCMS(LOTTE Chemical Management System)

Chemical Substance Introduction and Handling System

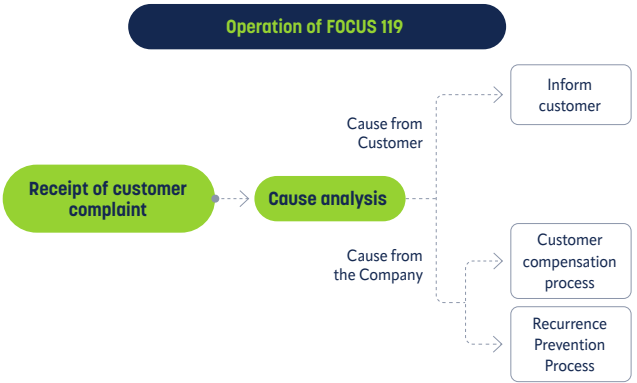


Chemical Substances Safety Management

Recognizing that the impact of chemicals on human health and the environment across the entire process of its use, manufacturing, and transportation can influence the competitiveness of our products and the company as a whole, LOTTE Chemical has devised the following safety management policies.

- 1 We shall reduce the use of hazardous and harmful chemicals to prevent or minimize risks to public health or the environment.
- 2 We shall embrace innovative approaches such as developing substitute materials for high-risk chemicals or developing new products.
- 3 We shall embrace innovative approaches such as developing substitute materials for high-risk chemicals or developing new products.

Process for Handling Customer Complaints



Compliance with the Hazardous Chemicals Management Standards

We have a “List of Hazardous Substances Managed by LOTTE Chemical” that also sets forth criteria on substances that need to be controlled or prohibited based on domestic and international regulations. When registering material, content is reviewed, and relevant regulations are checked in advance to secure safety. We also have chemical substance control guidelines prepared at our business sites to manage material subject to regulations such as the Occupational Safety and Health Act, Chemical Substances Control Act, and the Safety Control on Hazardous Substances Act in compliance with relevant standards on handling, labeling, transportation, and storage.





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Phased Reduction Plan for High-risk Chemicals

1 Mid-to-long-term Target and Roadmap for Reduction of High-risk Chemicals

LOTTE Chemical has a mid-to-long-term plan in place to reduce hazardous chemicals and internally identified high-risk chemicals (reduction, substitution, removal, etc.) to minimize harmful impact of our products on health and the environment.

2 Transition of High-risk Chemicals

LOTTE Chemical has been devising transition plans for high-risk chemicals* each year since 2023. In developing transition plans, various factors are considered including the hazards associated with chemical substances, the readiness of technology commercialization, and customer demands to maintain product

quality expectations. Implementation measures include transitioning to risk-free substances, reducing high-risk chemical content, and discontinuing such substances.* Internally selected toxic substances and SVHC (Substances of Very High Concern), etc.

* Internally selected toxic substances and SVHC (Substances of Very High Concern), etc.

Track Record and Plans for Transition of High-risk Chemicals

Category	No. of Transitions	Details	Impact
2024 Performance	10 cases	6 risk-free transitions 1 reduction of content 3 discontinuances	Reduction in hazardous material handled by the company Reduction in worker exposure and hazards
2025 Plans	15 cases	-	-

Participation and Activities related to Domestic and Global Chemical Groups

1 Application for Supplier of Raw Material that Fits Eco-label Certification

To support clients in quickly obtaining eco-label certification, we were the first Korean petrochemical player to be selected as a suitable supplier of raw material that fits the eco-label standards as part of the initiative led by KEITI*. Thirty-nine of our products were certified, and the list can be found on KEITI's website.

2 CP&H** (Chemical Policy & Health) Committee

LOTTE Chemical is a member of the CP&H Committee, working towards securing transparency in the the management of chemicals and pursuing safe emissions in terms of management and health.

3 Korea Petrochemical Industry Association (KPIA) Consortium for Joint Registration

We joined a consortium with fellow Korean petrochemical companies for joint registration in response to the Act on Registration and Evaluation of Chemicals. This collaboration helps us comply with regulations and effectively voice our opinions.

* KEITI(Korea Environmental Industry and Technology Institute)

** CP&H(Chemical Policy & Health)

Target and Mid-to-long-term Strategy for Transition of High-risk Chemicals

GOAL

Achieve Green Chemistry through the Transition of High-risk Chemicals

KEY STRATEGY



Purchase Eco-friendly Material



Produce Safe Products



Develop New Products

INITIATIVES

1. Substitute high-risk chemical material and reagents with risk-free chemical purchases
2. Purchase renewable and bio-based raw material

1. Produce products with reduced high-risk chemical content
2. Discontinue products containing high-risk chemical substances

1. Develop eco-friendly catalysts
2. Develop recycled products
3. Develop products with low concern



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Employee and Partner Company Training

LOTTE Chemical conducts periodic training for our internal employees and external partner companies to enhance their understanding of regulations on our products and chemical substances, as well as reduce legal risks. Focus is placed on the latest global regulatory trends and actions in the upstream and downstream supply chain to maintain a sustainable supply chain that promotes mutual cooperation and growth.

Training on Product and Chemical Substance Regulations

Program	Topic	Audience	No. of Participants	Total Hours
Training on domestic and global regulations on chemicals	Act on the Registration and Evaluation of Chemical Substances, REACH, India's BIS	Employees	117	196

RISK MANAGEMENT

Response to Regulations on Chemical Substances

LOTTE Chemical is proactively responding to not only Korea's Act on Registration, Evaluation, etc. of Chemicals, but also EU's REACH*, Türkiye's KKDİK**, UK's REACH, and India's BIS*** certification. In addition, we have completed the registration, authorization, and reporting of all chemicals imported and manufactured at our business sites.

* REACH (Registration, Evaluation, Authorization and restriction of Chemicals):

European Union's regulation on the management of chemical substances

** KKDİK (Kimyasalların Kaydı, Değerlendirilmesi İzni ve Kısıtlanması (Türkiye REACH)):

Türkiye's regulation on the registration, evaluation, authorization, and restriction of chemicals

*** BIS (Bureau of Indian Standards):

Government body for quality control in charge of quality certification for chemicals and steel in India

Act on the Registration and Evaluation of Chemicals	Pre-registration completed for approximately 300 substances Registration completed for 114 substances/ 73 substances exempt from registration
EU REACH	25 substances registered and subject to follow-up management
Türkiye REACH	Pre-registration completed for 92 substances Registration for over 1,000 tons to be completed by 2026
UK REACH	Pre-registration completed for 30 substances Registration for over 1,000 tons to be completed by 2026
Ukraine REACH	Pre-registration for over 1 ton of substances to be completed by January 2026

METRICS AND TARGETS

Chemical Substances Safety Management

We monitor the life cycle of hazardous chemicals including its manufacturing, imports, sales, storage, and transportation, strictly abiding by legal mandates on handling and managing the substances. We are strengthening our capabilities in this area through regular drills to prepare against possible leaks through our cascading system and response organization.

Issuing SVHC Certificate of Absence

LOTTE Chemical issues SVHC* Certificates of Absence to clients to prove safety of our products regarding use of harmful substances or substances of very high concern.

* SVHC: Substances of Very High Concern defined under EU's REACH regulation

Use and Reduction of Persistent Organic Pollutants

We obtained permits on persistent organic pollutants and is strictly in compliance with management guidelines to ensure related facilities are operated appropriately.

Treatment and Disposal of Hazardous Chemical Substances

Hazardous chemical waste is handled lawfully in accordance with relevant legislations through professional treatment companies. We are doing our utmost for safety management such as providing information on hazards that include areas where caution is needed in handling the waste generated from our company.



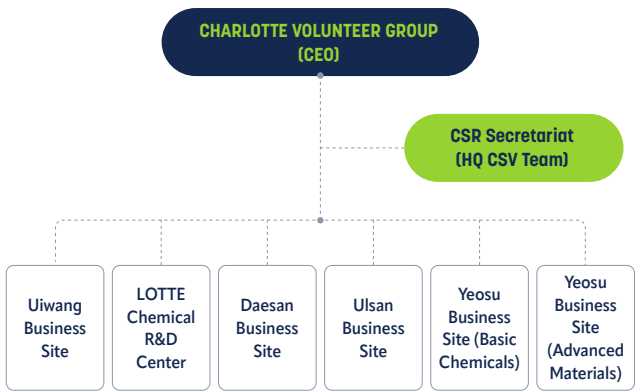
LOCAL COMMUNITY IMPACT

GOVERNANCE

Corporate Social Responsibility (CSR) Organization

LOTTE Chemical operates an organization dedicated to corporate social responsibilities (CSR) and social contribution activities to communicate effectively with local stakeholders in the communities where our business sites are located. In addition, we actively encourage voluntary participation from our employees in sharing with communities by launching the 'Charlotte Volunteer Group' in 2015. The direction and specific plans of social contribution are deliberated by the ESG Committee composed of relevant experts and reviewed and approved based on appropriateness in addressing local community issues. Through these efforts, we seek to create sustainable social value and grow together along with local communities.

Corporate Social Responsibility Organization

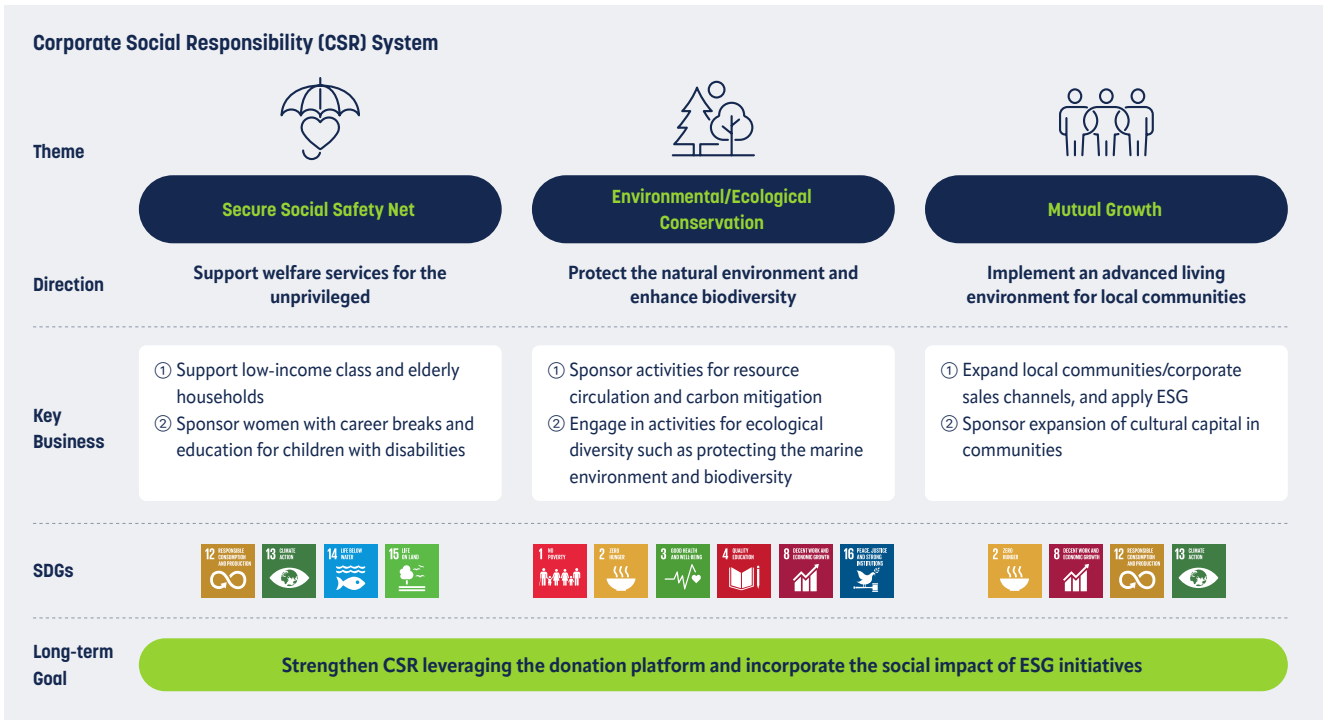


STRATEGY

CSR Implementation Strategy System

LOTTE Chemical is devoted to protecting local communities through CSR activities and creating a world of co-prosperity through sharing. In line with this vision, we carry out CSR activities focusing on three key areas: Securing a Social Safety Net, Environmental and Ecological Conservation, and Mutual Growth. Each business site, as a member of the local community, identifies key issues in their given community and sets up plans to resolve them. Under the social safety net theme, we endorse

programs tailored to the unprivileged (people with disability, women with career breaks, and the low-income class) while under the environmental and ecological conservation theme, we support activities related to resource circulation and carbon mitigations, as well as activities to enhance biodiversity and preserve the marine environment. Under the mutual growth theme, we are unfolding various activities to build a more advanced living environment in local communities.





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Corporate Social Responsibility (CSR) Activities

1 Theme 1 – Environmental/Ecological Conservation

Endangered Finless Porpoise Habitat Protection Program to Preserve Biodiversity

In collaboration with the Korea National Park Service, an ecological conservation agency, we launched initiatives to protect the habitat of the finless porpoise, an endangered dolphin species native to Korea. These porpoises inhabit shallow coastal waters less than 100 meters deep, making them vulnerable to microplastic pollution from land. As their numbers decrease, LOTTE Chemical employees volunteered at Dalsanpo Beach in Taean near our business site, to help protect their habitat. After receiving training on the impact of marine waste, they participated in plogging activities. We also supported marine and coastal cleanup efforts using an unmanned surface vehicle developed by the Taean National Marine Park to remove floating debris and monitor dolphin populations to help preserve their natural habitat.



MOU for Establishing Carbon-Offsetting Forests to Prevent Global Warming

LOTTE Chemical R&D Center has been participating in the 'ESG Corporate Campaign' since 2023, collaborating with the Korean Red Cross, Daejeon City, and Hana Bank, under a Memorandum of Understanding to establish a carbon-offsetting forest. In 2023, 3,000 tulip trees, known for their high carbon absorption capacity, were planted. In May 2024, an additional 6,000 wildflowers, representing 17 different species, were planted around the forest to help preserve the surrounding ecosystem. A total of 107 people participated in planting the wildflowers, including 12 employees from LOTTE Chemical's LOTTE Chemical R&D Center and others from local corporations based on Daejeon. The carbon-offsetting forest is estimated to absorb 180tCO₂eq of CO₂ annually, contributing to the protection of the local environment and investing in a more sustainable future.

2 Theme 2 – Expanding the Social Safety Net

mom Music Program, Music Therapy for Children and Families with Disabilities

We have been providing music therapy programs for the physical and emotional rehabilitation of children with disabilities and stress relief of their parents since 2018. In 2024, a total 213 people took part in a total 2,747 music therapy sessions while music workshops and emotional support programs were also offered to parents. In particular, we were involved in the production of a gait training manual for children with cerebral palsy in 2024. The social value of this program is estimated to be KRW 434.52 million (based on 213 participants), saving social costs worth KRW 181.05~266.25 million*.

* Based on government aid of for "Developmental Rehabilitation Services" government aid of KRW 170,000~250,000/month x 5 months (20 weeks) x 213 persons



mom MUSIC PROGRAM

PROGRAM OBJECTIVES

Improve the function and quality of life of children with disabilities

Capability-building for families with children with disabilities

Easing stress medical staff and enhancing efficiency of treatments

PROGRAMS

Pediatric patients

- Individual and group programs
- Collaborative programs
- Hospital programs
- Vacation programs
- Concerts

Caregiver

- Parenting programs
- MBTI self-growth programs
- Ukulele programs
- Parenting consultation

Medical staff

- Collaborative programs
- 'Musical with pediatric patients' program

SOCIAL VALUE MEASUREMENT

Per capita, when participating 2 times per week for 17 weeks

KRW 204m
(KRW 60,000 per session x 34 sessions)

Economic value of projects in 2024

KRW 43,452m
(213 people)

Total social cost savings

KRW 18,105~26,625m



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Sponsoring Families from KBS Documentary Program 'Companion' through Community Companionship

We have been providing housing, furniture, and goods to the unprivileged in local communities as part of our sponsoring efforts for 'Companion,' a public service program aired on KBS to reinforce the social safety net and improve civic awareness. We sponsored 50 families introduced through the program in 2024 by improving their living conditions and supplying them with necessities to help children and families suffering to build dreams and grow up healthy in a better environment.

3 Theme 3 – Co-Existence with Local Communities

Donation of 'Companion Rice' to Local Communities

LOTTE Chemical purchased rice from farms near our business sites and donated 16,717 sacks of 'companion rice' worth KRW 500 million to local communities including the unprivileged in Songpa-gu, Seoul, the Local Children's Center in Daejeon, and the Korea Association of Welfare Institutions for Single Parent Families. The 'Companion Rice' were purchased from farms in Daesan where LOTTE Chemical plants are located to vitalize rural economies near our business site. We purchased white rice and delivered it to the unprivileged to share warmth and renew our commitment to CSR activities and mutual growth with local communities.

Seeking Stable Employment in Local Communities

LOTTE Chemical supports partner companies in hiring and providing job stability to promote local development and enhance the quality of life of local residents. We sponsored 13 companies that hired youth employees with KRW 13 million and sponsored 24 companies that operate mutual aid programs for long-tenured employees with KRW 65 million. Such efforts have helped increase job opportunities for local talent and raise income levels to stimulate growth of the local economy.

2024 CSR Performance

Theme	Program	Starting Year	Description	2024 Performance	UN-SDGs
Environmental/ Ecological Conservation	Biodiversity Protection	2024	Habitat protection program for endangered finless porpoise near our business site	Supported marine/coastal cleanups, removing floating debris and monitoring the dolphin population	13 CLIMATE ACTION
	Week for a Better World	2023	An environmental campaign that engages employees to take part in PET recycling and ecological conservation activities near business sites	Planted hinoki cypress at Yeongchwisan near our plants and supported the cultivation of Jungheungcheon	13 CLIMATE ACTION
	Carbon-offset Forest	2023	Sponsoring forestation for carbon offsetting at Daejeon's Nolubeol Red Cross Ecological Park	Planted over 6,000 native wildflowers, representing 17 species	13 CLIMATE ACTION
	LOTTE Green School	2021	Researchers visit local children's centers to educate children on how to protect Earth and its environment	Total 5 rounds of training at the 'Altogether' childcare centers 1~5/participation from 150 children and youth	4 QUALITY EDUCATION 13 CLIMATE ACTION
Expanding Social Safety Net	mom MUSIC PROGRAM	2018	Music therapy program to support the emotional development of pediatric patients with intractable diseases and relieve stress of caregiver parents	2,747 music class sessions with participation from 213 patients and parents	4 QUALITY EDUCATION
	Dream Lunchbox	2019	Sponsoring lunchboxes for youth not enrolled in schools taking the GED (qualification exam)	Sponsored a total 200 lunches for 200 youth not enrolled in school taking the GED exam	1 NO POVERTY 2 ZERO HUNGER
	Humanities and Science Book Donations	2015	Sponsoring books to local children's centers and youth not enrolled in schools	Donated 474 books to 22 community children's centers/ 178 books to the Yuseong Youth Dream Center	4 QUALITY EDUCATION
	Sponsorship for KBS Companion	2021	Sponsoring families in 'Companion,' a public service program aired on KBS, by improving living conditions and supplying necessities	Sponsored 50 families	10 AFFORDABLE HOUSING
	Improvement in Living Conditions	2020	Home repair services for senior citizens and the socially disadvantaged in Daesan	- 1H: Sponsored 5 families - 2H: Sponsored 4 families	11 AFFORDABLE HOUSING
Co-Existence with Local Community	Companion Rice Donation	2021	Rice is purchased from farmers near our Daesan Plant and donated to single parent families for mutual growth with rural communities	- Purchased KRW 500 million in rice stalk - 17,542 sacks of 10KG rice - KRW 100m: Donated to Daesan - KRW 200m: Donated to single-parent families nationwide, etc. - KRW 200m: Local social welfare groups	1 NO POVERTY 2 ZERO HUNGER
	Co-Existence with Local Communities 2020	2020	Supporting the hiring and employment stability of partner companies to develop local communities and enhance their quality of life	Sponsored 37 companies with a total KRW 78 million	8 DECENT WORK AND ECONOMIC GROWTH





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Creating social values of circulation and coexistence in Connection to Our Business

LOTTE Chemical operates Project LOOP, a campaign for implementing a plastic resource circulation system. We aim to fulfill our social responsibility as a petrochemical company through the various activities that have been carried out through Project LOOP since 2020 to build a system for recycling plastic.

1 Project LOOP Social, Discovering and Incubating Social Ventures in Resource Circulation

Project LOOP Social is a project that discovers, incubates, and connects with social ventures in each part of the resource circulation value chain. Starting with a pilot project in 2020, the 3rd term kicked off in December 2023 and held a performance sharing session in July 2024 to discuss the need and direction for expanding Project LOOP and share investment trends in the environment sector, direction for development, and needs of green businesses. Based on our discussions, social ventures that need support and have high business relevance will be selected for the fourth round. We plan to sponsor the selected social ventures with business funds, mentoring, Accelerating, online lectures, and networking with Project LOOP Social alumni.

2 Project LOOP Cluster, Supporting Setup of Resource Circulation Systems in Local Communities

Recognizing that partnering with local governments is essential to implement a resource circulation system, We are working with various communities in Incheon, Busan, and Ulsan to build resource circulation hubs. In Incheon, we help students learn and practice resource circulation. We signed an MOU with the Incheon Metropolitan City Office of Education and the Korea Federation for Environmental Movements (KFEM) in Incheon in December 2021 to improve awareness on resource circulation and form a proper culture of sorting waste for disposal, installing and operating around 70 waste PET collection containers at

Incheon schools. In 2023, we signed agreements with local governments and relevant institutions such as the Michuhol-gu Office, the KFEM in Incheon, and AO2 to expand the waste plastic ecosystem in Incheon. In Ulsan and Busan, we are running projects to create jobs for senior citizens and build a waste plastic resource circulation system. Cooperating with local governments, the Korea Labor Force Development Institute for the Aged, senior clubs, public institutions, and corporations, we are supporting the opening and operations of ESG Centers as a hub for collecting and recycling plastic. Through 4 hubs,

we have contributed to creating over 1,100 jobs for the elderly and women with career breaks. The first 'Neighborhood ESG Center' opened in Geumjeong-gu, Busan in December 2022, followed by the 2nd center in Dong-gu, Busan in September 2023. Centers also opened in Ulsan (Dong-gu) and Busan (Haeundae-gu, Yeongdo-gu) in March and November 2024 and February 2025, each respectively. We support each center with the necessary recycling technology and infrastructure to assist building a system for waste plastic collection and conversion in local communities.

Track Record of Project LOOP social

Category	Company	Business Description	UN-SDGs
1st Term (2021~2022)	LOWLIT COLLECTIVE	Uses plastic scrap to make chairs and furniture with 3D printers	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
	WOORIM ICT	Produces pulverizing AI collectors that use proprietary technology to sort matter	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
	Kokkiri-gongjang	Collects and crushes plastic toys (ABS, PP) to produce renewable material	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
	Foresys	Produces feedstock for recycled plastic by developing a salt removal and pretreatment plant for waste fishing nets (PE,PP)	14 LIFE BELOW WATER
	Plus Life	Manufactures apparel using recycled material	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
2nd Term (2022~2023)	Gatda	Develops waste plastic processing procedures through 'Bbegi,' the recycling and collection platform	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
	E-plant	Produces eco-friendly artificial reefs using marine waste and proprietary plastic upcycling technology without pretreatment	14 LIFE BELOW WATER
	AUG 3rd	Produces military supplies such as plastic bullet loaders, magazine load-unloaders, and empty cartridge receivers and building circulation model through waste collection and recycling	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
3rd Term (2023~2024)	STUDIO LAB	Sorts waste apparel by material using AI technology	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
	Chansol Social Coop	Manufactures learning material for developmental disorders using recycled material	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
	TSP Biochem	Produces eco-friendly biosheets and insulated packaging using recycled material	12 RESPONSIBLE CONSUMPTION AND PRODUCTION



REINFORCE INFORMATION SECURITY

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Information Security Implementation System

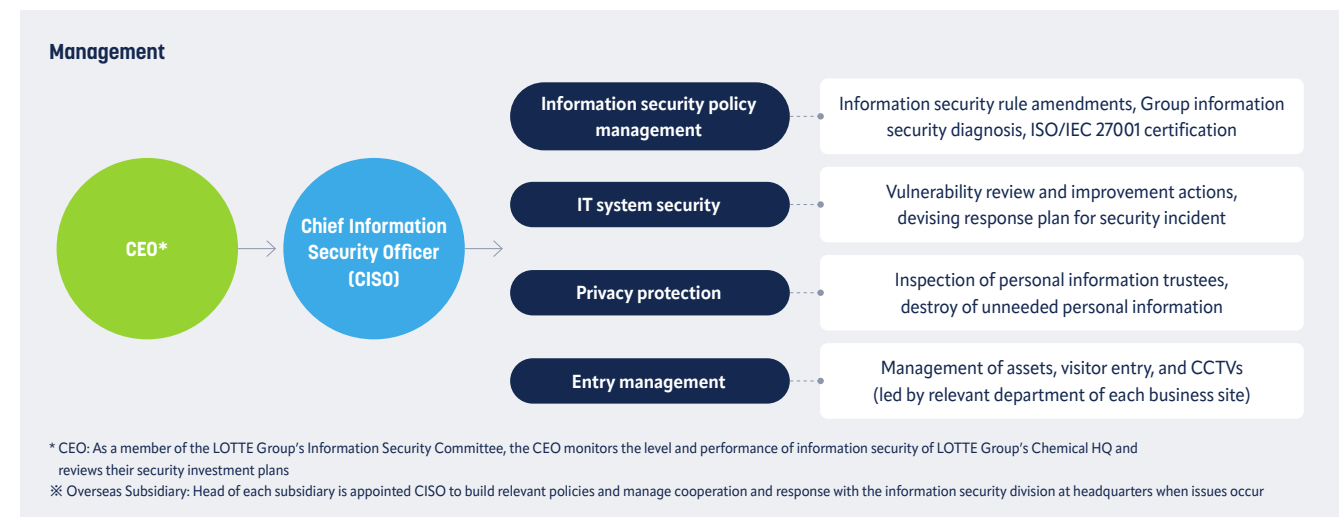
LOTTE Chemical is doing our utmost to protect our trade secrets including our core technologies and business management strategy. Our information security management system is in compliance with external recommendations, maintaining certification from the International Organization for Standardization on information security management systems (ISO/IEC 27001) since first obtaining certification in 2015. Each year, we grade our IT assets (server, database, network, software, information security solutions) based on an evaluation of their confidentiality, integrity, availability, and estimated losses in case of damages, operating system redundancy and backup measures when identified as a core asset. LOTTE Chemical's information security management system covers all areas of security management, physical security, and security technologies with basic principles and detailed guidelines prepared and shared with all employees and stakeholders. The system is revised on an annual basis to take into consideration the enactment and amendments of relevant legislations, as well as changes in the internal and external business environment. We also conduct regular audits on document security, disaster recovery, system authority, confidentiality in system developments, and system disposals to review compliance of information security policies and execution of security measures.

Information Security Organization Management

As of May 1, 2022, the information security organization has been upgraded to a division under direct control of the CEO to meet the requirements for designation of the Chief Information Security Officer (CISO) in accordance with the Act on the Promotion of Information and Communications Network Utilization and Information Protection and strengthen decision-making authority and independence. As the company's assets record over KRW 5 trillion as of the end of last year, LOTTE Chemical's CISO is prohibited from holding concurrent positions. Therefore, the CISO is appointed among talent that meet both general and special requirements with over 20 years of background in information technology and security. Moreover,

* CISO: Chief Information Security Officer

we appoint information security officers at each of our domestic R&D centers, plants, and overseas subsidiaries to operate a unified information security management system for joint response when emergency situations break out. We conduct the LOTTE Group's annual information security diagnosis to strengthen accident prevention and enhance the quality of security management. We carry out regularly monitoring to identify vulnerabilities and implement improvements and plan to submit our information security activities to the ESG Committee to raise awareness and interest in information security from management.





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STRATEGY

Information Security Management Policy

LOTTE Chemical is devoted to the protection of personal information of not only our employees, but also our stakeholders through the personal information internal control plan. The plan reflects the criteria on measures to strengthen stability in personal information management and covers items including encryption and disposal policies related to the company's personal information. It also contains plans on storing and regularly monitoring log records of unauthorized inquiry or downloads of personal information through the company system and monitoring access and history of permission changes regarding personal information that include legally required information. In addition, we destroy unnecessary personal information by regularly checking the status of personal information stored in the personal information processing system and PC of the person in charge of handling personal information. We conduct annual inspections of personal information trustees to ensure that personal information of our customers is being managed safely to maintain the same level of information security at the third-party trustee companies as at LOTTE Chemical.

 Declaration on Information Security

RISK MANAGEMENT

Information Security Incidents Response Process

LOTTE Chemical adopts 13 mandatory security solutions including vaccines, document encryption, media control, and control of access to networks and servers to protect our information assets. We also collaborate with the 365*24 Group Cyber Control Center to implement a management system

for the detection and incident response related to external cyber attacks. The response system is broken down by severity of incidents to prevent security incident and and take real-time responses in cooperation with the information security organization and Group Cyber Control Center specialists based on event analysis. Issues that have impact on the company's business are reported to top management and employee compliance requirements are disseminated to prevent the incident from spreading further across the organization. Moreover, to prepare against recent dark web*-based attacks involving credential stuffing**, we work with specialized external agencies to carry out continuous management including penetration testing and taking follow-up measures.

We also conduct mock hacking at least once a year to ensure business continuity to update our response measures and system in line with each security incident type. Disaster Recovery (DR) training takes place twice a year to check the backup of key company systems (e.g., SAP ERP, Production and Logistics Systems) and the process of handling work manually during the recovery period to prepare against emergency situations and address necessary areas. Moreover, our information security officers participate in mock hacking and system security inspections to identify vulnerabilities and take improvement actions. LOTTE Chemical has completed disclosure of information security information including our relevant investments and key activities. In accordance with the personal information damage liability system implemented since 2019, we re- new personal information damage compensation insurance every year to protect the rights and interests of the information subjects and respond to issues related to personal information incidents.

* Dark Web: Encrypted internet network that cannot be accessed by regular internet browsers

** Credential Stuffing: A type of cyberattack targeted mainly on users that use the same username and passwords for multiple apps

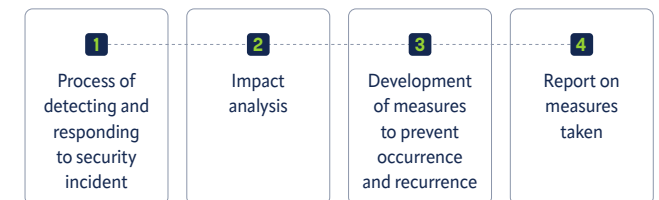
Privacy Leakage Events



LOTTE Chemical Grading System for Security Infringements

Severity	Description	Reporting System
Danger (Red)	- 1hr. or longer denial of service of internal system	Report to CEO
	- 10 min. or longer denial of customer services	
	- Legal or regulatory violation that evokes public criticism	
Warning (Orange)	- 30 min. or longer denial of service of internal system	Report to CISO
	- Ongoing penetration attempts to the company including its partners	
	- Information leaks due to viruses and hacking, etc.	
Caution (Yellow)	- Local service disruptions due to penetration attempts	Report to CISO
	- Security incident concerns due to external penetration	
Attention (Blue)	- Infringement incidents at other institutions/ companies	
	- Appearance of new vulnerabilities with high repercussions	

Detection and Response Process of Infringement Incidents





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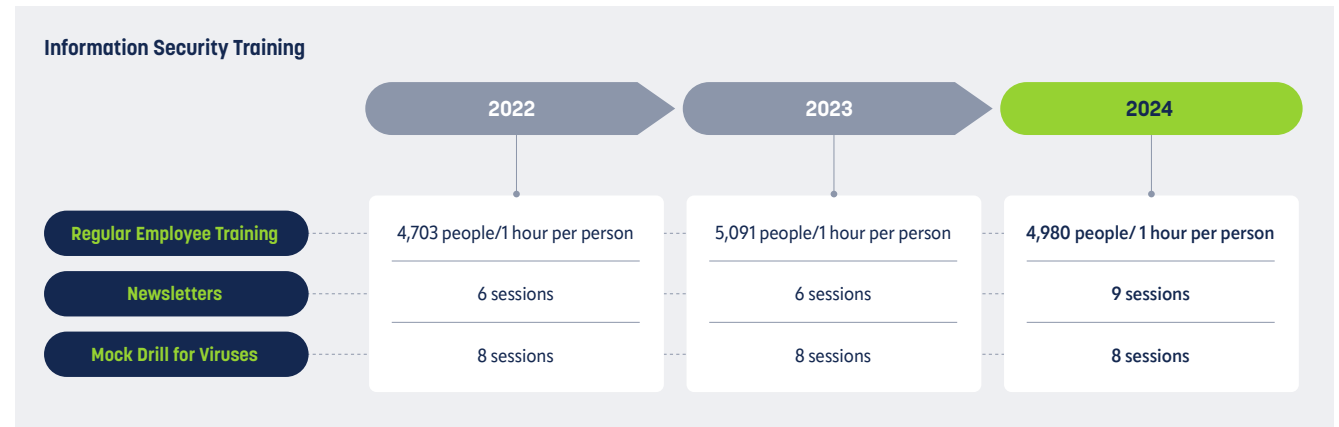
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METRICS AND TARGETS

Information Security Reinforcement Activities

To foster a culture of information security among employees and stakeholders, LOTTE Chemical provides annual information security training which includes case studies on ransomware and leakage of confidential business information. In addition, monthly information security newsletters that cover the company's information security activities and external security issues are sent out to continuously strengthen the security awareness of our employees. With the recent increase in malicious e-mail containing viruses, we conduct quarterly e-mail mock training where employees infected by the virus are subject to further training to prevent such e-mail security incidents from occurring. In addition, we send letters to inform partners on our policy to register and change accounts annually to prevent trade fraud between LOTTE Chemical and our trade partners. Along with such activities to reinforce information security, LOTTE Chemical also operates a reporting system for employees to report security incidents and signs of potential threat. Employees may report signs of hacking, information leaks, security vulnerabilities, phishing email, and relevant ideas to information security departments with rewards being given to those who report information security violations.



Information Security Activities and Outcomes

Category	Raise employee awareness on information security	Information Security Council Activities	Diagnose management system and take improvement actions	Inspect vulnerabilities in the internal system	Incident Prevention Activities
Specific Activities and Performance	- Information security training 100% completion rate (annual) - Training for persons handling personal info 100% completion rate (annual) - Development security training 100% completion rate (annual) - Newsletters 9 times(annual) - E-mail virus mock drill 8 times (annual)	- Information Security Committee(C-Level) 2 times (semiannual) - Information Security Working Council 4 times (quarterly)	- Diagnosis on the information security level of the Group 1 time (annual) - ISO27001 (information security standard) certification review 1 time (annual)	Web mock hacking, diagnosis of vulnerabilities in the IT infrastructure (server, database) 1 time (annual)	- E-mail on trade fraud to clients 1 time (annual) - Inspection of personal information trustees 1 time (annual) - Security incident response training 1 time (annual) - Disaster Recovery Drill 1 time (annual)



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Pondering the social responsibility of businesses, LOTTE Chemical has continuously evolved to create social value. We are committed to driving sustainable growth by creating a safer and sound working environment for employees, nurturing talent for the future, and pursuing mutual growth with our partners and communities to build a future where we can grow together based on strong trust from various stakeholders by setting forth strategic directions that consider social value and expanding our business model.



**SOUND
GOVERNANCE**



**RISK
MANAGEMENT**



**ETHICAL
MANAGEMENT**



COMPLIANCE



SOUND GOVERNANCE

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BOARD COMPOSITION

Composition of the Board

As of the 49th Annual Shareholder's Meeting (March 25, 2025), LOTTE Chemical's Board of Directors is composed of 11 members consisting of 4 inside directors, 6 outside directors, and 1 non-executive director. Inside directors are nominated by the Board while outside directors are appointed through resolution of the general shareholders' meeting after candidates are recommended and reviewed by the Outside Director Nomination Committee based on 'Diversity and Expertise Principle'. In order to strengthen checks and balances on management and realize sound governance, outside directors make up more than 50% of the BOD. In addition, the BOD enhances transparency, professionalism, independence, and diversity, and promotes balanced decision-making in our

business activities and strategic decisions for the happiness of our stakeholders and improvement of our long-term corporate value. In particular, the Articles of Incorporation specify that the BOD shall not be composed of a specific gender to increase diversity. Hence, female outside directors have been participating in our BOD since 2015.

In accordance with BOD regulations, the chairman of the BOD is elected among the 11 appointed directors through BOD resolution, and on March 24, 2025, Lee Young-jun was elected by unanimous vote. Drawing on his extensive field experience and industry knowledge, CEO Lee Young-jun has contributed to the company's growth. His appointment reflects confidence in his

ability to set the direction for the company's sustainable growth and enhance enterprise value based on his business experience and insight. Meanwhile, we introduced the lead independent director program at the 4th BOD meeting in March 2024 and appointed industrial expert, Sohn Byeong-hyeok as our lead independent director to enhance transparency in the Board's operations and independence of outside directors. Our outside directors serve a two-year term and are eligible for re-election. In 2023, Nam Hye-jung was reappointed and Cha Kyung-hwan was newly appointed while in 2024, Cho Woon-hang was reappointed and Oh Yoon, Sohn Byeong-hyeok, and Park Ji-soon were newly appointed. And in 2025, Cho Hye-seong and Seo Hwi-weon were newly appointed as outside directors.

LOTTE Chemical's Board of Directors (As of End-march 2025)

Category	Name	Gender	Expertise	Role (Job Title)	Category	Name	Gender	Expertise	Role (Job Title)
Inside Director	Shin Dong-bin	Male	General business management	Current) Chairman of LOTTE Group and CEO of LOTTE Chemical	Outside Director	Sohn Byeong-hyeok	Male	Industry, R&D (chemicals)	Current) Professor of Chemistry at Seoul National University Current) Member of the Subcommittee on Materials Preliminary Feasibility Evaluation Committee for National R&D Projects, MSIT
	Lee Young-jun	Male	General business management	Current) Head of the Chemical Division, CEO of both LOTTE Chemical and the Basic Materials Division		Park Ji-soon	Male	Labor, employment policies	Current) Professor of Law at Korea University
	Hwang Min-jae	Male	General business management	Current) CEO of LOTTE Chemical (Head of LOTTE Chemical's Advanced Materials Division)		Cho Hye-seong	Female	Industry, R&D (chemicals)	Current) Consulting role at Daesang
	Seong Nak-sun	Male	Finance/Accounting (CFO), Management	Current) Head of Chemical Division HQ Finance & Accounting Group (CFO)		Seo Hwi-weon	Male	Industry, R&D (chemicals)	Former) Head of AM BU and Sales PU Manager of AM BU at Samyang Corporation Former) Head of the Additives Business Division at BASF Korea
	Cho Woon-hang	Male	Finance/Accounting	Current) President of Hanbando Love Sharing Scholarship Association		Kim Jong-geun	Male	Business Operations Management	Current) Leader of 1st Innovation Team at LOTTE Corporation
Outside Director	Oh Yoon	Male	Tax, Law	Current) Professor of Law at Hanyang University	Non-executive Director				



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Board Committees

Five committees, including the Audit Committee, have been established within the BOD to reinforce expertise and efficiency in the Board's decision-makings. In order to enhance independence of each committee, more than half of the committee members are outside directors, especially appointing outside directors as the chair for all committees to strengthen the BOD's role of keeping checks and balances on management.

LOTTE Chemical BOD Committee Composition and Operations (As of End-march 2025)

Category	Key Role	No. of Members	Members	Meetings Held in 2024
Audit Committee	Accounting and auditing	3	Cho Woon-hang (Outside Director/Chair) Oh Yoon (Outside Director) Seo Hwi-weon (Outside Director)	5
Transparent Management Committee	Deliberates insider tradings and private contracts over a certain amount and proposes internal policy for fair trade	3	Cho Woon-hang (Outside Director/Chair)* Oh Yoon (Outside Director) Seo Hwi-weon (Outside Director)	3
Outside Director Nomination Committee	Nominates and verifies candidates for outside director	3	Oh Yoon (Outside Director/Chair) Sohn Byeong-hyeok (Outside Director) Park Ji-soon (Outside Director)	1
Compensation Committee	Deliberates remuneration ceiling for executives (including registered directors) and proposes remuneration policies	3	Park Ji-soon (Outside Director/Chair) Sohn Byeong-hyeok (Outside Director) Cho Hye-seong (Outside Director)	6
ESG Committee	Deliberates and proposes ESG policies	5	Park Ji-soon (Outside Director/ Chair) Cho Woon-hang (Outside Director) Sohn Byeong-hyeok (Outside Director) Cho Hye-seong (Outside Director) Hwang Min-jae (Inside Director)	5

* Appointed as Chair of the Transparent Management Committee in June

ESG Committee

Established in September 2021, LOTTE Chemical's ESG Committee consists of 4 outside directors and 1 inside director. Our ESG Committee carries out decision-makings, deliberations, and reviews on matters related to ESG management by integrating the company's ESG perspective to ensure environmental and social corporate responsibility, transparent governance, and sustainable growth.

Key Roles of the ESG Committee

1	Establish and approve ESG management strategies and action plans	
2	Publish reports to increase disclosure of ESG information	
3	Review agenda to be referred to the BOD as ESG implementation strategy	
4	Manage and oversee material risks from an ESG perspective	
5	Review communication and response measures regarding key external stakeholders	

Current ESG Committee Composition

Outside Director (4)	Inside Director (1)
Park Ji-soon (Chair), Cho Woon-hang, Sohn Byeong-hyeok, Cho Hye-seong	Hwang Min-jae

ESG Committee Training

Date	Course Title	Details
May 7, 2024	Introduction to LOTTE Chemical's Current ESG Management Status	- Understanding ESG management and its trend - ESG management and governance structure
May 22, 2025	Introduction to LOTTE Chemical's Current ESG Management Status	- Understanding ESG management and its trend - ESG management and governance structure

ESG Committee Activities

Year	Session	Date	Main Agenda
2024	1st	Feb 6, 2024	Approval Report ① Approval of CSR activity directions and annual business plan (draft) ① Report on progress of renewable energy pursuits and plans (draft)
	2nd	Mar 5, 2024	Approval Report ① Approval of 2024 targets for ESG focus areas and performance of previous year ① Report on improvement areas in the governance structure
	3rd	May 7, 2024	Approval Report ① Approval of appointment of ESG Committee Chair ① Report on outcome of the ESG materiality assessmen
	4th	Jun 28, 2024	Approval Report ① Approval of publishing the 2023 ESG REPORT ① Report on ESG management system (phase 1) implementation ② Report on Chemical Division employee CSR platform implementation (draft)
	5th	Sep 3, 2024	Report ① Report on progress in meeting 2024 targets for ESG focus areas ② Report on progress and plan regarding adoption of renewable energy (draft) ③ Report on 2024 outcome of advancement efforts regarding human rights management
2025	1st	Jan 22, 2025	Approval Report ① Approval of 2025 targets for ESG focus areas and performance of previous year ② Approval of CSR activity directions and annual business plan (draft) ③ Approval of increasing ceiling amount for procurement of renewable energy (draft) Report ① Report on introduction of an internal carbon price scheme (draft)
	2nd	May 22, 2025	Approval Report ① Approval of ESG Policy Book amendment (draft) ① ESG Report on outcome of the ESG materiality assessment ② Report on stakeholder trends and response plan



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BOARD OPERATIONS

Board Activities

LOTTE Chemical's BOD is the highest decision-making body within the company where 11* experts and executives from each field exchange various perspectives on pending issues to determine the company's mid-to-long-term strategy. In principle, the BOD is convened at least once every three months in accordance with Article 6 (Meetings) of the BOD Regulations while convening emergency meetings in case of urgent matters. A total 11 BOD meetings were convened in 2024. In addition, key issues regarding the economy, society, and environment that may influence the company's sustainable management are frequently reported to the BOD to incorporate their expertise in company policies.

* Out of the total 11 LOTTE Chemical BOD members, 6 outside directors account for the majority

Board Independence and Diversity

LOTTE Chemical recommends and appoints BOD members based on their career and expertise. We disclose the qualifications, background of appointment, and independence of directors through public announcements. The areas of expertise of our outside directors include industry, accounting, tax, labor management, law, and finance. With expert knowledge in their respective fields, the outside directors offer assistance in making rational decisions. In addition, we have been appointing female outside directors since 2015 to enhance diversity and independence in our governance which has also been revised in the articles of incorporation. We also removed the restrictions that were placed on qualifications for the BOD chairman while introducing the lead independent director system in 2024 to strengthen independence. We have also incorporated the clause related to separate election of audit committee members stipulated in the amended Commercial Act in our Articles to ensure independence of the audit committee. In fact, all of

the BOD committee chairs are outside directors. This way, we are strengthening the independence of outside directors and reflecting shareholder interests in a balanced manner.



LOTTE Chemical BOD Operations

Category	2022	2023	2024
No. of Agenda Items	64	55	56
No. of Meetings Convened	13	11	11
Inside Director Attendance (%)	92	93	98
Outside Director Attendance (%)	97	95	96

* The non-executive director is included in the inside director attendance rate.
Attendance rates are based on the average for all directors who served during the given period.

Outside Director Training

Date	Lead	Attendance of Outside Directors	Training Details
May 7, 2024	LOTTE Chemical	Nam Hye-jung, Cha Kyung-hwan, Sohn Byeong-hyeok, Park Ji-soon (ESG Committee members)	- Understanding ESG management and its trends - ESG management governance structure
May 28, 2024	LOTTE Chemical	All Outside Directors	Current state of our (Chemical Division) R&D and LOTTE R&D Center and strategic directions (LOTTE R&D Center)
June 17, 2024	LOTTE Corp.	All Outside Directors	Understanding LOTTE Group's business status and mid-to-long-term business strategy
September 6, 2024	EY Hanyoung Korea	Nam Hye-jung (Audit Committee)	- Policy direction to support accounting transparency - Improving the Act on External Audit and oversight direction - 2024 year-end closing and internal accounting management system considerations
November 22, 2024	KPMG Korea	Nam Hye-jung, Cho Woon-hang, Oh Yoon (Audit Committee)	- Compliance oversight (based on key domestic/global rulings) and integrated internal control - BOD's role in the corporate value-up program



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Board Expertise

LOTTE Chemical makes continuous efforts to enhance the expertise of our BOD for sustainable management and rational decision-making. Our BOD members have a high level of understanding on our industry as experts in various fields related to our key business activities are nominated as candidates and appointed as directors following careful examination and consideration. In addition, we continuously offer information and training on the petrochemical industry to our outside directors to enhance their understanding through site visits and reports on various issues. The Audit Committee is comprised of in- dependent directors, all of whom are professionals in accounting/finance and tax/law. In addition, the Audit Committee has sufficient independence and expertise, chaired by an accounting and finance specialist.

Board Performance Evaluation and Compensation

LOTTE Chemical conducts objective evaluations once a year on BOD members whose terms are scheduled to expire and incumbent outside directors based on their BOD contribution, internal and external influence, and expertise to be leveraged for reappointment decisions. The remuneration of directors is managed transparently and fairly through the BOD's Compensation Committee and approved at the Annual Shareholder's Meeting. Remuneration for individual inside directors is determined by reflecting the company's key values while remuneration for individual outside directors is determined and paid equally within the limit approved by the general shareholder's meeting. Compensation for Audit Committee members is paid based on separate fees determined by the Compensation Committee in consideration of their legal responsibilities, time, and effort. The remuneration limit for directors approved by the 2024 General Shareholder's Meeting was KRW 12 billion, and the total amount paid was approximately KRW 6.6 billion. Remuneration of each director and auditor over KRW 500 million is disclosed in the Business Report in accordance with relevant laws.

Board Skill Matrix (%)



TRANSPARENT DISCLOSURE

Activities to Enhance Shareholder Value

LOTTE Chemical is devoted to providing timely and accurate information to shareholders and stakeholders regarding the

company's overall business activities. When the BOD and its Committees make important management decisions, or in the event of critical issues affecting investment decisions, we immediately disclose it to the market. In response to growing demand for ESG information disclosure by domestic and overseas stakeholders, we have strengthened the ESG information disclosure system and expanded to stock exchange voluntary disclosures and posting on our website. We also provide disclosures in English on our website to provide our overseas investors with the same level of information as our domestic investors. We will continue to actively inform and communicate with the market including investors and stakeholders about our business activities.

Establishment and Disclosure of Mid-to-long-term Dividend Policy

To strengthen the shareholder return policy and raise possibility of dividend predictions, LOTTE Chemical established and disclosed the mid-term shareholder return policies for fiscal years 2022 to 2026. Based on the policies, we plan to achieve an annual dividend payout ratio of 30% based on separate net profits to enhance shareholder value. We are also making dividend decisions based on sound dividends for shareholders, future investments for growth in corporate value, and achieving financial stability.

Purchasing Treasury Stock

LOTTE Chemical aims to meet shareholder expectations by purchasing treasury stocks worth KRW 300 billion during the five years from 2022 to 2026. To reinforce accountable business management, we purchased a total 284,972 shares worth KRW 50 billion in 2022 along with an additional purchase of 323,300 shares worth KRW 50 billion in 2023. This is a total purchase of 608,272 treasury stock worth KRW 100 billion.





RISK MANAGEMENT

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RISK MANAGEMENT GOVERNANCE

LOTTE Chemical operates systematic risk management to identify and respond to potential risk factors that can emerge across our business. We manage risks by grouping them into daily risks and special risks based on their level of importance. We continuously respond to daily risks by forming committees and councils consisting of members of management under the Management Committee and CEO. As special risks have greater impact when occurring and require legal or technical expertise, we are doing our utmost for prevention with committees set up within the Board of Directors to implement a stronger risk management system.

Response Measure by Risk Type

LOTTE Chemical practices comprehensive and systematic risk management that covers not only common risks that accompany corporate activities such as operational and financial risks, but also non-financial risks regarding the environment, safety, supply chain, information security, ethics, and compliance.

Risk Management Process



Response by Risk Type

Category	Type	Details	Response Strategy (measure)
Operational Risk	Management Strategy	· Failing to make timely changes to business portfolio in line with changes in industry structure/market · Undermined efficiency in resource input	· Reinforce periodic industry/market sensing and company-wide portfolio reviews · Focus business capabilities on high value-adding specialty chemical · Strengthen review of investments and regularly inspect progress of key investments
	Raw Material	· Sales/production losses due to failing to secure supply of raw material	· Push for long-term contracts with suppliers · Diversify raw material such as LPG, Ethane, etc. · Diversify regions that supply raw material
	Logistics	· Delivery issues caused by lack of ships and accidents, etc.	· Push for long-term contracts with logistics partners · Continuous market monitoring by relevant departments · Introduce post-evaluation for logistics partners
Financial Risk	Liquidity and Credit	· Losses due to failed liquidity management	· Periodic financial forecasts and adjustments and risk of credit drop from breach in financial contracts · Manage credit rating and maintain financial flexibility
	Internal Control	· Corporate losses and damage to image caused by misconduct	· Establish internal accounting regulations and management system · Continuous monitoring and control by specialized department
	Finance	· Impact from fluctuating exchange rates due to growth of the global business · Increased interest rate volatility due to evolving financial markets	· Continuous monitoring by relevant departments · Use of hedging tools such as interest rates and F/X SWAP etc. · Minimize financial expenses by realizing an appropriate short- term and long-term borrowing structure
Non-Financial Risk	Environment	· Violation of environmental laws · Rise in costs due to lack of emission permits · Production sanctions and undermined brand image in case of environmental pollution	· Reinforce law monitoring and compliance process · Develop and implement net-zero roadmap · Increase investments in reducing energy usage and secure emission permits · Increase investments in environmental facilities such as air pollution prevention facilities, etc.
	Safety	· Recovery costs and losses in case of safety incidents · Damage to external image in case of accidents related to chemical substances or violations of law	· Improve safety program and strengthen employee training · Increase investments in safety such as for testing high-risk facilities, etc. · Conduct safety tests for all business sites and partners · Set up Chemical Substance Management System
	Information Security	· Loss/suspension of work due to information security issues	· Continuous monitoring by specialized department · Employee training
	Ethics and Compliance	· Violations of law such as on fair trade, anti-corruption, and safe work environments, etc. · Corporate/employee ethics	· Operate compliance regulations and processes · Operate continuous monitoring systems · Employee training
	Supply Chain	· Discontinued supply and damage to external image in case of legal or unethical issues	· Build supply chain risk management process · Develop and cascade Code of Conduct for partners

LOTTE Chemical's Risk Management Governance System





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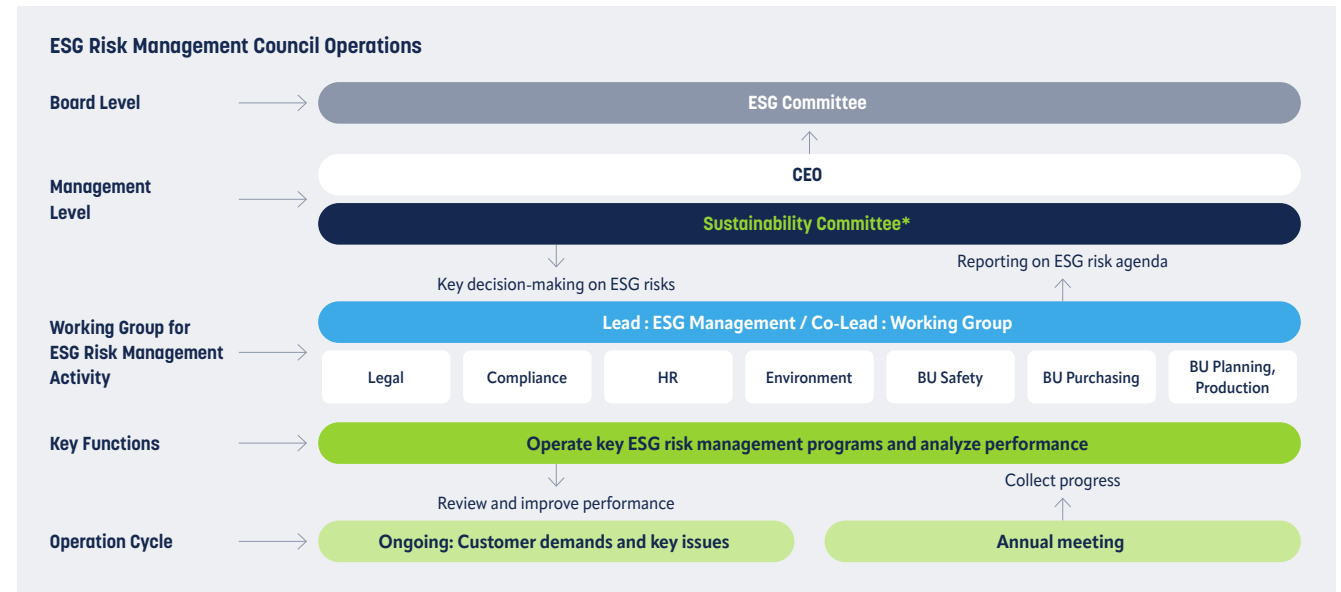
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ESG RISK MANAGEMENT SYSTEM

OTTE Chemical established an ESG Risk Management System in 2022 to carry out ratings/due diligence on ESG risks across our value chain and respond to customers. We have put in place ESG policies and standards that meet global regulations and customer demands, and a due diligence response system to address the stricter ESG evaluation procedures of customers.

ESG Risk Management Council (operated by Sustainability Committee)

LOTTE Chemical operates the Sustainability Committee, an internal management meeting where C-level and key ESG departments gather to prepare policies that reflect external trends and customer demands which become the basis for managing risks across our company and value chain, as well as raise and report key risk agenda to the ESG Committee.



* Sustainability Committee: A committee for ESG risk management that reviews the ESG strategic initiative action plan and implementation performance

LOTTE Chemical ESG Risk Management System



* EcoVadis: A global and highly credible third-party ESG risk assessment platform

Key Functions of the Risk Management Council



- **Regular: Respond to stakeholder risk assessments/due diligence and select contents for external disclosures**
 - Report ESG risk assessment and due diligence results and build response measures
 - Annual VOC report of key customers/investors/media
 - Conduct materiality assessment and select contents for ESG report
 - Report analysis of annual ESG management trends and regulations
- **Ongoing: Operated at the discretion of the chair (immediate risk response, significant changes in the business environment, etc.)**
- **Report results to CEO and ESG Committee**





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RISK MANAGEMENT THROUGH LOTTE CHEMICAL'S ESG POLICY BOOK

LOTTE Chemical's ESG policy book is a document that summarizes key standards and our perspective on key ESG risks, placing focus on our response to external stakeholders.

Competitiveness of LOTTE Chemical ESG Policy Book

1 Clear direction for sustainable management

- Internalizes Group charter and focuses on our ESG policies
- Policy implementation is scheduled to be disclosed through our Sustainability Reports

2 Systematic policy book hierarchy

- Prepares policy book logic tree in relation to internal standard documents
- Reviews standard documents needed for implementing ESG policies in each area

3 Response to ESG due diligence

- Supports response to external initiatives and supply chain due diligence

Criteria for Preparing LOTTE Chemical's ESG Policy Book

① Domestic Law

- Environmental: Air/water/soil/carbon neutrality/ emission rights/energy use rationalization act, etc.
- Social: Fair trade/product safety/ labor standards/ human rights/ information security, etc.
- Governance: Commercial law, capital market act/ The Act On the Prevention of Corruption and the Establishment and Management of the Anti-Corruption and Civil Rights Commission / Improper Solicitation and Graft Act, etc.

③ International Regulations

- Sustainability: OECD Guidelines for Multinational Enterprises (2011), etc.
- Environment: UN Framework Convention on Climate Change (1992), etc.
- Human Rights: UN Guiding Principles on Business and Human Rights (2011), etc.
- Ethics: UN Convention against Corruption (2003), etc.

② Customer demands and evaluation criteria

- Customer Code of Conduct
- Responsible Business Association (RBA)
- Ecovadis
- Sustainability Accounting Standards Board (SASB), etc.

④ Policy Operations



LOTTE Chemical ESG Policy Book Contents

Environmental	Social	Governance	Other (partners, etc.)
1. Environmental Management Charter 2. Environmental Management Policy · Implementation/operation of environmental management system · Prevention of environmental pollution - GHG reduction and prevention of air pollution - Water resource management and prevention of water pollution - Prevention of soil pollution · Resource circulation · Chemical safety management · Green purchasing · Environmental due diligence	1. Human Rights Management Charter 2. Human Rights Management Policy · Implementation/operation of human rights management system · Sub-policies on human rights management - Human rights protection - Prohibition of child labor and minors - Working hours and wages - Anti-discrimination - Prohibition of forced labor · Workplace safety · Freedom of association and right to collective bargaining · Compliance with responsible mineral regulations 3. health and safety Policy 4. Product Safety Policy 5. Information Security Policy	1. Corporate Governance Charter 2. Compliance Management Charter 3. Compliance Policy · Anti-corruption policy · Anti-monopoly policy · Fair tax policy 4. Ethical Management Policy · Implementation/operation of ethical management system · Ethical management system · Ethical management training · Regular and special audits · Reporting ethical management violations and protection of whistleblowers 5. ESG Risk Management Policy	Partner Companies Code of Conduct



ETHICAL MANAGEMENT

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Ethical Management System

Based on LOTTE Group's Code of Conduct, LOTTE Chemical has an ethical management system that takes into account individual work and business conditions. With the aim of integrating a transparent ethical culture into the company, the Management Improvement Division, overseen directly by the CEO, engages in various activities including carrying out internal audits, handling reports, and conducting ethics training.

Audit Committee

Our Management Improvement Team is an exclusive organization under the Audit Committee to ensure the committee's independence. The Audit Committee not only covers approval and reports related to legal obligations, but also plays an active role in internal control by reviewing and approving the Internal Audit Department's audit plans, reviewing non-auditing services provided by external auditors, and reporting on the external auditor's audit activities. The Audit Committee also has the right to consent to the appointment and dismissal of the head of the internal audit department. Further details are indicated in the company's Policies on the Audit Committee.

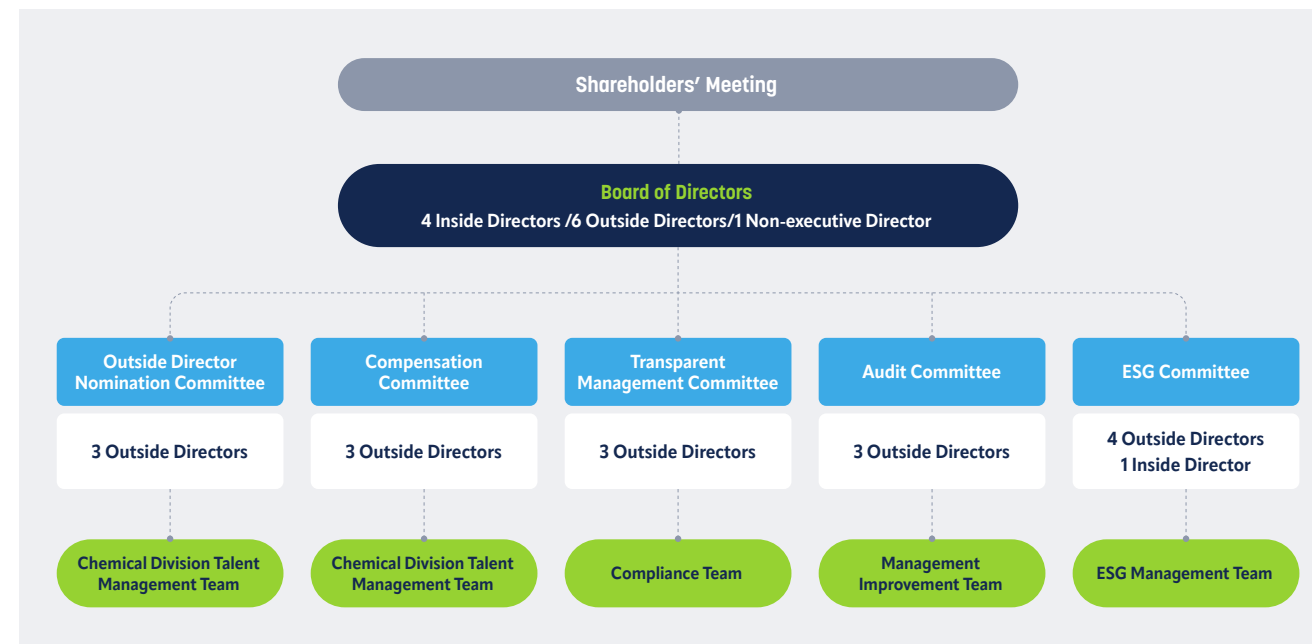
STRATEGY

Ethical Management Values and Code of Conduct

LOTTE Chemical stresses ethical management as a core value of our business activities, and strives to carry out transparent, fair, and reasonable work practices based on our Code of Conduct.

1 Values Pursued by Ethical Management

We seek to advance our business, pursue common interests, and realize our corporate philosophy of creating a prosperous future through ethical management to return our results and value to customers, employees, partners, shareholders, and society.





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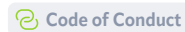
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2 Code of Conduct

Our Code of Conduct is applied to all full-time and part-time employees working at LOTTE Chemical and subsidiaries where LOTTE Chemical holds management rights. The Code of Conduct is composed of five parts - Customers, Employees, Partners, Shareholders, and Society - and sets forth LOTTE principles and action plans for each part.



3 Guidelines on Acceptance of Money and Valuables

Our organization offers the following guidelines for our employees to follow in regard to the acceptance of money and valuables. The regulations on acceptance of money and valuables prohibits receiving money and valuables from stakeholders and states that any provisions should be refused and returned immediately. When issues occur, it should be consulted with the Management Improvement Team. We are in compliance with the necessary procedures and regulations in the process of returning or handling money and valuables by operating a center for returning such money and valuables. When there is a violation of guidelines, it is handled based on “Shinmungo (reporting channel) Operation and Case Handling Guidelines” to investigate reports on violations and protect the whistleblower. We ensure confidentiality and have the obligation to protect those who report such violations.

Process at the Center for Returning Gifts of Money and Valuables



Code of Conduct

Category	LOTTE Principles	Action Plan
THEME C. TRUST WITH OUR CUSTOMERS	C1. Providing the best products and services C2. Honest marketing C3. Protecting customer information C4. Protecting our brand	Be the first brand in customers' hearts. Honesty is the easiest way of gaining customer's trust. Customer information matters the most. The best way to represent our brand LOTTE to our customers is you.
THEME E. TRUST WITH OUR EMPLOYEES	E1. Equal opportunity and fair treatment E2. Mutual respect among our members E3. Gender equality E4. Safe working environment E5. Protecting our assets E6. Protecting intellectual property rights E7. Preventing information leakage	We set business apart from pleasure and provide fair opportunities. We are all someone's precious family. LOTTE is working to create happy families and a fair workplace. Safety is the first priority in all circumstances. The assets of the company are for all employees. We shall protect our intellectual property achieved through our hard work. Information leakage begins with negligence.
THEME P. TRUST WITH OUR PARTNERS	P1. Compliance with the Fair Trade P2. Respect for our partners P3. Fair competition P4. Legitimate collection of information P5. Prohibition of corruption and improper solicitation	Fairness and trust are the power binding us and our partners as one team. Mutual respect strengthens the relationship between us and our partners. Fair competition makes us stronger. Information shall be collected in a lawful way. Every favor is followed by a price, no matter how small it may be.
THEME SH. TRUST WITH OUR STOCKHOLDERS	SH1. Improving shareholder value SH2. Preventing conflicts of interest SH3. Improving accounting transparency SH4. Prohibition of inhouse trading	LOTTE pursues long-term improvement of shareholder value. We think about the interests of our stakeholders. Honest reporting makes our effort and passion more valuable. We shall not make improper financial gain with insider information.
THEME S. TRUST WITH SOCIETY	S1. Environmental protection S2. Creation of social values and CSR activity S3. Human rights protection S4. Respect for cultural diversity S5. Compliance with laws of each country S6. Separation of politics and economy	Nature is something we have borrowed from our future generation. Sharing what is received from society with society is our biggest pleasure. Love and respect for humanity is an important value of LOTTE. We can earn respect only when we respect others. We work to abide by the laws of each country and prevent crimes. Politics and economy can fulfill their role when they are separated.



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Ethical Management System

LOTTE Chemical works hard to share a culture of ethical management with our employee by implementing an efficient ethical management system. We operate various reporting channels for both internal and external stakeholders to report unethical conduct of our employees and conduct monthly online employee training along with irregular offline training sessions to internalize ethical management across our business. In addition, we carry out internal control through our Audit Committee and Internal Accounting Management System regarding our accounting and work processes.

Reporting Channels

LOTTE Chemical operates internal and external reporting channels to allow employees to report violations of legislations and ethical management and unfair and unethical conduct. Reports can be filed anonymously or under real names while we practice a principle of carrying out investigations 100% for all reports. Informants and details of reports are kept strictly confidential with 43 cases being filed in 2024.



METRICS AND TARGETS

Ethical Management Diagnosis/Audit and Improvements

LOTTE Chemical performs regular audits based on annual audit plans and special audits that are conducted when necessary to address external complaints and accusations or certain matters. Standards and procedures for audits are stipulated in the 'Internal Audit Guidelines' of our internal regulations to ensure a standardized process is followed. Based on the audit results, if necessary, we also recommend taking appropriate measures in accordance with the 'Integrated Rules of Employment' and spread them through special training and company-wide notices to prevent recurrence of the same issue. In addition, a compliance diagnosis is carried out annually across the entire LOTTE Group to check on the ethical awareness and understand where the company stands in terms of ethical management to draw out improvement directions.

1 Internal and External Reporting Channels and Informant Protection

LOTTE Chemical operates various reporting channels including online websites, email, postal mail, and hotlines to allow stakeholders to easily consult and report ethical management affairs. In addition, by introducing additional external compliance reporting channels, we have reinforced the fairness and anonymity of the reporting process for our employees. We also operate an internal Grievance Committee to handle investigations and consultations regarding issues in the workplace including sexual harassment and workplace bullying.

2 Process of Handling Reports

Informants may file reports anonymously or using their real name. All reports filed are processed transparently in accordance with the procedures stipulated in the 'Shinmungo (reporting channel) Operation and Case Handling Guidelines', "External Compliance Report Channels and Case Handling Guidelines." When unethical behavior is confirmed through investigations, measures such as disciplinary actions are taken. In addition, protection of informant identities are strictly guaranteed in the course of investigation based on provisions for confidentiality, informant protection, and prohibition of retaliation.

LOTTE Chemical's Ethical Management System



Handling Reports



* External Compliance Reporting Channel: An external compliance reporting channel is being operated in addition to the existing Shinmungo to strengthen confidentiality of the informant and matter and protect their identity (operated by external legal agencies)





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Ethical Management Training and Internalization

LOTTE Chemical conducts various ethical management training such as group and online training for all our employees including part-time employees to internalize ethical management.

1 Group Training

Training for employees such as new joiners, seasoned workers, and expatriates cover various topics including ethical management at the individual/organization level, legal compliance such as for the Improper Solicitation and Graft Act, information ethics, and global ethics, etc.

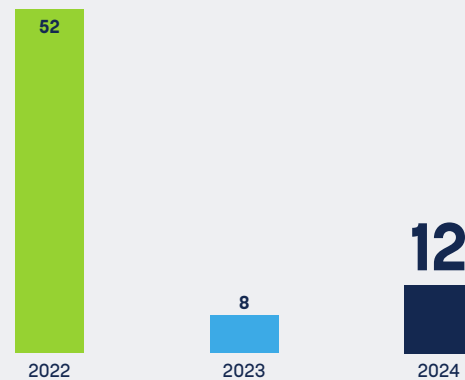
2 Online Training

LOTTE Chemical conducts monthly online employee training by making training videos on topics related to ethical management such as workplace bullying, use of company funds and assets, work discipline, corruption, and improper solicitations. In addition, we have been expanding our targets to all LOTTE chemical subsidiaries since 2024 to prevent misconduct and raise employee awareness on ethics.

Ethical Management Training Offerings

Category		Unit	2022	2023	2024
Group Training (Employees)	Number of Courses	Courses	6	11	16
	Training Hours	Hours	6	11	16
	Number of Completions	Persons	123	119	215
	Target Audience	Persons	123	119	215
Online Training (Employees)	Ratio	%	100%	100%	100%
	Number of Courses	Courses	52	8	12
	Training Hours	Hours	3	1	1
	Number of Completions	Persons	3,944	4,465	4,391
Online Training (Employees)	Target Audience	Persons	4,378	4,690	4,631
	Ratio	%	90%	95%	95%

Number of Online Courses



※ Reason for drop in online training courses in 2023: Improved quality with more practical training contents and change in frequency of training (weekly → monthly)

Online Training in 2024

JAN	FEB	MAR	APR	MAY	JUN
Eradicating Workplace Bullying	The Value of Conscience	The Little Big Things	Selection and Compensation	Understanding Conflicts of Interest	The Little Big Things
JUL	AUG	SEP	OCT	NOV	DEC
Pursuit of Improper Personal Benefits	Background Behind the Workplace Anti-bullying Act	Core Principles and Ethics for Preventing Organizational Irregularities	Morality and Shame	Restoring the Organization	Competition and Mutual Growth

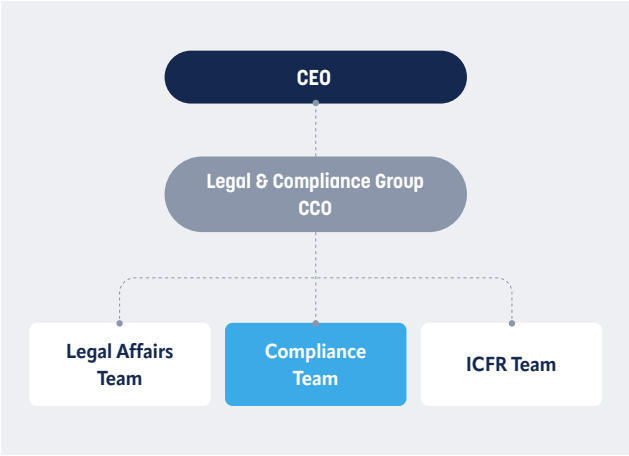


COMPLIANCE

COMPLIANCE MANAGEMENT SYSTEM

Compliance Organization and Operations

LOTTE Chemical supports the Chief Compliance Officer (CCO) in charge of the Legal & Compliance Group directly under the CEO to manage overall compliance risks across the company and also serves as manager of both the fair trade compliance program and internal control system. We also set up a Compliance Team which is an organization dedicated to operating an independent and practical compliance program. The Compliance Team is preparing the Compliance Management Charter and overhauling various internal policies related to compliance management, anti-corruption, fair trade, and trade secrets along with internal standards regarding fair trade (code of conduct, checklist, dos & don'ts, booklet, and guidelines, etc.).



Compliance System

LOTTE Chemical plans and executes a compliance program by starting with analyzing and assessing key compliance risks. We have annual training plans and a monitoring plan in place and showcase our determination for strengthening compliance through CEO compliance training and a compliance pledge made by our management (executives/BOD). We also established compliance policies, take measures based on the severity of violations, conduct assessments based on compliance diagnoses, and carry out improvement activities (validity assessment). Compliance management is also evaluated and reflected in organization evaluation scores. In addition, results of the compliance system are reported to the BOD once a year to manage our compliance performance.

Implementation Strategy

Phase 1 2017~2019

Introduction and Integration of the Compliance Management System

- Prepared compliance policies and set up organization
- Introduced optimized compliance system (CP) through company-wide risk assessment
- Obtained anti-corruption management system certification (ISO37001) in 2019, the first in Korea's chemical industry
- Continued compliance training and monitoring
- Ongoing update of internal compliance policies/guidelines

Phase 2 2020~2025

Advancement and Promotion of the Compliance Management System

- 2022: Obtained Compliance Management System certification (ISO37301)
- 2024: Obtained Compliance Management System and Anti-corruption Management System Integrated Certification (ISO37301 & 37001)
- Conducted annual compliance risk assessments/diagnosis of compliance awareness and foundations
- Pursued spread of CP to subsidiaries
- Prepared partner code of conduct for supply chain management and supported policy notifications and compliance

Phase 3 2026~

Global Top-Tier System Operations

- Achieve global top-tier level of compliance awareness
- Zero unfair and corruptive incidents
- Align with global business sites based on consistent compliance policies to build a compliance change consisting of Holding Company-LOTTE Chemical-Domestic/Overseas Subsidiaries
- Establish a supply chain compliance system

Compliance System



* CP(Compliance Program)



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International Standards Certification

In 2019, LOTTE Chemical became the first Korean chemical player to receive ISO 37001 certification, the international standard for anti-corruption management systems. Following a successful post-certification review, we obtained ISO 37301 certification for compliance management systems in 2022. In 2024, LOTTE Chemical's company-wide compliance management system was recognized as meeting global standards through integrated certification (ISO 37001 & 37301), based on which we achieved zero corruption and unfair trade practices every year.

COMPLIANCE PROGRAM

Risk Assessment

LOTTE Chemical plans and operates a compliance program to prevent risks after analyzing and identifying internal regulations and risks. In 2024, such risk analysis identified 80 key risks in the 6 categories of fair trade, anti-corruption, information security, industrial safety/environment, employment/unfair treatment, and financial capital market/anti-money laundering. Risk levels were assessed and control measures such as training and monitoring were executed for special management of risks through close cooperation with relevant departments. Risks are managed by updating the list each year.

Compliance Message/Compliance Letter/Compliance Pledge

The CEO's compliance message and compliance letters are delivered regularly to our employees and partners to showcase LOTTE Chemical's strong determination to practice compliance management. Our employees also sign Compliance Pledges each year.

Continuous Monitoring System

LOTTE Chemical operates a continuous monitoring system through which risks are continuously managed. In 2024, requests

for explanation were carried out and checked for 758 of the 3,230 cases monitored regarding anti-corruption, and four disciplinary, warning, and cautionary measures were taken through the email monitoring system. As for areas that require additional improvement, in-depth training was carried out to employees in relevant departments along with supplementary measures based on internal regulations.

Compliance Training (Including Fair Trade)

LOTTE Chemical offers group training based on function, topic, and business site along with online training for all employees, CEO compliance management training, and training for executives, as well. We also issue our Compliance Newsletter and Compliance Management Webtoon regularly to help raise employee awareness.

Number of Compliance Training Sessions

(Unit: Sessions)



2024	Training Course	No. of Sessions
Jan/Mar/Aug	Expatriate Training	3
Feb	Professional internship training	2
Feb	New Joiner Training	1
Mar	Training for subsidiary subcontracting managers	2
Mar/Aug	Case Study of Subcontracting Violations at Other Companies	2
Apr/Sep	Training for Experienced New Joiners	2
May	ISO integrated certification internal auditor training	2
Aug	Intensive Training for ISO Managers	4
Aug~Sep	Business Site Compliance Training	7
Oct	Training for those in positions with responsibility at domestic subsidiaries	1
Nov	Training on cautions to take regarding reporting petrochemical company business renewal	2
Quarterly	Compliance Management Webtoon	4

Anti-corruption Management

Led by the Compliance Team, LOTTE Chemical conducts training for all of our employees to remind them on the need and importance of anti-corruption compliance. This training covers details of domestic and overseas anti-corruption laws including the Korean Improper Solicitation and Graft Act and operates internal rules to prevent corruptive behavior and comply with anti-corruption principles. In addition, when contact with stakeholders such as public officials are required, prior-/post-contact reports must be submitted and approved while money and goods restricted by the Improper Solicitation and Graft Act must also be reviewed and approved before being executed.

Donations and Sponsorships

LOTTE Chemical established and operate inhouse standards on 'donation and sponsorship procedures' to make the compliance process regarding donations and sponsorships clear. It is applied to all business sites, so donations and sponsorships are carried out only for suitable beneficiaries that have been thoroughly examined in advance.

Number of Donations and Sponsorships Reviewed





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Trade Secret Management

LOTTE Chemical established and operates regulations on the protection of trade secrets and monitors compliance to prevent relevant risks and ensure that trade secrets are not leaked.

Spreading the Compliance System to Domestic and Overseas Subsidiaries

LOTTE Chemical conducts compliance training for overseas subsidiaries and established standard compliance rules and policies to disseminate the compliance system to our subsidiaries at home and abroad.

Strengthening Supply Chain Compliance

LOTTE Chemical carries out compliance pledges to ensure transparent and fair trade with our partner companies and applies standard contracts and an electronic procurement system for efficient transactions. In addition, we developed ESG (Environment/Society/Governance) policies and notified them to our partner companies while also taking part in the Price Indexation System to improve transaction terms for suppliers.

Internal control System

LOTTE Chemical established internal control regulations and designed and operates an internal accounting management system which is reported to the BOD.

Compliance Diagnosis and Reporting

Every year, diagnosis of employee awareness on compliance and overall compliance levels is carried out with annual performance reported to the BOD.

FAIR TRADE COMPLIANCE PROGRAMS (CP)

LOTTE Chemical has been operating the Fair Trade Compliance Program since 2006, setting forth clear behavior standards to prevent violation of legislations.

Unfair Trade Management

LOTTE Chemical is in compliance with fair trade principles and

provides training on our internal regulations (fair trade code of conduct). After reviewing all areas regarding fair trade, we are taking supplementary measures and making improvements when necessary to be in compliance with legislations.

Management of Insider Trading

LOTTE Chemical operates internal standards (Insider Trade Guidelines) that set forth areas that must be abided when carrying out insider tradings, reviewing all aspects of insider tradings and taking measures, when need- ed, to ensure compliance with relevant legislations. Moreover, the Transparent Management Committee, composed of outside directors, reviews compliance with fair trade laws and internal regulations regarding insider tradings of a certain scale.

Fair Trade with Partner Companies

LOTTE Chemical makes various efforts toward fair trade management and mutual cooperation with our partners. We conduct training through meetings with partner companies for each business site and check on compliance with relevant laws regarding fair trade with our partners. Stringent management of fair trade is carried out with improvement measures taken in case of non-compliance or reconsidering contracts. In addition, internal departments that work the closest with partners receive training on the Fair Transactions in Subcontracting Act. We also offer continuous advisory services and monitor activities to ensure compliance and promote mutual cooperation and shared growth with SMEs. Accordingly, we have been participating in the Ministry of SMEs and Startups' Price Indexation System pilot project since 2022.

Compliance with The Act on the Promotion of Mutually Beneficial Cooperation Between Large Enterprises and Small and Medium Enterprises

We are strictly managing subcontractor transactions through prior review processes and monitoring. In 2021, we reviewed the Act on the Promotion of Mutually Beneficial Cooperation Between Large Enterprises and Small and Medium Enterprises in relation to SMEs which are not subject to the Fair Transactions in Subcontracting Act. We also have set up a Subcontract Dispute Mediation Committee since 2023 to prevent disputes and resolve them promptly when they do occur.

Training on Fair Trade

The Compliance Team carries out training to all employees to remind them on the need and importance of complying with the principles of fair trade. Training is carried out periodically on fair trade laws and regulations, recent legal cases and court rulings, and internal standards and is offered catering to the needs of participants by staff level and function such as executives, managers, new joiners, seasoned employees, expatriates, subcontracting personnel, and sales managers.

Unfair Trade Reporting Channel

LOTTE Chemical operates various channels for employees to make anonymous reports at any time, anywhere, in case of unfair and inappropriate behavior.

No. of Transparency Committee Meetings Convened

8 in 2022

8 in 2023

3 in 2024

No. of Insider Trading Cases Reviewed

139 in 2022

185 in 2023

259 in 2024

No. of Partner Companies that Received Fair Trade Training

17 in 2022

34 in 2023

109 in 2024

Internal and External Reporting Channels and Handling Procedures


Victim or
representative
agent


Obtain
evidence/
witnesses

Compliance Hotline
Internal Reporting
Channel (Shinmungo)
Grievance Committee
Member

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MEMBERSHIP ASSOCIATIONS

GHG ASSURANCE STATEMENT

THIRD-PARTY ASSURANCE STATEMENT



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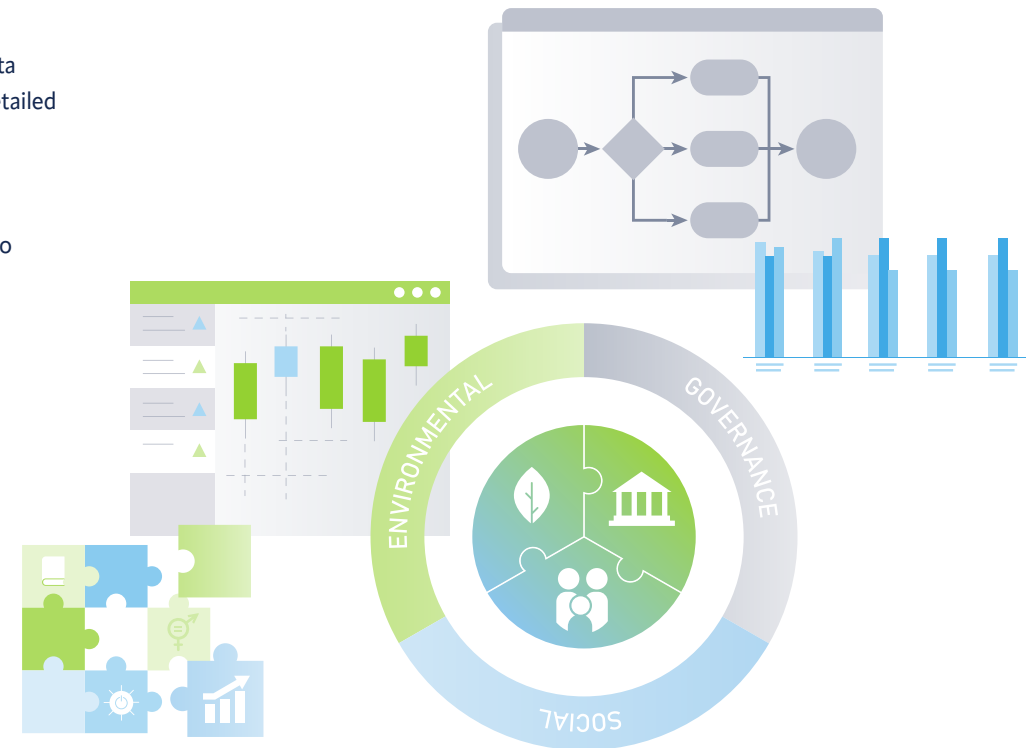
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ESG Data Management System

LOTTE Chemical organized our data metrics and reestablished our calculation processes in alignment with evaluation standards and initiative requirements to ensure ESG data consistency and lay the foundation for a robust ESG data management system. We plan to continuously expand this to our consolidated subsidiary companies in the future.

We defined data management roles and responsibilities by implementing a data input and approval process to enable consistent and accountable data handling. Metrics with identified errors were corrected accordingly, with detailed explanations provided in the footnotes.

We will continue to enhance our data management and disclosure systems to meet mandatory domestic and global ESG reporting requirements and to provide accurate data to our stakeholders.





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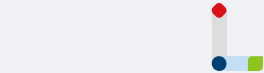
Category	Unit	2024	2023	2022
Current assets	KRW million	8,983,402	9,814,400	9,466,180
Cash and cash equivalents	KRW million	2,111,786	2,701,528	2,809,676
Short-term financial instruments	KRW million	1,319,619	1,100,894	348,390
Financial assets at fair value through profit or loss ("FVTPL")	KRW million	39,805	111,510	566,389
Trade and other account receivables	KRW million	2,174,114	2,328,537	2,268,810
Financial lease receivables	KRW million	1,796	597	139
Current tax assets	KRW million	93,082	114,520	76,282
Other financial assets	KRW million	61,672	329,367	536,173
Other current assets	KRW million	359,212	325,717	311,559
Inventory assets	KRW million	2,818,404	2,801,729	2,548,763
Non-current assets held for sale	KRW million	3,911	0	0
Non-current assets	KRW million	25,568,928	23,661,910	17,318,408
Long-term financial instruments	KRW million	78,549	138,878	67,534
Financial assets at FVTPL	KRW million	102,763	234,181	258,028
Financial assets at fair value through other comprehensive income ("FVOCI")	KRW million	366,893	253,317	197,788
Other financial assets	KRW million	305,661	86,596	64,582
Investments in associates and joint ventures	KRW million	3,854,222	3,833,620	3,808,164
Property, plant, and equipment	KRW million	16,084,512	14,272,599	10,725,984
Investment properties	KRW million	56,160	57,242	56,169
Right-of-use assets	KRW million	464,397	438,789	385,128
Other intangible assets	KRW million	3,314,147	3,732,329	1,217,372
Financial lease receivables	KRW million	8,183	8,456	2,251
Other non-current assets	KRW million	210,008	203,175	477,323
Deferred tax assets	KRW million	723,433	402,730	58,087
Total assets	KRW million	34,552,330	33,476,310	26,784,588
Current liabilities	KRW million	8,502,343	6,523,538	6,384,043
Non-current liabilities	KRW million	6,062,043	6,720,232	3,136,302
Total liabilities	KRW million	14,564,386	13,243,770	9,520,346
Equity attributable to owners of the Parent Company	KRW million	14,352,322	15,543,127	14,445,376
Capital stock	KRW million	213,877	213,877	171,377
Other paid-in capital	KRW million	1,730,354	1,942,927	825,844
Other components of equity	KRW million	1,345,657	421,562	309,612
Retained earnings	KRW million	11,062,4341	12,964,761	13,138,543
Non-controlling interests	KRW million	5,635,623	4,689,414	2,818,867
Total equity	KRW million	19,987,945	20,232,541	17,264,242



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Category	Unit	2024	2023	2022
Sales	KRW million	20,430,376	19,946,397	22,276,083
Cost of sales	KRW million	20,100,525	19,165,103	21,992,796
Gross Profit (Loss)	KRW million	329,851	781,294	283,287
Selling, general and administrative expenses	KRW million	1,223,932	1,128,996	1,045,894
Operating Profit (Loss)	KRW million	(894,081)	(347,702)	(762,607)
Finance income	KRW million	445,110	510,139	499,354
Finance costs	KRW million	801,964	734,960	720,625
Share of profit in associates and joint ventures	KRW million	(120,811)	20,261	252,632
Other non-operating income	KRW million	479,967	580,756	1,560,643
Other non-operating expenses	KRW million	1,380,430	488,638	1,230,027
Effect of KIFRS 1029	KRW million	14,060	7,872	8,011
Profit (Loss) before income tax	KRW million	(2,258,149)	(452,271)	(392,619)
Income tax benefits	KRW million	(432,594)	(413,028)	(420,440)
Net profit (Loss)	KRW million	(1,825,556)	(39,243)	27,820
Other comprehensive income (Loss)	KRW million	1,308,804	42,104	270,022
Other comprehensive income not to be reclassified to profit or loss in subsequent periods	KRW million	492,069	(4,258)	60,553
Remeasurements of defined benefit plans	KRW million	(29,919)	(29,221)	38,949
Gain (loss) on valuation of financial assets at FVOCI	KRW million	113,541	54,604	(51,332)
Retained earnings in equity method	KRW million	6,332	(24,299)	14,280
Foreign currency translation of foreign operations	KRW million	424,010	(1,231)	56,364
Equity adjustments using equity method	KRW million	(637)	(330)	(240)
Tax effects	KRW million	(21,258)	(3,781)	2,533
Other comprehensive income to be reclassified to profit or loss in subsequent periods	KRW million	816,735	46,362	209,468
Gain (loss) on valuation of derivative financial instruments	KRW million	7,039	20,215	(37,174)
Foreign currency translation of foreign operations	KRW million	724,364	1,765	188,892
Equity adjustments using equity method	KRW million	86,417	24,306	44,448
Tax effects	KRW million	(1,086)	76	13,302
Total comprehensive income	KRW million	(516,752)	2,861	297,842
Profit (loss) attributable to:	KRW million	-	-	-
Owners of the Parent Company	KRW million	(1,710,507)	(50,043)	61,594
Non-controlling interests	KRW million	(115,048)	10,800	(33,773)
Total comprehensive income attributable to:	KRW million	-	-	-
Owners of the Parent Company	KRW million	(824,448)	(5,306)	279,627
Non-controlling interests	KRW million	307,696	8,166	18,215
Earnings per share				
Basic earnings per share	KRW	(40,565)	(1,199)	1,802
Diluted earnings per share	KRW	(40,565)	(1,199)	1,802



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Reporting Period and Cycle

Indicator	Unit	2024	2023	2022
Cumulative number of ESG Report publications ¹⁾	Times	18	17	16
No. of disclosures of tentative sales performance, sales performance forecasts, future business management plan	Times	4	4	4

1) Published since 2007, titled 'Sustainability Report' until 2021

Economic Value Generation and Distribution

Indicator	Category	Unit	2024	2023	2022	Notes
Economic value distribution	Cost of operations	KRW 100 million	213,245	193,783	222,753	Operating expenses (COGS+SG&A) – Distribution to employees
	Employee	KRW 100 million	10,573	9,158	7,634	Salary, retirement benefits, welfare benefit expenses
	Shareholder /Investor_Dividend	KRW 100 million	843	1,476	1,190	
	Shareholder/Investor_Interest expense	KRW 100 million	4,213	3,789	1,499	
	Government_Corporate tax	KRW 100 million	(4,326)	(4,130)	(4,204)	
	Community_Donations	KRW 100 million	84	89	123	
	Total	KRW 100 million	224,632	204,165	228,994	

※ Based on main financial statements

Government Financial Support

Indicator	Unit	2024	2023	2022
Tax exemption and deduction	KRW million	1,636	1,378	912
Aid for research and development	KRW million	1,234	2,322	388

※ Based on main financial statements

GHG Emission Target

Indicator	Category	Unit	2024	2023	2022	Notes
Annual GHG emission target	Total	tCO ₂ eq	6,170,000	6,280,000	6,563,035	
No. of projects on GHG reductions	Total	Number	84	54	58	
Percentage of emissions covered under emissions-limiting regulations		%	100	100	100	



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Direct GHG Emissions (Scope 1)

Indicator	Category	Unit	2024	2023	2022	Notes
Direct GHG (Scope 1) emissions – by business site	Yeosu Complex (Basic Chemicals)	tCO ₂ eq	1,886,717	2,055,487	2,013,057	Data based on 2022/2023 final statements and 2024 initial statement submitted(total emissions are rounded down at the business site level, may resulting in discrepancies compared to the aggregated Scope 1 and Scope 2 totals)
	Yeosu Complex (Advanced Materials)	tCO ₂ eq	54,925	52,387	47,145	
	Daesan Complex	tCO ₂ eq	1,534,019	1,449,663	1,627,125	
	Ulsan Complex	tCO ₂ eq	330,335	438,757	496,537	
	Other	tCO ₂ eq	2,957	3,047	3,532	
	Total	tCO ₂ eq	3,808,952	3,999,341	4,187,396	
Direct GHG (Scope 1) emissions – by stationary combustion	CO ₂	tCO ₂ eq	3,774,834	3,962,568	4,152,424	Data based on 2022/2023 final statements and 2024 initial statement submitted(total emissions are rounded down at the business site level, may resulting in discrepancies compared to the aggregated Scope 1 and Scope 2 totals)
	N ₂ O	tCO ₂ eq	3,341	3,555	4,144	
	CH ₄	tCO ₂ eq	30,778	33,219	30,821	
	Total	tCO ₂ eq	3,808,952	3,999,341	4,187,396	

Indirect GHG Emissions (Scope 2)

Indicator	Category	Unit	2024	2023	2022	Notes
Indirect GHG (Scope 2) emissions	Yeosu Complex (Basic Chemicals)	tCO ₂ eq	900,828	864,644	790,059	
	Yeosu Complex (Advanced Materials)	tCO ₂ eq	355,034	348,185	330,000	
	Daesan Complex	tCO ₂ eq	650,497	693,873	644,813	
	Ulsan Complex	tCO ₂ eq	178,421	242,131	252,140	
	Other	tCO ₂ eq	9,661	10,370	10,254	
	Total	tCO ₂ eq	2,094,441	2,159,203	2,027,266	
						Data based on 2022/2023 final statements and 2024 initial statement submitted

Direct and Indirect GHG Emissions

Indicator	Unit	2024	2023	2022	Notes
Total	tCO ₂ eq	5,903,386	6,158,540	6,214,656	
Scope 1, Scope2 GHG intensity	tCO ₂ eq/ KRW billion	433	457	381	Based on separate financial statement



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Other Indirect
GHG Emissions
(Scope3)

Indicator	Unit	2024	2023	2022	Notes
Scope 3 emissions	tCO ₂ eq	13,231,056	8,078,185	11,579,412	Scope 3 reverification (refer to p.42 of this report, excluding Cat.12)
Scope 3 carbon intensity	tCO ₂ eq/ KRW billion	970	600	711	Based on separate financial statements

GHG Sales

Indicator	Unit	2024	2023	2022	Notes
GHG Sales	tCO ₂ eq	152,688	127,663	137,266	

Energy
Consumption
Within
the Organization

Indicator	Category	Unit	2024	2023	2022	Notes
Total energy consumption within the organization	Yeosu Complex (Basic Chemicals)	TJ	52,707	55,548	52,520	
	Yeosu Complex (Advanced Materials)	TJ	7,045	7,013	6,675	
	Daesan Complex	TJ	44,386	44,511	46,437	
	Ulsan Complex	TJ	8,717	11,412	12,788	
	Other ¹⁾	TJ	284	281	280	
	Total	TJ	113,139	118,765	118,700	
	Intensity	TJ/KRW billion	8.29	8.82	7.28	Based on separate financial statements
Total consumption of non-renewably energy by the organization	Fuel	TJ	74,919	78,697	81,116	
	Electricity	TJ	21,822	24,960	23,176	
	Steam	TJ	16,334	15,102	14,408	
	Total	TJ	113,076	118,759	118,700	
Percentage of renewable energy use		%	63TJ/0.06	6TJ/0.01 이하	0.01 이하	REC purchases (as of 2024, Daesan Complex - 38TJ, LOTTE Chemical R&D Center -12TJ, Seoul headquarters - 13TJ)

1) Seoul headquarters, Uiwang business site, LOTTE Chemical R&D Center, Innovation Center, Daegu Water Treatment Plant, Incheon Complex, etc.(Incheon Complex reflected starting in 2023)

Energy
Production

Indicator	Unit	2024	2023	2022	Notes
Total self-generated energy	TJ	12,787	10,982	9,336	2023 data recalculated



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Water-related Risks

Indicator	Category	Unit	2024	2023	2022	Notes
Management of water-related risks and opportunities	Business sites located at water- stressed regions ¹⁾	Number	10	10	9	

1) Seoul Headquarters, Uiwang Plant, Basic Chemicals Research Center, Innovation Center, Daegu Water Treatment Plant, Incheon Plant, etc.

Water Withdrawal

Indicator	Category	Unit	2024	2023	2022	Notes
Total amount of water withdrawal	Yeosu Complex (Basic Chemicals)	1,000 Tonne	21,772	20,664	19,928	
	Yeosu Complex (Advanced Materials)	1,000 Tonne	2,575	2,217	2,826	
	Daesan Complex	1,000 Tonne	13,765	11,988	12,740	
	Ulsan Complex	1,000 Tonne	5,526	7,736	8,329	
	Other ¹⁾	1,000 Tonne	107	86	97	
	Total	1,000 Tonne	43,745	42,692	43,920	
	Water withdrawal unit	1,000 Tonne/ KRW billion	3.21	3.17	2.69	Based on separate financial statements
Amount of water withdrawal by water source	Percentage of water withdrawal in water-stressed regions	1,000 Tonne	100	100	100	
	Third-party industrial water	1,000 Tonne	43,738	42,681	43,905	
	Groundwater ²⁾	1,000 Tonne	7	11	15	

1) Seoul headquarters, Uiwang business site, LOTTE Chemical R&D Center, Innovation Center, Daegu Water Treatment Plant, Incheon Complex, etc.

2) Ulsan Complex

Water Consumption

Indicator	Category	Unit	2024	2023	2022	Notes
Total water consumption ¹⁾	Yeosu Complex (Basic Chemicals)	1,000 Tonne	18,046	17,036	16,461	
	Yeosu Complex (Advanced Materials)	1,000 Tonne	482	398	805	
	Daesan Complex	1,000 Tonne	10,789	9,195	10,287	
	Ulsan Complex	1,000 Tonne	2,842	3,467	3,488	
	Other	1,000 Tonne	92	71	77	
	Total	1,000 Tonne	32,251	30,168	31,118	
	Water consumption unit	1,000 Tonne/ KRW billion	2.37	2.24	1.91	Based on separate financial statements
Amount of water reused ²⁾	Yeosu Complex (Advanced Materials)	1,000 Tonne	1,391	1,598	903	Data recalculated
	Other	1,000 Tonne	4	4	4	
	Total	1,000 Tonne	1,395	1,602	907	

1) Calculation formula revised to Amount of Water Withdrawal-Wastewater Discharge

2) 2022~2023 data recalculated, Seoul headquarters



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Wastewater Discharge

Indicator	Category	Unit	2024	2023	2022	Notes
Total wastewater discharge	Yeosu Complex (Basic Chemicals)	1,000 Tonne	3,726	3,628	3,467	
	Yeosu Complex (Advanced Materials)	1,000 Tonne	2,093	1,819	2,021	
	Daesan Complex	1,000 Tonne	2,976	2,793	2,453	
	Ulsan Complex	1,000 Tonne	2,684	4,269	4,841	
	Other ¹⁾	1,000 Tonne	15	14	20	
	Total	1,000 Tonne	11,494	12,524	12,802	
Treated amount in final wastewater discharge		1,000 Tonne	11,494	12,524	12,802	
Total wastewater discharge to water-stressed regions		1,000 Tonne	11,494	12,524	12,802	
Total amount of pollutants discharged with wastewater		Tonne	1,100	932	1,110	

1) Daegu Water Treatment Plant, LOTTE Chemical R&D Center

Water Pollutant Emissions

Indicator	Category	Unit	2024	2023	2022	Notes
TOC	Yeosu Complex (Basic Chemicals)	Tonne	192	196	323	
	Yeosu Complex (Advanced Materials)	Tonne	75	165	79	
	Daesan Complex	Tonne	30	36	29	
	Ulsan Complex	Tonne	73	65	96	
	Other ¹⁾	Tonne	1	0	0	
	Total	Tonne	381	461	527	
SS	Yeosu Complex (Basic Chemicals)	Tonne	219	170	273	
	Yeosu Complex (Advanced Materials)	Tonne	41	63	11	
	Daesan Complex	Tonne	2	5	4	
	Ulsan Complex	Tonne	36	34	61	
	Other	Tonne	0	0	0	
	Total	Tonne	298	272	349	
BOD	Yeosu Complex (Basic Chemicals)	Tonne	201	149	207	
	Yeosu Complex (Advanced Materials)	Tonne	34	30	6	
	Daesan Complex	Tonne	4	7	2	
	Ulsan Complex	Tonne	6	7	12	
	Other	Tonne	0	0	0	
	Total	Tonne	245	193	227	

1) Daegu Water Treatment Plant, LOTTE Chemical R&D Center, etc.
※ Amounts less than 0.5Tonne are indicated as '0'



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NOx, SOx, and
Other Major
Air Emissions

Indicator	Category	Unit	2024	2023	2022	Notes
NOx (nitrogen oxide) emissions ¹⁾	Yeosu Complex (Basic Chemicals)	Tonne	1,209	1,474	2,313	
	Yeosu Complex (Advanced Materials)	Tonne	44	41	38	
	Daesan Complex	Tonne	1,346	2,424	4,295	
	Ulsan Complex	Tonne	194	242	303	
	Other ²⁾	Tonne	2	3	3	
	Total	Tonne	2,795	4,184	6,953	
	Unit	Ton/KRW billion	0.2	0.3	0.4	
SOx (sulfur oxide) emissions	Yeosu Complex (Basic Chemicals)	Tonne	14	25	33	
	Yeosu Complex (Advanced Materials)	Tonne	4	5	7	
	Daesan Complex	Tonne	17	17	6	
	Ulsan Complex	Tonne	73	104	123	
	Other ²⁾	Tonne	0	0	0	
	Total	Tonne	108	151	180	
PM (particulate matter) emissions	Yeosu Complex (Basic Chemicals)	Tonne	12	31	16	
	Yeosu Complex (Advanced Materials)	Tonne	4	11	8	
	Daesan Complex	Tonne	20	22	24	
	Ulsan Complex	Tonne	6	7	6	
	Other ²⁾	Tonne	1	1	1	
	Total	Tonne	43	72	55	
VOC (volatile organic compounds) emissions	Yeosu Complex (Basic Chemicals)	Tonne	39	47	69	
	Yeosu Complex (Advanced Materials)	Tonne	22	28	23	
	Daesan Complex	Tonne	122	79	24	
	Ulsan Complex	Tonne	14	12	17	
	Other ²⁾	Tonne	198	167	133	
	Total	Tonne	43	72	55	
HAPs (hazardous air pollutant) emissions	Yeosu Complex (Basic Chemicals)	Ton	34	31	24	
	Yeosu Complex (Advanced Materials)	Ton	22	28	23	
	Daesan Complex	Ton	87	34	17	2023 data recalculated
	Ulsan Complex	Ton	10	12	9	
	Other ²⁾	Ton	-	-	-	
	Total	Ton	153	105	72	2023 data recalculated

1) NOx emissions mitigated by installing Ultra-Low-NOx burners
2) Uiwang business site, Daegu Water Treatment Plant, LOTTE Chemical R&D Center



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Emissions of
Ozone-depleting
Substances

Indicator	Category	Unit	2024	2023	2022	Notes
Amount of production		Tonne	-	-	-	
Amount of inflow		Tonne	10.3	4.7	15.0	
Amount of outflow		Tonne	11.3	-	6.2	

Waste
Discharge and
Recycling

Indicator	Category	Unit	2024	2023	2022	Notes
Waste discharge by business site	Yeosu Complex (Basic Chemicals)	Tonne	34,372	33,140	36,270	
	Yeosu Complex (Advanced Materials)	Tonne	36,099	33,656	35,007	
	Daesan Complex	Tonne	12,373	18,573	18,358	
	Ulsan Complex	Tonne	13,060	19,137	19,610	
	Other ¹⁾	Tonne	2,263	2,171	2,540	
	Total	Tonne	98,166	106,678	111,786	
Intensity of waste discharge		Ton/KRW billion	7.20	792	6.86	Based on separate financial statements
Discharge of designated waste by business site	Yeosu Complex (Basic Chemicals)	Tonne	21,723	18,421	22,623	
	Yeosu Complex (Advanced Materials)	Tonne	2,560	2,510	2,077	
	Daesan Complex	Tonne	7,878	14,878	11,851	
	Ulsan Complex	Tonne	682	886	1,079	
	Other	Tonne	1,059	1,125	1,517	
	Total	Tonne	33,902	37,820	39,147	
Discharge of general waste by business site	Yeosu Complex (Basic Chemicals)	Tonne	12,649	14,719	13,647	
	Yeosu Complex (Advanced Materials)	Tonne	33,539	31,147	32,930	
	Daesan Complex	Tonne	4,495	3,695	6,507	
	Ulsan Complex	Tonne	12,378	18,251	18,532	
	Other	Tonne	1,203	1,047	1,023	
	Total	Tonne	64,264	68,859	72,639	
Waste recycling and treatment	Total waste recycled	Tonne	85,292	91,920	94,348	
	Percentage of total waste recycled	%	86.9	86.2	84.4	
	Total waste to landfill	Tonne	3,571	5,131	7,308	
	Total waste incinerated	Tonne	8,669	9,409	9,934	
Outflow	Other _waste treated through other or unknown methods	Tonne	633	219	197	

1) Research institutes, pilot plants, offices (Seoul headquarters, Uiwang business site, LOTTE Chemical R&D Center, etc.)
※ Including waste from LOTTE Engineering Plastic at the Yeosu Complex (Advanced Materials)
※ 2023 data recalculated



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Waste Discharge and Recycling

Indicator	Category	Unit	2024	2023	2022	Notes
Recycling of designated waste at each business site	Yeosu Complex (Basic Chemicals)	Tonne	19,329	16,433	19,767	
	Yeosu Complex (Advanced Materials)	Tonne	557	474	535	
	Daesan Complex	Tonne	6,826	14,183	10,997	
	Ulsan Complex	Tonne	300	629	972	
	Other	Tonne	972	1,041	1,404	
	Total	Tonne	27,984	32,760	33,675	
Recycling of general waste at each business site	Yeosu Complex (Basic Chemicals)	Tonne	10,417	10,771	9,613	
	Yeosu Complex (Advanced Materials)	Tonne	31,053	28,180	29,412	
	Daesan Complex	Tonne	2,809	2,304	5,411	
	Ulsan Complex	Tonne	12,000	17,017	15,370	
	Other	Tonne	1,030	888	868	
	Total	Tonne	57,309	59,160	60,673	

Directly Disposed Waste

Indicator	Category	Unit	2024	2023	2022	Notes
Weight of designated waste treated	Landfill	Tonne	842	575	703	
	Incineration	Tonne	5,062	4,475	4,736	
	Other	Tonne	14	10	34	
Weight of general waste treated	Landfill	Tonne	2,728	4,556	6,605	
	Incineration	Tonne	3,607	4,935	5,198	
	Other	Tonne	620	208	163	
Total weight of designated and general waste treated		Tonne	12,873	14,758	17,438	

Chemical Substances

Indicator	Category	Unit	2024	2023	2022	Notes
Consumption of hazardous chemical ¹⁾ substances		Tonne	2,942,836	2,047,078	2,425,815	Corrected errors from manual aggregation
Pollutant ²⁾ release		Tonne	31,584	31,575	25,595	

※ Due to the difference in reporting periods, 2024 consumption is based on the 2023 consumption, and final confirmation of figures will be made in September 2025 under the Chemical Substances Control Act

※ In line with the Pollutant Release Transfer Registers (PRTR) system, data on pollutant releases was gathered and the name of the indicator was changed accordingly

1) Hazardous Chemical Substances: Toxic substances, substances requiring permission, restricted substances, prohibited substances, substances for accident preparedness, and other chemical substances that are hazardous or potentially hazardous (Chemical Substances Control Act).

2) Pollutant: Elements, compounds, substances obtained through induced reactions, and substances that exist in their natural state which are chemically altered, extracted, or refined (Chemical Substances Control Act).



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Product Life Cycle Assessment (LCA)

Indicator	Category	Unit	2024	2023	2022	Notes
No. of products that conducted LCA		Number	397	231	203	
No. of products being sold		Number	2,538	2,044	1,781	
Percentage of products that conducted LCA among total products		%	15.6	11.3	11.4	

Environmental Technology Developments and Investments

Indicator	Category	Unit	2024	2023	2022	Notes
No. of patented clean technology		Number	835	834	893	Corrected errors from manual aggregation
Eco-friendly investment expenditure		KRW million	165,855	210,972	156,847	
Ownership and ratio of zero-emission vehicles	No. of zero-emission vehicles	Units	17	12	9	Electric/Hydrogen Vehicles
	Total no. of vehicles	Units	185	197	172	
	Percentage of zero-emission vehicles	%	9.2	6.1	5.2	

Products Registered in the Chemical Substances Management System

Indicator	Category	Unit	2024	2023	2022	Notes
Ratio of products that contain Globally Harmonized System (GHS) of Classification and Labelling of Chemicals Category 1 and 2 Health and Environmental Hazardous substances	No. of products that contain such substances	Number	478	203	179	
	Percentage of products that contain such substances	%	18.8	9.9	10.1	
	Percentage of such products that have undergone a hazard assessment ¹⁾	%	64.6	33.0	32.4	

1) In compliance with domestic and international laws and regulations on chemical substances, hazard assessments were conducted on hazardous substances

Purchases of Eco-friendly Products and Services

Indicator	Category	Unit	2024	2023	2022	Notes
Eco-friendly purchases		KRW million	91,849	86,258	88,627	Data recalculation

※ Data was recalculated in line with expanded scope of eco-friendly product purchases



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Risk
Assessment

Indicator	Category	Unit	2024	2023	2022	Notes
No. of times occupational safety and health management procedure were taken	Regular processes	Times	8	8	8	
	Irregular processes ¹⁾	Times	3,815	489	283	
	Total	Times	3,819	497	291	
Business sites where occupational health and safety management procedure were taken		Number	8	8	8	

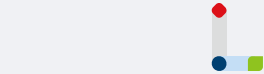
1) Reflecting change in risk assessment method at the Ulsan business site

Occupational
Health and Safety
Management
System

Indicator	Category	Unit	2024	2023	2022	Notes
Business sites that obtained health and safety management system certification (ISO 45001)		Number	8	8	8	
No. of employees represented through the occupational health and safety committee		Persons	4,581	4,640	4,488	Those working at business sites subject to implementing the occupational health and safety committee
Percentage of employees represented through the occupational health and safety committee		%	96.2	93.5	94.8	

Work-related
Injuries

Indicator	Category	Unit	2024	2023	2022	Notes
Employees	No. of industrial accidents	Cases	8	3	4	
	No. of deaths due to work-related injuries	Cases	0	0	0	
	No. of serious work-related injuries	Cases	0	0	0	
	No. of recordable injuries	Cases	7	3	4	
	Lost time injury frequency rate (LTIFR)	No. of cases per 1 million working hours	0.64	0.32	0.44	
	Total recordable incident rate (TRIR)	No. of cases per 200,000 working hours	0.15	0.06	0.08	
Partner Companies	No. of deaths due to work-related injuries	Cases	0	0	0	
	No. of serious work-related injuries	Cases	0	0	0	
	No. of recordable injuries	Cases	4	1	4	
	Lost time injury frequency rate (LTIFR)	No. of cases per 1 million working hours	1.3	0.2	0.86	
	Total recordable incident rate (TRIR)	No. of cases per 200,000 working hours	0.26	0.04	0.17	



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Work-related
Illnesses

Indicator	Category	Unit	2024	2023	2022	Notes
Employees	No. of deaths due to illness	Cases	0	0	0	
	No. of recordable cases of work-related illnesses	Cases	0	0	0	
Partner Companies	No. of deaths due to illness	Cases	0	0	0	
	No. of recordable cases of work-related illnesses	Cases	0	0	0	

Lost Time Injury
Rate (LTIR)

Indicator	Category	Unit	2024	2023	2022	Notes
Employees	Annual LTIR target	No. of cases per 200,000 working hours	0.07	0.07	0.08	joint target for 2022
	LTIR		0.129	0.06	0.08	
Partner Companies	Annual LTIR target	No. of cases per 200,000 working hours	0.07	0.07	0.08	joint target for 2022
	LTIR		0.259	0.04	0.17	

Transport
Incidents

Indicator	Category	Unit	2024	2023	2022	Notes
No. of transport incidents		Cases	0	0	0	

Process Safety
Incidents

Indicator	Category	Unit	2024	2023	2022	Notes
Process safety incident count (PSIC)		Cases	0	0	0	
Process safety total incident rate (PSTIR)		No. of cases per 200,000 working hours	0	0	0	

Health and Safety
and Impact
Assessment
in Product and
Service Categories

Indicator	Category	Unit	2024	2023	2022	Notes
Percentage of products that have had a health and safety impact assessment for improvement purposes		%	100	100	100	

※ Based on MSDS issued



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Employees

Indicator	Category	Unit	2024	2023	2022	Notes
Male	Permanent_Manager (Executive)	Persons	74	100	103	
	Permanent_Manager (Management-level)	Persons	1,157	1,178	1,167	
	Permanent_Staff (Admin/Managerial)	Persons	467	526	500	
	Permanent_Staff (Production and Other)	Persons	2,159	2,183	2,054	
	Contract_Staff (Full-time)	Persons	83	150	113	
	Contract_Staff (Part-time)	Persons	25	29	22	
	Subtotal	Persons	3,965	4,166	3,959	Including domestic/overseas workers
Female	Permanent_Manager (Executive)	Persons	4	3	3	
	Permanent_Manager (Management-level)	Persons	285	267	235	
	Permanent_Staff (Admin/Managerial)	Persons	245	254	270	
	Permanent_Staff (Production and Other)	Persons	242	237	227	
	Contract_Staff (Full-time)	Persons	7	19	22	
	Contract_Staff (Part-time)	Persons	16	16	16	
	Subtotal	Persons	799	796	773	Including domestic/overseas workers
Total Employees	Total	Persons	4,764	4,962	4,732	
Full-time Employees	Male	Persons	3,857	3,987	3,824	
	Female	Persons	776	761	735	
Part-time Employees	Male	Persons	108	179	135	
	Female	Persons	23	35	38	
Percentage of female among total employees		%	16.8	16.0	16.3	
Percentage of female among total manager positions		%	19.0	17.4	15.9	
Average tenure of total employees		Years	14	13.8	14.2	Business Report p.470 (2) Employee Trends

Employee New Hires

Indicator	Category	Unit	2024	2023	2022	Notes
Male	Manager (Executive)	Persons	4	2	3	
	Manager (Management-level)	Persons	8	26	38	
	Staff (Admin/Managerial)	Persons	48	119	118	
	Staff (Production and Other)	Persons	109	346	205	
Female	Manager (Executive)	Persons	1	0	0	
	Manager (Management-level)	Persons	2	4	8	
	Staff (Admin/Managerial)	Persons	36	46	65	
	Staff (Production and Other)	Persons	14	18	21	
Total		Persons	222	561	458	
No. of new hires per minority group	Employees with disabilities	Persons	11	23	13	
Recruiting expenses		KRW million	545	1,097	1,295	



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Employee
Turnover

Indicator	Category	Unit	2024	2023	2022	Notes
Male	Manager (Executive) Voluntary turnover	Persons	9	5	3	
	Manager (Executive) Non-voluntary turnover	Persons	28	6	12	
	Manager (Management-level) Voluntary turnover	Persons	56	35	45	
	Manager (Management-level) Non-voluntary turnover	Persons	19	20	20	
	Staff (Admin/Managerial) Voluntary turnover	Persons	60	39	66	
	Staff (Admin/Managerial) Non-voluntary turnover	Persons	0	2	0	
	Staff (Production and Other) Voluntary turnover	Persons	113	74	105	
	Staff (Production and Other) Non-voluntary turnover	Persons	100	93	77	
	Subtotal		385	274	328	
Female	Manager (Executive) Voluntary turnover	Persons	0	0	0	
	Manager (Executive) Non-voluntary turnover	Persons	1	0	0	
	Manager (Management-level) Voluntary turnover	Persons	9	3	13	
	Manager (Management-level) Non-voluntary turnover	Persons	0	2	0	
	Staff (Admin/Managerial) Voluntary turnover	Persons	20	21	32	
	Staff (Admin/Managerial) Non-voluntary turnover	Persons	0	0	0	
	Staff (Production and Other) Voluntary turnover	Persons	16	6	9	
	Staff (Production and Other) Non-voluntary turnover	Persons	1	2	2	
	Subtotal	Persons	47	34	56	
	Total	Persons	432	308	384	
Turnover rate	Male	%	9.7	6.6	8.3	
	Female	%	5.9	4.3	7.3	
	Total	%	9.1	6.2	8.1	



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Parental Leave

Indicator	Category	Unit	2024	2023	2022	Notes
No. of employees entitled to parental leave	Female	Persons	86	93	102	
	Male	Persons	146	168	166	
	Subtotal	Persons	232	261	268	
No. of employees that took parental leave	Female	Persons	86	93	102	
	Male	Persons	103	133	120	
	Subtotal	Persons	189	226	222	
No. of employees that returned to work after parental leave ended	Female	Persons	62	65	60	
	Male	Persons	125	123	131	
	Subtotal	Persons	187	188	191	
Employees subject to return to work after parental leave		Persons	187	188	191	
Percentage of employees returning to work after parental leave		%	100%	100%	100%	
No. of employees retained 12 months after returning to work from parental leave	Female	Persons	59	63	58	
	Male	Persons	123	122	122	
	Subtotal	Persons	182	185	180	
No. of employees exited within 12 months after returning to work from parental leave	Female	Persons	3	2	2	
	Male	Persons	2	1	9	
	Subtotal	Persons	5	3	11	
Percentage of employees retained 12 months after returning to work from parental leave		%	97	98	94	

※ Reestablishment of Calculation Standards (Standardization of Business Report Disclosure Criteria)

※ Calculation to include the company's own childcare leave systems (secondary childcare leave, caregiving childcare leave, paternity leave) in addition to the statutory childcare leave system.

Average Employee Salary

Indicator	Category	Unit	2024	2023	2022	Notes
Average employee salary		KRW million	98	98	94	Business Report p.470 (2) Employee Trends

Percentage of Female to Male Employees' Basic Salary

Indicator	Category	Unit	2024	2023	2022	Notes
Percentage of average female salary to male salary		%	67.3	67.0	65.7	Business Report p.470 (2) Employee Trends

Welfare Benefit Expenses

Indicator	Category	Unit	2024	2023	2022	Notes
Welfare benefit expenses		KRW million	104,460	101,073	101,405	



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Average hours of training and other related performance per employee

Indicator	Category	Unit	2024	2023	2022	Notes
Average hours of training per employee		Hours	68	59	61	
Average training expenses per employee		KRW million	1.1	1.3	1.7	

Employee regular performance and career development evaluations

Indicator	Category	Unit	2024	2023	2022	Notes
No. of employees subject to multifaceted evaluations (Male)	Full-time_Manager (Executive)	Persons	89	72	75	
	Full-time_Manager (Management-level)	Persons	1,154	1,175	1,049	
	Full-time_Staff (Admin/Managerial)	Persons	0	0	300	
	Full-time(Production and Other)	Persons	48	11	91	
No. of employees subject to multifaceted evaluations (Female)	Full-time_Manager (Executive)	Persons	4	2	3	
	Full-time_Manager (Management-level)	Persons	250	247	182	
	Full-time_Staff (Admin/Managerial)	Persons	0	0	133	
	Full-time_Staff (Production and Other)	Persons	12	7	12	
Total		Persons	1,557	1,514	1,845	
No. of employees who carried out multifaceted evaluations (Male)	Full-time_Manager (Executive)	Persons	89	72	75	
	Full-time_Manager (Management-level)	Persons	1,154	1,168	1,038	
	Full-time_Staff (Admin/Managerial)	Persons	0	0	300	
	Full-time_Staff (Production and Other)	Persons	48	11	91	
No. of employees who carried out multifaceted evaluations (Female)	Full-time_Manager (Executive)	Persons	4	2	3	
	Full-time_Manager (Management-level)	Persons	250	247	182	
	Full-time_Staff (Admin/Managerial)	Persons	0	0	133	
	Full-time_Staff (Production and Other)	Persons	12	7	12	
Total		Persons	1,557	1,507	1,834	

Employee regular performance and career development feedback

Indicator	Category	Unit	2024	2023	2022	Notes
No. of employees who performed MBO (Management by Objective) evaluations (Male)	Full-time_Manager (Executive)	Persons	89	98	75	
	Full-time_Manager (Management-level)	Persons	1,154	1,175	1,049	
	Full-time_Staff (Admin/Managerial)	Persons	451	504	442	
	Full-time_Staff (Production and Other)	Persons	141	124	116	
No. of employees who performed MBO (Management by Objective) evaluations (Female)	Full-time_Manager (Executive)	Persons	4	3	3	
	Full-time_Manager (Management-level)	Persons	250	247	182	
	Full-time_Staff (Admin/Managerial)	Persons	223	234	220	
	Full-time_Staff (Production and Other)	Persons	37	34	27	
Total		Persons	2,349	2,419	2,114	



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Employee Training on human rights Policies and Procedures

Indicator	Category	Unit	2024	2023	2022	Notes
No. of employees who completed training on human rights policies and procedures		Persons	4,708	4,962	4,732	
Percentage of employees who completed training on human rights policies and procedures		%	100	100	100	
Total hours of employee training on human rights policies and procedures		Hours	19,303	11,016	9,440	

Labor-Management Relations

Indicator	Category	Unit	2024	2023	2022	Notes
No. of labor union members		Persons	1,905	2,026	1,921	
Labor union membership rate		%	40.0	40.8	40.6	

Collective Bargaining

Indicator	Category	Unit	2024	2023	2022	Notes
No. of employees subject to collective bargaining		Persons	1,905	2,026	1,921	
Percentage of employees subject to collective bargaining		%	40.0	40.8	40.6	

Information Security Management System

Indicator	Category	Unit	2024	2023	2022	Notes
No. of executives responsible for information security		Persons	1	1	1	
Frequency of cyberattack response system testing		Times	12	12	12	
Frequency of audits on information security policies and system		Times	4	2	2	

Confirmed cases of complaints regarding breaches of customer privacy and loss of customer data

Indicator	Category	Unit	2024	2023	2022	Notes
No. of breaches of customer privacy		Cases	0	0	0	
No. of complaints regarding confirmed breaches of customer privacy		Cases	0	0	0	
No. of issues occurred in relation to information security		Cases	0	0	0	



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Spending on Local Community Engagement and Contribution Activities

Indicator	Category	Unit	2024	2023	2022	Notes
Donation value (by activity type)	Charitable donations	KRW million	2,857	2,340	3,264	
	Local community investments	KRW million	3,867	3,975	8,261	
Donation value (by spending type)	Total monetary donations	KRW million	6,175	5,554	10,796	
	Total in-kind donations	KRW million	549	761	729	
Total		KRW million	6,724	6,315	11,525	
Activity hours		Hours	3,600	3,874	3,518	
Indirect costs		KRW million	34	45	28	

Suppliers to the Organization

Indicator	Category	Unit	2024	2023	2022	Notes
Total no. of suppliers		Number		2,235	2,406	
No. of kye suppliers	Total no. of key suppliers	Number		340	349	
	No. of key Tier 1 suppliers	Number		78	46	
	No. of key Tier 2 suppliers	Number		262	303	
Percentage of purchasing in total purchases	Key Tier	%		89.9	75.6	
	Key Tier2	%		7.7	17.9	
	Key Tier3	%		2.4	6.5	

※ Total number of suppliers and tiers were determined based on purchasing records for 2023 based on which 2024 supply chain assessment was carried out. Supplier tiers and percentage of purchases for 2025 will be calculated based on purchasing records for 2024.

Supply Chain Sustainability Management

Indicator	Category	Unit	2024	2023	2022	Notes
No. of suppliers trained on sustainable procurement		Number	100	166	88	
Training record on Code of Conduct / Anti-Corruption / Fair Trade		Number	109	34	10	

※ Management initiated in 2022 by implementing the Supply Chain ESG Risk Management System



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Local Sourcing
Rate at Key
Business
Regions

Indicator	Category	Unit	2024	2023	2022	Notes
Local sourcing rate at key business regions	Total purchase value	KRW million	7,186,249	7,893,347	9,865,790	
	Value of local sourcing at key business regions (domestic)	KRW million	4,838,697	4,707,813	5,066,013	
	Local sourcing rate at key business regions	%	67.3	59.6	51.3	

※ When imports are purchased from entities other than LOTTE Chemical (domestic subsidiary, specialized distributor, etc.), which completed the domestic customs process, it is recognized as a domestic purchase

R&D
expenditures

Indicator	Category	Unit	2024	2023	2022	Notes
R&D expenditure		KRW million	148,185	120,369	102,444	

Grievance
Mechanism

Indicator	Category	Unit	2024	2023	2022	Notes
No. of grievances submitted through official mechanisms and procedures	Supply chain	Cases	11	3		
	Human rights	Cases	5	1		
	Other	Cases	27	27	25 ¹⁾	
No. of grievances addressed through official mechanisms and procedures	Supply chain	Cases	11	3		
	Human rights	Cases	5	1		
	Other ²⁾	Cases	28	26	25	Action for 1 unhandled case in 2023 was completed in 2024

1) Categories were reassessed in 2023, and 2022 is categorized under Other cases
2) Cases where actions taken fall under 'total no. of corruption/bribery cases' were excluded



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Governance
Structure and
Composition
(BOD and
Committees)

Indicator	Category	Unit	2024	2023	2022	Notes
No. of BOD meetings convened		Meetings	11	11	13	
Tenure of BOD Committee members	Shin Dong-bin	Years	32	31	30	
	Lee Hun-ki	Years	1	-	2	Lee Hun-ki (Inside Director): Term ended in Dec. 2024
	Lee Young-jun	Years	5	4	3	Hwang Jin-koo (Inside Director): Term ended in Dec. 2024
	Hwang Jin-koo	Years	4	3	2	Hwang Min-jae (Inside Director): Appointed in Mar. 2025
	Hwang Min-jae	Years	-	-	-	Seo Hwi-won (Outside Director): Appointed in Mar. 2025
	Seong Nak-sun	Years	1	-	-	Cho Hye-seong (Outside Director): Appointed in Mar. 2025
	Nam Hye-jung	Years	4	3	2	Kim Jong-geun (Other Non-executive Director): Appointed in Mar. 2025
	Cho Woon-hang	Years	3	2	1	Nam Hye-jung (Outside Director): Resigned in Mar. 2025
	Cha Kyung-hwan	Years	2	1	-	Cha Kyung-hwan (Outside Director): Resigned in Mar. 2025
	Park Ji-soon	Years	1	-	-	
	Oh Yoon	Years	1	-	-	
	Sohn Byeong-hyeok	Years	1	-	-	
	Seo Hwi-weon	Years	-	-	-	
	Cho Hye-seong	Years	-	-	-	
	Kim Jong-geun	Years	-	-	-	
Total no. of BOD directors	Male_Inside Director	Persons	4	5	4	
	Female_Inside Director	Persons	-	-	-	
	Male_Outside Director	Persons	5	5	4	
	Female_Outside Director	Persons	1	1	1	
	Male_Other non-executive director	Persons	1	-	1	
	Female_Other non-executive director	Persons	-	-	-	
Average tenure of members belonging to the top decision- making body and its committees (average BOD tenure)	Based on Outside Directors	Years	4	4	4	
Percentage of outside directors in the BOD	Female_Inside Director	%	54.5	54.5	50.0	
No. of long-serving outside directors	Male_Outside Director	Persons	0	0	0	
No. of outside directors exceeding the legal minimum standard	Female_Outside Director	Persons	0	0	0	
Percentage of long serving auditors or Audit Committee members	Male_Other non-executive director	Persons	0	0	0	
Percentage of non-audit services provided by external auditors	Female_Other non-executive director	%	52	0	4.0	
No. of Outside Director Nomination Committee Meetings convened		Meetings	2	1	1	
Percentage of outside directors within the Outside Director Nomination Committee		%	100	67	67	
No. of Compensation Committee meetings convened		Meetings	6	2	3	



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Structure and
Composition
(BOD and
Committees)

Indicator	Category	Unit	2024	2023	2022	Notes
No. of Compensation Committee meetings convened		Meetings	6	2	3	
Percentage of outside directors within the Compensation Committee		%	100	100	100	3 Persons
No. of Audit Committee meetings convened		Meetings	5	4	4	
Percentage of Audit Committee members that meet the requirements for accounting or financial experts according to law	No. of Audit Committee members that meet the requirements	Persons	1	2	2	
	Total no. of Audit Committee members	Persons	3	3	3	
	Percentage of directors that meet expert requirements	%	33	67	67	
No. of ESG Committee meetings convened		Meetings	5	4	6	

Appointment
and Selection for
Top Governance
Body

Indicator	Category	Unit	2024	2023	2022	Notes
No. of female registered directors who are not controlling shareholders and their relatives		Persons	1	1	1	
No. of executives who have a track record of undermining corporate value and shareholders’ rights and interests		Persons	0	0	0	

Top governance
body’s role of
overseeing
impact
management

Indicator	Category	Unit	2024	2023	2022	Notes
Frequency of key environmental management issues reported to the BOD		Times	2	2	2	
Frequency of climate issues being reported to the BOD		Times	6	6	6	
Frequency of climate issues being reported to the BOD		Times	2	1	6	

Communication
on key items

Indicator	Category	Unit	2024	2023	2022	Notes
Minimum notice date specified in the bylaws for notice of a BOD meeting		Days	1	1	1	
BOD average attendance rate		%	97.3	93.9	95.0	
Inside director average attendance rate		%	95.7	92.2	92.0	
Outside director average attendance rate		%	98.5	95.2	98.0	
Minimum required BOD attendance rate		%	75.0	75.0	75.0	



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Annual Total Compensation Rate

Indicator	Category	Unit	2024	2023	2022	Notes
Annual total compensation for the organization's highest-paid individual		KRW million	3,800	4,773	3,830	Based on highest paid individual in the Business Report
Median value of total annual employee compensation		KRW million	86	92	83	
Percentage of the annual total compensation for the organization's highest-paid individual to the median annual total compensation for all employees		%	2.3	1.9	2.2	

Company Ownership and Operations (voting rights, regulations on general shareholder meetings, internal trade)

Indicator	Category	Unit	2024	2023	2022	Notes
Total no. of shares	Executive stock ownership status	Shares	1,462	1,280	1,280	
	Stock ownership by majority shareholder and affiliated person	Shares	23,342,054	23,332,118	18,825,827	
	Equity ratio held by majority shareholder and affiliated person	%	54.6	54.5	54.9	
	Treasury stock ownership status	Shares	608,272	598,972	284,972	
	Equity ratio held by treasury stock	%	1.4	1.4	0.8	
	Shares held by employee stock ownership union	Shares	862,208	962,787	-	
	Equity ratio held by employee stock ownership union	%	2.0	2.3	-	
	Other_Ownership held by non-registered executives	Shares	30,453	2,405	2,959	
	Other_Ownership held by National Pension Service (NPS)	Shares	2,494,550	3,248,175	2,446,307	
	Other_Equity ratio held by NPS	%	5.8	7.6	7.1	
	Other_Ownership held by others	Shares	15,436,420	14,629,682	12,714,074	
	Total	Shares	42,775,419	42,775,419	34,275,419	
No. of unfair insider trading		Cases	-	-	-	
No. of violations related to disclosure of insider trading		Cases	-	-	-	
No. of days prior to general shareholders meeting for notifying convention of meeting ¹⁾		Days	18	20	20	
Total equity ratio of the company held by subsidiaries		%	55	55	55	
Net profit before deduction of corporate tax		KRW million	(2,258,149)	(452,271)	(392,619)	
Rate of shareholder return	Dividend	KRW million	84,334	147,618	118,967	
	Dividend per share	KRW	2,000	3,500	3,500	
	Purchasing among of treasury stock	KRW million	-	49,974	49,728	
	Other shareholder returns	KRW million	-	-	-	
	Net profit	KRW million	(1,825,556)	(39,243)	27,820	
	Shareholder return ratio	%	(5)	(504)	606	Net loss in 2023, 2024

1) 2024: Notification was made on March 7, and the shareholders meeting was held on March 25





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Business Site Corruption Risk Assessment

Indicator	Category	Unit	2024	2023	2022	Notes
Business sites assessed for corruption risks		Number	7	8	8	

※ Seoul Headquarters, Uiwang Advanced Materials, Office, Yeosu Complex (Basic Chemicals), Yeosu Complex (Advanced Materials), Daesan Complex, Ulsan Complex, LOTTE Chemical R&D Center

Notification and Training on Anti-corruption Policy and Procedures

Indicator	Category	Unit	2024	2023	2022	Notes
Notification rate on anti-corruption policy and procedures ¹⁾	BOD	%	100	100	100	
	Employee	%	100	100	100	
Notifications made on anti-corruption policy and procedures ²⁾	Supplier	Number	3,641	3,641	2,348	
Anti-corruption training performance	BOD	Persons	5	3	3	
Percentage of anti-corruption training	Employee	%	95	95	90	

1) Notices in internal system

2) Based on companies that consented to disclosing performance

Confirmed Anti- corruption Cases and Measures Taken

Indicator	Category	Unit	2024	2023	2022	Notes
Total no. of corruption and bribery cases		Cases	2	5	5	
No. of supplier contracts terminated/ non-renewed due to corruption and bribery		Cases	0	0	0	

Legal and Regulatory Compliance

Indicator	Category	Unit	2024	2023	2022	Notes
Total no. of legal/regulatory non-compliances (Environmental, anti-competitive behavior, marketing communications, health and safety, labeling, other, etc.)	Monetary sanctions	Cases	3	-	5	2022, 2024 in Environmental, Health and Safety
	Non-monetary sanctions	Cases	1	2	-	2023, 2024 in Environmental
	Warnings	Cases	-	-	-	
Monetary sanctions from legal/ regulatory non-compliances (Environmental, anti-competitive)	Penalty	KRW million	-	-	11	
	Fines, compensation, settlements	KRW million	4	-	4	

※ As a result of integrating data by category such as environment and safety for disclosure, air emission charges are excluded.



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Statement of use

LOTTE Chemical reports on sustainable management for the period from January 1, 2024 through December 31, 2024 in accordance with GRI Standards 2021 reporting principles.

GRI 1 used

GRI 1: Foundation 2021

Applicable GRI Sector Standards

As of the release date of this report, there are no applicable sector standards.

GRI Standard	Disclosure No.	Disclosure Indicators	Page	Notes
General Disclosures				
GRI 2: General Disclosures 2021	2-1	Organizational details	6~20, Business Report p.4~7	
	2-2	Entities included in the organization’s sustainability reporting	2	
	2-3	Reporting period, frequency, and contact point	2	
	2-4	Restatements of information	116	
	2-5	External assurance		
	2-6	Activities, value chain, and other business relationships	6~10	
	2-7	Employees	133	
	2-8	Workers who are not employees	Business Report p.470	
	2-9	Governance structure and composition	104~107, 140~141	
	2-10	Nomination and selection of the highest governance body	104	
	2-11	Chair of the highest governance body	104	
	2-12	Role of the highest governance body in overseeing the management of impacts	13~15	
	2-13	Delegation of responsibility for managing impacts	14, 105, 141	
	2-14	Role of the highest governance body in sustainability reporting	14, 15, 141	
	2-15	Conflicts of interest	104~107	
	2-16	Communication of critical concerns	14, 105, 140	
	2-17	Collective knowledge of the highest governance body	106	
	2-18	Evaluation of the performance of the highest governance body	107	
	2-19	Remuneration policies	107, Business Report p.472~477	
	2-20	Process to determine remuneration	107	
	2-21	Annual total compensation ratio	142	
	2-22	Statement on sustainable development strategy	5	
	2-23	Policy commitments	13, 24, 33~36, 47, 52, 63~65, 72, 81, 84~85, 90, 93, 98, 111~112, 115	
	2-24	Embedding policy commitments	110	
	2-25	Processes to remediate negative impacts	108~109, 113	
	2-26	Mechanisms for seeking advice and raising concerns	113	
	2-27	Compliance with laws and regulations	143	
	2-28	Membership associations (initiatives)		
	2-29	Approach to stakeholder engagement	18	
	2-30	Collective bargaining agreements	82, 137	



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GRI Standard	Disclosure No.	Disclosure Indicators	Page	Notes
Material Topic & Topic Standards				
GRI 3: Material Topics 2021	3-1	Process to determine material topics	19	
	3-2	List of material topics	20	
Material Topic 1 Climate Change				
GRI 3: Material Topics 2021	3-3	Management of material topics	21	
GRI 201: Economic Performance	201-2	Financial implications and other risks and opportunities due to climate change	29~45	
GRI 305: Greenhouse Gas (GHG) Emissions	305-1	Direct GHG Emissions (Scope1)	123	
	305-2	Indirect GHG emissions (Scope2)	123	
	305-3	Other indirect GHG emissions (Scope3)	42, 124	
	305-4	GHG emissions intensity	123	
	305-5	Reduction of GHG emissions	35~36, 123	
	305-6	Emissions of ozone-depleting substances (ODS)	128	
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	127	
Material Topic 2 Energy				
GRI 3: Material Topics 2021	3-3	Management of material topics	21	
GRI 302: Energy	302-1	Energy consumption within the organization	124	
	302-2	Energy consumption outside of the organization	42	
	302-3	Energy intensity	124	
	302-4	Reduction of energy consumption	35~36	
Material Topic 3 Resource Circulation				
GRI 3: Material Topics 2021	3-3	Management of material topics	21	
GRI 301: Materials	301-2	Recycled input materials used	89, 130	
Material Topic 4 Product Environmental Impact				
GRI 3: Material Topics 2021	3-3	Management of material topics	21	
GRI 302: Energy	302-5	Reductions in energy requirements of products and services	51	
Material Topic 5 Employees and Process Safety				
GRI 3: Material Topics 2021	3-3	Management of material topics	21	
GRI 403 : Occupational Health and Safety	403-1	Occupational health and safety management system	62~63	
	403-2	Hazard identification, risk assessment, and incident investigation	66, 67	
	403-3	Occupational health services	68~70	
	403-4	Worker participation, consultation and communication on occupational health and safety	63, 69	
	403-5	Worker training on occupational health and safety	71	
	403-6	Promotion of worker health	69	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	69	
	403-8	Workers covered by an occupational health and safety management system	131	
	403-9	Work-related injuries	131	
	403-10	Work-related ill health	132	
Material Topic 6 Supply Chain				
GRI 3: Material Topics 2021	3-3	Management of material topics	21	
GRI 308: Supplier Environmental Assessment	308-2	Negative environmental impacts in the supply chain and actions taken	86~88	
GRI 414: Supplier Social Assessment	414-2	Negative social impacts in the supply chain and actions taken	86~88	



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GRI Standard	Disclosure No.	Disclosure Indicators	Page	Notes
General Topic standards				
GRI 201: Economic Performance	201-1	Direct economic value generated and distributed	122	
	201-3	Defined benefit plan obligations and other retirement plans	79	
	201-4	Financial assistance received from government	122	
GRI 203 : Indirect Economic Impacts	203-1	Infrastructure investments and services supported	97~98	
GRI 204 : Procurement Practices	204-1	Proportion of local sourcing	139	
GRI 205 : Anti-corruption	205-1	Operations assessed for risks related to corruption	116, 143	
	205-2	Communication and training about anti-corruption policies and procedures	114, 116, 143	
	205-3	Confirmed incidents of corruption and actions taken	143	
GRI 206 : Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	116~117, 143	
GRI 303 : Water and Effluents	303-1	Interactions with water as a shared resource	52	
	303-2	Management of water discharge-related impacts	52	
	303-3	Water withdrawal	52, 125	
	303-4	Water discharge	52, 126	
	303-5	Water consumption	52, 125	
GRI 304 : Biodiversity	304-1	Protected areas and areas of high biodiversity value	57	
	304-2	Significant impacts on biodiversity	58~59	
	304-4	IUCN Red List species and national conservation list species	57	
GRI 306 : Waste	306-1	Waste generation and significant waste-related impacts	53	
	306-2	Management of significant waste-related impacts	53	
	306-3	Waste generated	53, 128~129	
	306-4	Waste diverted from disposal (reuse, recycle, etc.)	53, 128~129	
	306-5	Waste directed to disposal (incineration, landfill, etc.)	53, 128~129	
GRI 401 : Employment	401-1	Employee new hires and employee turnover	133, 134	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	77	
	401-3	Parental leave	78, 135	
GRI 404 : Training and Education	404-1	Average hours of training per year per employee	136	
	404-2	Programs for upgrading employee skills and transition assistance programs	74~75	
	404-3	Percentage of employees receiving regular performance and career development reviews	136	
GRI 405 : Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	104, 133	
	405-2	Ratio of basic salary and remuneration of women to men	135	
GRI 406 : Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	139	
GRI 407 : Freedom of Association and Collective Bargaining	407-1	Freedom of association and right to collective bargaining	82	No negative impacts during reporting period
GRI 408 : Child Labor	408-1	Operations at significant risk for incidents of child labor	82	
GRI 409 : Forced or Compulsory Labor	409-1	Operations at significant risk for incidents of forced labor	82	
GRI 411 : Rights of Indigenous Peoples	411-1	Incidents of violations involving rights of indigenous peoples	-	No issues found among reports made during reporting period
GRI 415 : Public Policy	415-1	Political contributions	Not reported as prohibited by Korean Law	
GRI 416 : Customer Health and Safety	416-1	Assessment of the health and safety impacts of product and service categories	132	
GRI 418 : Customer Privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	137	



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Category	TCFD Recommendations	LOTTE Chemical's Response	Page
Governance	a) Describe the Board's oversight of climate-related risks and opportunities	LOTTE Chemical discusses and makes decisions on climate change response and energy savings targets and performance under the management and supervision of the BOD's ESG Committee. The ESG Committee is the highest decision-making body within the BOD, in charge of setting internal policies and targets to reduce fossil fuel dependency and promote the transition to a low-carbon economy. In addition, the committee receives reports on relevant matters to monitor carbon mitigation targets and performance at least twice a year and oversees financial decisions in the carbon mitigation process such as transitioning to renewable energy.	30~31
	b) Describe management's role in assessing and managing climate-related risks and opportunities	LOTTE Chemical's Sustainability Committee composed of internal executives covers the management of overall ESG management initiatives including climate change and stakeholder risks as its key agenda. In addition, a separate Net-Zero Council equipped with relevant expertise has also been set up to review performance of carbon-neutrality initiatives and promote practical results by meeting on a quarterly basis to manage targets, discuss issues, and share best practices. The CEO has decision-making authority on executions for addressing climate issues, overseeing the ESG Management Division, the organization dedicated to ESG matters, where overall environmental and climate issues are handled.	30~32
Strategy	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term	Considering the internal and external stakeholders and impact period (short-, medium-, and long-term), LOTTE Chemical identifies physical and transition risks related to climate change and selects material risks and opportunities considering the company's business and value chain structure.	33
	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	LOTTE Chemical identified the quantitative/qualitative current and estimated financial impact of climate-related key risks and opportunities and has built a response strategy.	33~38
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	LOTTE Chemical analyzed climate scenarios based on the International Energy Agency's (IEA) Net Zero 2050 (Below 1.5°C) scenario and built plans to pursue new clean energy businesses in hydrogen and ammonia production, purchase renewable energy, and recycle waste plastic, etc.	38~40
Risk Management	a) Describe the organization's processes for identifying and assessing climate-related risks	LOTTE Chemical conducted analysis on global standards, evaluation criteria, media, and leading group bench- marking to identify climate change risks and opportunities across the business, and is carrying out risk assessments including environmental, social, and financial impacts by reflecting and analyzing the opinions of stakeholders.	41
	b) Describe the organization's processes for managing climate-related risks	LOTTE Chemical reports risk response measures and strategies to the BOD's ESG Committee and to management and establishes its final risk management process system according to management's decision.	31~32, 41
	c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management	LOTTE Chemical reflects non-financial risks, including climate change, and operational and financial risks in the company's management decisions through the ESG Committee risk management governance.	41
Metrics & 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	LOTTE Chemical monitors the emission performance such as of Scope 1, Scope 2, and Scope 3, intensity and change rate of GHG emissions, GHG reductions, GHG sales volume, eco-friendly investment for environmental management, and percentage of zero-emission vehicles.	42~45
	b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks	Scope 1 : 3,808,952 tCO ₂ eq Scope 2 : 2,094,441 tCO ₂ eq Scope 3 : 13,231,056 tCO ₂ eq Related risks: Policy and regulatory risks (rise in credit purchasing costs due to the reinforced emissions trading system, rise in freight costs due to transition to a low-carbon transport market, weakened cost competitiveness due to global carbon tariff regulations, etc.), market risks (growing demand for low-carbon products, rise in raw material prices due to carbon regulations and carbon taxes in the supply chain), reputation risks (increased needs to adopt renewable energy)	37, 39~40, 42, 123
	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets	LOTTE Chemical developed plans to reduce GHG emissions by 20% by 2030 compared to 2018, setting KPIs and making efforts to achieve this goal.	35, 44~45



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Category	Topic	Unit	SASB Code	LOTTE Chemical Response				Notes
				2024	2023	2022	Page	
GHG Emissions	Gross global Scope 1 emissions	tCO ₂ eq	RT-CH-110a.1	3,808,952	3,999,341	4,187,396	123	
	Percentage covered under emissions-limiting regulations	%	RT-CH-110a.1	100	100.0	100.0	123	
	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	-	RT-CH-110a.2	In place	In place	In place	25,39,42	Green Promise 2030 Net-zero Roadmap
Air Quality	(1) NOx (excluding N2O)	Tonne	RT-CH-120a.1	2,795	4,184	6,953	127	
	(2) SOx	Tonne	RT-CH-120a.1	108	151	180	127	
	(3) Volatile organic compounds (VOCs)*	Tonne	RT-CH-120a.1	198	167	133	127	
	(4) Hazardous air pollutants (HAPs)	Tonne	RT-CH-120a.1	153	105	72	127	
Energy Management	(1) Total energy consumed	TJ	RT-CH-130a.1	113,076	118,759	118,700	124	Total energy consumption within the organization
	(2) Percentage renewable	%	RT-CH-130a.1	Less than 0.01%	Less than 0.01%	Less than 0.01%	124	
	(3) Total self-generated energy	TJ	RT-CH-130a.1	12,787	10,982	9,336	124	
Water Management	(1) Total water withdrawal	1,000 Tonne	RT-CH-140a.1	43,745	42,692	43,920	125	
	(2) Total water consumed	1,000 Tonne	RT-CH-140a.1	32,251	30,168	31,118	125	
	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Cases	RT-CH-140a.2	-	-	2	143	
	Description of water management risks and discussion of strategies and practices to mitigate those risks	-	RT-CH-140a.3	In place	In place	In place	52	Water resource management
Hazardous Waste Management	Amount of hazardous waste generated	Tonne	RT-CH-150a.1	33,902	37,820	39,147	128	Designated waste discharge
Community Relations	Discussion of engagement processes to manage risks and opportunities associated with community interests	-	RT-CH-210a.1	In place	In place	In place	96~99	Community environment and ecosystem protection, expanding social safety net, co-existence with local community
Workforce Health and Safety	(a) (1) Total Recordable Incident Rate (TRIR) of direct employees	No. of cases per 200,000 working hours	RT-CH-320a.1	0.15	0.06	0.08	131	
	(b) (1) Total Recordable Incident Rate (TRIR) of contract employees	No. of cases per 200,000 working hours	RT-CH-320a.1	0.26	0.04	0.02	131	
	(a) (2) Fatality rate of direct employees	%	RT-CH-320a.2	0	0	0	131	
	(b) (2) Fatality rate of contract employees	%	RT-CH-320a.2	0	0	0	131	
Safety & Environmental Stewardship of Chemicals	(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	%	RT-CH-410b.1	18.8	9.9	10.1	130	
	(2) Percentage of such products that have undergone a hazard assessment	%	RT-CH-410b.1	64.6	33.0	32.4	130	
Management of the Legal & Regulatory Environment	Discussion of corporate positions related to government regulations or policy proposals that address environmental and social factors affecting the industry	-	RT-CH-530a.1	In place	In place	In place	105~107	Analyzed regulatory risks and opportunities
Process Safety, Emergency Preparedness & Response	Process Safety Incidents Count (PSIC)	Cases	RT-CH-540a.1	0	0	0	132	
	Process Safety Total Incident Rate (PSTIR)	No. of cases per 200,000 working hours	RT-CH-540a.1	0	0	0	132	
	No. of transport incidents	Cases	RT-CH-540a.2	0	0	0	132	





UN SDGs(SUSTAINABLE DEVELOPMENT GOALS) COMMITMENT

LOTTE Chemical promotes activities in connection to the ESG management direction and UN Sustainable Development Goals, and seeks to join in achieving the UN SDGs which are the common goals of mankind.

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UN SDGs	LOTTE Chemical's Key Activities	Page
 3 GOOD HEALTH AND WELL-BEING Ensure healthy lives and promote well-being for all at all ages	• Group accident insurance • Programs for work-life balance • Mental health care	77~79
 4 QUALITY EDUCATION Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	• Enhancing global competency education, talent nurturing program such as online education	72~75
 5 GENDER EQUALITY Achieve gender equality and empower all women and girls	• Customized programs for women and children • Stipulation of non-discrimination through enactment of Statement on Human Rights Management	78, 81
 6 CLEAN WATER AND SANITATION Ensure availability and sustainable management of water and sanitation for all	• Reuse of process water, cleaning water, and firefighting water, and the identification of the degree of pollution of reused water • Operation of own wastewater treatment plant (Daesan, Yeosu, Ulsan Plant)	52~53
 7 AFFORDABLE AND CLEAN ENERGY Ensure access to affordable, reliable, sustainable and modern energy for all	• Introduction of an energy management system • Use of renewable energy sources in business sites at home and abroad • Introduction of zero-emission vehicles • Launch of the hydrogen energy and battery material business group	35~36
 12 RESPONSIBLE CONSUMPTION AND PRODUCTION Ensure responsible consumption and production patterns	• Establishment and implementation of procurement policy for sustainable raw material • Compliance with responsible mineral regulations • Project LOOP social ventures • Obtainment of global sustainable materials certification, 'ISCC PLUS' • Life Cycle Assessments (LCA)	47~51, 89, 96
 13 CLIMATE ACTION Take urgent action to combat climate change and its impacts	• Establishment of goals and action plan for 2030 carbon reduction and 2050 Net-Zero • Activities to reduce GHG emissions	35~36, 44~45
 14 LIFE BELOW WATER Conserve and sustainably use the oceans, seas, and marine resources for sustainable development	• Biodiversity analysis using LEAP • Marine life protection campaigns near business site	56~60
 16 PEACE, JUSTICE AND STRONG INSTITUTIONS Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	• Implementation of ethical management • ISO 37001&37301 integrated certification and operation of the anti-corruption monitoring system • Employee training on compliance and risk removal activities	111~117





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MEMBERSHIP ASSOCIATIONS

Korea Fair Competition Federation	Hydrogen Convergence Alliance	Federation of Korean Industries	Korea Fine Chemical Industry Association
Korea Chemicals Management Association	Clean Ammonia Association	Korea Enterprises Federation	The Korean Institute of Chemical Engineers
The Climate Group	Korea Association for Intellectual Property	Korea Chemical Industry Association	The Polymer Society of Korea
Korea AEO Association	Korea Fire Safety Institute	Korea Business Council for Sustainable Development	Korea Japan Economic Association
Korea Hydrogen Industry Association	Korea Electric Engineers Association	Korea Chemical Industry Council	Korea International Trade Association
Europe Petrochemical Association	Korea Water Cluster Conference	Korea Chamber of Commerce and Industry	The National Academy of Engineering of Korea
Korea H2 Business Summit	The Korea Professional Engineer Association of Mould and Die	Korea Industrial Technology Association	Korea Battery Industry Association
Green Plastic Alliance	The Membrane Society of Korea	Korea Responsible Care Council	





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Verification Target

Korean Foundation for Quality (hereinafter 'KFQ') has conducted a verification of Greenhouse Gas Emissions (hereinafter 'GHG Inventory') of LOTTE Chemical Corporation (hereinafter 'Company') for 2024.

Verification Purpose

The purpose is to ensure the reliability of the company's GHG Report in relation to the operation of the Emissions Trading Scheme.

Verification Scope

KFQ's verification covered on all facilities and emission sources under the operational control and organizational boundary of Company during 2024.

Verification Criteria

The verification process was based on [Rule for emission reporting and certification of GHG emission trading Scheme*], [Rules for verification of operating the GHG emission trading scheme**] and [ISO14064-3] for every applicable part.

* Notification No. 2025-28 of Ministry of Environment

** Notification No. 2024-169 of Ministry of Environment

Level of Assurance

The verification has been planned and conducted as 'Rules for verification of operating the greenhouse gas emission trading scheme', and the level of assurance for verification shall be satisfied as reasonable level of assurance. And it was confirmed through an internal review whether the process before the verification was conducted effectively.

Verification Limitation

The verification shall contain the potential inherent limitation in the process of application of the verification criteria and methodology.

Verification Opinions

Regarding to the data of the Greenhouse Gas Emission Consumption from the report through the verification, KFQ provides our verification opinions as below;

- ① The Inventory Report has been stated in accordance with "Rule for emission reporting and certification of greenhouse gas emission trading Scheme" and "ISO 14064-1".
- ② The materiality assessment result of GHG emissions has satisfied the criteria for and organization that emits more than 5,000,000tCO₂-eq by meeting less than 2% of the total emission, as per "Rules for verification of operating the greenhouse gas emission trading scheme".
- ③ Thus, KFQ concludes that the Greenhouse Gas Emissions of Company in 2024 is correctly calculated and stated in accordance with "Rule for emission reporting and certification of greenhouse gas emission trading Scheme".

(Unit: tCO₂eq)

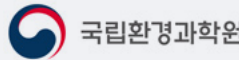


* The totals in this verification statement do not match the totals in emission trading scheme because the total emissions of each facility are calculated by truncating to integer units.

April 23rd, 2025

Ji Young Song

CEO Ji-Young Song
Korean Foundation for Quality





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To: The Stakeholders of LOTTE CHEMICAL CORPORATION

Overview

BSI (British Standards Institution) Group Korea (hereinafter referred to as the “Assurer”) was requested to verify the LOTTE CHEMICAL 2024 ESG REPORT (hereinafter referred to as the “Report”). The Assurer is independent of the LOTTE CHEMICAL CORPORATION and has no major operational financial interest other than the assurance. This assurance opinion statement is intended to provide information related to the assurance of the LOTTE CHEMICAL CORPORATION report relating to the environment, social and governance (ESG) to the relevant stakeholders and may not be used for any purpose other than the purpose of publication. This assurance opinion statement was prepared based on the information presented by the LOTTE CHEMICAL CORPORATION and the assurance was carried out under the assumption that presented the information and data were complete and accurate.

LOTTE CHEMICAL CORPORATION is responsible for managing the relevant information contained within the scope of assurance, operating the relevant internal control procedures, and for all information and claims contained in the report. Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to LOTTE CHEMICAL CORPORATION only.

The Assurer is responsible for providing LOTTE CHEMICAL CORPORATION management with an independent assurance opinion containing professional opinions derived by applying the assurance methodology to the scope specified, and to provide the information to all stakeholders of LOTTE CHEMICAL CORPORATION. The Assurer shall not bear any other responsibility, including legal responsibility, to any third party other than LOTTE CHEMICAL CORPORATION in providing the assurance opinion and shall not be liable to any other purpose, purpose or stakeholders related thereto for which the assurance opinion may be used.

Scope

The scope of engagement agreed upon with LOTTE CHEMICAL CORPORATION includes the following:

- Reporting contents during the period from January 1st to December 31st 2024 included in the report, some data included the first half of 2025.
- Major assertion included in the Report, such as sustainability management policies and strategies, goals, projects, and performance, and the Report contents related to material issues determined as a result of materiality assessment.
- Appropriateness and consistency of processes and systems for data collection, analysis and review.
- In Accordance with the four principles of AA1000 AccountAbility in the report, based on the type of Sustainability Assurance based on AA1000AS v3 and if applicable, the reliability of the sustainability performance information contained in the report.

The following contents were not included in the scope of assurance.

- Financial information in Appendix.
- Index items related to other international standards and initiatives other than the GRI.
- Other related additional information such as the website, business annual report.

Assurance Level and Type

The assurance levels and types are as follows;

- Moderate level based on AA1000 AS and Type 2 (confirmation to the four principles as described in the AA1000 Accountability Principle 2018 and quality and reliability of specific performance information published in the report.)

Description and sources of disclosures covered

Based on the scope and methodology of assurance applied, the assurer reviewed the following Disclosures based on the sampling of information and data provided by LOTTE CHEMICAL CORPORATION.

[Universal Standards]

2-1 to 2-5 (The organization and its reporting practices), 2-6 to 2-8 (Activities and workers), 2-9 to 2-21 (Governance), 2-22 to 2-28 (Strategy, policies and practices), 2-29 to 2-30 (Stakeholder engagement), 3-1 to 3-3 (Material Topics Disclosures)

[Topic Standards]

201-1~4, 203-1, 204-1, 205-1~3, 206-1, 301-2, 302-1~4, 302-5, 303-1~5, 304-1~2, 304-4, 305-1~7, 306-1~5, 308-2, 401-1~3, 403-1~10, 404-1~3, 405-1~2, 406-1, 407-1, 408-1, 409-1, 411-1, 414-2, 415-1, 416-1, 418-1



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Methodology

As a part of its independent assurance, the Assurer has used the methodology developed for relevant evidence collection in order to comply with the verification criteria and to reduce errors in reporting. The Assurer has performed the following activities;

- A top-level review of issues raised by external parties that could be relevant to organizations policies to provide a check on the appropriateness of statements made in the report.
- Discussion with managers and staffs on organization’s approach to stakeholder engagement.
- Review of the supporting evidence related to the material issues through interviews with senior managers in the responsible departments.
- Review of the system for sustainability management strategy process and implementation
- Review of materiality issue analysis process and prioritization by reviewing materiality issue analysis process and verifying the results
- Verification of data generation, collection and reporting for each performance index and document review of relevant systems, policies, and procedures where available
- An assessment of the company's reporting and management processes concerning this reporting against the principles of Inclusivity, Materiality, Responsiveness and Impact as described in the AA1000 AccountAbility Principles Standard (2018).
- Visit of the LOTTE CHEMICAL CORPORATION Seoul Headquarters to confirm the data collection processes, record management practices.

Limitations and approach used to mitigate limitations

The Assurer performed limited verification for a limited period based on the data provided by the reporting organization. It implies that no significant errors were found during the verification process, and that there are limitations related to the inevitable risks that may exist. The Assurer does not provide

assurance for possible future impacts that cannot be predicted or verified during the verification process and any additional aspects related thereto.

Competency and Independence

BSI (British Standards Institution) is a leading global standards and assessment body founded in 1901. BSI is an independent professional institution that specializes in quality, health, safety, social and environmental management with almost 120 years history in providing independent assurance services globally. No member of the assurance team has a business relationship with LOTTE CHEMICAL CORPORATION. The Assurer has conducted this verification independently, and there has been no conflict of interest. All assurers who participated in the assurance have qualifications as an AA1000AS assurer, have a lot of assurance experience, and have in-depth understanding of the BSI Group's assurance standard methodology.

Opinion Statement

The assurer was carried out by a team of sustainability report assurers in accordance with the AA1000 Assurance Standard v3. Assurer planned and performed this part of our work to obtain the necessary information and explanations assurer considered to provide sufficient evidence that LOTTE CHEMICAL CORPORATION’s description of their approach to AA1000 Assurance Standard and their self-declaration of compliance with the GRI standards were fairly stated.

On the basis of our methodology and the activities described above, it is our opinion that the information and data included in the Report are accurate and reliable and the Assurer cannot point out any substantial aspects of material with mistake or misstatement. We believe that the economic, social and environmental performance indicators are accurate and are supported by robust internal control processes.

Conclusions

The Report is prepared in accordance with the GRI Standards. (Reporting in accordance with the GRI standards). The detailed reviews against the AA1000 AccountAbility Principles of Inclusivity, Materiality, Responsiveness and Impact and the GRI Standards are set out below.

Inclusivity: Stakeholder Engagement and Opinion

LOTTE CHEMICAL CORPORATION defined customers, employees, government/related organizations, shareholders/ investors, partner companies, and local community as a Key Stakeholder Groups (Core, Strategy and Environmental). In order to collect opinions by each stakeholder group in the context of sustainability, operated the stakeholder engagement process. LOTTE CHEMICAL CORPORATION conducted a review of the stakeholder engagement process to reflect the major issues derived through the stakeholder engagement process in sustainability strategy and goals. LOTTE CHEMICAL CORPORATION disclosed the results related to the process in the Report.

Materiality: Identification and reporting of material sustainability topics

LOTTE CHEMICAL CORPORATION implemented its own materiality assessment process in consideration of the major business and operational characteristics to derive important reporting issues related to sustainability. In the materiality evaluation, LOTTE CHEMICAL CORPORATION conducted the analysis of global sustainability reporting or assessment standards, and conducted the IRO (Impact, Risk, Opportunity) analysis to derive the impact and financial materiality. LOTTE CHEMICAL CORPORATION derived 6 material issues through the relevant process, and disclosed GRI topic standards disclosures related to material issues in the Report.



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Responsiveness: Responding to material sustainability topics and related impacts

LOTTE CHEMICAL CORPORATION operated a management process for material issues in the context of sustainability derived from the materiality assessment. LOTTE CHEMICAL CORPORATION established mid- to long-term sustainability plans and goals in according to the management methodology established to effectively reflect the expectations of key stakeholders. LOTTE CHEMICAL CORPORATION disclosed the process including policy, indicator, activity and response performance on material issues in the Report.

Impact: Impact of an organization's activities and material sustainability topics on the organization and stakeholders

LOTTE CHEMICAL CORPORATION identified the scope and extent of the impacts to the organization and key stakeholders in the context of the sustainability of the reported material issues. LOTTE CHEMICAL CORPORATION established sustainability strategies and objectives based on the analysis results of major impacts, including risks and opportunities for material issues at the governance level, disclosed mid- to long-term plans and strategic system in the Report.

Findings and conclusions concerning the reliability and quality of specified performance information

Among the GRI Topic Standards, the following disclosure were carried out in a assurance Type 2 based on the information and data provided by the reporting organization. In order to verify the reliability and accuracy of the data and information, internal control procedures related to data processing, processing, and management were verified through interviews with the responsible department, and accuracy was verified through sampling. Errors and intentional distortions in sustainability performance information included in the report were not found through assurance processes. The reporting organization manages the sustainability performance information through reliable internal control procedures and can track the process of deriving the source of the performance. Errors and unclear expressions found during the assurance process were corrected during the assurance process and prior to the publication of the report, and the assurer confirmed the final published report with the errors and expressions corrected.

- GRI Topic standards: 201-2, 203-1, 204-1, 205-1~3, 206-1, 301-2, 302-1~5, 303-1~5, 304-1~2, 304-4, 305-1~7, 306-1~5, 308-2, 401-1~3, 403-1~10, 404-1~3, 405-1~2, 406-1, 414-1~2

Recommendations and Opportunity for improvement

The assurer will provide the following comments to the extent that they do not affect the result of assurance;

Considering business characteristics and industrial sector characteristics,

- It may be helpful to lead the sustainability management system by specifying a sustainability strategy direction based on the specificity of the front industry of the sustainability value chain.
- It may be helpful to lead the sustainability management system by advancing the system for calculating sustainability goals and performance indicators, taking into account the characteristics of each business sector, such as materials and new businesses.

GRI-reporting

LOTTE CHEMICAL CORPORATION provided us with their self declaration of compliance within GRI Standards. Based on our review, we confirm that social responsibility and sustainable development indicators with reference to the GRI Index. The Assurer confirmed that the Report was prepared in accordance with the GRI Standards and the disclosures related to the Universal Standards and Topic Standards Indicators based on the data provided by LOTTE CHEMICAL CORPORATION. The sector standard was not applied.

Issue Date: 25/06/2025

For and on behalf of BSI (British Standards Institution):

BSI representative

Jungwoo Lee,
Lead Assurer, ACSAP

Seonghwan Lim,
Managing Director of BSI Korea

BSI Group Korea Limited: 29, Insa-dong 5-gil, Jongno-gu, Seoul, South Korea
Hold Statement Number: SRA 791253



