

# LOTTE ENERGY MATERIALS SUSTAINABILITY REPORT

2023

# ABOUT THIS REPORT

## Overview

In June 2024, LOTTE ENERGY MATERIALS released its first sustainability report in an effort to transparently showcase its sustainable management endeavors and significant achievements and to engage stakeholders with comprehensive information. This report illustrates both the environmental, social, and governance (ESG) management strategies and the financial performance of LOTTE ENERGY MATERIALS. LOTTE ENERGY MATERIALS remains committed to incorporating stakeholder feedback from sustainability reports into our management practices.

## Reporting Period and Scope

The reporting period is from January 1, 2023, to December 31, 2023, and includes some information from 2022 and the first half of 2024 that may affect stakeholders. This report encompasses three years of quantitative performance data to facilitate trend analysis. The scope of this report includes the ESG performance of LOTTE ENERGY MATERIALS' domestic business sites, and some non-financial data also encompasses the performance of overseas subsidiaries. Footnotes are used to provide clarity and detail concerning the scope and boundaries of the report as needed.



### Interactive PDF

This report has been published in both Korean and English to facilitate communication with global stakeholders and is produced in an Interactive PDF format.

### Navigator Button

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Link

## Reporting Principles and Standards

This report adheres to the 2021 compliance requirements of the Global Reporting Initiative (GRI) Standards, incorporating key disclosure indicators from the Sustainability Accounting Standards Board (SASB) while accounting for industry-specific characteristics and the United Nations Sustainable Development Goals (UN SDGs). Financial performance is presented on a consolidated basis, following the Korean International Financial Reporting Standards (K-IFRS).

## Report Assurance

To ensure the integrity and fairness of both financial and non-financial data presented herein, third-party assurance has been conducted by the independent professional organization, Korea Management Registrar (KMR). The results of this assurance are detailed in the assurance statement on page 66 of the report. KMR maintains no conflicts of interest, thereby preserving the independence and impartiality of the verification services rendered to LOTTE ENERGY MATERIALS.

## Publication

|                  |  |
|------------------|--|
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# ① INTRODUCTION

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# CEO MESSAGE

Dear esteemed stakeholders. Greetings, I am Yeon-seop Kim CEO of LOTTE ENERGY MATERIALS.

The year 2023 presented numerous challenges for all businesses, with global conflicts, accelerated trade barriers, and persistent inflation. Despite these adversities, we achieved relatively favorable outcomes, thanks to the unwavering support and encouragement from all our stakeholders. These accomplishments were made possible by your continuous trust and support, for which I extend my deepest gratitude on behalf of our employees.

Today, the electric vehicle (EV) market and most industries are grappling with international instability and the impacts of protectionism, leading to heightened demands for sustainable corporate activities from stakeholders. In particular, the EU's Critical Raw Materials Act, Carbon Border Adjustment Mechanism, and the United States' Inflation Reduction Act have established sustainable management, including carbon neutrality, as an essential rather than an optional endeavor.

Since becoming a part of the LOTTE Group in 2023, LOTTE ENERGY MATERIALS has been striving to enhance global competitiveness by promoting activities designed to achieve sustainable management, such as establishing a responsible supply chain, declaring carbon neutrality, and transitioning to eco-friendly energy sources. As a core growth driver of the LOTTE Group and to reciprocate the support of all our stakeholders, we are gaining momentum for our sustainable management activities with a focus on the following key fields:

**First, we will institute a series of proactive measures across our operational spectrum in our concerted effort to mitigate the impact of climate change.** As we augment our presence on the international stage, we strategically prioritize the integration of renewable energy sources at the forefront of our production processes. The standards for site selection are primarily predicated upon the availability of sustainable energy resources. To this end, we have inaugurated facilities in Malaysia, taking advantage of the prevalent hydroelectric power, and we plan to establish additional operations in Spain, which is renowned for its substantial solar energy infrastructure. These eco-friendly conditions guarantee the production of sustainable products. Moreover, our Iksan plant is at the vanguard of accelerating the adoption of renewable energies and next-generation technologies, thus spearheading our response to climate change.

**Second, we are committed to the enhancement of our business portfolio to substantially increase our brand valuation.** Extending beyond our foundational activity of Elecfoil production, we are diversifying into the secondary battery market by commencing mass production of cutting-edge lithium iron phosphate (LFP, LiFePO<sub>4</sub>) cathode active materials. We remain committed to spearheading the development and investment in solid electrolytes, thereby positioning ourselves as a leader in the emergent market of next-generation solid-state batteries.

**Third, we will endeavor to fortify our collaboration and support within local communities to cultivate mutual prosperity.** Advancing past the conventional scope of donations, we are dedicated to the establishment and broadening of stable employment frameworks for community members, which will invariably contribute to the development of local communities. We will engage with local inhabitants proximate to our international hubs and tailor our support to accurately reflect their actual demand.

**Fourth, we will develop a management strategy that is oriented towards human capital to forge an organization conducive to the satisfaction of our members.** By enhancing communication with existing employees, we are determined to implement supportive policies that engender a profound sense of belonging and contentment within their professional spheres. For our new employees, we will amplify the distinct talent development programs of the LOTTE Group to maintain our competitive advantage in the global arena. Our corporate policies will be geared towards promoting activities designed to enhance the capabilities of our members and foster greater diversity.

Dear valued stakeholders, LOTTE ENERGY MATERIALS remains unwavering in our commitment to engage with our stakeholders and transform into an enterprise that embodies sustainable and eco-friendly principles while making significant contributions to humanity. We kindly ask for your unwavering support and warm encouragement as we shape a new future.

As a leader in the field of secondary battery materials, central to the eco-friendly industry for the future, LOTTE ENERGY MATERIALS is committed to unique environmental activities by leveraging recycled copper and renewable energy sources from the production stage. We will continue to achieve sustainable business operations through management practices that exceed global standards, ultimately contributing to the enrichment of humanity.



In June, 2024  
**Yeon-seop Kim**  
 CEO of LOTTE ENERGY MATERIALS



# ABOUT LOTTE ENERGY MATERIALS COMPANY OVERVIEW

## Company Overview

In March 2023, LOTTE ENERGY MATERIALS joined the ranks of the LOTTE Group. Since its inception in 1987, we have distinguished ourselves by our proprietary hybrid Elecfoil technology, which uniquely combines ultra-thin dimensions with high strength and elongation properties. This innovation has earned us widespread acclaim and recognition from leading global battery manufacturers for our superior technical expertise.

Beyond our specialization in Elecfoil, we are enhancing our research and development capabilities to augment the future value of our products. Our focus is directed toward the creation of next-generation battery materials (solid electrolytes, cathode active materials, and silicon anode active materials) that are increasingly in demand within the secondary battery market.

LOTTE ENERGY MATERIALS maintains robust global operations with strategic footholds in Malaysia, Europe, and North America. Through these bases, we have consistently achieved annual growth, and we are committed to increasing the proportion of recycled materials.

In our quest to establish ourselves as a green materials company, we are dedicated to implementing eco-friendly management practices that leverage renewable energy sources, in strict alignment with the rigorous demands of both the international community and the global marketplace.

as of Dec. 2023

|              |   |                           |   |
|--------------|---|---------------------------|---|
| Company Name | LOTTE ENERGY MATERIALS Corporation          | No. of Employees          | 564   |
| Established  | August 11, 1987                             | Sales (in KRW)            | 809 billion   |
| CEO          | Yeon-seop Kim                               | Operating Profit (in KRW) | 11.8 billion  |
| Headquarters | 63-25 Seogam-ro 3-gil, Iksan-si, Jeonbuk-do | Business Areas            | Elecfoil (battery foil, circuit foil), construction |

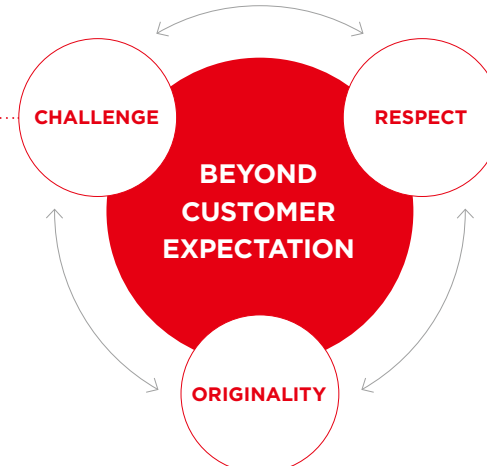
## 주요 제품 생산량

Unit: Ton

| Business Division     | Products               | Sites  | 2021   | 2022   | 2023   |
|-----------------------|------------------------|--|--------|--------|--------|
| Materials Division    | Elecfoil               | Iksan Plant 1&2<br>Malaysian Plant                 | 31,978 | 35,001 | 37,886 |
|                       | Total                  |  |        |        |        |
| Construction Division | Unit doors and windows | Gyeonggi-do Icheon Plant<br>Chungnam Dangjin Plant | 3,833  | 1,787  | 3,709  |
|                       | Total                  |  |        |        |        |

## Core Values

We achieve higher objectives by focusing on the essence of our work and embracing constant challenges.



By valuing different viewpoints, we communicate and uphold principles to build a trust-based community.

We adapt rapidly to change and foster uniqueness that cannot be easily imitated through innovative collaboration and boundary-breaking efforts.

## Growth Strategy

|  |  |   |  |
|--|--|---|--|
| <p><b>High-End "Super-Gap" Technology</b></p> <p>We possess hybrid products that simultaneously satisfy ultra-thin, high-strength, and high-elongation properties.</p> | <p><b>Global Expansion Strategy</b></p> <p>We continue to expand our global presence in Malaysia, Europe, and North America to increase capacity and practice eco-friendly management.</p> | <p><b>Synergy with LOTTE Group's Chemical Division</b></p> <p>We provide total solutions through joint R&amp;D and marketing collaborations within the chemical division.</p> | <p><b>Development of Next-Generation Battery Materials</b></p> <p>We develop sulfide-based solid electrolytes, highly mass-productive LFP cathode active materials, and third-generation silicon composite anode active materials.</p> |
|--|--|---|--|

# ABOUT LOTTE ENERGY MATERIALS HISTORY

| 1987-1999  | 2000-2009  | 2010-2019   | 2020-Current  |
|--|--|---|---|
| <p><b>1987</b></p> <ul style="list-style-type: none"> <li>Founded as Duksan Metal Corporation (now LOTTE ENERGY MATERIALS)</li> </ul> <p><b>1989</b></p> <ul style="list-style-type: none"> <li>Constructed the first plant in Iksan, Jeonbuk-do, and began to produce the first Elecfoil<sup>1)</sup> in Korea</li> </ul> <p><b>1992</b></p> <ul style="list-style-type: none"> <li>Established an Elecfoil development research institute</li> </ul> <p><b>1999</b></p> <ul style="list-style-type: none"> <li>Selected as one of Korea's top 100 technologies of the 20th century (Ministry of Science and Technology)</li> </ul> | <p><b>2001</b></p> <ul style="list-style-type: none"> <li>Developed the I2B Elecfoil, a universal copper foil for secondary batteries, for the first time in Korea</li> </ul> <p><b>2002</b></p> <ul style="list-style-type: none"> <li>Certified as a World-Class Product of Korea for Elecfoil (Ministry of Knowledge Economy)</li> </ul> <p><b>2004</b></p> <ul style="list-style-type: none"> <li>Developed IBT Elecfoil, a copper foil for Plasma Display Panels (PDP)</li> </ul> <p><b>2005</b></p> <ul style="list-style-type: none"> <li>Developed Elecfoil for FPCBs</li> </ul> <p><b>2006</b></p> <ul style="list-style-type: none"> <li>Developed IUT Elecfoil, for semiconductor packaging, for the first time in Korea</li> </ul> <p><b>2007</b></p> <ul style="list-style-type: none"> <li>Developed Elecfoil for CTP</li> </ul> <p><b>2009</b></p> <ul style="list-style-type: none"> <li>Developed high-end I2K Elecfoil, high-capacity, and high-power copper foil for secondary batteries for the first time in Korea</li> </ul> | <p><b>2011</b></p> <ul style="list-style-type: none"> <li>Listed on KOSPI</li> </ul> <p><b>2013</b></p> <ul style="list-style-type: none"> <li>Developed high-end I2S Elecfoil, ultra-thin, high-strength, and high-elongation hybrid product copper foil for secondary batteries, for the first time in the world</li> <li>Developed high-end ISS-T7 Elecfoil, high-strength copper foil for secondary batteries for the first time in the world</li> <li>Constructed the second plant in Iksan, Jeonbuk-do</li> <li>Obtained ISO 9001 (quality management system) certification</li> <li>Obtained IATF 16949 (automotive quality management system) certification</li> </ul> <p><b>2015</b></p> <ul style="list-style-type: none"> <li>Developed high-end I2S Elecfoil (4 μm/5 μm), ultra-thin, high-strength, and high-elongation copper foil for secondary batteries, for the first time in the world</li> </ul> <p><b>2018</b></p> <ul style="list-style-type: none"> <li>Obtained ISO 14001 (environmental management system) certification</li> </ul> <p><b>2019</b></p> <ul style="list-style-type: none"> <li>Developed high-end I2H Elecfoil, high-elongation copper foil for secondary batteries</li> <li>Developed high-end ISS-T9 Elecfoil, ultra-high-strength copper foil for secondary batteries, for the first time in the world</li> <li>Developed low-profile ISP Elecfoil for 5G signal transmission</li> <li>Developed ICR Elecfoil for FCCLs</li> <li>Constructed the first plant of the Malaysian production subsidiary</li> </ul> | <p><b>2020</b></p> <ul style="list-style-type: none"> <li>Constructed the second plant of the Malaysian production subsidiary</li> </ul> <p><b>2022</b></p> <ul style="list-style-type: none"> <li>Developed low-profile, ultra-thin UTS Elecfoil for packaging</li> <li>Constructed the third and fourth plants of the Malaysian production subsidiary</li> </ul> <p><b>2023</b></p> <ul style="list-style-type: none"> <li>Officially launched LOTTE ENERGY MATERIALS</li> </ul> <p><b>2024</b></p> <ul style="list-style-type: none"> <li>Commenced the construction of a new production subsidiary in Spain</li> <li>Completed the fifth and sixth plants of the Malaysian production subsidiary</li> </ul> |

1) Elecfoil(Electrodeposited Copper Foil) : Thin copper foil produced by electrolyzing a copper sulfate solution

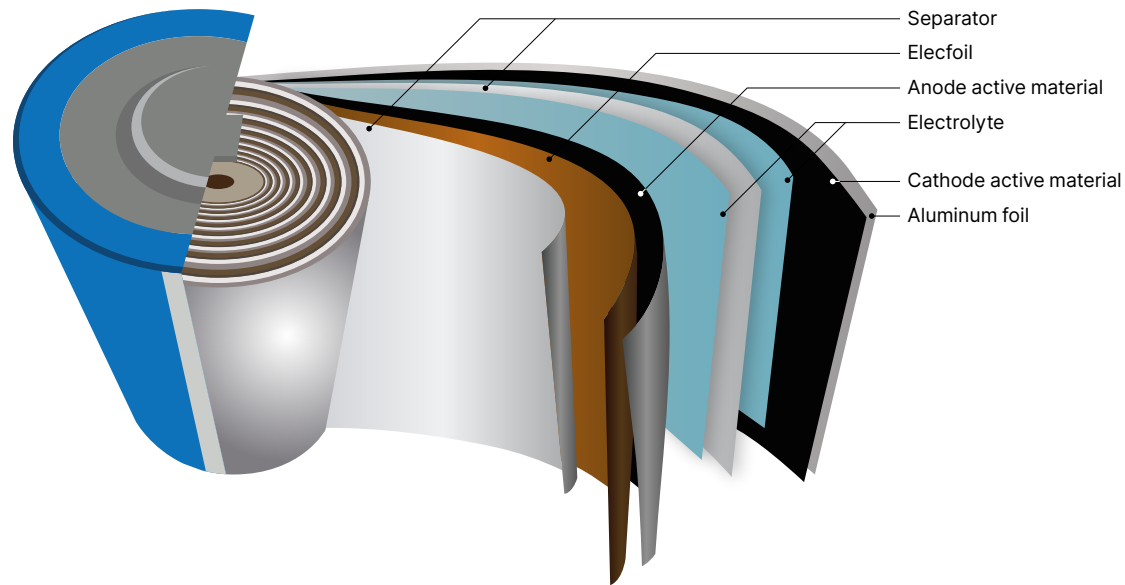
# ABOUT LOTTE ENERGY MATERIALS OUR BUSINESSES

## Elecfoil

### High-End Elecfoil for Secondary Battery

Copper foil for batteries is a key component used as the anode current collector in lithium-ion batteries for electric vehicles. LOTTE ENERGY MATERIALS develops and mass-produces high-end battery foils with high-strength and high-elongation properties. These foils are designed to improve the driving range, charging safety, and energy density of electric vehicles. This unique hybrid copper foil meets ultra-thin, high-strength, and high-elongation standards, backed by patents.

Elecfoil for Secondary Battery foils, ranging from 4-8 $\mu$ m, enable the fixation of active material and electron movement. LOTTE ENERGY MATERIALS produces these foils for BEV<sup>1)</sup>, PHEV<sup>2)</sup>, HEV<sup>3)</sup>, and Energy Storage Systems (ESS), including models like I2S, ISS, ISS T-6, I2H, and I2B.



1) Battery Electric Vehicle  
 2) Plug-in Hybrid Electric Vehicle  
 3) Hybrid Electric Vehicle

### Elecfoil for PCB

Elecfoil for PCB is a thin copper foil used in Printed Circuit Boards (PCB). It is produced by depositing copper from a copper sulfate (CuSO<sub>4</sub>) electrolyte solution, refined through advanced processes to meet customer requirements, and used in electronics like TVs, computers, and smartphones. LOTTE ENERGY MATERIALS leads the market with high-performance special circuit foil, developed and commercialized early.

LOTTE ENERGY MATERIALS offers products for PCB and PKG applications, including ICS, and high-end ultra-thin foils like IUT, UTL, UTS, UTZ, and UTFS. Network products include RTF and HVLP grades, suitable for high-speed signal transmission in 4G/5G antennas, server, and car radar systems.

### Establishment of a lineup for each PCB application Meeting customer requirements

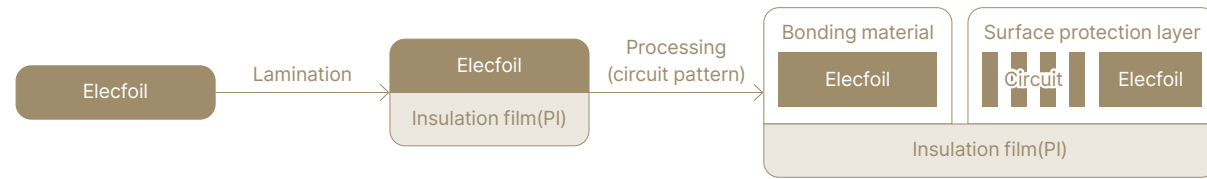
|  |  |  |
|--|--|--|
| <p><b>Ultra-thin</b></p> <p><b>1<math>\mu</math>m</b></p> <p>Production of ultra-thin packaging foil of 1-3<math>\mu</math>m</p> | <p><b>Circuit Foil</b></p> <p><b>7<math>\mu</math>m</b></p> <p>Production of the thinnest circuit foil of 7<math>\mu</math>m</p> | <p><b>Ultra-low-profile</b></p> <p><b>0.5<math>\mu</math>m</b></p> <p>Production of ultra-low-profile foil of 0.5<math>\mu</math>m for high-speed signal transmission<br/>                 Minimization of skin effect to reduce transmission loss</p> |
|--|--|--|



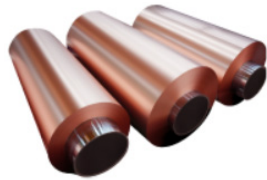
# ABOUT LOTTE ENERGY MATERIALS OUR BUSINESSES

## Application Flexible Copper Clad Laminate (FCCL)

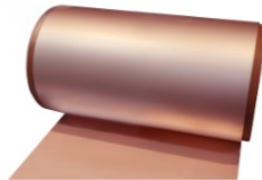
FCCL is a material composed of Elecfoil and insulating film laminated together to form flexible printed circuit boards (FPCB). The circuit boards of smartphones must use FPCBs due to the need for flexibility in component placement. FCCL, as a key material for FPCB, influences heat generation and signal interference within smartphones depending on the material and performance. LOTTE ENERGY MATERIALS supplies high-performance FCCL to global smartphone manufacturers, recognized for its technological capabilities.



Copper Foil



FCCL



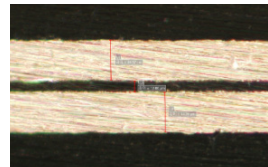
FPC



### Features

- Uniform thickness stability
- Excellent flexuosity
- Stable supply chain
- Excellent heat resistance
- Low dielectric performance

### Single-Sided



— Elecfoil (42 $\mu$ m)  
— Insulating Film (12 $\mu$ m)  
— Elecfoil (42 $\mu$ m)

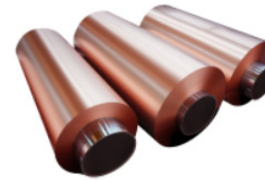
Product: IMIR-FB-4201242

## Cu Tape (Copper Adhesive Tape)

Cu Tape is an essential material for small to medium-sized devices requiring miniaturization and lightweight (such as smartphones, tablets, automobiles, and TVs). It effectively transfers and dissipates heat from high-performance components like central processing units and motherboards, reducing malfunctions by shielding and mitigating electromagnetic interference.



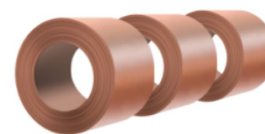
Copper Foil



Mobile, Tablet, Display, etc.



### Cu Tape



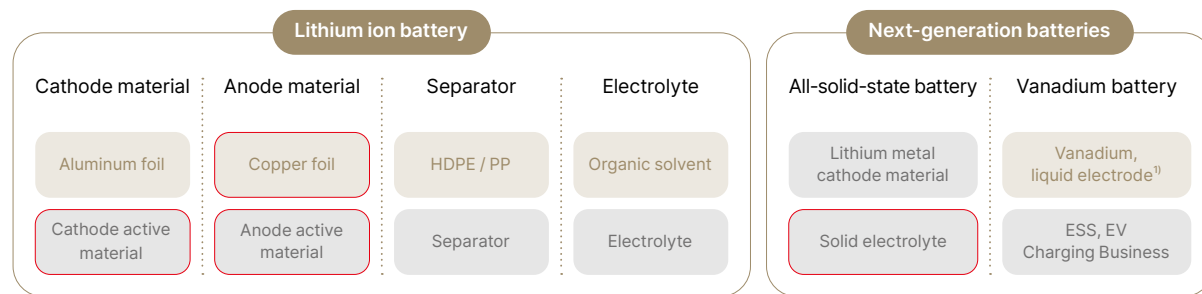
# ABOUT LOTTE ENERGY MATERIALS OUR BUSINESSES

## R&D

### Advancing next-generation materials development projects

LOTTE ENERGY MATERIALS is accelerating the development of next-generation battery materials to create new growth opportunities while leading the market with top-tier technology. We focus on developing sulfide-based solid electrolytes, silicon composite anode materials, and high-yield LFP cathode materials. Our efforts aim to ensure continuous growth as a leading battery materials company.

#### Business Areas of the LOTTE Group Chemical Division



**2030 Goal : Sales of 7 trillion won** (Accumulated investment in total : 7 trillion KRW)

1) As an essential element for a high-stability vanadium batteries designed for ESS, it acts as a cathode material, anode material, and electrolyte simultaneously

■ Current businesses ■ Expansion areas under review  
— Main businesses of LOTTE ENERGY MATERIALS

LOTTE ENERGY MATERIALS is undertaking the following advanced materials development projects

|  |   |
|--|---|
| <b>Sulfide-Based Solid Electrolytes</b>                    | We are developing sulfide-based solid electrolytes, with the goal of building a pilot production line in 2024 and commencing mass production by 2027.   |
| <b>Silicon Composite Anode Active Materials</b>            | We are developing silicon-carbon (Si-C) anode materials focused on cost competitiveness. We plan to begin mass production between 2026 and 2027, facilitated by equity investments in Enwires. This will enable us to expand into the silicon-based next-generation anode materials market. |
| <b>Highly Mass-Productive LFP Cathode Active Materials</b> | In collaboration with the Korea Automotive Technology Institute, we are developing high-density next-generation LFP cathode active materials, with mass production targeted for the second half of 2025.  |

#### Sulfide-Based Solid Electrolytes

High ion-conductive and moisture-stable nanometer-scale solid electrolytes for -solid-state batteries

**Progress**

- Invested in U.S. solid-state battery company Factorial (2021)
- Selected as the leading R&D institute for government-funded projects (2021)
  - Pilot production line setup in 2024
  - Targeting mass production by 2027

#### Silicon Composite Anode Active Materials

High-performance Si-C type silicon anode products with cost competitiveness

**Progress**

- Invested in French next-generation anode materials company Enwires (2023)
  - Developing high-performance, cost-effective Si-C anode materials
  - Targeting mass production by 2027

#### Highly Mass-Productive LFP Cathode Active Materials

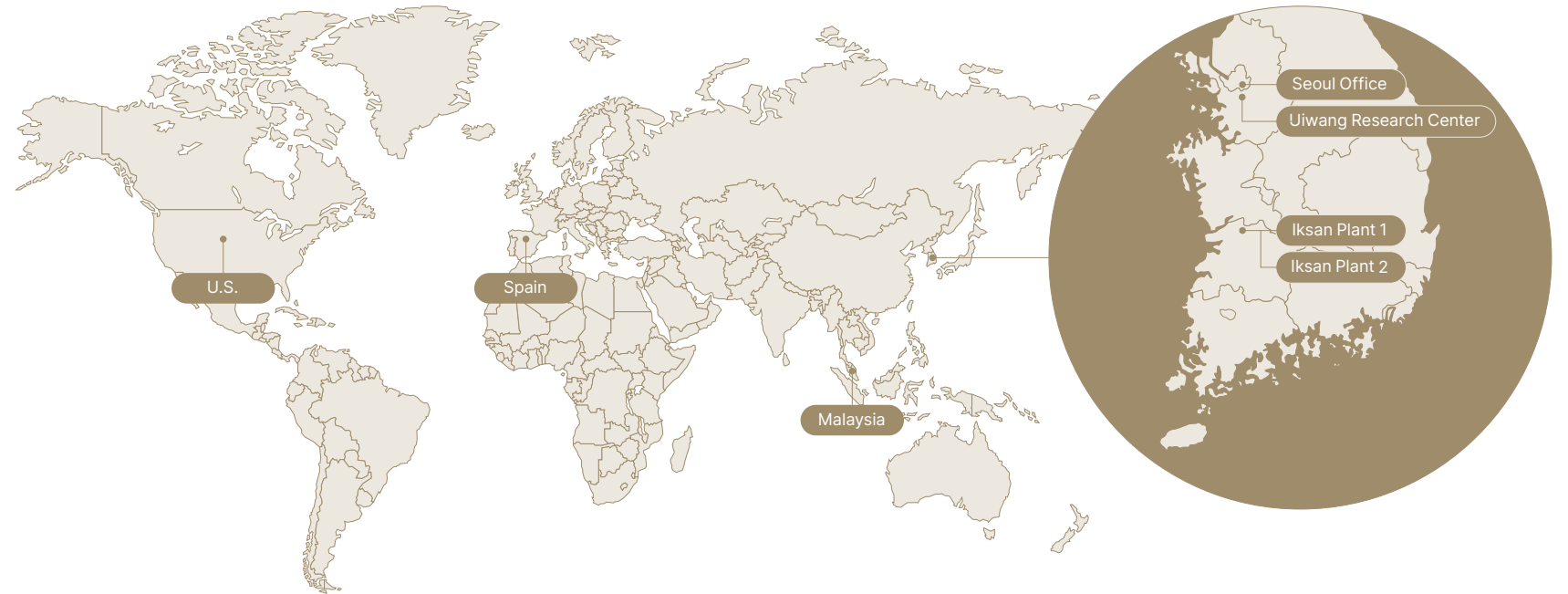
High-voltage products with higher energy density and production efficiency compared to conventional LFP-based materials

**Progress**

- Joint development with the Korea Automotive Technology Institute (2023)
  - Developing high-energy density and high-production efficiency products
  - Semi-mass production line setup for LFP in 2024
  - Targeting mass production by 2025

# ABOUT LOTTE ENERGY MATERIALS BUSINESS SITES

LOTTE ENERGY MATERIALS actively broadens its operational scope beyond the confines of Korea to engage the international market. In particular, we drive growth through high-end Elecfoil manufacturing. Our business site in Malaysia marks our leadership within the Asian sector, and we are currently constructing a new plant in Spain to extend our reach into the European market. Furthermore, we are considering the establishment of a plant in the U.S. to cater to the demands of global battery customers, thereby affirming our position as a premier global leader in battery materials.



|                               |   |   |
|-------------------------------|---|---|
| <b>Seoul Office</b>           | <b>Our Seoul office</b> , located in Seocho-gu, is at the forefront of the copper foil industry, distinguished by its superior technological prowess. Our strategic objectives encompass the expansion of new business ventures, the augmentation of both domestic and international product sales, and the provision of management support to rise as a global leader in high-end Elecfoil.  | 17F, 396 Seocho-daero, Seocho-gu, Seoul                 |
| <b>Uiwang Research Center</b> | <b>Our Uiwang Research Center</b> is dedicated to advancing our product competitiveness and acquiring pivotal technologies. The center is spearheading the development of new business areas, including sulfide-based solid electrolytes, highly mass-productive LFP cathode active materials, and third-generation silicon composite anode active materials, all of which represent the vanguard of next-generation battery materials and industries poised for future growth. | 4F, 50 Obongsandan 3-ro, Uiwang-si, Gyeonggi-do         |
| <b>Iksan Plant 1</b>          | <b>Iksan Plant 1</b> is a critical nexus within the advanced materials industry, credited with achieving the first domestic production of Elecfoil. This facility functions as the mother plant, pivotal in the development of high-end Elecfoil, innovative products, and process technologies.  | 63-25 Seogam-ro 3-gil, Iksan-si, Jeonbuk-do             |
| <b>Iksan Plant 2</b>          | <b>Iksan Plant 2</b> is dedicated to the production of high-value application products, including FCCLs for telecommunications circuit boards and tapes for display units. Furthermore, the plant is gearing up for the mass production of cutting-edge products by establishing pilot lines for sulfide-based solid electrolytes and highly mass-productive LFP cathode active materials, in alignment with the shifting paradigms of mobility.                                | 11 Sandangupyong-gil, Samgi-myeon, Iksan-si, Jeonbuk-do |

|   |   |  |
|---|---|--|
| <b>Malaysian Plant</b>  | <b>The Malaysia Smart Factory</b> , celebrated for its exemplary infrastructure, represents the first triumphant overseas venture in the domestic Elecfoil industry. Powered by eco-friendly hydroelectric energy, this facility delivers high-quality products to global customers, bolstered by superior cost competitiveness.  | Sama Jaya FIZ MTLD, Block 12, 93450 Kuching, Sarawak, Malaysia |
| <b>Spain Plant (Scheduled for completion by 2027)</b>                         | <b>The forthcoming Spain Smart Factory</b> , positioned in a region noted for its mild climate and minimal annual temperature variations, is ideally suited for Elecfoil production and quality control. With a stable power supply derived from wind and solar renewable energy, the facility is poised to provide high-end products to major European customers through its distinct product technology.  | 43892 Mont-roig del Camp, Tarragona, Spain                     |
| <b>U.S. Plant (Subsidiary established; final site selection under review)</b> | The U.S., a significant market for eco-friendly vehicles, is identified as a strategic locale for meeting customer demands. By adeptly responding to external factors such as the Inflation Reduction Act, this plant will endeavor to supply superior quality products to prominent battery manufacturers and global automobile original equipment manufacturers (OEM) throughout North America, thereby securing a leadership position in the high-end Elecfoil market. | (Undecided)  |



# ② SUSTAINABILITY STRATEGY

ESG Strategy and Governance System

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Double Materiality Assessment

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ESG Story

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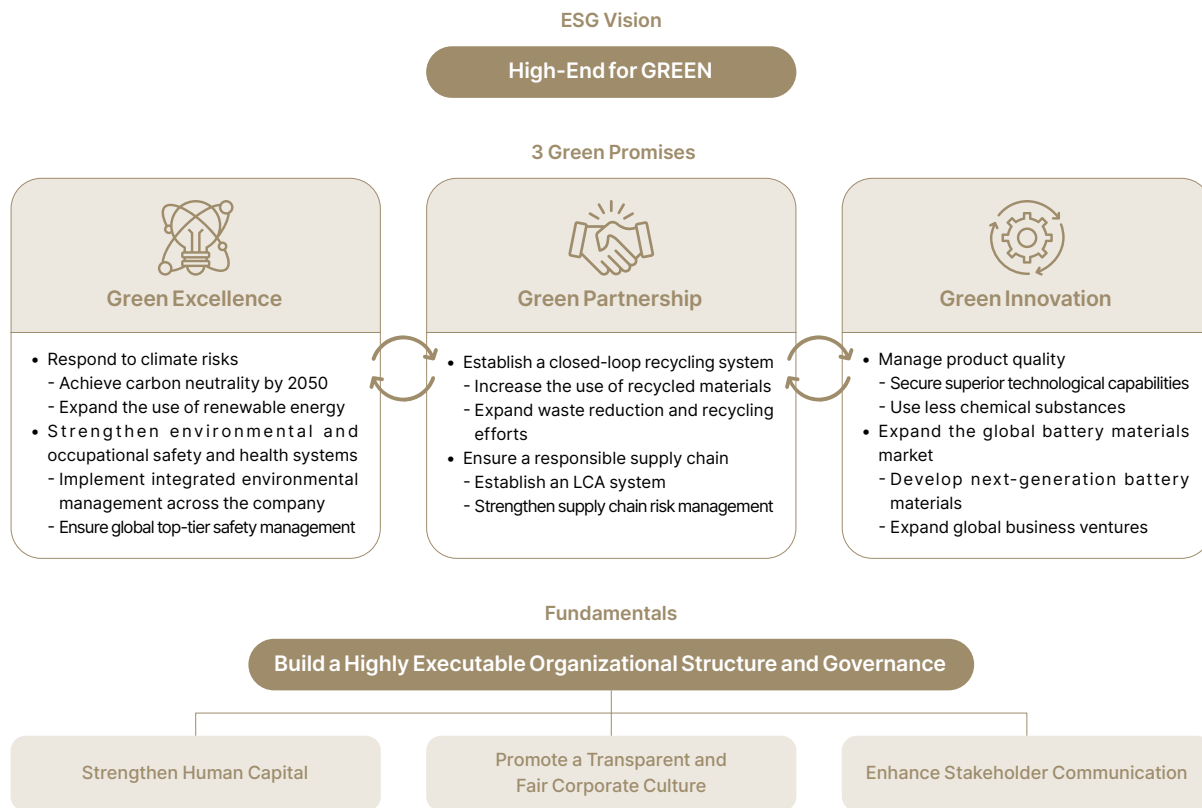
# ESG STRATEGY AND GOVERNANCE SYSTEM

## ESG Management Strategy System

LOTTE ENERGY MATERIALS is resolutely committed to establishing itself as the foremost global provider of eco-friendly materials by concentrating on three fundamental values.

- **Green Operation:** We are dedicated to minimizing the environmental impact during the production and delivery phases and are committed to adopting sustainable operational practices.
- **Green Partnership:** We aim to enhance eco-friendly practices throughout our supply chain by forging environmentally responsible partnerships starting from raw material procurement.
- **Green Innovation:** We are pursuing technological innovations aimed at the development of eco-friendly materials and are investing significantly in research and development to ensure a sustainable future.

Through these concerted efforts, we aspire to be recognized globally as the most reliable partner in eco-friendly materials.



## ESG Management Operational System

In 2023, LOTTE ENERGY MATERIALS instituted the ESG Committee and appointed an ESG oversight department to proactively address the sustainability and ESG imperatives, as well as international standards mandated by the secondary battery industry. The ESG Committee is responsible for making critical decisions, functioning as the principal management and supervisory entity concerning customer demands and ESG management-related matters. The ESG oversight department, on the other hand, oversees the management and monitoring of the ESG requirements across the company. LOTTE ENERGY MATERIALS is poised to establish a specialized ESG organization and augment professional expertise in the domains of sustainability and ESG.



### ESG Committee

The ESG Committee of LOTTE ENERGY MATERIALS, constituted under the Board of Directors, acts as the pivotal management and oversight body dedicated to sustainability and ESG matters. It is tasked with making decisions on critical issues such as climate response, human rights, and supply chain management, based on proposals from the ESG oversight department.

- **Roles:** Overseeing strategies, plans, and performance pertaining to key sustainability and ESG issues
- **Composition:** Comprised of one inside director and two outside directors, with one individual designated as the chairperson in accordance with committee regulations

- **Major Agenda:** Engages in resolution, deliberation, and reporting as stipulated by regulations
- **Convenes:** Every quarter
- **ESG Committee Activity Report**

| Meeting Date    | Key Agenda    |  |
|-----------------|---------------|--|
| 7th, Feb., 2024 | Agenda Item 1 | Approval of the Appointment of the ESG Committee Chair (Proposal)                                    |
|                 | Agenda Item 2 | Approval of the Selection of a Consulting Firm for Establishing the ESG Management System (Proposal) |

### ESG Oversight Department

The ESG oversight department takes charge of the execution of strategies and plans related to sustainability and ESG, addressing both internal and external requirements. This department works in close collaboration with relevant departments to implement comprehensive ESG management tasks and improve performance.

- **Roles:** Responsible for proposing agendas in accordance with ESG Committee regulations, assembling and executing tasks associated with internal and external sustainability and ESG management requirements, and aiding relevant departments in the execution of ESG management tasks

# DOUBLE MATERIALITY ASSESSMENT

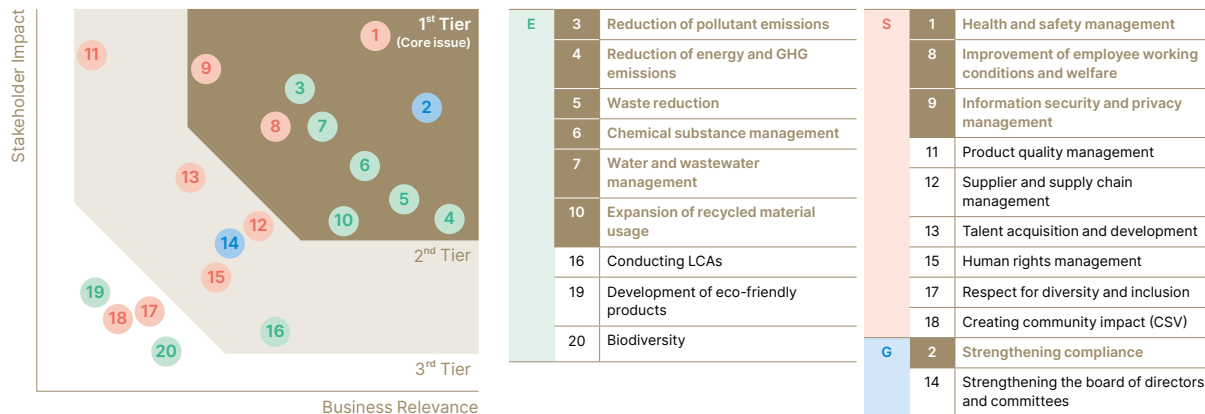
## Double Materiality Assessment Process

LOTTE ENERGY MATERIALS undertakes an annual materiality assessment to pin down ESG issues that might have a significant impact on its management activities and to incorporate the perspectives of stakeholders in this process. Through the lens of “double materiality,” this report integrates both the inside-out view designed to analyze the potential impact of corporate activities on the environment and society and an outside-in view aimed at exploring how external sustainability and ESG factors might affect the company’s financial soundness.

### Material Issue Selection Procedure

|               |   |   |
|---------------|---|---|
| <b>Step 1</b> | Identification of Material Sustainability Management Issues | To identify the material sustainability management issues for 2023, LOTTE ENERGY MATERIALS examined issues reported in the previous year, prominent issues highlighted in recent reports from industry peers, indicators mandated for disclosure and management by global evaluation and disclosure standards specific to our industry, and detailed tasks for LOTTE ENERGY MATERIALS’ sustainability management. As a result, a total of 20 issues were ascertained for the 2023 materiality assessment.   |
| <b>Step 2</b> | Prioritization  | To determine the priority of material issues, LOTTE ENERGY MATERIALS ascertained the top 10 material issues based on stakeholder requirements and employee feedback, and assessed their impact and financial materiality.<br>- Environmental-Social Materiality Assessment (Inside-Out): We factored in the stakeholders likely to be affected, the severity of the impact, and the probability of its manifestation to assess the impacts of LOTTE ENERGY MATERIALS on the environment and people (including human rights).<br>- Financial Materiality Assessment (Outside-In): To assess the impacts of the external environment on financial value, we took the following into consideration: short- and long-term financial impacts in terms of costs, revenues, and investments. |
| <b>Step 3</b> | Validity Verification                                       | The ESG team, together with senior management, examined the identified material issues and ultimately confirmed a total of 10 issues.   |

By comprehensively reviewing business relevance (employee importance ranking) and stakeholder impact (external stakeholder requirement level), the final priority of material issues, 10 issues in the 1st tier (core issue), 6 issues in the 2nd tier, and 4 issues in the 3rd tier, for 2023 was determined.



## Double Materiality Matrix

The top 10 material issues for 2023 are as follows.

### The top 10 material issues

| Rank | Category      | Issue  | A Environmental and Social Materiality (Inside-Out) | B Financial Materiality (Outside-in) | Double Materiality | Details  |
|------|---------------|--|---|--------------------------------------|--------------------|--|
| 1    | Social        | Health and safety management                           | ●●●   | ●●●                                  | ●●●                | A Impact on employees and partners in case of safety and health incidents<br>B Legal costs and significant financial compensation  |
| 2    | Governance    | Strengthening compliance                               | ●●●   | ●●●                                  | ●●●                | A Ethical issues arising from non-compliance<br>B Fines for legal violations, negative impact on customer relationships  |
| 3    | Environmental | Reduction of pollutant emissions                       | ●●●   | ●●○                                  | ●●●                | A Environmental pollution and community impact due to inadequate water and wastewater management<br>B Fines for legal violations   |
| 4    | Environmental | Energy and GHG management                              | ●●●   | ●●●                                  | ●●●                | A Contribution to carbon neutrality by reducing greenhouse gas (GHG) emissions<br>B Mitigation of physical and financial risks from climate change, improvement of customer relations through renewable energy use |
| 5    | Environmental | Waste reduction and recycling                          | ●●●   | ●●○                                  | ●●●                | A Reduction of environmental pollution, increased use of resources<br>B Sales of raw materials and by-products such as sewage sludge   |
| 6    | Environmental | Chemical substance management                          | ●●●   | ●●○                                  | ●●●                | A Environmental pollution and community impact<br>B Fines for legal violations, factory shutdown in case of chemical accidents   |
| 7    | Environmental | Water and wastewater management                        | ●●●   | ●●○                                  | ●●●                | A Environmental pollution and community impact due to inadequate water and wastewater management<br>B Legal costs and financial compensation   |
| 8    | Social        | Improvement of employee working conditions and welfare | ●●○   | ●○○                                  | ●●○                | A Improvement of labor conditions<br>B Enhancement of business value through improved employee efficiency  |
| 9    | Social        | Information security and privacy management            | ●○○   | ●●●                                  | ●●○                | A Leakage of information about employees, customers, and partners<br>B Loss of sales due to technology leaks, legal costs, financial compensation, and other related costs.  |
| 10   | Environmental | Expansion of recycled material usage                   | ●●●   | ●○○                                  | ●●○                | A Contribution to closed-loop recycling by using less natural resources<br>B Improvement of customer relations by using recycled materials   |

# ESG STORY ESG CORE DEPARTMENT INTERVIEW

## Corporate Planning Division Hoon Kim (Vice President)

LOTTE ENERGY MATERIALS is committed to establishing an ESG management system. They have set up a dedicated ESG management team and are focused on developing strategies and systems that align with global standards. To meet customer demands and global ESG regulations, they are working towards carbon neutrality by expanding the use of renewable energy, particularly hydro and solar power, in their Malaysian and Spanish operations. The goal is to ensure that consumers can take pride in the eco-friendly materials used in their electric vehicles. Additionally, LOTTE ENERGY MATERIALS will align with Lotte Group's overall ESG management framework by setting and monitoring management tasks and KPIs. The success of their ESG activities hinges on clear role distribution and effective communication among departments.

## EHS Part 1 Goul Kim (Part Leader)

The EHS team, which stands for Environment, Health, and Safety, oversees these three areas in the plant, managing tasks such as administration, education, and planning. Currently, I handle the management of various environmental data, including greenhouse gas emissions, as part of the broader ESG (Environmental, Social, Governance) strategy. In alignment with Lotte Chemical's carbon neutrality declaration, we are developing and implementing mid- and long-term carbon neutrality goals and roadmaps for 2030 and 2050. At the Iksan Plant 1, the EHS team leads efforts in energy and greenhouse gas reduction activities, including equipment upgrades and climate change responses. We are expanding our scope to include Scope 1, 2, and potentially Scope 3 emissions, and planning LCA data calculation and analysis to continuously achieve carbon neutrality goals.

## Safety Management Team Buseong Choi (Manager)

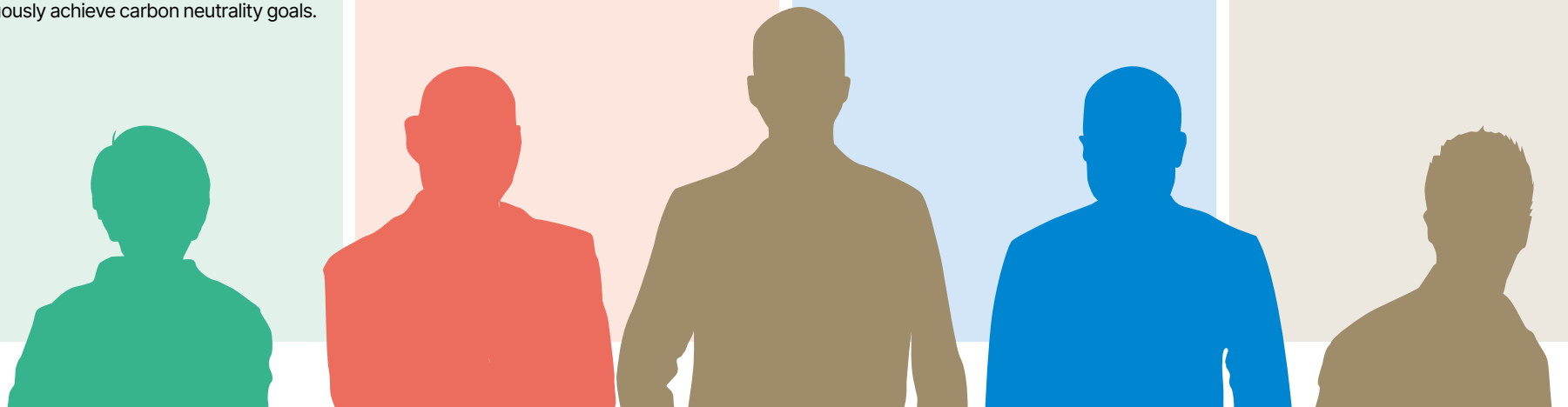
The Safety Management Team, directly reporting to the CEO, is dedicated to creating a safe and healthy workplace. They establish and manage safety and health systems across all business sites, ensuring compliance with relevant laws. The focus of safety and health management is shifting from post-incident and facility-based to proactive, people-centric, and process-oriented approaches. The key to success in this shift is the awareness and participation of all employees. The team aims to enhance employee involvement and develop safety professionals capable of identifying and mitigating risks. Future plans include activities that encourage active employee participation in safety management.

## Compliance Team SungHa Song (Manager)

The Compliance Team ensures that the company adheres to all applicable regulations and promotes a culture of legal compliance. Their goal is to prevent potential risks, enhance employees' understanding of compliance issues such as anti-corruption, fair trade, and protection of trade secrets, and encourage proactive participation. They conduct online and offline training, disseminate regulations and policies, and plan to obtain ISO 37301 (Compliance Management System) and ISO 37001 (Anti-Bribery Management System) certifications. These efforts aim to reduce legal risks, prevent corruption, and build trust with customers and partners.

## Marketing Strategy Team Jeman Yoo (Manager)

The Marketing Strategy Team is responsible for market research, responding to ESG-related customer requirements and initiatives, and integrating ESG management. Given the stringent ESG regulations in the secondary battery industry, the team prioritizes staying ahead of industry trends. In 2024, they plan to publish a sustainability report and focus on embedding basic ESG elements within the organization. Efforts include deepening the understanding of ESG importance and application, with plans to establish a more integrated ESG management system across global operations starting next year.





# ③ 2023 ESG PERFORMANCE

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# 2023 ESG HIGHLIGHTS

## Strengthening the ESG Management System



Established a diagnostic and strategic framework for ESG management



Published the first sustainability report



Joined the Korea Business Council for Sustainable Development (KBCSD)

## ENVIRONMENT



Reviewed and actively applied the potential for renewable energy usage in the establishment of new plants



Strengthened partnerships to increase the use of recycled copper

## SOCIAL



Actively collected employee opinions through organizational culture diagnostics post-acquisition



Established the Safety and Health Committee



Implemented safety diagnostics to enhance facility safety



Initiated the “Mom-Friendly Playground” project

## GOVERNANCE



Established and operated the ESG Committee, appointed an ESG-specialized outside director



Formulated global-level compliance policies in conjunction with LOTTE Holdings and affiliates



Conducted compliance education for all employees



Updated the compliance issue pool and built a risk monitoring system tailored to LOTTE ENERGY MATERIALS’ business structure



# ENVIRONMENT

## Manufacturing in Green Way



6.4 - By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity



7.2 - By 2030, increase substantially the share of renewable energy in the global energy mix



12.5 - By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

|                              |    |
|------------------------------|----|
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# ENVIRONMENT Manufacturing in Green Way

## Eco-friendly Management

### Eco-friendly Management System and Strategy

LOTTE ENERGY MATERIALS has established a framework aimed at responding proactively to global environmental transformations and pertinent regulations, thereby minimizing the environmental impacts arising from its operations. In alignment with LOTTE Chemical's vision, "Every Step for Green," we have instituted eco-friendly strategies and are executing practical policies and guidelines to foster sustainable management practices. Throughout this endeavor, we undertake our corporate social responsibilities and bolster endeavors aimed at environmental preservation, establishing a foundation for a sustainable future. These efforts are pivotal in mitigating unavoidable environmental risks, enhancing corporate value, and cultivating social trust.

### Eco-friendly Management Promotion Governance

In 2023, LOTTE ENERGY MATERIALS instituted the ESG Committee and appointed an ESG oversight department to proactively address the sustainability and ESG imperatives, as well as international standards mandated by the secondary battery industry. The ESG Committee is responsible for making critical decisions, functioning as the principal management and supervisory entity concerning customer demands and ESG management-related matters. The ESG oversight department, on the other hand, oversees the management and monitoring of the ESG requirements across the company. LOTTE ENERGY MATERIALS is poised to establish a specialized ESG organization and augment professional expertise in the domains of sustainability and ESG.

The ESG Committee of LOTTE ENERGY MATERIALS, constituted under the Board of Directors, acts as the pivotal management and oversight body dedicated to sustainability and ESG matters. It is tasked with making decisions on critical issues such as climate response, human rights, and supply chain management, based on proposals from the ESG oversight department. Comprising one inside director and two outside directors, the committee convenes quarterly, and the chairperson, elected from among the members in accordance with regulatory stipulations, is responsible for executing committee resolutions and reporting on deliberations.

The ESG oversight department takes charge of the execution of strategies and plans related to sustainability and ESG, addressing both internal and external requirements. This department works in close collaboration with relevant departments to implement comprehensive ESG management tasks and improve performance. The ESG oversight department at LOTTE ENERGY MATERIALS devises and facilitates the execution of sustainability and ESG management tasks, not only at the Korean headquarters but also across affiliated entities in Malaysia, Spain, and other regions.

### Eco-friendly Business Promotion Activities

LOTTE ENERGY MATERIALS strategically reconfigures its business model to foster sustainable growth by augmenting the proportion of sustainable future businesses. We are engaged in research and development of future business materials, including sulfide-based solid electrolytes, highly mass-productive LFP cathode active materials, and third-generation silicon composite anode active materials, alongside high-end Elecfoil. These initiatives are part of our broader venture into the battery and high-value materials business.

### Investment Plans and Performance for Practicing Eco-Friendly Management

LOTTE ENERGY MATERIALS formulates annual environmental investment plans aimed at minimizing pollutant emissions and safeguarding the natural environment. In 2023, we invested approximately KRW 830 million in the maintenance and enhancement of air and water pollution control facilities. Acknowledging the escalating significance of environmental considerations, the investment has been increased to KRW 3.76 billion for 2024. By 2030, we strongly aspire to expand our eco-friendly business and advance the carbon-neutral growth strategy, captured in the ESG strategy "Green Promise 2030" by LOTTE Chemical. Furthermore, we conduct thorough assessments of environmental risks and opportunities during the evaluation and deliberation of new investment projects, aiming to secure long-term environmental management competitiveness.

### Employee Environmental Education

LOTTE ENERGY MATERIALS administers various educational programs to bolster environmental management capabilities. In 2023, we conducted monthly one-hour environmental education sessions for all employees, including plant managers, distributing knowledge on internal and external environmental incident cases to avert risks. In addition, we provided hazardous chemical handling training to 80 managerial staff and extended hazardous chemical worker training to 402 general staff, fostering proper environmental consciousness among environmental technicians and applicable employees. We continue to support the completion of mandatory and group-wide environmental education programs, contributing to enhancing the staff's ability to manage environmental tasks comprehensively. In 2024, we intend to continue these comprehensive environmental education programs to further enhance environmental management capabilities.

### Green Purchasing Policy

LOTTE ENERGY MATERIALS is actively implementing a Green Procurement Policy as part of its sustainable management strategy, aiming to enhance environmental protection and resource circulation. This policy considers the environmental impact throughout the entire process of product production and business operations, expanding the purchase of eco-friendly certified products and services. Environmental impact is considered in all purchasing plans, and the procurement departments actively support the purchase of green products. Based on this policy, the company strives to expand the sustainable use of resources, such as purchasing recycled copper and renewable energy. In this way, LOTTE ENERGY MATERIALS seeks to promote sustainable growth and fulfill its responsibility as a company contributing to environmental protection.

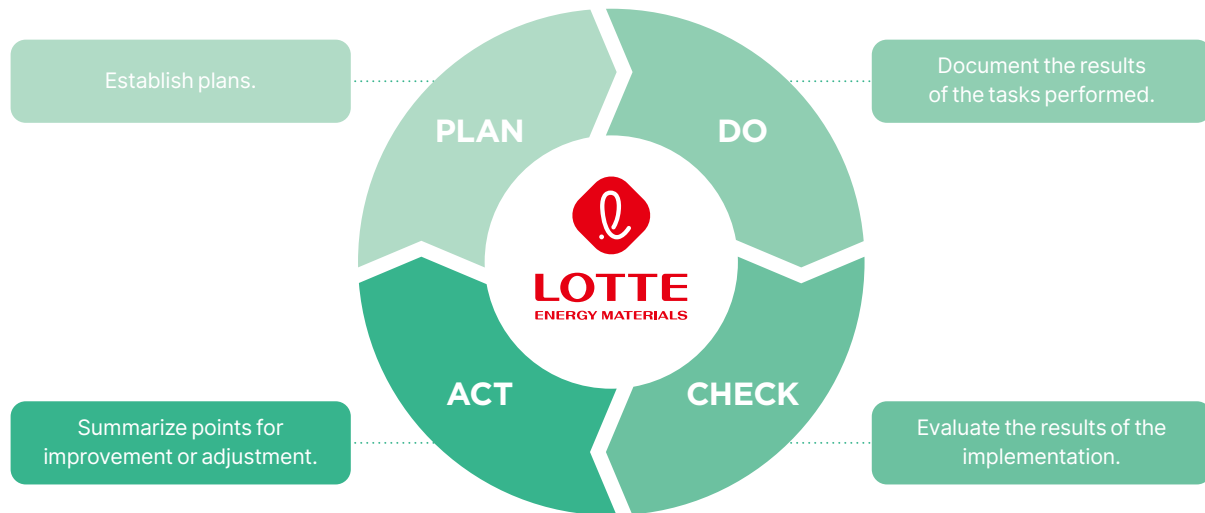
# ENVIRONMENT Manufacturing in Green Way

## Environmental Management System and Certifications

LOTTE ENERGY MATERIALS implements an integrated operational system encompassing environment, safety, and health, as well as quality management, to generate synergistic effects across various aspects. We also seek external certifications and conduct reviews related to environmental impacts to secure objective evidence. We re-established operational efficiency in each business site so as to build systems as demanded by the international community, through the revision and implementation of standardized procedures across all business sites. Domestic plants have obtained ISO 14001 certification. Moreover, we completed a life cycle assessment for the I2S product, achieving ISO 14044 third-party certification to promptly respond to customer information requests. We rigorously support and conduct various regulatory inspections through strict monitoring to ensure compliance with environmental regulations and prevent violations. In this regard, we conduct annual environmental impact assessments and compliance evaluations according to ISO 14001 standards, and the results are reported to management each year.

Each plant's environmental, health, and safety (EHS) team is composed of external environmental experts and internal inspection teams to ensure full compliance with environmental laws. This process not only mitigates anticipated risks for the company but also contributes to the spread of environmental culture internally and externally through system improvements. We undergo verification of the plan-do-check-act (PDCA) cycle of LOTTE ENERGY MATERIALS' environmental impact assessment through a third-party agency and ISO 14001 certification.

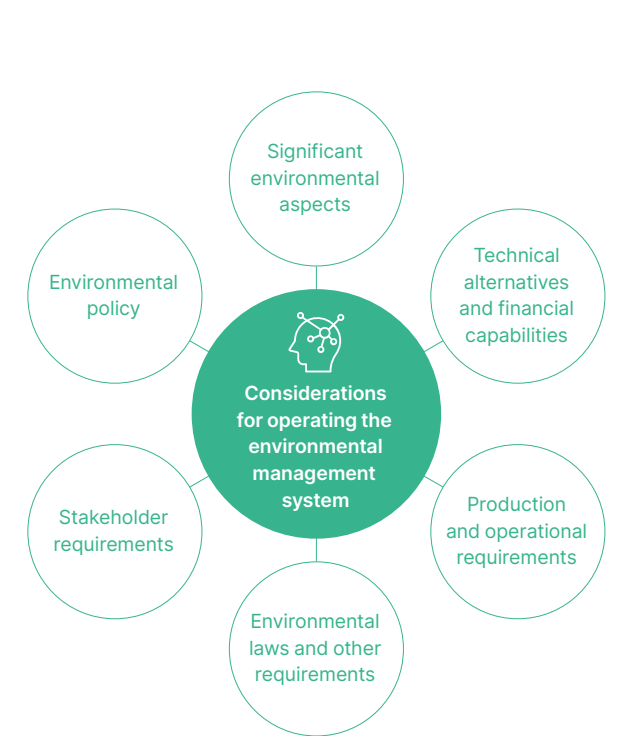
## PDCA(Plan-Do-Check-Act) Cycle



## ISO 14001(Environmental Management System)



## Environmental Management System Operation



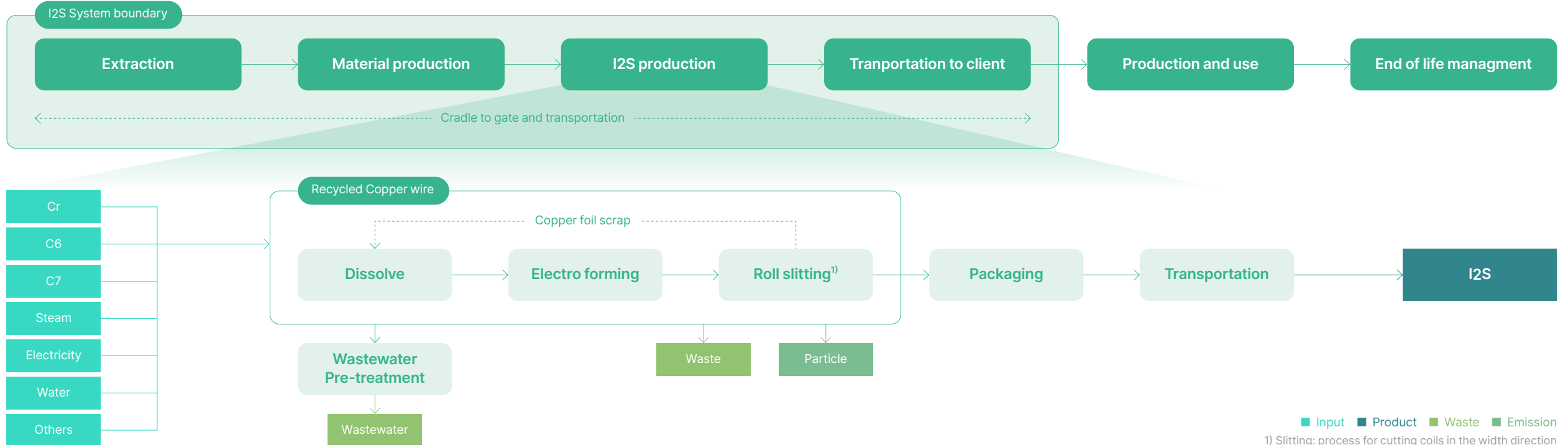
# ENVIRONMENT Manufacturing in Green Way

## Life Cycle Assessment

LOTTE ENERGY MATERIALS conducted a comprehensive life cycle assessment (LCA) for its I2S battery foil product. This assessment strictly adhered to the Product Environmental Footprint Category Rules of Europe, providing a detailed analysis of various environmental impacts throughout the product's life cycle. The research studied the environmental impacts of the acquisition and production of raw materials and energy, the production process of the I2S battery foil, transportation, and waste treatment. The manufacturing process of I2S battery foil includes stages such as smelting, foil rolling, cutting, and packaging, all optimized to minimize environmental impacts. This process was conducted following the ISO 14044 guidelines for life cycle assessment, which standardizes the evaluation of product life cycles and offers methodologies for improving environmental performance based on the obtained information.

The results of this assessment significantly contribute to achieving LOTTE ENERGY MATERIALS' environmental sustainability goals and form a core component of the company's strategic framework. Through this, we continuously enhance environmental responsibility from product design to production, distribution, use, and disposal, transparently demonstrating to customers and stakeholders that our products are produced in an environmentally responsible manner, thereby enhancing market competitiveness. These efforts are vital in pursuing sustainable growth in the global market and fulfilling environmental protection and social responsibility.

## I2S Product Manufacturing Process



# ENVIRONMENT Manufacturing in Green Way

## Climate Change Response

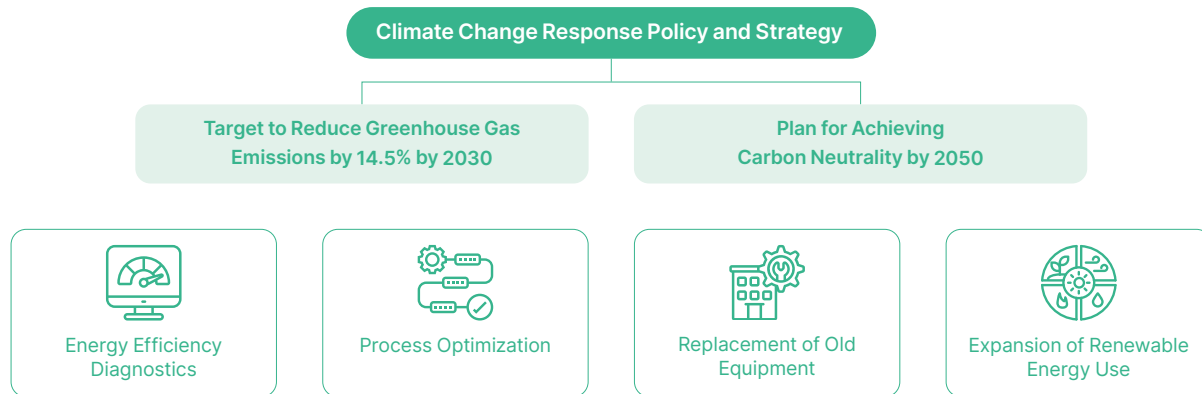
### Climate Change Response Policy and Strategy

Climate change poses a severe threat to the global ecosystem and human survival. Extreme weather events, rising sea levels, and the resulting economic losses are realities we all face. In this context, LOTTE ENERGY MATERIALS engages in relevant activities aligned with the goals of the Paris Climate Agreement, aiming to limit the global average temperature rise to below 2°C, ideally no more than 1.5°C, compared to pre-industrial levels. In addition, referencing the comprehensive report on global warming announced by the Intergovernmental Panel on Climate Change (IPCC)<sup>1)</sup> and the national GHG reduction roadmap, we have declared our commitment to carbon neutrality by 2050. This commitment represents a critical response towards a sustainable future, and we are fully addressing climate change through this initiative.

Through the declaration of carbon neutrality, LOTTE ENERGY MATERIALS paves the way for global environmental protection efforts, targeting sustainable development across economic, social, and environmental dimensions. We adopted climate change response as a key performance indicator for management, building a link between performance and the reward system. In collaboration with the LOTTE Group's chemical division, we will set a goal to reduce GHG emissions by 14.5% compared to 2018 levels by 2030 and declare carbon neutrality by 2050. To achieve this goal, we are developing a roadmap that includes strategies such as energy efficiency diagnostics, process optimization, replacement of outdated facilities, and expansion of renewable energy use. We are also applying methodologies to improve process energy efficiency and consider the introduction of renewable energy.

Furthermore, to deal with changing consumer demands due to climate change in advance, we are pursuing diversification into new business areas such as secondary battery cathode and anode materials and solid electrolytes, based on the core identity of our existing business, in response to the paradigm shift towards a low-carbon economy. Through these various efforts, we work to effectively address climate change and build a sustainable future.

1) The IPCC is a United Nations body that provides scientific, technical, and socio-economic information on climate change to policymakers.



### Climate Change Response System

LOTTE ENERGY MATERIALS has established a comprehensive system to respond to climate change, closely coupled with the company's environmental management strategy. The ESG Committee under the Board of Directors discusses the direction and implementation plans of the environmental management strategy, systematically managing the decision-making process for climate change response, energy reduction goals, and performance. In addition, the committee manages the implementation of ESG management tasks and addresses risks in key stakeholder engagements.

To promote practical achievements and manage goals for carbon neutrality, we formed a Carbon Neutrality Task Force composed of different departments, LOTTE Aluminum, and LOTTE Holdings. This task force meets quarterly to discuss material issues. The ESG oversight department, reporting directly to the CEO, oversees strategies for responding to environmental and climate crises. This department formulates GHG reduction strategies in response to climate change, manages energy use and GHG emissions by facility, and reviews strategies to address carbon-neutrality regulations and changes in the energy paradigm. All these measures demonstrate LOTTE ENERGY MATERIALS' commitment to effectively responding to climate change and building a sustainable future.

| Category                           |                               | Issue   | Term  | Financial Risks Associated with Climate Change  | Countermeasures Against Climate Change   |
|------------------------------------|-------------------------------|---|---|---|--|
| Transition risks and opportunities | Regulatory aspects            | GHG emission regulations and policy enhancements                                      | Short-term  | - Increased costs for purchasing emission allowances due to reduced domestic emissions allocations and expanded proportions of paid emission allowances within the Emissions Trading Scheme                           | - Minimize the need for purchasing emission allowances through GHG reduction activities<br>- Expand eco-friendly business initiatives<br>- Reduce energy consumption |
|                                    |                               | Introduction of carbon pricing (carbon tax, Carbon Border Adjustment Mechanism, etc.) | Mid-term  | - Increased compliance costs due to global GHG emission regulations such as carbon taxes and the Carbon Border Adjustment Mechanisms<br>- Revenue impacts from high-carbon products due to climate change regulations | - Enhance the introduction of low-carbon raw materials and LCA management<br>- Rapidly respond to customer needs through local operations in Europe                  |
|                                    | Energy paradigm shift aspects | Introduction and adoption of low-carbon technologies                                  | Long-term   | - Increased R&D and process improvement costs following the adoption of low-carbon technologies<br>- Increased investment costs for GHG reduction facilities and high-efficiency energy equipment technologies        | - Reduce GHG emissions and energy costs at business sites through process optimization   |
|                                    |                               | Expansion of renewable energy use   | Mid-term  | - Increased production costs due to short-term electricity cost hikes   | - Reduce electricity costs through renewable energy supply contracts such as solar and hydropower  |
| Physical risks and opportunities   | Natural disasters             | Short-term  | - Increased investment in natural disaster prevention, disaster management, and environmental and safety facilities<br>- Increased costs for recovery and loss of business opportunities in the event of a disaster | - Prevent losses through the operation of emergency response systems to prevent and respond to accidents and risks  |  |
|                                    | Water supply shortages        | Long-term   | - Increased costs from loss of business opportunities due to factory shutdowns caused by water supply shortages   | - Secure cost competitiveness through the expansion of wastewater recycling via water treatment businesses such as membrane systems<br>- Reduce water usage costs by enhancing water recycling                        |  |

# ENVIRONMENT Manufacturing in Green Way

## Climate Action

### Establishment of Business Sites on Account of the Use of Eco-Friendly Energy

LOTTE ENERGY MATERIALS evaluates methods to integrate eco-friendly energy sources in the selection of business sites and construction processes. The Smart Factory in Malaysia harnesses hydropower, demonstrating the company's commitment to increased use of eco-friendly energy. Similarly, the Smart Factory in Spain benefits from a robust power grid fueled by renewable sources such as wind and solar power. The site selection process for the Smart Factory in the U.S. also incorporates considerations of these eco-friendly energy factors.

### Utilization of Renewable Energy

LOTTE ENERGY MATERIALS, as part of its climate action initiatives, selects production sites for new plants where renewable energy (such as solar, wind, and hydro power) can be utilized. In the case of Catalonia, Spain, where the site selection for a new plant has been finalized, a stable power grid based on renewable energy is in place, and the region aims to achieve a renewable energy ratio of over 90% in the future. The copper foil plant currently under the final review for site selection in the United States is also securing power supply contracts that exclusively use renewable energy. Malaysia has been chosen as a strategic location for its operations due to the country's goal of achieving carbon neutrality by 2050 and its efforts to expand renewable energy sources. The Malaysian facility receives its power through hydroelectric generation. Furthermore, to ensure smooth power supply to the expanding plants, Malaysia's power supply capacity is set to gradually increase to approximately 4,500 MW. LOTTE ENERGY MATERIALS is committed to increasing the proportion of renewable energy used across all its business sites.

### LOTTE ENERGY MATERIALS Malaysia Smart Factory



### Expansion of Renewable Energy Supply

LOTTE ENERGY MATERIALS is working to expand its supply of renewable energy. Most of the carbon emissions during copper foil production arise from electricity consumption. We place significant emphasis on reducing carbon emissions at the production stage by increasing the utilization of renewable energy. In the process of assessing overseas business sites, we deemed the availability of a renewable energy supply the utmost priority, culminating in the establishment of a plant in Malaysia, which is abundant in hydropower. Furthermore, we selected our business site in Spain over other potential sites due to its superior access to solar and wind power, as opposed to nuclear or gas power. The forthcoming business site in the U.S. is also engaged in negotiations concerning renewable energy supply contracts to sustain the production of Elecfoil through renewable sources.

### Renewable Energy Purchase Activities at the Spain Smart Factory

For the plant in Spain, initial plans involve procuring 50% of its energy from solar power and the remainder through power purchase agreements (PPAs)<sup>1)</sup>. According to these agreements, solar energy will predominantly power the facility during the summer months, while wind energy will be the principal source during the winter. The business site in Spain aims to maintain a renewable energy consumption ratio of at least 80%, with aspirations to reach up to 100%. As such, we will remain committed to continuously expanding our procurement of renewable energy.

1) PPA: A long-term electricity supply contract where an electricity generator sells the electricity generated over a specified period to a specific purchaser at a pre-agreed price.

### LOTTE ENERGY MATERIALS Spain Smart Factory



# ENVIRONMENT Manufacturing in Green Way

## Closed-loop Recycling

### Closed-loop Recycling Policy and Strategy

As an integral component of its sustainable business strategy, LOTTE ENERGY MATERIALS is committed to enhancing environmental protection and advancing resource circulation. We are dedicated to augmenting the recovery rate of recyclable resources while concurrently reducing the volume of landfill and incineration waste. It is imperative that all stakeholders comprehend and engage in the significance of closed-loop recycling; thus, we are systematically operating and refining recycling processes. In particular, we place emphasis on minimizing landfill waste and maximizing the recycling rate in sludge management. We aim to recycle sludge effectively to mitigate environmental impacts and achieve sustainable resource management. This strategy lays a fundamental cornerstone for the company's sustainable growth, environmental protection, and conservation of global resources.

### Operation of Closed-loop Recycling Council

LOTTE Chemical, the parent company, is in the process of establishing a closed-loop recycling council to fulfill one of the 20 strategic tasks for Green Promise 2030, which includes selling over 1 million tons of recycled plastics by 2030. LOTTE ENERGY MATERIALS is anchored in the holding company's commitment, concentrating on sustainable, eco-friendly business strategies. Beyond our core Elecfoil products, we are driving the research and development of next-generation batteries, including sulfide-based solid electrolytes and highly mass-productive LFP cathode active materials—integral to our green business portfolio. Subsequent to the formation of the closed-loop recycling council, we will enact additional recycling business initiatives, seek collaborative solutions, establish goals, and manage performance metrics.

### Closed-loop Recycling Activities

Every year, LOTTE ENERGY MATERIALS diverts over 3,000 tons of sludge from its business sites and has escalated the recycling volume of synthetic waste materials from 1.8 tons in 2022 to 700.8 tons in 2023 by transitioning from outsourced disposal methods (crushing) to eco-friendly recycling practices. To continuously foster the development of closed-loop recycling activities, we will introduce additional waste recycling treatment measures, facilitate connections among stakeholders, and furnish necessary resources, systems, and education to systematically forge a sustainable closed-loop recycling system.



### Increased Use of Recycled Copper

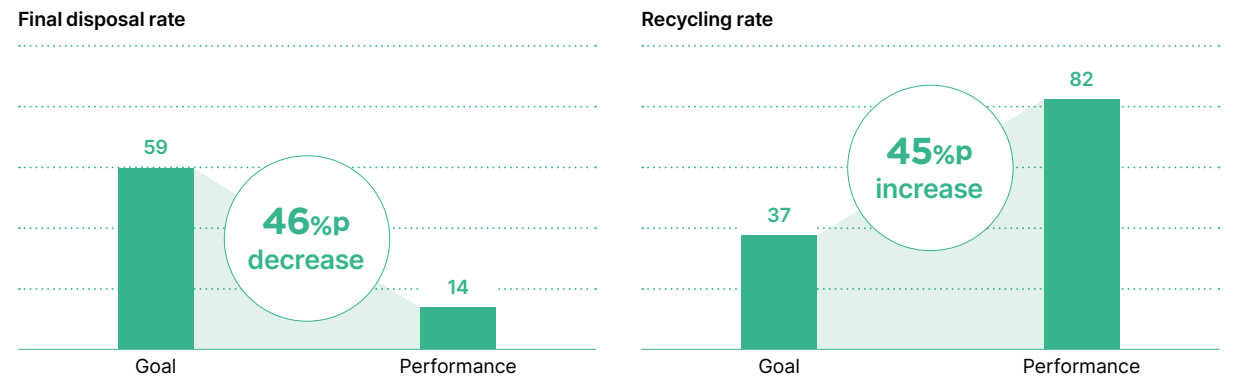
LOTTE ENERGY MATERIALS is exerting the utmost effort to increase the use of recycled copper. In light of the significant environmental and human rights concerns associated with the mining and refining of copper ore, we initiated the production of Elecfoil utilizing 100% recycled copper within Korea. In addition, we are exploring methodologies to incorporate recycled copper raw materials at our business sites in Malaysia and Spain.



### Waste Reduction Activities

LOTTE ENERGY MATERIALS is resolutely committed to achieving a 100% recycling rate for waste generated at its business sites. We persistently scrutinize tasks aimed at reducing waste generation and converting waste from business sites into recycled materials, thereby establishing a closed-loop recycling system to ensure sustainable business operations and growth. LOTTE ENERGY MATERIALS currently manages waste generated within its business sites. After setting the 2023 resource circulation performance goals for final disposal rate (59.28%) and recycling rate (37.2%), we achieved a final disposal rate of 13.5% and a recycling rate of 81.9%, surpassing the set objectives in 2023 through eco-friendly recycling practices. Moving forward, we will continue to evaluate recycling treatment measures for landfill waste, foster connections among stakeholders, and allocate necessary resources, systems, and education to methodically establish a sustainable closed-loop system.

### 2023 Closed-loop Recycling Performance



### Waste Management Activities

LOTTE ENERGY MATERIALS focuses on managing waste sources to reduce waste generation and actively implements green management policies to improve the efficiency of sorting and recycling. To achieve this, the company enforces a waste identification system to accurately determine the amount of waste generated at each source. Based on this data, strategies for waste reduction and management are developed. Additionally, LOTTE ENERGY MATERIALS utilizes the Ministry of Environment's 'All baro System' to systematically monitor the entire process of waste treatment and storage, minimizing environmental impact. These measures play a crucial role in enhancing the effectiveness of the company's environmental management.






# ENVIRONMENT Manufacturing in Green Way

## Water Resources Management

### Water Resources Management Policy and Strategy

Population Action International (PAI) calculates the annual per capita available water resources for countries around the world and classifies them into categories of water scarcity, water-stressed, and water-sufficient nations based on their level of water shortage. There are three main strategies to reduce water stress: expanding agricultural efficiency (cultivating crops that require less water), investing in water supply and quality improvement, and increasing water reuse/recycling. So, LOTTE ENERGY MATERIALS conducts assessments to determine whether its operations are situated in regions afflicted by water stress or water risk. Accordingly, we formulate tailored response strategies for various water resource risks. In response to the acute water shortage crisis in Spain, precipitated by climatic changes, our local business site implements wastewater recycling endeavors. This treated wastewater will be repurposed for agricultural applications, thereby mitigating the challenges faced by local agricultural communities due to water scarcity. We persist in our engagement with and attentiveness to residents, striving to sustain a harmonious and cooperative relationship.

### Water Resources Management Activities



|   |   |
|---|---|
| <p><b>Water Consumption and Recycling</b></p>                    | <p>LOTTE ENERGY MATERIALS is dedicated to tackling the global water crisis. Our goal is to enhance the efficiency of water resource consumption by consistently reducing the volumes of discharged wastewater and incoming water. For efficient water resources management, we make concerted efforts to save water and treat water employed in various processes—such as process water, cleaning water, and firefighting water—to reduce contamination and energy consumption. When internal standards are surpassed, chromium wastewater is treated by transforming hexavalent chromium to trivalent chromium and measuring total dissolved solids (TDS). It is then recycled using ion exchange resins when TDS levels remain below internal thresholds. Through process improvements that reduce water consumption and encourage wastewater reuse, we plan to cut water and wastewater volumes to 50% of the 2019 levels by the year 2030. Recently, there has been a trend towards increasing wastewater reuse, such as using up to 1,500 tons per day of chromium wastewater as recycled water. In line with this trend, LOTTE ENERGY MATERIALS will continue to contribute to water conservation and pollution prevention through the adoption of more advanced technologies and facilities.</p> |
| <p><b>Wastewater and Water Pollution Control Activities</b></p>  | <p>LOTTE ENERGY MATERIALS ensures that no harmful substances are discharged into rivers by outsourcing wastewater treatment to a final treatment plant within industrial complexes. We have set internal standards for discharge which are maintained at 20–30% of the legal discharge limits, ensuring the wastewater is treated and safely released.</p>  |
| <p><b>Water Reuse in Spain</b></p>                               | <p>The Spanish plant is located in the water-scarce region of Mont-Roig del Camp in Catalonia. Considering the regional conditions, the plant sources water from Barcelona, outside the water-scarce area. After undergoing recycling processes, wastewater meets legal requirements for discharge and can be used for agricultural purposes. This will help residents address agricultural issues caused by water shortages. We persist in our engagement with and attentiveness to residents, striving to sustain a harmonious and cooperative relationship.</p>  |

## Pollutant Emission Reduction

### Pollutant Management Policy and Strategy

LOTTE ENERGY MATERIALS emphasizes environmental protection and sustainable management through its pollutant management policies. We identify major pollutants and establish detailed management plans to reduce air pollution and waste. Our goals are to improve recycling and reduce air and soil pollution. We seek recycling partners and develop reuse technologies to regularly monitor and manage our environmental performance. All operational stages incorporate eco-friendly technologies, and we carry out continuous environmental monitoring to prevent pollution, demonstrating our commitment to environmental protection. This approach plays a crucial role in practicing sustainable management, reducing environmental impact, and enhancing the reputation of the company as a model that meets international environmental standards.

### Pollutant Reduction Activities

|  |  |
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| <p><b>Activities Designed to Reduce Air Pollutants</b></p>  | <p>LOTTE ENERGY MATERIALS recognizes the severity of the particulate matter issue and the necessity for improvement. To reduce the sources of particulate matter such as sulfur oxides and dust, we have invested in upgrading existing pollution control facilities and installing new ones, thereby strengthening the reduction and management of various air pollutants. As part of our systematic air pollutant management strategy, internal air pollutant emission limits are set at less than 80% of legal standards. Also, we ensure that self-monitoring of air pollution control facilities is conducted on a regular basis.</p> |
| <p><b>Soil Pollution Management Activities</b></p>        | <p>LOTTE ENERGY MATERIALS uses impermeable concrete for the flooring of facilities that pose a risk of soil contamination. We issue additional environmental work permits before and after operations to prevent soil pollution from chemical substances during production processes and transportation. In addition, we conduct regular soil contamination inspections to monitor the impact on the soil surrounding the business sites.</p>  |

## Biodiversity

### Biodiversity Policy and Strategy

LOTTE ENERGY MATERIALS is committed to protecting biodiversity and practicing sustainable management. We identify in advance and respond to biodiversity-related risks throughout our business activities and decision-making processes. We strive to protect biodiversity by planning and implementing business activities with consideration for their impact on the environment and biodiversity. Additionally, through policies and activities aimed at conserving biodiversity, we emphasize the importance of ecosystem restoration and biodiversity, exerting efforts to minimize risks related to biodiversity.

# SOCIAL

## Growing Stronger with Stakeholders



1.5 - By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters



4.3 - By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university



10.3 - Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard

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# SOCIAL Growing Stronger with Stakeholders

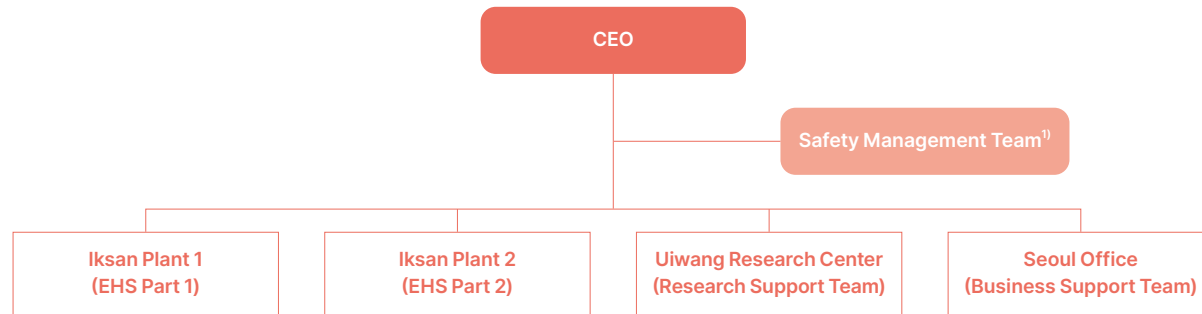
## Safety and Health

### Safety and Health Management Guidelines

LOTTE ENERGY MATERIALS is fully aware that the safety and health of employees are paramount throughout all aspects of business activities. Accordingly, we established a comprehensive health and safety management policy that takes into account vulnerable stakeholders. This policy is reported to and approved by the Board of Directors. Following approval, the policy is shared with all employees and stakeholders via online and offline channels, applying to all workers, including partners. We make sure that the policy is strictly managed through continuous monitoring.

### Safety and Health Management Governance

Centered on the goal of achieving "zero serious accidents," LOTTE ENERGY MATERIALS has organized safety and health departments and personnel at each business site. These departments are dedicated to fulfilling legal obligations related to health and safety, preventing industrial accidents, and creating a pleasant working environment. In addition, our safety and health organization under the CEO is dedicated to planning and evaluating the health and safety management of each business site to bolster the overall system.



1) Safety Management Team: Responsible for overall safety and health management

### Safety and Health Committee

To ensure effective safety and health management, a Safety and Health Committee has been in operation at each business site since January this year. This in-house committee, consisting of health and safety officers and leaders of related departments, holds regular monthly meetings to review the performance of safety and health aspects and have in-depth discussions of issues for decision-making each month.

### Safety and Health Activities

#### Emergency Drills

LOTTE ENERGY MATERIALS orchestrates at least two emergency drills annually in an effort to establish a rapid response system for chemical spills or fire emergencies. These drills, executed unpredictably throughout the year, engage all employees.

Repetitive drills serve to remind employees of their responsibilities during emergencies, and any shortcomings in the response are systematically addressed to ensure prompt initial reactions are taken during actual emergencies, thereby averting secondary accidents and minimizing casualties.

#### Risk Assessment

In recognition of the critical importance of risk assessment as a fundamental and core element of workplace safety and health management, LOTTE ENERGY MATERIALS provides education to all employees on identifying and mitigating hazards directly.

Risk assessments are conducted biannually and as necessary for new machinery or incidents.

Hazardous and risk factors identified at the frontline are managed across the company through classification and coding by category. When improvements are made, we actively consider horizontal deployment (widespread implementation) to minimize the exposure of employees to these hazards and risks.



### 2023 Risk Assessment Details

| Category   | Unit            | First half | Second half | Total |
|--|-----------------|------------|-------------|-------|
| Conducting a Risk Assessment                                 | Number of cases | 221        | 213         | 434   |
| Cases requiring improvement of harmful and hazardous factors | Number of cases | 63         | 53          | 116   |
| Improvement rate   | %               | 100        | 100         | 100   |

# SOCIAL Growing Stronger with Stakeholders

## Safety and Health Programs

### Appointment and Training of Safety Specialists

LOTTE ENERGY MATERIALS conducts safety patrols every Thursday to continuously identify potential hazards and risks in the workplace. The results of these patrols are shared with each department weekly to ensure that all employees can participate directly in improvements. We carry out a monthly review of safety patrol activities with all employees, providing education on relevant safety and health regulations. In addition, our first aid and CPR training enhances the safety management capabilities of our employees, encouraging all employees to become safety specialists.

### Safety Exercises and Toolbox Meeting

LOTTE ENERGY MATERIALS initiates all workday activities with daily safety exercises that involve the full participation of all employees. We also conduct toolbox meetings (TBMs) under the supervision of on-site supervisors. These preliminary safety inspections evaluate the health status of individuals, the adequacy of personal protective equipment, and the condition of hand tools to ascertain safety in the workplace. Our safety and health departments have developed standard operating procedures and produced instructional videos for the execution of TBMs, and they select and reward departments monthly that exhibit exemplary TBM practices.

## ISO 45001 (Occupational Health and Safety Management System)



## Safety and Health Internalization

### Safety and Health Compliance Management

The safety and health departments across the business sites of LOTTE ENERGY MATERIALS independently assess their compliance with safety and health regulations, such as the Occupational Health and Safety Act, the Act on the Establishment of Safe Laboratory Environment, fire service laws, the Safety Control of Hazardous Substances, and the Chemical Substances Control Act, at a minimum of twice annually. We ensure individual and overall workplace safety in compliance with our process safety management protocols. To maintain objectivity, a specialized team from the headquarters oversees the compliance with health and safety regulations at each business site on a quarterly basis, promptly addressing any discrepancies. Through dual-level monitoring, which involves both site-specific evaluations and centralized inspections, we effectively minimize the risk of violations of safety and health regulations.

### Voluntary Safety Consulting

To augment the stability of facilities and equipment that present a high risk of fire and explosion, LOTTE ENERGY MATERIALS engaged an external safety and health agency in December 2023 to perform voluntary safety inspections. Identified potential risk factors from these audits have been integrated into the company's investment plans for improvements in 2024. We remain committed to conducting safety inspections to forestall high-risk accidents.

### Health Care Management

LOTTE ENERGY MATERIALS conducts regular assessments and evaluations related to various hygiene and health measures to manage employee health effectively. Firstly, workplaces such as research labs and factories where hazardous substances, noise, dust, and other harmful factors may occur are required to measure and evaluate the working environment at least semi-annually. While there have been no cases exceeding legal exposure limits for hazardous substances during these measurements, proactive engineering and administrative measures, including continuous improvement of local exhaust systems, are implemented to safeguard employee health. Additionally, to prevent occupational diseases such as musculoskeletal disorders and cardiovascular diseases among employees, the company conducts periodic assessments on musculoskeletal risk factors, job stress factors, and cardiovascular disease risk assessments. Facilities such as health management rooms and fitness centers are also available for all employees to use.

# SOCIAL Growing Stronger with Stakeholders

## Human Rights Management

### Human Rights Policy

Central to its corporate culture, LOTTE ENERGY MATERIALS upholds respect for human rights, implementing programs to avert human rights violations and providing human rights education. We employ the LOTTE Group's value creation culture assessment to identify human rights risks and evaluate their impacts, with ongoing monitoring and enhancement of specific processes and objectives. We established and disclosed the Human Rights Charter, mandating adherence by all employees to foster a culture of human rights management. Furthermore, we developed human rights management and promoted active strategies to foster respect for human rights.

### Human Rights Protection Activities

#### Grievance Channel for Human Rights

LOTTE ENERGY MATERIALS prioritizes the protection of the identities of victims, and we operate a channel that encourages employees to report any grievances freely. We ensure a thorough investigation and resolution of reported incidents, thereby restoring the rights of the affected parties.

#### Internalization of Human Rights Management

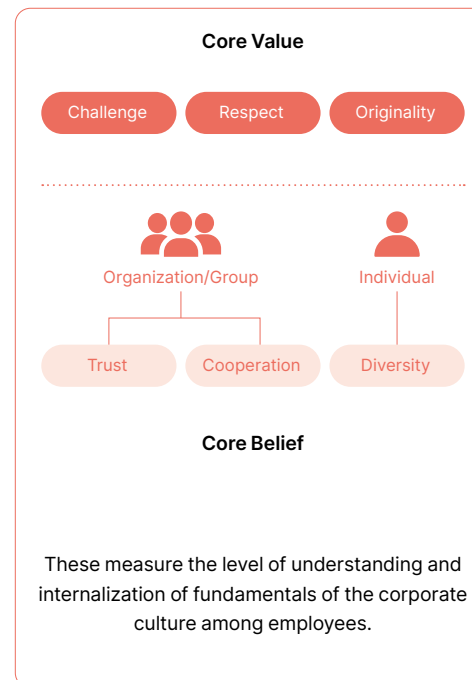
LOTTE ENERGY MATERIALS administers a wide range of human rights education programs aimed at addressing human rights issues and enhancing the human rights capabilities of employees. In 2023, we conducted both in-person and online sessions on preventing sexual harassment and raising disability awareness for all employees, including new hires, along with ethics enhancement education conducted in person. These educational efforts have fostered increased awareness of gender equality in the workplace and have diminished prejudices and misconceptions concerning disabilities.

### Value Creation Culture Assessment

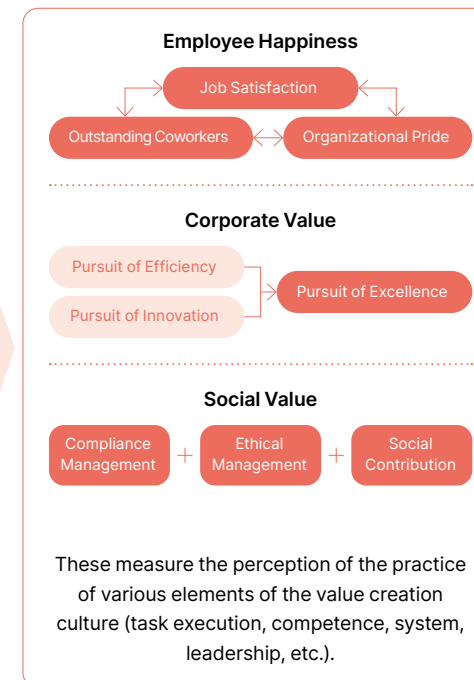
In September 2023, LOTTE ENERGY MATERIALS conducted a value creation culture assessment system to evaluate employee satisfaction. This system, grounded in the core values and foundational beliefs of the LOTTE Group, is designed to foster happiness for employees, enhance corporate value, and contribute to social value. The primary goal of this assessment is to precisely determine the perception and implementation level of the value creation culture within the organization, identify potential aspects for enhancement, and achieve substantive improvements. The assessment is structured around fundamentals, actions, and outcomes. The fundamentals measure the employees' understanding and internalization levels of our core values (challenge, respect, and creativity) and fundamental beliefs (trust, cooperation, and diversity). The actions consist of factors designed to foster employee happiness and create corporate and social values. These include job satisfaction, organizational pride, innovation pursuit, compliance management, and social contribution. Lastly, the outcomes are derived from employees' perceptions of the level of implementation of a value creation culture and the feasibility of achieving the corporate culture orientation.

Based on the cultural diagnosis of value creation, LOTTE ENERGY MATERIALS currently perceives itself in a "hope" state and holds a positive outlook regarding the feasibility of achieving its corporate culture goals. Employee engagement is high, and the company continues to implement various programs to actively enhance organizational culture improvement. Overall analysis of the corporate culture type indicates a strong emphasis on relationship-oriented (People) culture. To foster a positive organizational culture, LOTTE ENERGY MATERIALS conducts quarterly employee briefings and engages in various communication activities such as on-site communication days. Furthermore, we intend to implement fair compensation structures that are performance-based, improve mechanisms for equitable employee evaluations, and develop and execute meaningful social contribution programs that encourage active employee participation.

### Fundamentals



### Actions



### Outcomes



# SOCIAL Growing Stronger with Stakeholders

## Diversity, Equality, and Inclusion

### Diversity, Equality, and Inclusion Policy and Strategy

Currently, the world demands three cultures: diversity, equity, and inclusion (DEI). Diversity involves understanding and respecting differences between oneself and others. Equity means having equal opportunities and treatment, allowing individuals to fully utilize their capabilities in a fair environment. Inclusion ensures that diverse individuals are not excluded and are integrated into the overall environment. In another sense, embracing diversity is inclusion. Now, companies must actively embrace and institutionalize these principles of diversity, equity, and inclusion. LOTTE ENERGY MATERIALS strives to respect the diversity of its employees and endeavors to provide equal opportunities to all individuals. Here are some of the key diversity and inclusion policies pursued by LOTTE ENERGY MATERIALS: Through these policies, we aim to create an environment where all employees are respected and have equal opportunities, fostering sustainable growth.

### Diversity, Equality, and Inclusion Activities

#### LOTTE Diversity Forum

The LOTTE Group has hosted the LOTTE Diversity Forum with the goal of establishing an inclusive organizational culture that embraces members from varied backgrounds, including different generations, genders, disabilities, and nationalities. The forum is dedicated to promoting the notion that embracing diversity beyond prejudice is essential for driving future growth and enriching the organizational culture that renews today and benefits tomorrow. The previously women-focused Wow Forum has been expanded to the Diversity Forum, which now includes external speaker lectures and employee relay speeches to facilitate the sharing of experiences and insights. In addition, presentations on human resource strategies for enhancing diversity and global leadership strategies for localization were conducted. These programs include mandatory paternity leave for men, extended maternity leave for women, increased employment of disabled individuals, and efforts to foster foreign employees, demonstrating our continuous effort to formulate family-friendly policies and increase diversity.

#### Efforts to Increase Diversity

Moving away from a previously male-dominated workforce structure, LOTTE ENERGY MATERIALS has incorporated anti-gender discrimination clauses in its management charter and recruitment guidelines. These provisions promote equitable evaluation and recruitment processes and have facilitated an increase in the hiring of female employees. In addition, we maintain an employment rate for disabled individuals that surpasses legal requirements to pursue non-discriminatory recruitment practices. Through these measures, we ensure that individuals from diverse backgrounds are afforded fair opportunities.

#### LOTTE Group Diversity Forum Message

LOTTE Group has secured demographic diversity through the recruitment and development of women, people with disabilities, and global residents. Now, beyond quantitative growth, we must achieve qualitative growth through the connection of diverse members. It is crucial not only to embrace diversity but also to enhance members' sense of belonging and connection. The sense of belonging fostered through connections among diverse members will be a source of future growth momentum.



Non-discrimination

The company strictly forbids discrimination in hiring, evaluation, promotion, and compensation based on gender, nationality, race, religion, or cultural background, thus guaranteeing equitable opportunities for all employees.



Expanding Female Talent

The company fully supports the advancement of female employees by monitoring metrics such as the ratio of female managers. We are planning various programs to enhance systematic women's leadership and prevent career interruptions due to childcare.



Diversity Communication Meetings

To minimize conflicts among diverse stakeholders and maximize organizational synergy, we frequently hold ongoing diversity communication meetings where employees from various backgrounds such as workplace, rank, position, gender, and job function come together. Through these meetings, we aim to foster a deep understanding of perspectives and cultivate an inclusive organizational culture.

# SOCIAL Growing Stronger with Stakeholders

## Human Resource Management

### Talent Acquisition Strategy

LOTTE ENERGY MATERIALS has various recruitment strategies to secure outstanding talent. These multifaceted recruitment approaches are instrumental in reinforcing the talent pool of LOTTE ENERGY MATERIALS, enabling us to maintain our leadership in the industry.

|   |  |
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| <b>Diverse Recruitment Channels</b>                     | Within LOTTE Group, we utilize our internal transfer system (InCareer) to recruit talent through various hiring channels, including new graduates, professionals, experienced hires, and individuals with disabilities.  |
| <b>Flexible Recruitment Process</b>                     | The traditional open recruitment system has been abolished in favor of on-the-spot recruitment, allowing the company to flexibly adjust the timing and frequency of hiring to secure top talent promptly.  |
| <b>Participation in Job Fairs and Briefing Sessions</b> | We attend various job fairs and host recruitment presentations and counseling sessions at major universities to promote the company and engage directly with prospective candidates.   |
| <b>Talent Acquisition Events and Networking</b>         | We are establishing networks to collaborate with a specialized graduate school in batteries, facilitating research and personnel exchanges. Additionally, through chemistry R&D conferences, we aim to proactively secure doctoral and master's R&D personnel. |

### Talent Development Strategy

LOTTE ENERGY MATERIALS develops and offers innovative educational programs to enhance employee capabilities. These diverse educational and development programs play a pivotal role in enhancing the professionalism of employees and boosting the company's competitive edge.

|  |  |
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| <b>Generative AI Education</b>         | We provide specialized training to promote awareness and enhance skills necessary for generative AI. Through this education, we aim to increase proficiency in utilizing AI skills effectively to improve workflow and productivity.   |
| <b>Leadership Development Programs</b> | Leadership training on coaching, performance management, generational understanding, and more is provided to executives, team leaders, and incumbents to help them understand their roles and execute their responsibilities effectively within the organization. This training is vital for the long-term improvement of the corporate culture, equipping leaders with skills in role adaptation, coaching, and feedback. |
| <b>New Employee Onboarding Support</b> | We focus on addressing concerns and enhancing organizational adaptation through semi-annual meetings with new employees.   |
| <b>Overseas Expatriate Training</b>    | Continuous training in leadership, performance management, communication, change management, and language education is provided for expatriates for their effective role performance in a global environment.  |
| <b>Strengthening Safety Culture</b>    | In response to strengthened safety and health regulations and the increased importance of safety culture, we conduct mandatory biannual industrial safety and health training for all employees. Additionally, we establish workplace safety and health committees at each site, share relevant information internally, and enhance awareness to improve our safety culture.   |
| <b>Failure Reward System</b>           | We view failure as part of the journey toward success. We foster a culture that encourages and rewards various attempts, with planned award activities at the year's end to support this ethos. We have introduced a 'Challenge' category for our founding anniversary awards and have plans to activate ongoing rewards.  |

### Talent Management

LOTTE ENERGY MATERIALS operates a system designed to accurately evaluate and appropriately reward employees based on their performance through a fair evaluation framework. Through these measures, LOTTE ENERGY MATERIALS strives to accurately evaluate employee performance, fairly reward them, and respect work-life balance, thereby enhancing the quality of life for employees

|                                |   |
|--------------------------------|---|
| <b>Fair Evaluation</b>         | <ul style="list-style-type: none"> <li>Leveraging the management by objectives (MBO) approach, key performance indicators (KPIs) are set to objectively evaluate employee performance.</li> <li>The potential and growth possibilities of employees are assessed based on common and job-specific competencies. These are to bolster their strengths and address weaknesses to cultivate future leaders.</li> <li>Introduced in 2023, we were adopting a new system that allows for real-time mutual feedback (Check-in), and this evaluation method incorporates feedback from diverse perspectives to enhance fairness and objectivity within the vertical evaluation structure.</li> </ul> |
| <b>Reasonable Compensation</b> | The principle of "job-based compensation" is reinforced, with rewards provided in line with each employee's authority and responsibility. The performance-based compensation system adjusts base salaries and bonuses according to individual evaluation results to ensure equitable compensation devoid of unreasonable discrimination based on gender, age, disability, etc.  |
| <b>Work-Life Balance</b>       | Saving Leave System, WLB Days, etc. are available to ensure employees can take sufficient rest and maintain a balance between work and life. Through this, we oriented to promote flexible working arrangements.  |

# SOCIAL Growing Stronger with Stakeholders

## Employee Welfare Programs

LOTTE ENERGY MATERIALS places significant importance on welfare programs that support the mutual growth of employees and the company, aiming to enhance pride and engagement among its members. This commitment is based on the belief that the happiness of employees and their families contributes to the company's overall growth. Therefore, LOTTE ENERGY MATERIALS operates various welfare programs aimed at improving the lives and daily experiences of its employees. These programs are designed to create a flexible and enjoyable workplace environment, establishing a virtuous cycle where employee happiness leads to company success. Furthermore, detailed welfare manuals are published on the internal HR system to ensure that employees can easily understand and access these benefits. These efforts underscore LOTTE ENERGY MATERIALS' dedication to meeting the needs of its workforce and contributing to the creation of a happy workplace for everyone involved.

## Key Welfare Programs

|   |  |   |   |   |  |   |
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| <br>Group accident insurance for employees | <br>Support for children's education expenses | <br>Specialized health check-ups (for factories) | <br>Health management room (for factories) | <br>Housing loan support | <br>Lotte Resort support | <br>Support for online and offline education |
|---|--|---|---|---|--|---|

## Junior Board "High-Five" for Communication Led by Generation Z

LOTTE ENERGY MATERIALS has established the Junior Board as a communication channel led by generation Z employees to facilitate intergenerational communication. Starting with the High-Five on the Way to Work campaign, the first campaign of High-Five at the Seoul office, the CEO and Junior Board members greeted employees on their way to work and did high five with supporting for all Korean office. The "Junior Board High-Five" combines "high-five" and "high-end copper foil," representing a composite term merging five business locations. Board members were selected with consideration given to diversity across business sites, job functions, positions, and gender. The keyword for 2024 is "flexibility of the organizational culture," with plans for various campaigns, including a themed event of LEM Day, which will collect employee feedback via the intranet to design activities that transform the organizational culture.

## Talent Development Activities



### Job Skills Enhancement Training and Promotion/Position Training

LOTTE ENERGY MATERIALS operates job training programs to enhance job competencies. To further refine these training programs, we conduct Focus Group Interviews (FGI) with frontline practitioners to develop educational content that directly benefits their work. Tailored training courses are designed based on years of job experience to cultivate necessary skills and align with LOTTE Group's values. We have introduced promotion training for cultivating competencies required to fulfill expected roles at each job level, including Grade training for newly promoted employees and qualification courses for those aiming for higher-level promotions. These efforts are aimed at developing essential competencies necessary for career advancement. Additionally, leadership programs are provided for employees transitioning into roles like section chief or team leader to enhance their leadership styles, while also nurturing coaching skills among team members.

### Introductory Program for New Employees

LOTTE ENERGY MATERIALS offers an introductory program to help new employees rapidly adapt to the organization and gain positive employee experiences. This program introduces the management status and vision of each business unit and site, includes learning about secondary battery materials and products, and provides on-site training opportunities at the Iksan Plant. Furthermore, they are given the opportunity to undergo practical training in Excel and PowerPoint to support immediate application in their tasks.

## Global Competency-building Education

|  |   |
|--|---|
| <p><b>Employee Language Skills Enhancement Support</b></p>  | <p>We provide various in-house language courses to enhance the global competencies of all employees. These courses support the improvement of language skills necessary for their job performance. We offer external language institutes, online language classes, and micro-learning content to enable employees to enhance their language abilities according to their personal schedules. Additionally, we actively support employees in pursuing self-development by sponsoring certification exam costs.</p>   |
| <p><b>Expatriate Capability Enhancement Program</b></p>     | <p>We support the enhancement of capabilities for upcoming expatriates through various essential competency courses. These programs focus on increasing awareness and adaptation to personal and environmental changes, enhancing the role perception of expatriates driving overseas business, and developing essential competencies for achieving business capabilities and results in overseas subsidiaries. Additionally, through business analysis courses, we cultivate the competencies required to excel as business leaders. Furthermore, our foreign language proficiency enhancement programs strengthen local language proficiency, thereby improving communication skills necessary for local business operations and cultural adaptation.</p> |



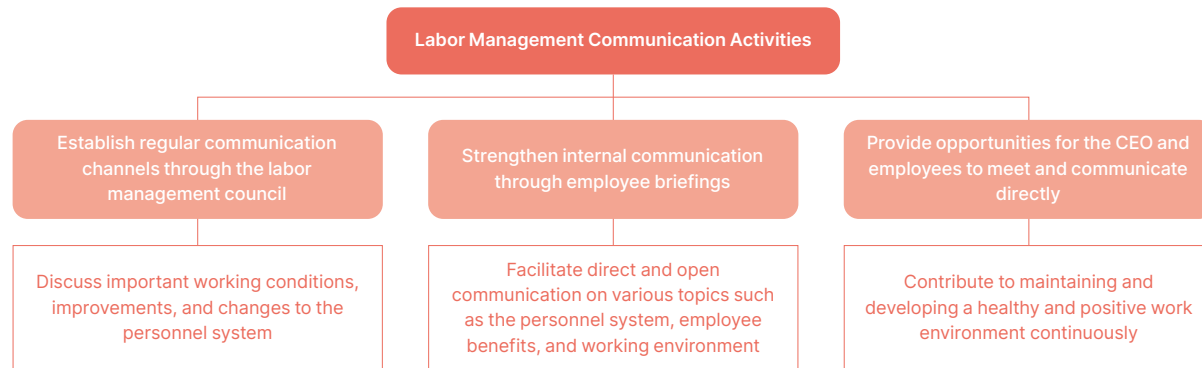
# SOCIAL Growing Stronger with Stakeholders

## Labor-Management Council

LOTTE ENERGY MATERIALS provides regular communication platforms through the labor-management council. These councils function as representative bodies for employee communication, discussing significant working conditions, and improvements or changes in HR systems at each business site. In this process, we continuously listen to employees' lively opinions and needs, incorporating them into company policies. These efforts contribute to LOTTE ENERGY MATERIALS establishing a true cooperative labor-management culture based on the voices of all members.

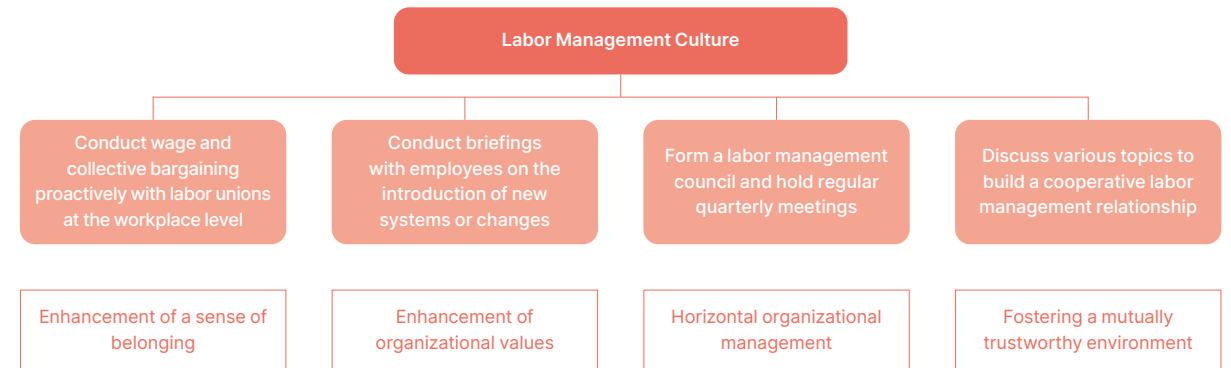
LOTTE ENERGY MATERIALS takes various steps to ensure a pleasant and enjoyable work culture for its employees. To boost company pride and reinforce communication and unity among employees, we engage in a wide range of team-building activities. These activities pave the way for better understanding and cooperation among members. Furthermore, we also work to improve internal communication by holding briefing sessions for employees, which transparently share management performance, future business plans, and other various topics such as HR systems, welfare benefits, and working conditions. This approach plays a crucial role in fostering a transparent and open organizational culture.

Opportunities for direct interactions between the CEO and employees are also provided to bolster their communication through voluntary participation. These diverse communication channels and events are crucial in maintaining and enhancing a healthy and positive work environment at LOTTE ENERGY MATERIALS.



## Labor-Management Culture

LOTTE ENERGY MATERIALS enhances corporate value and strengthens organizational unity by fostering two-way communication between labor and management based on respect and trust. To this end, the company actively engages in wage and collective bargaining with labor unions at the workplace level, aiming to foster mutual understanding and agreement through prior discussions on major business and policy changes. Additionally, explanatory sessions are held with employees regarding the introduction of new policies or changes, gathering feedback and building consensus. Through such communication, LOTTE ENERGY MATERIALS aims to enhance employees' sense of belonging and organizational value, creating an environment of horizontal organizational operation and mutual trust. A labor-management council is formed to hold regular quarterly meetings, discussing various topics such as improving working conditions and welfare benefits, thereby establishing a mutually beneficial labor-management relationship.



# SOCIAL Growing Stronger with Stakeholders

## Partnerships

### Stable Raw Material Supply through MOU

LOTTE ENERGY MATERIALS has secured a memorandum of understanding (MOU) with POSCO International to ensure a stable supply of raw materials, crucial for sustainable management. This agreement, effective from 2023 to 2033, guarantees the procurement of 600,000 tons of copper scrap, including mill berry and granule. These materials are pivotal for the production of Elecfoil, a key component in encasing the anode of secondary batteries, where consistent quality is essential due to the need for reliable raw material sources. The raw materials procured under this agreement are entirely recycled copper scrap, which matches the preferences of environmentally conscious international customers. Furthermore, LOTTE ENERGY MATERIALS and POSCO International have agreed to establish a joint council comprising senior executives and working-level staff to boost collaboration. This council will be responsible for overseeing the selection, inspection, and development of joint projects. It will progressively work on securing local production sites, refining processes for Elecfoil raw materials, and establishing operational bases.

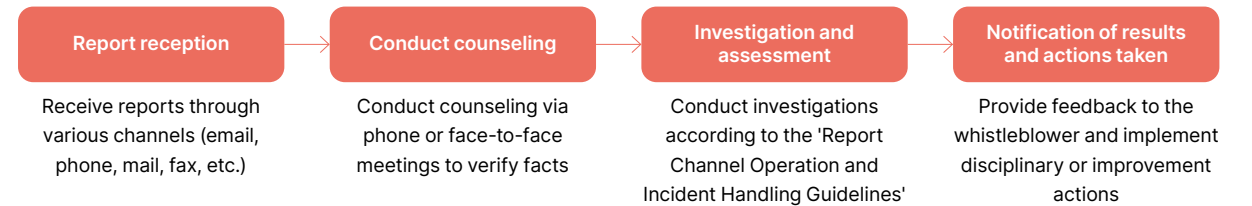
In February 2024, LOTTE ENERGY MATERIALS formalized another MOU with ISU Specialty Chemical to secure a stable supply of lithium sulfide (Li<sub>2</sub>S), a key raw material for manufacturing sulfide-based solid electrolytes. By receiving a stable supply of lithium sulfide from ISU Specialty Chemical based on the agreement, LOTTE ENERGY MATERIALS will be able to provide high-quality solid electrolyte samples to solid-state battery companies at home and abroad. In addition, on June 5, LOTTE ENERGY MATERIALS commenced construction of a pilot facility at the Iksan Plant 2, designed to produce up to 70 tons of solid electrolytes annually. Following trial operations and a stabilization phase set to conclude by the end of this year, we plan to expand the facility's capacity to 1,200 tons per annum by 2027. Our strategic alliance with ISU Specialty Chemical will expedite the development of sulfide-based solid electrolyte projects, enhancing research and innovation in next-generation battery materials due to the synergy created by the partnership. These efforts are key to achieving LOTTE ENERGY MATERIALS' commitments to sustainable management and eco-friendly objectives.

### Supplier Code of Conduct [📄](#)

In acknowledgment of the importance of responding to climate change and fostering a sustainable ecosystem as universal challenges of our time, LOTTE ENERGY MATERIALS strives to achieve its vision of sustainable management by fulfilling its environmental and social responsibilities. We expect our partners to collaborate on this path towards a sustainable future for humanity. We are dedicated to elevating our partners' adherence to sustainable management practices to meet global standards, ensuring compliance with broader social responsibilities encompassing labor, environmental issues, human rights, safety, and ethical standards. We adopted a supply chain management system that meets global ESG metrics as part of our efforts for sustainable coexistence with our partners. The Supplier Code of Conduct is integral to the bidding phase of contracts, with the Fair Trade Compliance Agreement form attached to ensure adherence.

### Supplier Complaint Handling Process

LOTTE ENERGY MATERIALS receives complaints from suppliers through a reporting channel. When significant supplier issues are identified, they are reported to the CEO and verified in consultation with the purchasing team. If necessary, an investigation is initiated, and interviews are conducted to address the issues.



# SOCIAL Growing Stronger with Stakeholders

## Social Contribution

### Community Contribution Policy and Strategy

LOTTE ENERGY MATERIALS is committed to fulfilling its corporate social responsibilities by safeguarding the environment, promoting mutual growth with the community, and ensuring the happiness of all. Our social contribution activities are organized around three themes: nature, people, and society.

In the nature theme, the focus is on enhancing societal awareness and promoting ecological conservation to establish a closed-loop recycling system. For the people, tailored programs are designed to support low-income and multicultural women and children. For the society, detailed strategies are being formulated to aid and sponsor vulnerable groups in regions housing major business sites. The operational organization for social contributions at LOTTE ENERGY MATERIALS includes the Business Support Team at the Seoul office and the Administrative Support Team at the Iksan site. The Business Support Team takes charge of the overall planning and execution of the company's social contribution activities, while the Administrative Support Team at the Iksan site engages in a variety of community-related social contribution activities and fosters voluntary participation among employees.



Nature



People



Society

### Social Contribution Organization



### Social Contribution Activities

#### Construction of the 26th Mom's Happiness Playground at Iksan Elementary School

In December 2023, LOTTE ENERGY MATERIALS, under the goal of creating a safe and enjoyable environment for play, contributed to the construction of a Mom's Happiness Playground as part of our diversity social contribution campaign aimed at the local community in Iksan, where our business site is located. This program, known as the Mom's Happiness Campaign, is a leading group-wide social contribution activity designed to address low birth rates and to create a welcoming environment for women and mothers by encouraging children to engage in creative activities within a secure setting. Subsequent to the company's integration in March 2023, LOTTE ENERGY MATERIALS completed the construction of the 26th playground. During this process, we incorporated feedback from child design teams to meet the actual needs of the users, thereby creating a safe and interesting environment. This campaign transformed the children's park at Iksan Elementary School into an engaging area featuring a pirate ship structure and collaborative play equipment, which supports various forms of play.

#### Participation in Zero Single-Use Item Challenge

In October 2023, LOTTE ENERGY MATERIALS took part in the Zero Single-Use Item Challenge initiated by the Ministry of Environment. The objective of this challenge is to reduce the use of single-use items in everyday life by building a social consensus and fostering voluntary engagement. The challenge promotes actions nationwide to heighten awareness of single-use items, reduce their consumption, and encourage the routine use of reusable items. LOTTE ENERGY MATERIALS took part by nomination from LOTTE INEOS Chemical. We motivated our employees to minimize the use of single-use items and rely on personal tumblers to successfully carry out the challenge.







# SOCIAL Growing Stronger with Stakeholders

## Local Community Volunteering

Local community volunteering at the Iksan site of LOTTE ENERGY MATERIALS involves planning social contribution activities in collaboration with the local community. These plans include making donations to vulnerable populations, children, and single-parent families in partnership with local governments, social welfare organizations, and public institutions in the region. Moreover, volunteering activities involving employees are organized quarterly, which include emergency relief efforts during natural disasters. We plan to launch various more programs designed to donate goods to vulnerable groups, thereby ultimately expanding ESG management.

## Social Contribution Programs

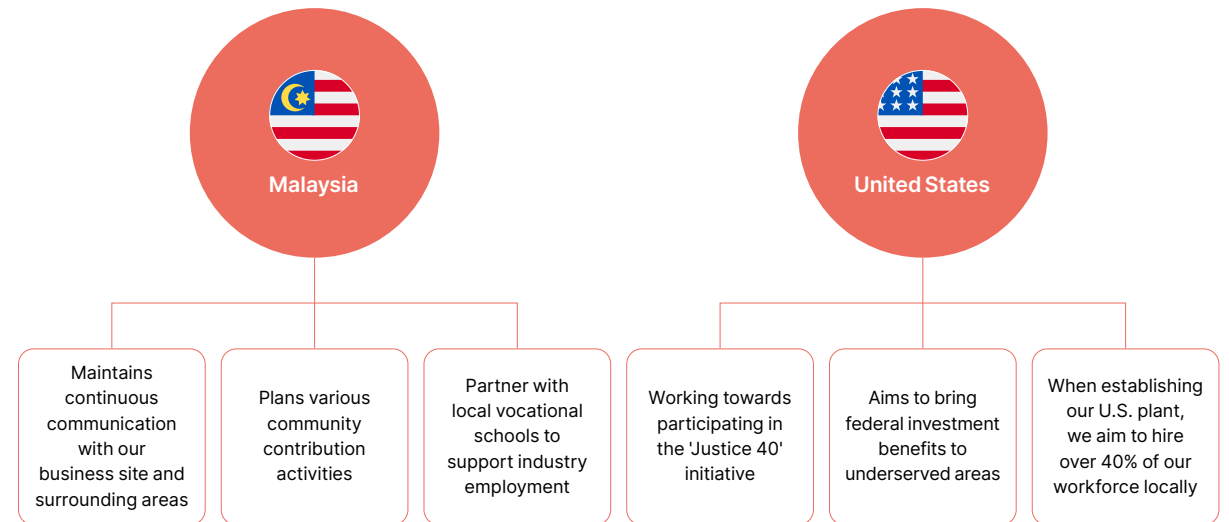
At LOTTE ENERGY MATERIALS, we plan to organize various social contribution activities as part of our commitment to corporate social responsibility. LOTTE ENERGY MATERIALS is dedicated to growing alongside the local community and achieving sustainable development through these social contribution programs. We will remain committed to our social responsibility and continue to engage in activities that positively impact the local community.

|  |  |
|--|--|
| <p><b>Employees' Donation of Spare Change</b></p>             | <p>Through a voluntary program, LOTTE ENERGY MATERIALS employees will have spare change not exceeding KRW 1,000 deducted from their monthly salaries, which will be accumulated into a donation fund to assist those in need.</p>  |
| <p><b>Environmental/Ecological Protection Activities</b></p>  | <p>To enhance social awareness and engage in local ecological preservation, LOTTE ENERGY MATERIALS intends to engage in activities such as establishing a closed-loop recycling system and planting trees to reduce carbon emissions.</p>  |
| <p><b>Building Social Safety Net</b></p>                      | <p>LOTTE ENERGY MATERIALS considers a wide range of donation activities designed to support vulnerable groups, including women, children, and persons with disabilities, particularly in the vicinity of our Iksan plant.</p>  |
| <p><b>Natural Disaster Supplies Kit</b></p>                   | <p>LOTTE ENERGY MATERIALS plans to provide emergency supplies kits to support swift rescue operations in the event of natural disasters like wildfires, earthquakes, and floods. These kits will include essential items such as food and electrical appliances to aid in preventing casualties during an emergency.</p> |

## Global Community Activities

LOTTE ENERGY MATERIALS plans to engage in activities that will allow the company to grow alongside local communities around its overseas business sites by incorporating feedback from local governments and institutions. Our Malaysia plant maintains a highly favorable relationship with the local community. The plant engages in continuous communication with the Malaysian Investment Development Authority (MIDA), fostering ongoing development and interaction with the plant and its neighboring area. In addition, at the request of MIDA, we intend to provide dormitories for local Malaysian workers and create employment links through partnerships with local vocational schools.

In the U.S., we are promoting participation in the Justice40 Initiative to benefit disadvantaged communities affected by pollution. The Justice40 Initiative, the largest environmental justice program of the U.S. federal government, is part of President Biden's executive order to tackle the climate crisis both domestically and internationally. The primary objective is to ensure that 40% of federal investment benefits are directed toward underserved communities in response to the climate crisis. Anchored in this initiative, LOTTE ENERGY MATERIALS is developing detailed implementation plans, including hiring over 40% of employees from the local community when building a plant in the U.S.



# SOCIAL Growing Stronger with Stakeholders

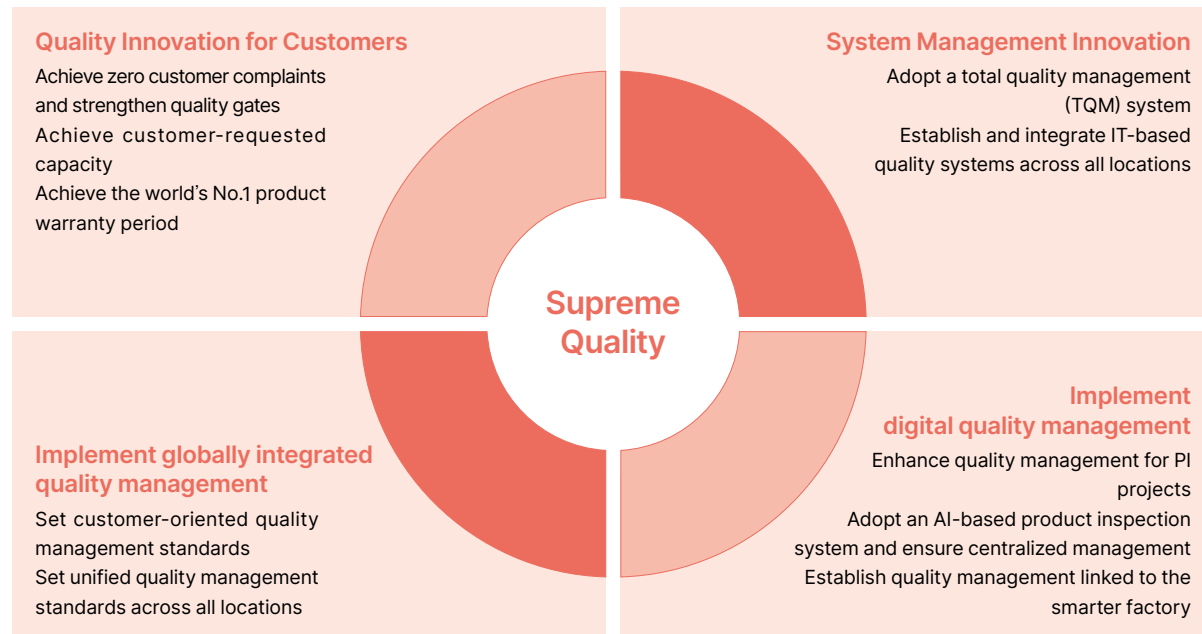
## Product Quality

### Quality Management Strategy

LOTTE ENERGY MATERIALS prioritizes customer satisfaction as its core value. We strengthen our quality management system through customer-oriented quality innovation, advanced systems management, digital quality control, and globally integrated quality management. This strategic approach encompasses setting a goal of zero customer complaints, reinforcing stringent quality control standards, actively incorporating customer requirements, and establishing product warranty periods at the highest level in the industry. These efforts are realized through embedding a customer-oriented mindset into the corporate culture and providing products and services that prioritize customer satisfaction. Through this approach, all employees at LOTTE ENERGY MATERIALS are dedicated to maximizing customer satisfaction, enhancing competitiveness in the market, and playing a crucial role in pursuing sustainable growth.

### LEMK 2024 Quality Policy

VISION: Achieve Global Quality No. 1 with Unified Quality!



### Quality Management Certification

LOTTE ENERGY MATERIALS operates a systematic quality management system based on ISO 9001, an internationally recognized standard, across all processes from design, production, and shipping to customer satisfaction. Through the system, we ensure consistent quality levels at our global business sites while securing customer trust. In addition, we obtained IATF 16949 certification from an external agency, demonstrating compliance with stringent quality management standards required in the automotive industry. We undergo periodic follow-up audits to ensure continuous maintenance and improvement of the quality management system according to certification standards.

#### ISO 9001 Quality Management System



#### IATF 16949 Automotive Quality Management System



# SOCIAL Growing Stronger with Stakeholders

## Product Quality Management Activities

### Establishment of Product Quality and Safety System

LOTTE ENERGY MATERIALS ensures transparency in product information through close collaboration with partners and customers. To maintain superior product quality, we set quality goals and manage monthly performance objectives. We emphasize sustainable product production, sharing and reinforcing this value through communication with partners and customers.

### Chemical Substance Regulation Compliance Activities

LOTTE ENERGY MATERIALS fully adheres to the expanding global legal requirements for the registration and evaluation of chemical substances. We have faithfully registered all chemical substances used at our facilities in accordance with both domestic and international guidelines, including the Korean Registration, Evaluation, Authorization and Restriction of Chemicals (K-REACH). This process was facilitated by close cooperation with representatives at home and abroad, ensuring timely registrations and responsiveness to customer needs. Accordingly, we place a high priority on environmental protection and customer satisfaction to pave the way for chemical substance management.

## Customer Satisfaction Management

### Meeting Customer Requirements

LOTTE ENERGY MATERIALS implemented a process designed to identify and address customer needs effectively. We continuously engage in activities to gather and respond to the feedback obtained from the voice of customer through various channels. Alongside our compliance with the Code of Conduct, we established a management review procedure where the causes of an event are regularly analyzed, and improvements are made through continuous reformation.

In response to increasing customer demand for ESG management activities, we preemptively collect environmental and safety data for customer use and strive to understand their requirements thoroughly. These actions form the basis of our internal product strategies, with a focus on enhancing customer satisfaction through high-quality products and value delivery.

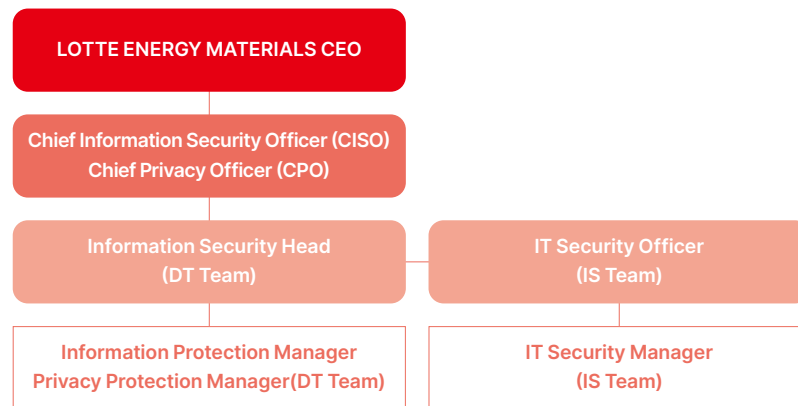
# SOCIAL Growing Stronger with Stakeholders

## Information Security

### Information Security Management System

#### Information Security Governance

LOTTE ENERGY MATERIALS is devoted to protecting core technologies, management strategies, and trade secrets. We have designated a Chief Information Security Officer (CISO) to manage our security system, and updated our guidelines and manuals to reflect the latest laws, related systems, information technology, and business environments. These resources are made accessible to all employees via internal groupware and bulletin boards.



#### Information Security Policy

LOTTE ENERGY MATERIALS endeavors to protect the personal data of all stakeholders, including employees. We have established robust information security regulations to ensure the security and integrity of information in accordance with relevant policies. In accordance with the Personal Information Protection Act and the Act on Promotion of Information and Communications Network Utilization and Information Protection, we encrypt and manage critical personal data to prevent loss, theft, breach, alteration, or damage. We also log and store access and authorization change histories related to personal data, including legally required items such as unauthorized viewing or downloading of personal data. These logs are periodically monitored to ensure compliance and security.

#### Information Security Incident Response System

LOTTE ENERGY MATERIALS, in collaboration with LOTTE Group's Cybersecurity Monitoring Center, has established a 24/7 monitoring system to detect and respond promptly to cyberattacks or viruses. Since becoming part of the LOTTE Group, we have introduced essential security solutions such as antivirus software, Digital Rights Management (DRM), data loss prevention (DLP), and network access control (NAC) to enhance information security. In addition, our information security manager conducts system security inspections of major systems to identify and address vulnerabilities.




#### Information Security Disclosure

To ensure user protection and the right to know, as well as to objectively understand and promote continuous investment in information security, LOTTE ENERGY MATERIALS discloses its information security status, including the amount invested and related activities conducted by our employees, through the Ministry of Science and ICT's Information Security Disclosure System.

#### LOTTE ENERGY MATERIALS' Personal Data Breach Cases

| Category           | Unit            | 2021 | 2022 | 2023 |
|--------------------|-----------------|------|------|------|
| Number of Breaches | Number of cases | 0    | 0    | 0    |

#### Information Security Capability Enhancement Activities

|   |   |
|---|---|
| <b>Annual Information Security Training</b><br>  | LOTTE ENERGY MATERIALS provides annual educational sessions on information security to raise awareness among employees and stakeholders. In 2023, the training focused on precautions when using artificial intelligence (AI) tools with inherent information security risks, like the recently popular ChatGPT, essential security checks for using business cloud services and emails and case studies of information security incidents arising from remote trade. |
| <b>Biannual Policy Update on Company Account Registration Changes and Security Checks for Retirees</b><br> | To prevent trade fraud attacks between our company and our trading partners due to the increase in virtual trade, we established a process to send a formal notice to our trading partners every six months to inform them of our policy on changing registered bank accounts. We also improved our security check process for retiring employees to prevent the breach of confidential company information or trade secrets.   |
| <b>Quarterly Simulated Email Virus</b><br>   | We work to enhance employees' security awareness and encourage information security practices. We conduct simulated phishing exercises every quarter under the supervision of LOTTE Group and its chemical division, and we provide specialized training for employees who were classified as infected to prevent email security breaches.  |



# GOVERNANCE

## Becoming a Trusted Partner



17.16 - Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries

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| Embedding a Culture of Fair Trade | 41 |
| Ethical Management                | 43 |
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# GOVERNANCE **Becoming a Trusted Partner**

## Compliance

### Compliance Management Promotion System

#### Compliance Management Regulations and Responsible Organization

LOTTE ENERGY MATERIALS established a compliance team directly under the CEO to manage compliance risks throughout management activities. We formulated a mid- to long-term compliance vision and continue to make efforts to stay in line with global standards and foster a trusted compliance management culture among stakeholders. Furthermore, we updated our internal regulations, including compliance management regulations and those related to anti-corruption, fair trade, and trade secrets. Periodic on- and offline programs also take place. In addition, in consideration of comparisons with global standards and the size of subsidiaries, we promote the spread of the compliance system to ensure a minimum level of internal control at domestic subsidiaries and overseas business sites.

#### Mid- to Long-Term Vision

AS-IS



TO-BE

#### Internal Control System

LOTTE ENERGY MATERIALS established an organization and processes to systematically identify and preemptively manage and inspect the diverse risks that may arise in economic, social, and environmental aspects within a rapidly changing internal and external business landscape. Furthermore, propelled by the management's full commitment to risk management, we built an efficient response system so as to recognize and aptly address the multifaceted risks associated with economic, social, and environmental factors. In light of the amplified exposure to compliance risks, precipitated by the global expansion of regulations pertinent to compliance and ESG management, coupled with the heightened scrutiny from stakeholders, we are fortifying our compliance management architecture, commensurate with the company's growth trajectory.

We are shifting from a temporary and reactive approach to a more proactive and preventative management strategy, facilitated by manuals and the monitoring of specific risk parameters. In addition, we designated a compliance officer in an effort to incessantly enhance and refine internal risk assessments and consultations. We formulated the internal control over financial reporting (ICFR) regulations and oversee the design and operation of the ICFR system. The operational status of this system is reported to the general meeting of shareholders, the Board of Directors, and the Audit Committee annually, in accordance with Article 8(4) of the Act on External Audit of Stock Companies ("External Audit Act"). Furthermore, in compliance with Article 8(5) of the External Audit Act, the Audit Committee annually evaluates and reports the operational status of the ICFR system to the Board of Directors. Pursuant to Article 8(7), the external auditor examines the system and furnishes an audit opinion within the audit report. Today, we distinguish the tiers of our 16 subsidiaries to institute consolidated internal accounting, thereby establishing a more transparent internal control system. Our objective is to realize the overarching goals and elevate the performance of LOTTE ENERGY MATERIALS through a comprehensive and systematic internal control, encompassing our subsidiaries.

#### Anti-Corruption Monitoring System

LOTTE ENERGY MATERIALS, in its quest for zero corruption, adheres strictly to both domestic and international laws and internal regulations pertinent to anti-corruption, ensuring that no corrupt practices occur by perpetually managing risks related to corruption through a preliminary reporting process. In addition to ongoing monitoring, pre- and post-contact reports are submitted when engagements occur with public officials, and pre-approval applications are filed for providing items restricted under the Improper Solicitation and Graft Act, executing only those that have been reviewed and approved to prevent related corruption risks.

# GOVERNANCE Becoming a Trusted Partner

## Compliance Programs

|   |   |
|---|---|
| <b>Review of Donations and Sponsorships</b>           | LOTTE ENERGY MATERIALS implemented internal standards (Guidelines for the Operation of Donation and Sponsorship Procedures) that articulate the procedures that must be adhered to for donations or sponsorships. All donations and sponsorships across workplaces require prior review by the Compliance Team. We also scrutinize the legitimacy of the donation or sponsorship purpose, the eligibility of recipient organizations, the applicability of the Improper Solicitation and Graft Act, and the appropriateness of reciprocal benefits to preemptively block potential corruption risks. Our goal is to establish a proper donation and sponsorship culture, ensuring legality and eligibility. |
| <b>Compliance Education</b>                           | Compliance education designed to heighten employee awareness includes group sessions categorized by work, subject, and workplace, as well as online education for all employees. In 2024, LOTTE ENERGY MATERIALS produced a video led by the CEO emphasizing compliance management awareness and distributed the video for organization-wide education. In addition, compliance newsletters and webtoons are regularly distributed through various media channels to ensure employees can easily apply compliance practices in their daily routines.  |
| <b>Other Activities to Eliminate Compliance Risks</b> | LOTTE ENERGY MATERIALS strives to respond rapidly to the increasingly stringent internal and external compliance regulations. We are amplifying consultations on fair trade and anti-corruption, introducing standard contracts, and mandating the inclusion of standard anti-corruption clauses to mitigate related risks. Given the growing significance of trade secrets, we established regulations related to trade secrets, and we conduct monitoring to prevent the infringement of trade secrets of our company, customers, and partners. We are resolutely committed to actively adhering to global compliance standards and corporate demand for social responsibility.                           |
| <b>Strengthening Supply Chain Compliance</b>          | With the company's operations expanding globally, the systematic management of supply chain compliance risks has become critically imperative. LOTTE ENERGY MATERIALS identifies and monitors domestic and international supply chain risks in advance to forestall risks from third parties as part of its endeavor to establish sustainable business practices and fulfill social responsibility. We promote transparent and fair transactions with partners by delivering anti-corruption messages, requiring adherence to the compliance pledge, mandating the use of standard contracts, and expanding the electronic procurement system to strengthen supply chain compliance.                        |

## Embedding a Culture of Fair Trade

### CEO's Compliance Management Message and Compliance Letters

LOTTE ENERGY MATERIALS regularly sends the CEO's compliance management messages and compliance letters to employees and partners. This is part of our initiatives to declare a strong commitment to compliance management internally and externally. These communications emphasize the importance of fair and transparent transactions, blocking any attempts of demands, offerings, or receipts of money, gifts, or entertainment. We persistently endeavor to extend our dedication to rigorous compliance management and adherence to compliance practices across all stakeholders, including employees, shareholders, customers, partners, competitors, and the local community. We aim to cultivate a culture imbued with fairness and transparency in transactions.

### Compliance Programs

In its commitment to fostering voluntary compliance with fair trade principles among its workforce, LOTTE ENERGY MATERIALS developed and distributed a Compliance Manual to its personnel. The manual is regularly updated to reflect the latest changes in relevant legal and regulatory frameworks, ensuring these are integrated into daily practices while consistently monitoring for potential fair-trade risks within business activities. In addition, we circulate a variety of internal standards, including regulations, checklists, Dos and Don'ts, and guidelines tailored to fair trade, providing employees with clear procedural guidelines applicable under diverse circumstances. To bolster voluntary adherence to fair trade practices, we undertake a range of endeavors such as employing the standard subcontract agreement as recommended by the Korea Fair Trade Commission. We also devised management strategies to navigate the complexities of the Act on the Promotion of Mutually Beneficial Cooperation Between Large Enterprises and Small and Medium Enterprises, starting from 2023, to manage risks associated with its application.

### Unfair Trade Management

LOTTE ENERGY MATERIALS firmly upholds the principles of fair trade to effectively manage and prevent the occurrence of unfair trade practices. We established internal regulations (Rules of Conduct for Fair Trade) and conduct a variety of educational sessions designed to forestall any violations of laws related to fair trade. Employees receive in-depth instruction regarding prohibitions on collaborative acts, unfair trade practices, inappropriate support activities, and adherence to the Fair Transactions in Subcontracting Act, thereby ensuring compliance with the guidelines.

### Internal Transaction Management

Determining compliance with fair trade-related legal stipulations in internal transactions hinges on the appropriateness of selecting business partners, the validity of detailed transaction terms and conditions, and the legitimacy of reasons for awarding a private contract. LOTTE ENERGY MATERIALS enforces internal standards (Internal Transaction Management Guidelines), which illustrate compliance requirements for internal transactions, to prevent potential infringements. For internal transactions that exceed a predetermined threshold, a preliminary review by the Compliance Team is mandated to confirm that there are no breaches of fair trade-related laws or corporate policies.

# GOVERNANCE   Becoming a Trusted Partner

## Fair Trade Management with Partners

In its dedication to managing fair trade and cultivating cooperative relationships, LOTTE ENERGY MATERIALS orchestrates annual compliance education sessions coupled with comprehensive investigations into incidents of unfair trade involving our partners. These measures allow us to verify and rectify compliance with fair trade standards and relevant laws by both our organization and our partners, adopting stringent protocols such as reassessment of existing contracts to prevent the recurrence of non-compliance. We consistently provide extensive education on subcontracting laws to departments that work closely with our partners, ensuring uniformity in subcontract agreements across all pertinent operations. Starting in 2023, we expanded our review and inspection processes to include not only enterprises governed by the Fair Transactions in Subcontracting Act but also those associated with the Act on the Promotion of Mutually Beneficial Cooperation Between Large Enterprises and Small and Medium Enterprises, incorporating the Ministry of SMEs and Startups' price adjustment mechanism into our procedures.

## Compliance with Relevant Laws

At LOTTE ENERGY MATERIALS, we require a preliminary assessment by our Compliance Team for every subcontract transaction executed at each business site in accordance with the Fair Transactions in Subcontracting Act. We ensure the appropriateness of payment decisions, the absence of unfair special agreements, and the use of standard contracts to mitigate potential risks. Through ongoing monitoring, we endeavor to strike a balance that promotes mutual prosperity for all involved parties. Furthermore, in our commitment to adhere to the Act on the Promotion of Mutually Beneficial Cooperation Between Large Enterprises and Small and Medium Enterprises, our Compliance Team delivers continuous advice and oversight concerning subcontract transactions, assuring that legal requirements are fulfilled and fostering a cooperative and prosperous relationship with small and medium-sized enterprises (SMEs).

## Establishment and Operation of Subcontract Payment Dispute Mediation Committee

In June 2023, LOTTE ENERGY MATERIALS inaugurated a Subcontract Payment Dispute Mediation Committee, aimed at ensuring reasonable and transparent adjustments to subcontract payments. This committee, recommended for establishment within the company, is tasked with mediating disputes related to subcontract payments in accordance with Article 13-3(1) of the Fair Transactions in Subcontracting Act and Article 8-2 of its Enforcement Decree. The committee has been operational preemptively from its inception to guarantee fair and transparent mediation of subcontract payment disputes.

## Fair Trade Education

LOTTE ENERGY MATERIALS orchestrates fair trade education, overseen by the Compliance Team, to underline the significance and imperative of upholding fair trade principles amongst all employees. Such educational endeavors are systematically executed to cover fair trade-related statutes, the latest legal decisions, precedents, and organizational standards. The curriculum is specifically adapted for various tiers of the corporate hierarchy—ranging from executives and managers to newcomers and experienced employees—as well as for roles specific to expatriates, managers handling subcontract transactions, and sales forces.

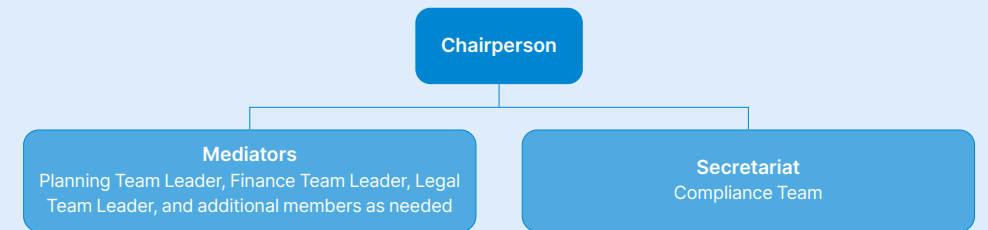
## Establishment and Operation of Subcontract Payment Dispute Mediation Committee

### Subcontract Payment Dispute Mediation Committee

LOTTE ENERGY MATERIALS has established and is operating a Subcontract Payment Dispute Mediation Committee to ensure reasonable and transparent adjustments of subcontract payments with its partners.

- Nature of the Committee**
- An internal body that handles disputes related to subcontract payments raised by subcontractors
  - This body handles payment disputes (determinations, reductions, etc.) on subcontract agreements under the Fair Transactions In Subcontracting Act.

**Committee Composition**  
(Established on Jun. 30, 2023)



**Mediation Procedure**



# GOVERNANCE   Becoming a Trusted Partner

## Ethical Management

### Ethical Management System

|   |  |
|---|--|
| <p><b>Ethical Management Regulations and Responsible Organization</b></p>  | <p>LOTTE ENERGY MATERIALS established a robust ethical management system, predicated upon the LOTTE Group's Code of Conduct and considering the distinct job characteristics and circumstances of each role, which includes Rules of Conduct for Anti-Corruption and other ethical guidelines. Through our Compliance Team directly under the CEO, we instill a transparent ethical culture company-wide and conduct a wide range of activities so as to continuously foster ethical awareness among employees. Various departments responsible for managing compliance, legal risks, and internal controls collaborate effectively to ensure that every employee fully embraces and executes their responsibilities within the framework of this ethical management system.</p>   |
| <p><b>Ethical Management System</b></p>                                    | <p>LOTTE ENERGY MATERIALS administers a structured ethical management system, aiming to inculcate a shared ethos of ethical conduct among employees. This is achieved by promulgating the LOTTE Group's Code of Conduct across the organization via the corporate website (<a href="http://www.lotteenergymaterials.com/esg/compliance.do">www.lotteenergymaterials.com/esg/compliance.do</a>). This ongoing initiative is designed to cultivate ethical awareness among staff members. In addition, we instituted multiple reporting channels that facilitate both internal and external stakeholders to report any unethical conduct within the organization, thereby ensuring the internalization of ethical management through both regular online and non-regular offline educational sessions for employees. The system also includes routine checks and assessments of accounting and business operations through the ICFR system and business process.</p> |
| <p><b>Internal Audit</b></p>   | <p>LOTTE ENERGY MATERIALS executes audits based on established annual plans, complemented by special audits initiated in response to external grievances, accusations, or emerging issues. The audit standards and procedures are standardized under the company's Internal Audit Regulations to ensure uniformity and clarity in execution. Suitable recommendations for commendations or disciplinary actions are proposed following audit results. Furthermore, to avert similar future recurrences, we provide special educational sessions and distribute company-wide notices. The overarching aim of these audits is to solidify trust amongst all stakeholders—including customers, partners, and shareholders—to foster mutual development and prosperity.</p>  |
| <p><b>Ethical Management Assessment and Enhancement</b></p>              | <p>The LOTTE Group codified a Code of Conduct that explicitly delineates the trajectory for ethical management, and we leverage such compliance management regulations to dispense ethical management guidelines. Departments dedicated to compliance management maintain monitoring at all times to ensure that all organizational members discharge their duties with fairness and integrity, according to these established guidelines. Assessments are routinely carried out across different business domains—like sales, procurement, and manufacturing—to continuously enhance procedural efficiencies. Furthermore, an annual ethical compliance evaluation spanning the entire LOTTE Group assesses the ethical consciousness of employees and identifies the overall ethical orientation of the organization to identify areas for improvement.</p>  |

### Strengthening Ethical Management Activities

#### Internal and External Reporting Channels and Whistleblower Protection

LOTTE ENERGY MATERIALS implemented a variety of reporting channels, including websites, e-mail systems, postal services, and telephone lines, in an effort to streamline the process of consultations and reporting concerning ethical management by stakeholders. In addition, we enhanced both the fairness and anonymity of these reporting processes to stimulate the submission of reports and foster a robust culture of ethical management. Furthermore, we maintain an internal grievance committee tasked with the investigation and consultation on issues such as sexual harassment, workplace bullying, and other related grievances that may occur within the organization. Whistleblowers have the option to report issues anonymously or under their actual names. All reports submitted are processed with complete transparency, adhering strictly to the Compliance Policies and Procedures and the Reporting Channel Operation and Incident Handling Guidelines. Should unethical conduct be verified through these investigations, appropriate disciplinary actions are enforced. The identity of the whistleblower is strictly kept confidential throughout the investigative process, with stringent measures for confidentiality, whistleblower protection, and the prohibition of retaliation firmly in place. Any breach of these protective measures is met with disciplinary actions to thoroughly protect the whistleblower.

|   |   |
|---|---|
| <p><b>Operation of Reporting Channels</b></p> <p>LOTTE ENERGY MATERIALS operates channels for employees, customers, shareholders, partners, and other stakeholders to gather their opinions on ethical management and management improvement.</p> |   |
| <p><b>Principles of Whistleblower Protection</b></p> <p><b>Reportable Content</b></p>   | <ul style="list-style-type: none"> <li>• The identity of whistleblowers is protected under any circumstances, and they shall not suffer any detriment.</li> <li>• In cases where the report is related to themselves, their responsibility may be mitigated in consideration of the circumstances.</li> <li>• Violations of ethical management by employees (receipt of money, entertainment, convenient treatment, etc.)</li> <li>• Unfair practices related to fair trade, such as abuse of power, collusion, and unfair support activities toward partners</li> <li>• Human resources-related issues such as workplace bullying and sexual harassment</li> <li>• Breach of trade secrets by employees and other matters requiring improvement</li> </ul> <p><b>Filing a Report</b></p> <ul style="list-style-type: none"> <li>• E-mail submission: LEM_HOTLINE@lotte.net</li> <li>• Postal submission: Compliance Team, LOTTE ENERGY MATERIALS, 17F, 396 Seocho-daero, Seocho-gu, Seoul, 06619, Republic of Korea</li> </ul> |

#### Ethical Management Reports Submitted, Investigations Conducted, and Actions Taken

Unit: Number of cases

| Year | Reports/Investigations | Resolved | Unethical Actions and Disciplinary Actions |
|------|------------------------|----------|--|
| 2021 | 9                      | 9        | 1  |
| 2022 | 12                     | 12       | 0  |
| 2023 | 9                      | 9        | 4  |

#### Ethical Management Education

LOTTE ENERGY MATERIALS delivers a comprehensive array of ethical management education programs, encompassing both group and online education, tailored for all staff members, including contract workers and partners, to deeply embed principles of ethical management. In 2023, we carried out two educational sessions for employees, with further sessions scheduled. These educational sessions are highly effective as they cover a broad spectrum of subjects, including compliance with the Improper Solicitation and Graft Act, global and information ethics, and both personal and organizational ethical conduct.

# GOVERNANCE Becoming a Trusted Partner

## Board of Directors

### Composition

As recorded on March 25, 2024 during the 37th Annual General Meeting (AGM), the Board of Directors of LOTTE ENERGY MATERIALS was composed of five members: two outside directors, two inside directors, and one non-executive director. Subsequent to April 1, 2024, following the resignation of an inside director due to a change in professional affiliation, the Board was restructured to include four members, comprising two outside directors and two inside directors. In March 2024, we appointed a new female outside director with expertise in the ESG field. The new outside director has previously served as the president of the Ministry of Environment and the Korea LPG Association. With approximately 30 years of direct and indirect experience, she is an environmental expert expected to play a pivotal role in LOTTE ENERGY MATERIALS' environmental protection activities, related system improvements, and particularly in the development and execution of environmental strategies within ESG management. Candidates for outside director are recommended based on the principles of diversity and expertise, with their qualifications thoroughly reviewed. The recommended candidates are then appointed at the shareholders' meeting. By maintaining a 50% ratio of outside directors on the board, we strive to strengthen the function of checks and balances on management and to implement sound governance.

| Category         | Name          | Gender | Key Career  | Term                |
|------------------|---------------|--------|---|---------------------|
| Inside director  | Yeon-seop Kim | Male   | - CSO & Head of ESG Management Division, LOTTE Group Chemical Division HQ<br>- Head of Management Planning Division, LOTTE Advanced Materials<br>- Current) CEO/Vice President of LOTTE ENERGY MATERIALS                            | Mar. 2023–Apr. 2025 |
| Inside director  | In-gu Park    | Male   | - Head of Battery Materials Division, Battery Materials Business HQ, LOTTE Chemical<br>- Head of Basic Materials CTO Innovation Center, LOTTE Chemical<br>- Current) Head of Sales and Procurement Division, LOTTE ENERGY MATERIALS | Mar. 2023–Mar. 2025 |
| Outside director | Se-min Oh     | Male   | - Inside director (Senior Managing Director), POSCO Chemical<br>- Head of Anode Materials Business Division (Senior Managing Director), POSCO Chemical  | Mar. 2023–Mar. 2025 |
| Outside director | Pil-jae Lee   | Female | - President, Korea LPG Association<br>- Chairperson, National Environmental Dispute Resolution Commission   | Mar. 2024–Mar. 2026 |

board of directors aims to enhance transparency, expertise, independence, and diversity, striving for balanced decision-making activities that pursue the happiness of stakeholders and strategic decision-making to improve long-term corporate value. We are committed to strengthening the board's expertise and diversity by introducing tools such as the Board Skill Matrix (BSM), which outlines the required competencies and expertise of the board members.

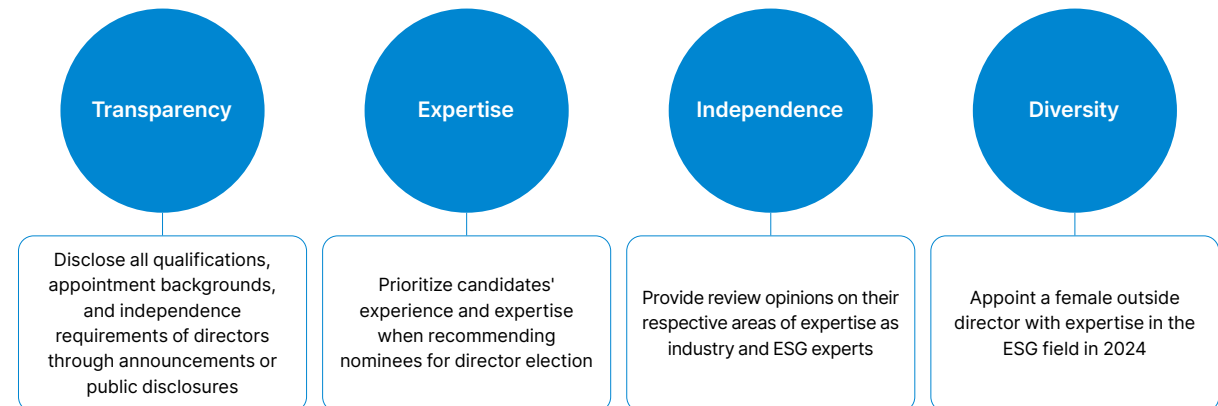
| Experience and expertise    | Yeon-seop Kim(CEO) | In-gu Park (Internal Director) | Se-min Oh (Outside Director) | Pil-jae Lee (Outside Director) |
|-----------------------------|--------------------|--------------------------------|------------------------------|--------------------------------|
| Leadership                  | ○                  | ○                              | ○                            | ○                              |
| Financial accounting        | ○                  | ○                              |                              |                                |
| Secondary battery materials | ○                  | ○                              | ○                            |                                |
| Government/Public Policy    | ○                  |                                |                              | ○                              |
| Marketing/Sales             | ○                  | ○                              | ○                            |                                |
| ESG                         |                    |                                |                              | ○                              |
| Gender (Female ratio: 25%)  | male               | male                           | male                         | female                         |

### Board Activities

The Board of Directors of LOTTE ENERGY MATERIALS, comprised of four experts and executives from varied sectors, functions as the paramount decision-making entity within the company, deliberating on prevalent issues and formulating the mid- to long-term strategic directives of the company. Regular board meetings take place once a month, but they may be complemented by an extraordinary board meeting convened to address pressing concerns. In 2023, a total of 13 board meetings were held. After each meeting, the agenda items and reports were disclosed and posted on the website to communicate transparently with shareholders and stakeholders. The board has established and operates an ESG committee, consisting of two internal directors and two external directors (a total of four members), to conduct preliminary reviews and manage the implementation performance of major ESG-related issues such as climate response, human rights, and supply chain. To support the active participation of external directors, we offer various programs including site visits and business trend education, enabling them to perform their roles as top experts effectively. Additionally, to ensure diversity and independence in governance, we appointed a female outside director in 2024 and introduced a lead director system, thereby enhancing the transparency of board operations and the independence of outside director activities.

**Board of Directors**

- 2 outside directors, 2 inside directors
- Held regularly once a month
- The highest decision-making organization within the company that determines the mid- to long-term strategy
- Total of 13 board meetings held in 2023





# ④ FACT & FIGURES

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# FINANCIAL DATA

Summary of Consolidated Financial Information<sup>1</sup>

Unit: KRW million

| Category  | 2021      | 2022      | 2023      |
|---|-----------|-----------|-----------|
| Total Assets                                      | 1,753,565 | 2,430,280 | 2,392,247 |
| Current assets                                    | 959,411   | 1,436,348 | 1,262,000 |
| Cash and cash equivalents                         | 234,580   | 200,612   | 551,987   |
| Short-term financial instruments                  | 3,284     | 22,808    | 20,034    |
| Trade receivables and other receivables           | 157,222   | 170,394   | 202,540   |
| Progress billing due from customers               | 9,666     | 7,094     | 9,296     |
| Other current financial assets                    | 393,561   | 711,203   | 104,592   |
| Income tax receivable                             | 37        | 483       | 1,193     |
| Other current non-financial assets                | 26,195    | 18,681    | 27,324    |
| Inventories                                       | 134,866   | 305,073   | 345,033   |
| Non-current assets                                | 794,154   | 993,932   | 1,130,247 |
| Long-term deposits at financial institutions      | 16        | 15        | 71,344    |
| Long-term trade receivables and other receivables | 7,090     | 3,774     | 2,784     |
| Other non-current financial assets                | 57,834    | 49,874    | 24,449    |
| Deferred tax assets                               | 3,580     | 13,940    | 18,093    |
| Investments in associates                         | 42,507    | 40,829    | -         |
| Tangible assets                                   | 673,797   | 873,976   | 1,000,401 |
| Investment properties                             | 961       | 938       | 915       |
| Intangible assets                                 | 8,241     | 10,544    | 12,208    |
| Other non-current assets                          | 128       | 42        | 54        |
| Total Liabilities                                 | 404,285   | 440,193   | 426,414   |
| Current liabilities                               | 148,562   | 176,544   | 332,800   |
| Non-current liabilities                           | 255,723   | 263,649   | 93,614    |
| Total Equity                                      | 1,349,280 | 1,990,087 | 1,965,833 |
| Equity attributable to owners of parent           | 988,599   | 1,459,906 | 1,433,495 |
| Capital stock                                     | 23,055    | 23,055    | 23,055    |
| Paid-in capital                                   | 696,945   | 1,140,278 | 1,137,696 |
| Retained earnings                                 | 256,977   | 293,741   | 243,419   |
| Other components of equity                        | 11,622    | 2,832     | 29,325    |
| Non-controlling interests                         | 360,681   | 530,181   | 532,337   |
| Total Equity and Liabilities                      | 1,753,565 | 2,430,280 | 2,392,247 |

Summary of Consolidated Income Statement<sup>2</sup>

Unit: KRW million

| Category                          | 2021    | 2022    | 2023     |
|-----------------------------------|---------|---------|----------|
| Sales                             | 688,893 | 729,363 | 809,006  |
| Cost of goods sold                | 576,235 | 599,780 | 739,598  |
| Gross profit                      | 112,658 | 129,583 | 69,408   |
| SG&A                              | 42,732  | 44,810  | 57,602   |
| Operating profit                  | 69,926  | 84,773  | 11,805   |
| Financial profit                  | 12,715  | 51,911  | 52,466   |
| Financial expenses                | 10,528  | 84,559  | 106,241  |
| Non-operating income              | 10,485  | 26,915  | 21,497   |
| Non-operating expenses            | 6,478   | 19,404  | 17,352   |
| Equity method income              | 2,119   | 889     | 446      |
| Profit before tax                 | 78,238  | 60,525  | (37,378) |
| Income tax expense                | 15,063  | 11,538  | 7,742    |
| Net income                        | 63,176  | 48,987  | (45,120) |
| Other comprehensive income (loss) | 14,239  | (2,487) | 34,620   |
| Comprehensive Income              | 77,415  | 46,500  | (10,501) |

ESG Common<sup>3</sup>

| Category                          | 2021  | 2022   | 2023   |
|-----------------------------------|-------|--------|--------|
| Overseas sales ratio (%)          | 0.72  | 0.72   | 0.76   |
| R&D investments (in KRW million)  | 7,770 | 10,949 | 11,252 |
| R&D investment ratio to sales (%) | 1.13  | 1.50   | 1.39   |

1) Major Consolidated Subsidiaries: LOTTE Tech, LOTTE EcoWall, IRM, Ijinco, Origin & Co, LOTTE IM Global, LOTTE ENERGY MATERIALS Fund

2) Major Consolidated Subsidiaries: LOTTE Tech, LOTTE EcoWall, IRM, Ijinco, Origin & Co, LOTTE IM Global, LOTTE ENERGY MATERIALS Fund

3) All domestic and overseas business sites of LOTTE ENERGY MATERIALS

# ESG DATA Environment

| Category  | Unit            | Location           | 2021      | 2022      | 2023      |
|---|-----------------|--------------------|-----------|-----------|-----------|
| Zero-emission vehicle ratio   | %               | Domestic total     | 25.0      | 31.3      | 22.2      |
| Air pollutant emissions: Nitrogen oxides (NOx)                                  | Ton             | Iksan Plant 1      | 0         | 0         | 0         |
|   |                 | Iksan Plant 2      | 0.087     | 0.123     | 0.675     |
| NOx emissions intensity   | Ton/KRW billion | Iksan Plant 1      | 0         | 0         | 0         |
|   |                 | Iksan Plant 2      | 0.000246  | 0.000395  | 0.002056  |
| Air pollutant emissions: Sulfur oxides (SOx)                                    | Ton             | Iksan Plants total | 0.020     | 0.108     | 0.012     |
| SOx emissions intensity   | Ton/KRW billion | Iksan Plants total | 0.000056  | 0.000345  | 0.000036  |
| Air pollutant emissions: Volatile organic compounds (VOCs)                      | Ton             | Iksan Plants total | -         | -         | -         |
| Air pollutant emissions: Hazardous air pollutants (HAPs)                        | Ton             | Iksan Plant 1      | -         | -         | -         |
|   |                 | Iksan Plant 2      | -         | 0.062     | 0.053     |
| Air pollutant emissions: Particulate matter (PM)                                | Ton             | Iksan Plants total | 3.872     | 3.031     | 1.851     |
| Total water withdrawn   | Ton             | Iksan Plants total | 2,111,183 | 2,044,012 | 1,988,306 |
| Water withdrawal intensity  | Ton/KRW billion | Iksan Plants total | 5,981.520 | 6,542.466 | 6,060.642 |
| Wastewater discharged   | Ton             | Iksan Plants total | 1,693,996 | 1,607,895 | 1,702,036 |
| Performance against water consumption targets                                   | %               | Iksan Plants total | -         | -         | -         |
| Total water consumption <sup>1)</sup>   | Ton             | Iksan Plants total | 417,187   | 436,117   | 286,270   |
| Water consumption intensity   | Ton/KRW billion | Iksan Plants total | 1,181.997 | 1,395.922 | 872.592   |
| Ratio of alternative water resources (reclaimed water, rainwater, sewage, etc.) | %               | Iksan Plant 1      | 102.9     | 94.3      | 72.8      |
| Water reused  | Ton             | Iksan Plant 1      | 429,377   | 411,361   | 208,354   |
| Water pollutant emissions: Total organic carbon (TOC)                           | Ton             | Iksan Plants total | 16        | 24        | 26        |
| Total water pollutant emissions: Suspended solids (SS)                          | Ton             | Iksan Plants total | 0         | 6         | 7         |
| Total water pollutant emissions: Biochemical oxygen demand (BOD)                | Ton             | Iksan Plants total | 15        | 22        | 23        |
| Total energy consumption (internal/external)                                    | TJ              | Domestic total     | 2,424     | 2,421     | 2,336     |
| Total external energy consumption   | TJ              | Domestic total     | -         | -         | -         |
| External energy intensity   | TJ/KRW billion  | Domestic total     | -         | -         | -         |
| Total non-renewable internal energy consumption                                 | TJ              | Domestic total     | 2.582     | 2.037     | 1.892     |
| Total renewable internal energy consumption                                     | TJ              | Domestic total     | 75.439    | 88.644    | 89.325    |
| Total internal energy consumption   | TJ              | Domestic total     | 2,423     | 2,420     | 2,335     |
| Internal energy intensity   | TJ/KRW billion  | Domestic total     | -         | -         | -         |
| Percentage of renewable energy consumption                                      | %               | Iksan Plant 1      | 3.191     | 3.772     | 3.940     |

| Category  | Unit                            | Location           | 2021    | 2022    | 2023    |
|---|---------------------------------|--------------------|---------|---------|---------|
| Percentage of grid electricity                          | %                               | Iksan Plants total | -       | -       | -       |
| Total self-generated energy                             | TJ                              | Iksan Plants total | -       | -       | -       |
| Annual GHG targets                                      | tCO <sub>2</sub> eq             | Domestic total     | 122,416 | 122,416 | 122,416 |
| Direct (Scope 1) emissions <sup>2)</sup>                | tCO <sub>2</sub> eq             | Domestic total     | 515     | 481     | 566     |
| Indirect (Scope 2) emissions <sup>2)</sup>              | tCO <sub>2</sub> eq             | Domestic total     | 112,257 | 111,478 | 107,411 |
| Scope 1 and Scope 2 emissions intensity                 | tCO <sub>2</sub> eq/KRW billion | Domestic total     | 318.052 | 356.819 | 327.403 |
| Recycled/recyclable raw materials purchased             | KRW 100 million                 | Domestic total     | 1,992   | 1,837   | 1,624   |
| Amount of hazardous chemicals used                      | Ton                             | Iksan Plants total | 3,775   | 2,553   | 2,157   |
| Emissions of hazardous chemicals                        | Ton                             | Iksan Plants total | 0       | 0       | 0.195   |
| Performance against waste discharge targets             | %                               | Iksan Plants total | -       | -       | -       |
| Total waste discharged                                  | Ton                             | Iksan Plants total | 5,539   | 5,371   | 5,315   |
| Percentage of designated waste recycled                 | %                               | Iksan Plants total | 2.4     | 2.3     | 16.3    |
| Designated waste discharged                             | Ton                             | Iksan Plants total | 511     | 471     | 597     |
| General waste discharged                                | Ton                             | Iksan Plants total | 5,029   | 4,900   | 4,718   |
| General waste intensity                                 | Ton/KRW billion                 | Iksan Plants total | 14.247  | 15.684  | 14.381  |
| Percentage of products with LCA performed <sup>3)</sup> | %                               | Iksan Plants total | -       | 4.76    | -       |

1) Total water consumption = Total water intake - Wastewater discharge

2) There is a discrepancy between the total emissions of direct greenhouse gases (Scope 1) and indirect greenhouse gases (Scope 2) and the sum of emissions by business site (sum of truncated emissions at the business site level to the company level).

3) LCA conducted in 2021, reflected in 2022 data



# ESG DATA Social

| Category   | Unit                                    | Location           | 2021    | 2022    | 2023    |
|--|---|--------------------|---------|---------|---------|
| No. of consumer opinions or complaints processed   | ea                                      | LEM total          | 42      | 37      | 13      |
| No. of business sites calculating safety and health indicators like lost time incident rate (LTIR) | ea                                      | Domestic total     | 4       | 4       | 4       |
| No. of deaths due to injury (Employees)  | ea                                      | Domestic total     | 0       | 0       | 0       |
| No. of deaths due to disease (Employees)   | ea                                      | Domestic total     | 0       | 0       | 0       |
| Death rate due to injury and disease (Employees)   | %                                       | Domestic total     | 0       | 0       | 0       |
| No. of serious injuries (Employees)  | ea                                      | Domestic total     | 0       | 0       | 0       |
| Percentage of serious injuries (Employees)   | %                                       | Domestic total     | 0       | 0       | 0       |
| No. of industrial accidents  | ea                                      | Domestic total     | 2       | 3       | 1       |
| No. of reportable diseases (Employees)   | ea                                      | Domestic total     | 13      | 13      | 13      |
| No. of reportable injuries (Employees)   | ea                                      | Domestic total     | 37      | 33      | 31      |
| Total recordable incident rate (TRIR) (Employees)  | No. of incidents per 200,000 work hours | Domestic total     | 5.31    | 4.63    | 4.33    |
| Total work hours (Partners)  | Hours                                   | Domestic total     | 172,800 | 159,400 | 160,800 |
| No. of deaths due to injury (Partners)   | ea                                      | Iksan Plants total | 0       | 0       | 0       |
| No. of deaths due to disease (Partners)  | ea                                      | Iksan Plants total | 0       | 0       | 0       |
| Death rate due to injury and disease (Partners)  | %                                       | Iksan Plants total | 0       | 0       | 0       |
| No. of serious injuries (Partners)   | ea                                      | Iksan Plants total | 0       | 0       | 0       |
| Percentage of serious injuries (Partners)  | %                                       | Iksan Plants total | 0       | 0       | 0       |
| No. of reportable injuries (Partners)  | ea                                      | Iksan Plants total | -       | -       | 6       |
| No. of reportable diseases (Partners)  | ea                                      | Iksan Plants total | -       | -       | 0       |
| Total recordable incident rate TRIR (Partners)   | No. of incidents per 200,000 work hours | Domestic total     | -       | -       | 7.46    |
| No. count of process safety incidents (PSIC)   | ea                                      | Domestic total     | -       | -       | -       |
| Process safety total incident rate (PSTIR)   | No. of incidents per 200,000 work hours | Domestic total     | -       | -       | -       |
| Process safety incident severity rating (PSISR)  | %                                       | Domestic total     | -       | -       | -       |
| No. of Transportation Accidents  | ea                                      | Domestic total     | -       | -       | -       |
| No. of grievance cases handled through official mechanisms or procedures by channel                | ea                                      | LEM total          | 0       | 0       | 1       |

| Category   | Unit     | Location       | 2021 | 2022 | 2023 |
|--|----------|----------------|------|------|------|
| Total no. of employees   | Persons  | Domestic total | 544  | 573  | 564  |
| Total no. of employees (Female)                                  | Persons  | Domestic total | 32   | 35   | 39   |
| Total no. of regular employees (Female)                          | Persons  | Domestic total | 22   | 25   | 31   |
| Total no. of contract employees (Female)                         | Persons  | Domestic total | 10   | 10   | 8    |
| Total no. of full-time employees (Female)                        | Persons  | Domestic total | 22   | 25   | 31   |
| Total no. of part-time employees (Female)                        | Persons  | Domestic total | 8    | 9    | 8    |
| Total no. of employees (Male)                                    | Persons  | Domestic total | 512  | 538  | 525  |
| Total no. of regular employees (Male)                            | Persons  | Domestic total | 452  | 496  | 509  |
| Total no. of contract employees (Male)                           | Persons  | Domestic total | 60   | 42   | 16   |
| Total no. of full-time employees (Male)                          | Persons  | Domestic total | 452  | 496  | 509  |
| Total no. of part-time employees (Male)                          | Persons  | Domestic total | 5    | 5    | 4    |
| Total no. of (non-affiliated) workers                            | Persons  | Domestic total | 73   | 66   | 79   |
| No. of employees eligible for parental leave                     | Persons  | Domestic total | 2    | 4    | 2    |
| Average training hours per employee (Total)                      | Hours    | Domestic total | 40   | 32   | 30   |
| No. of employees performing MBO evaluations                      | Persons  | Domestic total | 149  | 174  | 199  |
| Ratio of female managers <sup>1)</sup>                           | %        | Domestic total | 0    | 0    | 5.3  |
| Ratio of female executives (board members)                       | %        | Domestic total | 0    | 0    | 0    |
| Ratio of male executives (board members)                         | %        | Domestic total | 100  | 100  | 100  |
| Ratio of junior female managers <sup>2)</sup>                    | %        | Domestic total | 21.9 | 15.2 | 19.4 |
| No. of minority group (person with a disability) employees       | Persons  | Domestic total | 13   | 14   | 12   |
| Frequency of audits on information security policies and systems | Sessions | Domestic total | 3    | 3    | 2    |

1) Managers: categorized into Team Leader, Section Leader, and Executive

2) Junior managers: categorized as Senior Associate level and below

# ESG DATA Governance

| Category   | Unit        | Location       | 2021      | 2022      | 2023      |
|--|-------------|----------------|-----------|-----------|-----------|
| Total shareholding ratio of controlling shareholders and their relatives   | %           | Domestic total | -         | -         | 0         |
| Total no. of shares held by controlling shareholders and their relatives   | Shares      | Domestic total | -         | -         | 0         |
| Total shareholding ratio of registered directors excluding controlling shareholders and their relatives  | %           | Domestic total | -         | -         | 0.01      |
| Total no. of shares held by registered directors excluding controlling shareholders and their relatives  | Shares      | Domestic total | -         | -         | 2,500     |
| Total shareholding ratio of affiliates in the company  | %           | Domestic total | 0         | 0         | 0         |
| Total no. of shares held by affiliates in the company  | Shares      | Domestic total | 0         | 0         | 0         |
| Shareholding ratio of shareholders with 5% or more excluding majority shareholders and especially related persons (including executives and affiliates)      | %           | Domestic total | 5.89      | 5.89      | 5.89      |
| Total no. of shares held by shareholders with 5% or more excluding majority shareholders and specially related persons (including executives and affiliates) | Shares      | Domestic total | 2,718,220 | 2,718,220 | 2,718,220 |
| Total amount of repurchased shares   | KRW         | Domestic total | -         | -         | -         |
| Total investment in affiliates compared to equity capital  | KRW million | Domestic total | 176,049   | 166,756   | 149,517   |
| Total amount of credit offered to affiliates compared to equity capital  | KRW million | Domestic total | -         | -         | -         |
| Total no. of legal/regulatory non-compliance cases   | ea          | Domestic total | 0         | 0         | 0         |
| Ratio of Audit Committee members meeting legal requirements for accounting/finance experts   | %           | Domestic total | -         | -         | -         |
| Ratio of non-audit services provided by external auditors  | %           | Domestic total | 0         | 0         | 15.7      |
| No. of Audit Committee meetings held   | Sessions    | Domestic total | -         | -         | -         |
| No. of ESG Committee meetings held   | Sessions    | LEM total      | 0         | 0         | 0         |
| Ratio of anti-corruption education (Employees)   | %           | Domestic total | 100       | 100       | 100       |
| No. of board meetings held   | Sessions    | Domestic total | 19        | 16        | 13        |
| No. of female executives who are not controlling shareholders or their relatives   | Persons     | Domestic total | 0         | 0         | 0         |
| Ratio of female directors on the board   | %           | Domestic total | 0         | 0         | 0         |
| Ratio of outside directors on the board  | %           | Domestic total | 25        | 25        | 25        |
| Total no. of directors   | Persons     | Domestic total | 4         | 4         | 4         |
| No. of outside directors exceeding the legal minimum standard  | Persons     | Domestic total | 0         | 0         | 0         |
| Average remuneration per inside director   | KRW million | Domestic total | 303       | 227       | 295       |
| Average remuneration per outside director  | KRW million | Domestic total | 36        | 36        | 36        |

| Category  | Unit        | Location       | 2021       | 2022       | 2023       |
|---|-------------|----------------|------------|------------|------------|
| Total remuneration per non-executive director                     | KRW million | Domestic total | 0          | 0          | 0          |
| Date of prior notification regarding place, agenda, etc., for AGM | Date        | Domestic total | 2022.03.18 | 2023.03.16 | 2024.03.07 |
| Effective tax rate  | %           | Domestic total | 22         | 30         | (37)       |
| Cash dividend per share   | KRW         | Domestic total | 300        | 300        | 200        |



# ⑤ ESG POLICY BOOK

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# ENVIRONMENT

## Environmental Management

### Environmental Management Charter

LOTTE ENERGY MATERIALS maintains its commitment to integrating environmental values at the heart of its corporate philosophy to foster sustainable growth and elevate the quality of life for humanity. To this end, we have instituted an Environmental Management Charter, mandating adherence by all employees. This Charter derives its authority from both domestic and international legislative frameworks, including the Constitution of the Republic of Korea, the Framework Act on Environmental Policy, the Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis, the UN Framework Convention on Climate Change, and the Convention on Biological Diversity. We are dedicated to the good faith implementation and practice of this Charter.

1. We uphold the fundamental human right to a healthy and enjoyable environment and are committed to integrating environmental preservation into our management and business processes.
2. We pledge adherence to both domestic and international environmental statutes, and are proactive in establishing and enforcing internal environmental standards that surpass statutory requirements to prevent pollution in advance.
3. By conserving resources and energy and utilizing them efficiently, we will advance environmental management that fulfills our social responsibility through the minimization of greenhouse gas emissions and environmental pollution.
4. We are committed to diminishing the negative environmental impact of our products throughout their life cycle, employing eco-friendly raw materials and refining processes to decrease emissions of pollutants.
5. Acknowledging the global scale of the climate crisis, we are engaged with the international community in efforts to mitigate global warming and advance towards a carbon-neutral society.
6. We recognize the critical importance of biodiversity conservation and are committed to minimizing the impact of our business operations to prevent any reduction in biodiversity.
7. We will conduct regular and transparent disclosure of environmental management data such as greenhouse gas emissions, reduction achievements, and sustainable development accomplishments to improve accessibility to this information for all stakeholders.
8. We will work with our partners to share our achievements in the environmental management system and facilitate the adoption of the environmental management system, thereby reinforcing our mutual prosperity and growth.

We solemnly pledge to devote our utmost efforts to establish and perpetuate these guiding principles of environmental management.

### Environmental Management Policy

LOTTE ENERGY MATERIALS holds the environment as a pivotal value in our management activities and hereby articulates our environmental management policy aimed at safeguarding our precious environment for future generations.

1. All employees are expected to acquire a thorough understanding of, and comply with, environmental laws and regulations to embed an eco-friendly corporate culture.
2. We commit to the efficient use of resources and energy, and through periodic emissions management, substantially reduce greenhouse gas emissions and environmental pollutants to the minimum.
3. Throughout our research and development and manufacturing processes, we use materials that are least harmful to the environment and enhance facilities that emit pollutants as part of our environmental protection initiatives.
4. By maintaining transparency in our environmental information disclosures, we reinforce the trust and confidence of various stakeholders including employees, partners, customers, shareholders, and the local communities.

# ENVIRONMENT

## Environmental Management Policy

|  |  |
|--|--|
| Establishment and Operation of Environmental Management System | LOTTE ENERGY MATERIALS is committed to the establishment and effective implementation of an environmental management system by setting out precise objectives and execution plans and structuring related organizations to engage in management practices that conserve resources and energy, significantly reduce greenhouse gas (GHG) emissions and environmental pollutants, and fulfill our social and ethical responsibilities ("environmental management").  |
| Prevention of Environmental Pollution                          | Throughout all our business operations, LOTTE ENERGY MATERIALS will employ raw materials that have minimal environmental impact, enhance processes, promote resource conservation and recycling, fundamentally decrease emissions of pollutants, and minimize the negative environmental effects associated with the use and disposal of our products.   |
| Reduction of GHG Emissions and Prevention of Air Pollution     | In response to the global climate crisis and to mitigate the emission of particulate matter, LOTTE ENERGY MATERIALS will establish and enforce internal environmental standards that are more stringent than the legal limits to minimize the release of GHGs from our operations and prevent air pollution.   |
| Water Resources Management and Prevention of Water Pollution   | LOTTE ENERGY MATERIALS will implement efficient management and use of water resources through conservation and recycling measures and operate wastewater treatment systems that adhere to internal environmental standards that exceed legal discharge limits, thereby preventing water pollution.   |
| Prevention of Soil Pollution                                   | Going beyond mere compliance with statutory requirements, LOTTE ENERGY MATERIALS conducts regular inspections of facilities likely to cause soil contamination, adhering to internal guidelines, to prevent soil pollution.  |
| Resource Circulation   | LOTTE ENERGY MATERIALS commits to the efficient use of resources assigned and energy consumed, the enhancement of processes as well as the materials and structures of products to minimize products, raw materials, ingredients, and containers needed for business activities from being disposed of as waste as part of its efforts to reduce waste generation. The company diligently endeavors to ensure the efficient recycling of generated waste by either repurposing the waste internally or segregating and disposing of it according to its type and intended use.   |
| Safe Handling of Chemical Substances                           | LOTTE ENERGY MATERIALS acknowledges the potential impacts of chemical substances on human health and the environment, which could affect both products and corporate competitiveness. In light of this understanding, the company is committed to (i) reducing the use of hazardous substances to prevent or minimize risks to public health and the environment; (ii) embracing innovative approaches by developing alternative substances or new technologies to replace such chemicals; and (iii) rigorously implementing necessary measures to prevent any harm caused by chemicals, and these measures include maintaining appropriate facilities and equipment, providing employee training, advancing technological development, and promoting the exchange of information. |
| Environmental Due Diligence                                    | When assessing potential new business ventures and investment opportunities, LOTTE ENERGY MATERIALS undertakes, as needed, preliminary environmental due diligence to fully comprehend the potential impacts these could have on critical environmental concerns such as the climate crisis, biodiversity, and water resources, as set out in our Environmental Management Charter, and to remain committed to mitigating any negative impacts.  |

## Biodiversity Policy

1. We are dedicated to identifying and minimizing the ecological threats posed by our corporate operations to biodiversity.
2. We monitor ecosystems affected by our activities, safeguard endangered species, and conduct ongoing evaluations of biodiversity risks.
3. We promote and expand investments aimed at the conservation and restoration of biodiversity proximate to our business sites.
4. We adhere strictly to international biodiversity and land protection agreements and pertinent legal standards, and we engage with external experts as needed and comply with pertinent legal requirements.
5. We actively review the participation in global biodiversity conservation initiatives, all the while distributing relevant information to our employees and stakeholders to deepen their understanding of biodiversity issues.

# SOCIAL

## Human Rights Management

### Human Rights Management Charter

LOTTE ENERGY MATERIALS is dedicated to advancing “human rights management” that significantly benefits not only our customers but also the broader society to contribute towards the enhancement of human well-being. To this end, we have instituted the LOTTE ENERGY MATERIALS Human Rights Management Charter as a guideline for appropriate conduct and value judgments that all employees must adhere to during their management activities and business operations, thereby affirming our commitment to adding value to human life. This Charter is anchored in international human rights principles and norms, including the UN Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, and the UN Convention on the Rights of the Child. We pledge our unwavering commitment to the good faith adherence and implementation of this Charter.

1. We honor the inherent dignity and value of all individuals under our management umbrella and prioritize human rights management.
2. We respect international standards and norms on human rights such as the UN Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, and the UN Convention on the Rights of the Child.
3. We develop and enforce human rights management systems and policies to ensure that human dignity and values are reflected across all management activities and deeply embedded within our organizational culture.
4. We are committed to protecting and promoting the human rights of socially vulnerable groups, upholding the rights of all our stakeholders, including customers, affiliated institutions, partners, the local community, and our employees.
5. We maintain a non-discriminatory employment policy, refraining from any discrimination based on race, gender, educational background, age, disability, religion, place of birth, or political affiliation, and foster an organizational culture of mutual respect and consideration.
6. We strictly prohibit any form of forced or child labor in compliance with the minimum age requirements prescribed by local laws and international standards in the countries where we operate.
7. We ensure adherence to legally mandated working hours and wage standards in the countries where we operate.
8. We are dedicated to creating a workplace that prioritizes the safety and health of our employees.
9. We uphold the constitutional right to freedom of association, protecting and promoting the labor rights of our employees.
10. We prevent workplace harassment, sexual harassment, and other forms of human rights violations, and make the utmost effort to relieve any damage.
11. We engage with our partners on an equal footing, supporting their efforts to implement effective human rights management practices.
12. We do not use raw materials sourced through illegal or unethical means that could involve human rights violations.
13. We protect the personal data acquired during our management and business operations, ensuring its confidentiality and integrity.
14. We comply with both domestic and international environmental regulations, actively pursuing objectives such as carbon neutrality, environmental protection, biodiversity conservation, and closed-loop recycling.
15. We preemptively address any human rights infringements within our management processes and provide timely and appropriate remedies for any violations that may occur.

We pledge our unwavering commitment to continuously enhance and expand our practices in environmental management.

All employees of LOTTE ENERGY MATERIALS

# SOCIAL

## Human Rights Management Policy

### Establishment and Operation of Human Rights Management System

The senior management of LOTTE ENERGY MATERIALS bears the responsibility to (i) respect the human rights of all stakeholders impacted by our corporate activities, including employees, those within our supply chains, residents, and consumers; (ii) refrain from any actions that would infringe upon the human rights of these stakeholders or permit third parties to do so through our business operations, domestically and internationally; and (iii) make the utmost effort to provide adequate means of relief by preparing in advance effective relief procedure to address any potential human rights abuses arising from our corporate actions.

LOTTE ENERGY MATERIALS (i) implements stringent human rights due diligence in accordance with international guidelines such as the OECD Guidelines for Multinational Enterprises to protect stakeholders' human rights, (ii) prevent negative impacts on human rights in advance, and (iii) ensure prompt and appropriate redress for any violations that might occur. To facilitate these efforts, LOTTE ENERGY MATERIALS may establish a specialized unit tasked with setting policies and directions related to human rights management, providing advisory services and reviews, and managing relief procedures.

LOTTE ENERGY MATERIALS encourages its partners and entities within the supply chain to adopt and implement human rights management policies and may provide necessary support by offering the code of conduct of LOTTE ENERGY MATERIALS partners. LOTTE ENERGY MATERIALS operates a reporting channel to allow anyone, including stakeholders, to report any human rights violations or concerns related to our corporate activities.

- E-mail submission: LEM\_HOTLINE@lotte.net
- Postal submission: Compliance Team, LOTTE ENERGY MATERIALS, 17F, 396 Seocho-daero, Seocho-gu, Seoul, 06619, Republic of Korea

|   |   |
|---|---|
| Detailed Policies on Human Rights Management            | Beyond the human rights provisions stipulated in the Human Rights Management Charter, LOTTE ENERGY MATERIALS is committed to safeguarding the human rights of local inhabitants (in areas hosting our overseas subsidiaries and factories) as well as ensuring the human rights of our consumers (protection of various rights of consumers such as the safety of product). We undertake regular evaluations and enhancements of our detailed policies on the human rights that we must protect and respect.                  |
| Respect for Human Rights                                | LOTTE ENERGY MATERIALS upholds the dignity of all individuals impacted by our corporate activities, including our members as well as our partners' members, affirming that no actions that could be construed as human rights violations will be tolerated. Any form of verbal abuse, assault, sexual abuse, or physical or mental coercion is prohibited under any circumstances, with stringent measures in place to address and penalize such misconduct.  |
| Child and Adolescent Labor                              | LOTTE ENERGY MATERIALS strictly adheres to the minimum employment age laws of each country in which we operate, refusing employment to children and adolescents below the compulsory education age or under 15 years old. For minors under 18, we ensure compliance with local legal requirements, particularly concerning the prohibition of hazardous or detrimental labor practices, including night shifts and overtime work.   |
| Working Hours and Wages                                 | LOTTE ENERGY MATERIALS' business sites comply with the working hour regulations prescribed by the labor laws of each country where we operate. We ensure that overtime work, when necessary, is adequately compensated according to legal standards. We commit to remunerating our employees at rates exceeding the minimum wage requirements specified by local legislation.   |
| No Discrimination                                       | LOTTE ENERGY MATERIALS enforces a strict non-discrimination policy in all employment and working conditions, ensuring no employee faces discrimination based on race, skin color, gender, educational background, age, disability, religion, nationality, place of birth, or political views.   |
| No Forced Labor   | LOTTE ENERGY MATERIALS rejects any form of forced labor against free will by coercion, whether physical or mental, including practices akin to slavery and human trafficking. We strive to eradicate all manifestations of forced labor, and we enforce adequate measures to prevent any such forced labor.   |
| Workplace Safety  | LOTTE ENERGY MATERIALS is dedicated to creating and maintaining a safe working environment that conforms to international standards and pertinent laws, and internal regulations for working environment. We provide all personal protective equipment indispensable for safe job performance and offer sufficient industrial safety training. We ensure that our employees take regular health checkups to protect and maintain their health, and we provide support programs for employees affected by workplace accidents. |
| Freedom of Association and Collective Bargaining Rights | LOTTE ENERGY MATERIALS fully supports and guarantees the rights to freedom of association and collective bargaining as mandated by the labor laws governing our business sites. We respect the rights of our employees to form or join labor unions or similar organizations and engage in collective bargaining concerning their employment conditions. We ensure that no employee is disadvantaged due to their union membership or activities.   |
| Compliance with Responsible Mineral Regulations         | Acknowledging the severe implications of human rights abuses and environmental degradation resulting from the extraction of minerals in conflict-affected and high-risk areas, LOTTE ENERGY MATERIALS refrains from employing conflict minerals such as tin, tantalum, tungsten, gold, and cobalt that are mined under unethical conditions. To this end, we implement rigorous due diligence, disclosure requirements, and other essential measures with our partners in the supply chain, adhering to applicable norms.     |

# SOCIAL

## Safety and Health

### Safety and Health Policy

LOTTE ENERGY MATERIALS upholds safety and health as key values within our management activities and hereby articulates our safety and health policy aimed at cultivating a safe and healthy working environment.

1. We establish safety and health objectives and diligently execute detailed action plans tailored to fulfill these objectives.
2. All employees are expected to acquire a thorough understanding of, and comply with, health and safety laws and regulations to embed a safety culture within the organization.
3. We institute a safety and health management system that encourages continuous identification of potential risks by all employees, fostering an atmosphere of voluntary participation in safety enhancements.
4. We maintain communication with an open mind with a broad spectrum of stakeholders, including employees, partners, customers, shareholders, and local inhabitants, to fortify our safety and health collaboration framework.

January 1, 2024 CEO Yeon-seop Kim

## Product Safety

### Product Safety Policy

LOTTE ENERGY MATERIALS prioritizes product safety and rigorously complies with established safety standards throughout the manufacturing and distribution processes, as part of our commitment to ensuring product safety and minimizing any damage that may be sustained by product use. In instances where existing domestic and international product safety standards are deemed insufficient, we establish and thoroughly implement more stringent internal safety standards.

We manage, from the initial stage of raw material usage, potential product impacts on human health and the environment, ensuring transparency in related information disclosure. This strategy is designed to elevate product safety, preemptively reduce regulatory risks, and boost consumer trust. We persistently endeavor to uphold product safety and enhance consumer confidence.



## Information Security

### Information Security Policy

#### Compliance with Domestic and International Information Security Laws

LOTTE ENERGY MATERIALS adheres to international information security standards, relevant domestic international laws, and the LOTTE Group's stringent information security policies. We maintain an information security management system to ensure the effective protection of our information assets. Our information security management system is universally applicable across all security management domains and is updated annually to reflect new enactments or amendments to relevant laws and regulations.

We classify and protect all company management information, trade secrets, intellectual property, and personal data of employees, customers, and partners as critical information assets. We are committed to minimizing risks and effectively managing security, acknowledging the profound impact that security threats and information breaches can pose to our growth and development.



# GOVERNANCE

## Compliance Management

### Compliance Management Policy

#### Compliance Management Regulations

##### Article 1 Purpose

The purpose of these Compliance Management Regulations (hereinafter referred to as the "Regulations") is to ensure the sustainable growth of LOTTE ENERGY MATERIALS Corporation (hereinafter referred to as the "Company") by delineating the management principles necessary for adherence to all applicable legal requirements in the Company's business operations and for the implementation of the philosophy embedded in the LOTTE Code of Conduct.

##### Article 2 Scope of Application

- ① These Regulations are applicable to all employees of the Company and, as a matter of principle, to employees of overseas subsidiaries and affiliates.
- ② These Regulations govern all business activities of the Company.

##### Article 3 Relationship with Other Regulations

- ① These Regulations establish the framework for decision-making and conduct for employees across all management activities. Employees are obligated to adhere to these Regulations and the specific rules of conduct (hereinafter referred to as "Rules of Conduct") that detail these Regulations.
- ② The Rules of Conduct pursuant to these Regulations include:
  - 1. Rules of Conduct for Anti-Corruption and subordinate guidelines;
  - 2. Rules of Conduct for Fair Trade and subordinate guidelines;
  - 3. Trade Secret Management Rules and subordinate guidelines; and
  - 4. Compliance Management Operation Rules and subordinate guidelines.

##### Article 4 Definition of Terms

The definitions of terms used in these Regulations shall be subject to those specified in the "Definitions Clause" within the Rules of Conduct.

##### Article 5 General Principles: Company Responsibilities

- ① The Company remains committed to acting in accordance with international standards for corporate management and fostering a culture of compliance management.
- ② The Company is responsible for establishing and revising these Regulations and Rules of Conduct in accordance with the enactment and revision of relevant laws.
- ③ The Company shall establish an internal system for self-auditing or inspecting compliance with these Regulations and oversee and manage adherence to these standards.
- ④ The Company shall conduct regular compliance education sessions.
- ⑤ If the company perceives a violation of these Regulations, the Company shall initiate an audit and discipline employees based on the audit results.
- ⑥ The Company shall implement protective measures to ensure that whistleblowers do not suffer detriment for reporting violations of these Regulations.

##### Article 6 General Principles: Employee Obligations

- ① Employees are obligated to comply with these Regulations in the performance of their duties to prevent the risk of violations of pertinent laws.
- ② Employees shall participate in compliance education sessions diligently.
- ③ Employees shall adhere to these Regulations and the Rules of Conduct in the execution of their duties, employ standard agreements, and reference the pertinent guidelines to ensure all activities are conducted within legal frameworks. In instances of ambiguity concerning potential regulatory violations, employees shall seek preliminary counsel from the Compliance Team.
- ④ Supervisory personnel are not allowed to issue directives that compel subordinates to contravention of laws or company regulations, and subordinates retain the right to decline assignments that go beyond these laws and company regulations.
- ⑤ Employees shall independently verify their adherence to statutory and internal regulations within their professional duties and shall forward the outcomes of such inspections to the Compliance Team for the tasks predetermined.
- ⑥ Employees shall promptly address any inquiries from the Compliance Team concerning legal compliance and shall furnish the necessary supporting documentation within the stipulated timeframe to confirm that their business conduct is in line with legal standards.

##### Article 7 Anti-Corruption Management (or Conduct) Principles

- ① Employees of the Company are strictly prohibited from offering, or indicating an intention to offer, any unauthorized gifts or benefits to public officials or other stakeholders, under any circumstances.
- ② Employees of the Company shall refuse to solicit or accept any form of economic benefits or money and valuables from stakeholders that may potentially compromise the impartiality of their duties.
- ③ Employees of the Company shall avoid any improper solicitation with public officials or other stakeholders and shall resist complying with improper solicitations from others.
- ④ Employees of the Company shall, prior to making donations or sponsorships, or responding to requests for donations or sponsorships from third parties, verify the counterpart in accordance with the relevant company regulations before proceeding with any such donations or sponsorships.

# GOVERNANCE

## Article 8 Fair Trade Management (or Conduct) Principles

- ① The Company and its employees shall refrain from any actions that unjustly restrict competition, whether in collaboration with competitors or other business operators.
- ② The Company and its employees shall remain committed to avoiding engagement in unfair trade practices during the performance of their duties, and shall not induce affiliates or other businesses to participate in such practices.
- ③ The Company and its employees shall avoid any unfair support of affiliates and specially related persons.
- ④ In the context of subcontracting agreements under the Fair Transactions in Subcontracting Act, the Company and its employees shall use the standard subcontracting agreement as stipulated by the Company and adhere to the obligations under the said Act and pertinent regulations.
- ⑤ The Company and its employees shall abstain from engaging in unfair practices by exploiting superior positions in dealings with partners such as customers, suppliers, and contractors.
- ⑥ Employees shall consult with the Compliance Team in advance, according to the Company's relevant regulations when conducting transactions or activities outlined in each clause of this Article.

## Article 9 Safety and Environmental Management Principles

- ① The Company and its employees shall effectively operate an environmental management system to achieve environmental management goals by assessing the impacts and risks of business activities on the environment and systematically managing and analyzing environmental management performance.
- ② The Company and its employees shall share environmental management issues and engage in environmental protection activities in collaboration with various stakeholders, including local communities and environmental protection organizations.
- ③ The Company and its employees shall strive to improve environmental impacts throughout the entire process of product development, production, and use, and minimize pollutant emissions by adopting eco-friendly production processes and applying the best available technologies for preventing environmental pollution.
- ④ The Company and its employees shall prevent environmental harm caused by chemical substances, manage the substances properly, and respond promptly to chemical incidents to protect all life, property, and the environment from chemical substances.
- ⑤ The Company and its employees shall maintain and enhance workplace safety and health by preventing industrial accidents and creating a pleasant working environment.

## Article 10 Protection of Intellectual Property and Trade Secrets

- ① Employees shall actively protect the Company's undisclosed information, intellectual property rights, business information, and technical information as critical information assets in accordance with relevant regulations, ensuring that neither they nor others gain undue benefits from them.
- ② Employees shall equally protect others' intellectual property rights and promptly relay important information immediately upon perception to the necessary personnel for business purposes.
- ③ Employees shall not disclose or provide the Company's information and trade secrets to external parties without prior approval or to even unauthorized internal personnel.
- ④ Employees shall not to leak or disclose any stakeholder's bid, technical information, trade secrets, or personal data to external parties or third parties.

## Article 11 Operation of Whistleblowing System and Confidentiality

- ① All employees shall report or whistleblow to the Compliance Team using the fastest and most convenient method if they become aware of violations of laws, these Regulations, or any Rules of Conduct to fully protect the Company and employees from such violations.
- ② The relevant personnel from the Compliance Team shall, upon receiving a report, promptly verify and investigate the facts. The investigation, however, may be concluded without fact-checking if:
  1. The subject of the report does not constitute a violation, or the degree of violation is negligible, rendering the investigation unwarranted;
  2. The details of the report are ambiguous and lack sufficient evidence for factual verification;
  3. The matter has already been reported and the outcome communicated but the report has been filed again without due cause; or
  4. An investigation by government agencies or authorities has already commenced or concluded.
- ③ The details of the report must be handled with confidentiality, and the identity of the whistleblower and related information are strictly protected. The whistleblower shall not suffer any disadvantage due to the report, and any attempt to do so shall result in the punishment of the responsible party.
- ④ Employees handling the reception and processing of reports shall strictly protect the whistleblower's identity.
- ⑤ If a whistleblower requests a transfer, reassignment, or other changes to avoid inconvenience or disadvantage due to the report, the Company shall accommodate such requests to the fullest extent possible.
- ⑥ The head of the Compliance Team may demand that the Company, relevant executives, and team leaders restore the status of the whistleblower if they have suffered detriment due to their report.

## Article 12 Inspection of Compliance

- ① The Compliance Team shall execute regular inspections at least annually to ascertain the adherence to and implementation of these Regulations by the employees.
- ② The Compliance Team is empowered, beyond the scope of regular inspections, to undertake special inspections with explicit authorization from the CEO.
- ③ Upon completion of the inspections described in the aforementioned paragraphs (1) and (2), the Compliance Team shall present the findings directly to the CEO. Should the results require further investigation, the Compliance Team may enlist the services of the internal audit department, external legal counsel, or certified accountants to carry out the investigation.

## Article 13 Reporting of Investigation Results and Disciplinary Procedures




- ① The Compliance Team is tasked with directly conveying the outcomes of investigations and inspections set out under Articles 11 and 12 of these Regulations to the compliance officer and the CEO, while also ensuring the preservation of pertinent documentation.
- ② If the findings from the investigations and inspections reveal any breaches of legal or regulatory requirements by an employee, the Compliance Team shall formally request the human resources department to initiate disciplinary actions. In instances where, despite the Compliance Team's request for disciplinary actions, the proceedings are delayed without due cause, the Compliance Team may escalate the matter to the compliance officer and the CEO and may independently convene a disciplinary committee to advance the proceedings.

# GOVERNANCE



## Ethical Management

### Ethical Management Policy



#### Establishment and Operation of Ethical Management System

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|---|---|
| <p>Ethical Management System</p>     | <p>LOTTE ENERGY MATERIALS proclaims a commitment to ethical management, both internally and externally, cultivating a transparent ethical culture and persistently nurturing ethical awareness among its employees. Our ethical management system, derived from the LOTTE Group's Code of Conduct, is customized to reflect the unique characteristics and circumstances of our operations, encompassing the Code of Ethics, relevant Rules of Conduct, and execution directives to provide the guidelines for addressing ethical issues and shaping pertinent organizational structures. We engage in continuous monitoring to ensure that employee activities are in line with established ethical management standards, employing the outcomes of such evaluations to enhance business processes. We maintain diverse channels for reporting and managing the status of ethical management, facilitating the submission and handling of reports on unethical conduct. The submitted reports undergo investigations and referrals to appropriate departments.</p> |
| <p>Ethical Management Education</p>  | <p>LOTTE ENERGY MATERIALS administers a range of educational programs—both online and offline—designed to embed ethical management within all employees. In addition to compliance education related to domestic laws, our ethical management education may include topics on international standards and foreign regulations. We ensure that the subjects and participants of the education are kept updated.</p>  |
| <p>Regular and Special Audits</p>    | <p>At LOTTE ENERGY MATERIALS, we conduct both regular and special audits. In accordance with internal regulations that standardize audit criteria and procedures, we take requisite measures based on the audit results, including awards and disciplinary actions, to avert the recurrence of similar events.</p>  |

#### Reporting Ethical Violations and Protection of Whistleblowers

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|---|---|
| <p>Reporting Ethical Violations</p>    | <p>Employees who become aware of ethical management violations are required to report such incidents to organizational leaders or the ethical management department. Leaders who receive reports of such incidents must promptly relay them to the ethical management department for appropriate consultation and action. The ethical management department, upon identifying any violations of relevant laws and/or internal regulations or any information related to employees' illegal or improper job performance, will receive the report according to the five Ws and one H, including the identity of the reporter. An investigation takes place following internal reporting. Based on the findings, LOTTE ENERGY MATERIALS takes relevant actions, such as disciplinary actions, in accordance with internal regulations, and the results are appropriately communicated to the reporter.</p> |
| <p>Protection of Whistleblowers</p>  | <p>LOTTE ENERGY MATERIALS guarantees that whistleblowers suffer no detriment for legitimate reports and associated submissions of statements or data. The confidentiality of the whistleblower's identity and the details of the report are rigorously protected, ensuring that such information is not disclosed against the will of the reporter.</p>   |

#### Detailed Ethical Management Policies

|   |   |
|---|---|
| <p>Anti-Corruption Policy</p>  | <p>LOTTE ENERGY MATERIALS acknowledges that prohibiting improper solicitations and gifts to public officials ensures fair performance of public duties, thereby supporting the company's compliance and ethical management. In this context, we adhere to the UN Convention Against Corruption, the OECD Anti-Bribery Convention, Korea's Act on Combating Bribery of Foreign Public Officials in International Business Transactions, the Improper Solicitation and Graft Act, and other relevant international and domestic anti-corruption laws and regulations. Employees are prohibited from offering, receiving, demanding, promising, or delivering bribes (including financial benefits) or allowing other employees to do so under any circumstances, and must not engage in improper solicitations or provide money and valuables or promise or express to provide such money and valuables beyond legally permissible limits related to public officials' duties. We strictly prohibit donations and sponsorships aimed at supporting businesses unrelated to charitable or public interest purposes, such as political objectives. All donations and sponsorships by the company must obtain prior approval through established procedures within the bounds of relevant laws and socially accepted norms. To prevent corruption risks, we examine the legitimacy of the donation purpose, the eligibility of the recipient organization, and the appropriateness of any reciprocal benefits. The goal is to ensure that only lawful and appropriate donations and sponsorships are made to verified organizations.</p> |
| <p>Antitrust Policy:</p>       | <p>LOTTE ENERGY MATERIALS strives to promote fair and free competition, fostering creative corporate activities, protecting consumers, and contributing to balanced national economic development. To this end, we comply with the Monopoly Regulation and Fair Trade Act and other domestic and international antitrust laws to prevent abuses of market dominance and undue economic concentration, and to regulate unfair trade practices. Employees are prohibited from engaging in activities that abuse market dominance, exploit superior positions to harm fair trade, or collude with other businesses on prices, supply quantities, trading areas, or conditions to unfairly restrict competition. Furthermore, the company must avoid sharing prohibited information with competitors, either directly or through intermediaries, and must collect information through legal and transparent means.</p>  |

# GOVERNANCE

## ESG Risk Management

### ESG Risk Management Policy

Subsequent to its incorporation as an affiliate of LOTTE Group in 2023, LOTTE ENERGY MATERIALS formulated and instituted a set of risk management policies designed to minimize the negative impacts potentially arising from risk factors. These policies are in line with the established standards of the LOTTE Group and aim to identify and preempt potential risks across the entirety of its business operations. The policies are firmly rooted in global standards and norms concerning human rights, including the UN Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, and the UN Convention on the Rights of the Child. Furthermore, we have committed to conducting annual company-wide inspections to evaluate the degree of sustainable management, with any discovered shortcomings promptly reported to the ESG Committee for subsequent corrective measures.

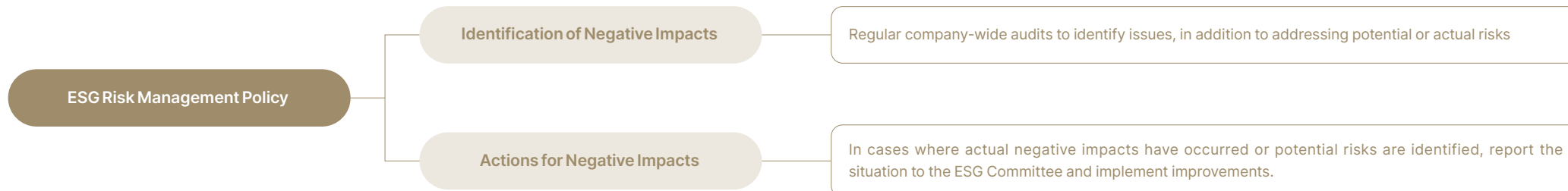
Our ESG risk management policy is regularly updated to reflect both internal and external environmental shifts, and we ensure that risk management is deeply ingrained within the company's overarching organizational culture through employee education.

### Identification of Negative Impacts

LOTTE ENERGY MATERIALS ensures the inspection and recognition of potential and emergent risks about environmental, corporate social responsibility, and human rights impacts. We employ not only the potential and actual risks, as reported through diverse internal and external channels, but also outcomes derived from the company-wide due diligence to inspect any issues.

### Actions on Negative Impacts

Upon the identification of actual negative impacts or potential risks, LOTTE ENERGY MATERIALS adheres stringently to its established risk policy process to report the current status to the ESG Committee and formulate and execute necessary corrective actions. For improved risks, the top priority is to prevent recurrence through employee education across the entire organization.



# STAKEHOLDER ENGAGEMENT AND COMMUNICATION

## Stakeholders and Their Activities

LOTTE ENERGY MATERIALS, in its engagement and communication with stakeholders, classifies stakeholders who either impact or are impacted by its business activities into distinct categories of core, strategic, and environmental stakeholders. We establish tailored communication channels for each category of stakeholders, thereby identifying their key concerns, and unfold responsive activities to fully reflect their feedback. In light of the growing emphasis on ESG regulations and the escalating interest of investors in levels of ESG management, interactions with stakeholders have reinforced the imperative for ESG-related requirements. We remain unwavering in our commitment to upholding fair business practices and the transparent disclosure of information through active communications with stakeholders.

### Classification and Definition of Stakeholders

| Category           | Groups to which LOTTE ENERGY MATERIALS holds legal, financial, and operational responsibility | Groups that influence LOTTE ENERGY MATERIALS' performance        | Groups impacted by LOTTE ENERGY MATERIALS' business activities |
|--------------------|---|--|--|
| Characteristics    | Essential role in the company's survival  | Essential role in responding to specific issues                  | Stakeholders other than core and strategic groups              |
| Stakeholder Groups | Employees, customers, and investors   | Partners, government and related agencies, and local communities | Media, NGOs, research institutions, and experts                |

### Communication Channels and Response Activities by Stakeholder

| Category | Stakeholders                     | Channels   | Key Concerns   | Activities  |
|----------|----------------------------------|--|--|---|
| Internal | Employees                        | <ul style="list-style-type: none"> <li>- Labor-management council</li> <li>- Management performance sharing meeting</li> <li>- Employee portal</li> <li>- Junior Board</li> <li>- Job training</li> <li>- Employee surveys</li> <li>- HR Session</li> <li>- Company newsletter</li> <li>- Strategy workshop</li> </ul> | <ul style="list-style-type: none"> <li>- Fair compensation</li> <li>- Welfare benefits</li> <li>- Safe workplace</li> <li>- Labor relations management</li> <li>- Mid- to long-term vision</li> <li>- Employee communication</li> <li>- Work and life balance</li> </ul> | <ul style="list-style-type: none"> <li>- Parental leave</li> <li>- Employee health checkup</li> <li>- Safety and Health Committee</li> <li>- Grievance channel for human rights</li> <li>- Work&amp;Life Balance Day</li> <li>- Employee Organizational Culture Programs (Events and Activities)</li> </ul> |
|          | Shareholders and investors       | <ul style="list-style-type: none"> <li>- Annual general meeting</li> <li>- Public disclosure(ongoing)</li> <li>- Management performance disclosure</li> <li>- IR meeting(ongoing)</li> <li>- Company explanation</li> </ul>  | <ul style="list-style-type: none"> <li>- Transparent business operations &amp; public disclosure</li> <li>- Financial performance</li> </ul>   | <ul style="list-style-type: none"> <li>- IR conference</li> <li>- Global NDR</li> <li>- Disclosure of financial/non-financial data</li> </ul>   |
| External | Customers                        | <ul style="list-style-type: none"> <li>- Website</li> <li>- Brochures</li> <li>- Exhibitions and fairs</li> <li>- Promotional videos</li> </ul>  | <ul style="list-style-type: none"> <li>- Quality</li> <li>- Supply chain stability</li> <li>- ESG management activities</li> </ul>   | <ul style="list-style-type: none"> <li>- ISO certification</li> <li>- New product development</li> <li>- Supply agreements through MOUs</li> <li>- Expansion of renewable energy distribution</li> </ul>  |
|          | Partners                         | <ul style="list-style-type: none"> <li>- Meetings (at least once a year)</li> <li>- Surveys</li> <li>- Grievance handling channels</li> </ul>  | <ul style="list-style-type: none"> <li>- Mutual growth</li> <li>- Strengthening communication with partners</li> </ul>   | <ul style="list-style-type: none"> <li>- Employment support</li> <li>- Welfare benefits</li> <li>- Operation of grievance handling channels</li> </ul>  |
|          | Local communities                | <ul style="list-style-type: none"> <li>- Social contribution activities</li> <li>- Sisterhood ties</li> <li>- Local resident meetings</li> </ul>   | <ul style="list-style-type: none"> <li>- Reduction of environmental impact</li> <li>- Management of hazardous substances</li> <li>- Social contribution activities</li> </ul>  | <ul style="list-style-type: none"> <li>- Setting and achieving key environmental metrics</li> <li>- Social contribution activities</li> <li>- Active communication with local community</li> </ul>  |
|          | Government and local authorities | <ul style="list-style-type: none"> <li>- Ministry of Environment &amp; Korea Fair Trade Commission</li> <li>- ISO</li> </ul>   | <ul style="list-style-type: none"> <li>- Job creation</li> <li>- Compliance with environmental, safety, and human rights regulations</li> <li>- ESG-related trade</li> </ul>   | <ul style="list-style-type: none"> <li>- Adherence to government policies and guidelines</li> <li>- Participation in government-led discussions</li> <li>- Considering participation in national projects</li> <li>- Identification of global ESG regulations and trends</li> </ul>                         |



# ⑥ APPENDIX

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| GRI Index                            | 62 |
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| UN SDGs                              | 65 |
| Third-party Assurance Statement      | 66 |
| GHG Emissions Assurance Report       | 68 |
| ESG Initiative Certifications Status | 68 |

# GRI INDEX

## GRI Standards: General

LOTTE ENERGY MATERIALS has reported the reporting period in accordance with the GRI Standards. At the time of the report's publication, there was no GRI Sector Standard announced for the industry relevant to LOTTE ENERGY MATERIALS, and thus, no specific Sector Standard was applied.

| GRI Standard                              | Disclosure No. | Disclosure Indicators   | Page                            | Note |
|---|----------------|---|---------------------------------|------|
| GRI 2 :<br>General<br>Disclosures<br>2021 | 2-1            | Organizational details  | 5-10                            |      |
|   | 2-2            | Entities included in the organization's sustainability reporting            | 1                               |      |
|   | 2-3            | Reporting period, frequency, and contact point                              | 1                               |      |
|   | 2-4            | Restatements of information   | -                               | Ⓐ    |
|   | 2-5            | External assurance  | 1, 66-67                        |      |
|   | 2-6            | Activities, value chain, and other business relationships                   | 5, 7-9, 60                      |      |
|   | 2-7            | Employees   | 5, 48                           |      |
|   | 2-8            | Workers who are not employees   | 48                              |      |
|   | 2-9            | Governance structure and composition  | 12, 44, 49                      |      |
|   | 2-10           | Nomination and election of the highest governance body                      | 44                              |      |
|   | 2-11           | Chair of the highest governance body  | 44                              |      |
|   | 2-12           | Role of the highest governance body in overseeing the management of impacts | 44                              |      |
|   | 2-13           | Delegation of responsibility for managing impacts                           | 12                              |      |
|   | 2-14           | Role of the highest governance body in sustainability reporting             | 12                              |      |
|   | 2-15           | Conflicts of interest   | 44                              |      |
|   | 2-16           | Communication of critical concerns  | 12                              |      |
|   | 2-17           | Collective knowledge of the highest governance body                         | 44                              |      |
|   | 2-18           | Evaluation of the performance of the highest governance body                | 44                              |      |
|   | 2-19           | Remuneration policies   | -                               | Ⓐ    |
|   | 2-20           | Process to determine remuneration   | -                               | Ⓐ    |
|   | 2-21           | Annual total compensation ratio   | -                               | Ⓒ    |
|   | 2-22           | Statement on sustainability development strategy                            | 4                               |      |
|   | 2-23           | Policy commitments  | 21, 23-24, 28-29, 34, 38, 52-59 |      |
|   | 2-24           | Embedding policy commitments  | -                               | Ⓐ    |
|   | 2-25           | Processes to remediate negative impacts                                     | 40-42                           |      |
|   | 2-26           | Mechanisms for seeking advice and raising concerns                          | 43, 56-57                       |      |
|   | 2-27           | Compliance with laws and regulations  | 40-43                           |      |

| GRI Standard                              | Disclosure No. | Disclosure Indicators                | Page | Note |
|---|----------------|--------------------------------------|------|------|
| GRI 2 :<br>General<br>Disclosures<br>2021 | 2-28           | Membership associations              | 68   |      |
|   | 2-29           | Approach to stakeholder engagement   | 60   |      |
|   | 2-30           | Collective bargaining agreements     | 68   |      |
| GRI 3 :<br>Material Topics<br>2021        | 3-1            | Process to determine material topics | 13   |      |
|   | 3-2            | List of material topics              | 13   |      |
|   | 3-3            | Management of material topics        | -    | Ⓓ    |

## GRI Standards: Economic

| GRI Standard                                | Disclosure No. | Disclosure Indicators  | Page         | Note |
|---|----------------|--|--------------|------|
| GRI 201:<br>Economic<br>Performance         | 201-2          | Financial implications and other risks and opportunities due to climate change | 13           |      |
| GRI 203:<br>Indirect<br>Economic<br>Impacts | 203-1          | Infrastructure investments and services supported                              | 22, 34-35    |      |
|   | 203-2          | Significant indirect economic impacts  | 13           |      |
| GRI 205:<br>Anti-corruption                 | 205-2          | Communication and training about anti-corruption policies and procedures       | 40-43, 56-58 |      |

Ⓐ Not applicable, Ⓑ Legal prohibition, Ⓒ Confidential, Ⓓ Incomplete information

# GRI INDEX

## GRI Standards: Environmental

| GRI Standard       | Disclosure No. | Disclosure Indicators   | Page   | Note |
|--------------------|----------------|---|--------|------|
| GRI 301: Materials | 301-2          | Percentage of recycled input materials  | 23     |      |
|                    | 302-1          | Energy consumption within the organization                                      | 47     |      |
| GRI 302: Energy    | 302-2          | Energy consumption outside of the organization                                  | 47     |      |
|                    | 302-3          | Energy intensity  | 47     |      |
|                    | 302-4          | Reduction of energy consumption   | 22     |      |
| GRI 303: Water     | 303-1          | Water management  | 24, 47 |      |
|                    | 303-2          | Management of wastewater discharge-related impacts                              | 24     |      |
|                    | 303-3          | Total volume and percentage of water reused and recycled                        | 47     |      |
|                    | 303-4          | Wastewater discharge  | 24, 47 |      |
|                    | 303-5          | Water consumption   | 24, 47 |      |
| GRI 305: Emissions | 305-1          | Direct (Scope 1) GHG emissions  | 47     |      |
|                    | 305-2          | Energy indirect (Scope 2) GHG emissions   | 47     |      |
|                    | 305-4          | GHG emissions intensity   | 47     |      |
|                    | 305-5          | Reduction of GHG emissions  | 21     |      |
|                    | 305-7          | Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions | 47     |      |
| GRI 306: Waste     | 306-1          | Waste generation and significant waste-related impacts                          | 23     |      |
|                    | 306-2          | Management of significant waste-related impacts                                 | 23     |      |
|                    | 306-3          | Waste generated   | 24, 47 |      |
|                    | 306-4          | Waste diverted from disposal  | 23     |      |
|                    | 306-5          | Waste directed to disposal  | 47     |      |

## GRI Standards\_Social

| GRI Standard                             | Disclosure No. | Disclosure Indicators   | Page   | Note |
|--|----------------|---|--------|------|
| GRI 401: Employment                      | 401-1          | New employee hires and employee turnover  | 48     |      |
|  | 401-3          | Parental leave  | 48     |      |
| GRI 402 : Labor/ Management Relations    | 402-1          | Minimum notice periods regarding operational changes  | 32     |      |
|  | 403-1          | Occupational health and safety management system  | 26-27  |      |
|  | 403-2          | Hazard identification, risk assessment, and incident investigation  | 26-27  |      |
|  | 403-3          | Occupational safety programs  | 26-27  |      |
|  | 403-4          | Worker participation, consultation, and communication on occupational health and safety                       | 26-27  |      |
|  | 403-5          | Worker Training on occupational health and safety   | 26-27  |      |
|  | 403-6          | Worker health   | 26-27  |      |
|  | 403-7          | Prevention and mitigation of occupational health and safety impacts directly linked by business relationships | 26-27  |      |
|  | 403-9          | Work-related injuries   | 48     |      |
|  | 403-10         | Work-related ill health   | 48     |      |
| GRI 404: Training and Education          | 404-2          | Programs for upgrading employee skills and transition assistance programs                                     | 30, 31 |      |
| GRI 405: Diversity and Equal Opportunity | 405-1          | Diversity of governance bodies and employees  | 48     |      |
| GRI 413 : Local Communities              | 413-1          | Operations with significant actual and potential negative impacts on local communities                        | 34-35  |      |
|  | 413-2          | Operations with significant actual and potential negative impacts on local communities                        | 24     |      |
| GRI 418 : Customer Privacy               | 418-1          | Substantiated complaints concerning breaches of customer privacy and losses of customer data                  | 38     |      |



# SASB INDEX

## Industrial Category: Resource Transformation (Chemicals)



| Topic   | Code         | Metric  | Page  | Note   |
|---|--------------|---|-------|--------|
| Greenhouse gas emissions                          | RT-CH-110a.1 | Gross global Scope 1 emissions  | 47    |        |
|   | RT-CH-110a.2 | Long term and short term strategy or plan to manage Scope 1 emissions, emissions reduction targets                            | 21    |        |
| Air quality                                       | RT-CH-120a.1 | NOx emissions   | 47    |        |
|   |              | SOx emissions   | 47    |        |
|   |              | VOC emissions   | 47    |        |
|   |              | HAPs emissions  | 47    |        |
| Energy management                                 | RT-CH-130a.1 | Total energy consumed   | 47    |        |
|   |              | Percentage renewable  | 47    |        |
|   |              | Total self-generated energy   | 47    |        |
| Water management                                  | RT-CH-140a.1 | (1) Total water withdrawn, (2) Total water consumption  | 47    |        |
|   | RT-CH-140a.2 | Number of incidents of non-compliance associated with water quality permits, standards, and regulations                       | -     | 1 case |
|   | RT-CH-140a.3 | Water management risks and strategies and practices to mitigate those risks   | 24    |        |
| Hazardous Waste Management                        | RT-CH-150a.1 | Amount of hazardous waste generated, percentage recycled  | 47    |        |
| Community Relations                               | RT-CH-210a.1 | Engagement processes to manage risks and opportunities associated with community interests                                    | 34-35 |        |
| Workforce Health and Safety                       | RT-CH-320a.1 | Total recordable incident rate (TRIR) and fatality rate for direct employees and contract employees                           | 48    |        |
|   | RT-CH-320a.2 | Efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks         | 26-27 |        |
| Product Design for Efficiency in Use Phase        | RT-CH-410a.1 | Revenue from products designed for resource efficiency in the use phase   | -     | Ⓐ      |
| Safety and environmental stewardship of chemicals | RT-CH-410b.1 | Percentage of products that have undergone a hazard assessment  | -     | Ⓐ      |
|   | RT-CH-410b.2 | Discussion of strategy to manage chemicals of concern and develop alternatives with reduced human and/or environmental impact | -     | Ⓐ      |
| Genetically Modified Organisms (GMO)              | RT-CH-410c.1 | Revenue from products labeled as containing genetically modified organisms (GMO)  | -     | Ⓐ      |




| Topic   | Code         | Metric   | Page  | Note                                   |
|---|--------------|--|-------|--|
| Management of the legal and regulatory environment      | RT-CH-530a.1 | Corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry | 51-60 |  |
| Operational safety, emergency preparedness and response | RT-CH-540a.1 | Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)               | -     | Ⓢ - To be implemented starting in 2024 |
|   | RT-CH-540a.2 | Number of transportation incidents   | -     | Ⓢ - To be implemented starting in 2024 |
| Production Volume                                       | RT-CH-000.A  | Production by reportable segment   | 5     |  |

Ⓐ Not applicable, Ⓢ Legal prohibition, © Confidential, Ⓢ Incomplete information

# UN SDGs

## UN SDGs (Sustainable Development Goals) Commitment

| UN SDGs  | Our Key Activities  | Page          |
|--|---|---------------|
|  1 NO POVERTY                                | End poverty in all its forms everywhere<br>- Support plan for underprivileged neighbors<br>- Operating employment linkage programs in partnership with local schools in Malaysia<br>- Justice40 Initiative  | 35            |
|  3 GOOD HEALTH AND WELL-BEING                | Ensure healthy lives and promote well-being for all at all ages<br>- Operation of safety and health programs<br>- Implementation of value creation culture diagnosis<br>- Failure compensation system<br>- Promotion of non-discriminatory hiring process<br>- Mom's Happiness Playground project | 26-29, 30, 34 |
|  4 QUALITY EDUCATION                         | Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all<br>- Training for skilled plant personnel<br>- Education and training for expatriates<br>- In-house language courses for employees   | 30            |
|  5 GENDER EQUALITY                           | Achieve gender equality and empower all women and girls<br>- Non-discriminatory hiring process<br>- Mom's Happiness Playground project<br>- Diversity forums<br>- Cultivating female workforce<br>- Appointment of female outside directors   | 29, 34, 44    |
|  6 CLEAN WATER AND SANITATION              | Ensure availability and sustainable management of water and sanitation for all<br>- Reducing water consumption and recycling wastewater   | 24            |
|  7 AFFORDABLE AND CLEAN ENERGY             | Ensure access to affordable, reliable, sustainable and modern energy for all<br>- Using renewable energy such as solar and hydropower   | 22            |
|  8 DECENT WORK AND ECONOMIC GROWTH         | Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all<br>- Securing talented individuals and formulation of talent development strategies<br>- Work environment oriented towards work-life balance                                 | 30            |
|  9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation<br>- Expansion of battery materials business  | 5, 9          |

| UN SDGs   | Our Key Activities   | Page   |
|---|--|--------|
|  10 REDUCED INEQUALITIES                     | Reduce inequality within and among countries<br>- Diversity-oriented hiring  | 29     |
|  11 SUSTAINABLE CITIES AND COMMUNITIES       | Make cities and human settlements inclusive, safe, resilient and sustainable<br>- Operating employment linkage programs in partnership with local schools in Malaysia  | 35     |
|  12 RESPONSIBLE CONSUMPTION AND PRODUCTION   | Ensure sustainable consumption and production patterns<br>- Engagement in production activities using recycled copper  | 23     |
|  13 CLIMATE ACTION                           | Take urgent action to combat climate change and its impacts<br>- Declaration of carbon neutrality by 2050<br>- Promotion of increased supply of renewable energy   | 21, 22 |
|  14 LIFE BELOW WATER                       | Conserve and sustainably use the oceans, seas, and marine resources for sustainable development<br>- Engagement in activities designed to reduce wastewater and manage water pollution   | 24     |
|  15 LIFE ON LAND                           | Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation, and halt biodiversity loss<br>- Formulation of biodiversity policies<br>- Monitoring pollutant emissions   | 24, 52 |
|  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<br>- Development of the Human Rights Management Charter<br>- Adoption of human rights protection policies for all employees including partners | 53, 54 |
|  17 PARTNERSHIPS FOR THE GOALS             | Strengthen the means of implementation and revitalize the global partnership for sustainable development<br>- Participation in various domestic and international initiatives<br>- Definition of stakeholders and engagement in response activities  | 60, 68 |

# THIRD-PARTY ASSURANCE STATEMENT

To readers of 2023 LOTTE ENERGY MATERIALS Sustainability Report

## Introduction

Korea Management Registrar (KMR) was commissioned by LOTTE ENERGY MATERIALS to conduct an independent assurance of its 2023 LOTTE ENERGY MATERIALS Sustainability Report (the "Report"). The data and its presentation in the Report is the sole responsibility of the management of LOTTE ENERGY MATERIALS. KMR's responsibility is to perform an assurance engagement as agreed upon in our agreement with LOTTE ENERGY MATERIALS and issue an assurance statement.

## Scope and Standards

LOTTE ENERGY MATERIALS described its sustainability performance and activities in the Report. Our Assurance Team carried out an assurance engagement in accordance with the AA1000AS v3 and KMR's assurance standard SRV1000. We are providing a Type 2, moderate level assurance. We evaluated the adherence to the AA1000AP (2018) principles of inclusivity, materiality, responsiveness and impact, and the reliability of the information and data provided using the Global Reporting Initiative (GRI) Index provided below. The opinion expressed in the Assurance Statement has been formed at the materiality of the professional judgment of our Assurance Team.

Confirmation that the Report was prepared in accordance with GRI standards 2021 was included in the scope of the assurance. We have reviewed the topic-specific disclosures of standards which were identified in the materiality assessment process.

- GRI Sustainability Reporting Standards 2021
- Universal standards
- Topic specific standards
  - GRI 205 : Anti-corruption
  - GRI 302 : Energy
  - GRI 303 : Water and Effluents
  - GRI 305 : Emissions
  - GRI 306 : Waste
  - GRI 401 : Employment
  - GRI 403 : Occupational Health and Safety
  - GRI 418 : Customer Privacy

As for the reporting boundary, the engagement excludes the data and information of LOTTE ENERGY MATERIALS partners, suppliers and any third parties.

## KMR's Approach

To perform an assurance engagement within an agreed scope of assessment using the standards outlined above, our Assurance Team undertook the following activities as part of the engagement:

- reviewed the overall Report;
- reviewed materiality assessment methodology and the assessment report;
- evaluated sustainability strategies, performance data management system, and processes;
- interviewed people in charge of preparing the Report;
- reviewed the reliability of the Report's performance data and conducted data sampling;
- assessed the reliability of information using independent external sources such as Financial Supervisory Service's DART and public databases.

## Limitations and Recommendations

KMR's assurance engagement is based on the assumption that the data and information provided by LOTTE ENERGY MATERIALS to us as part of our review are provided in good faith. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the organization were applied. To address this, we referred to independent external sources such as DART and National Greenhouse Gas Management System (NGMS) and public databases to challenge the quality and reliability of the information provided.

## Conclusion and Opinion

Based on the document reviews and interviews, we had several discussions with LOTTE ENERGY MATERIALS on the revision of the Report. We reviewed the Report's final version in order to make sure that our recommendations for improvement and revision have been reflected. Based on the work performed, it is our opinion that the Report applied the GRI Standards. Nothing comes to our attention to suggest that the Report was not prepared in accordance with the AA1000AP (2018) principles.

## Inclusivity

LOTTE ENERGY MATERIALS has developed and maintained different stakeholder communication channels at all levels to announce and fulfill its responsibilities to the stakeholders. Nothing comes to our attention to suggest that there is a key stakeholder group left out in the process. The organization makes efforts to properly reflect opinions and expectations into its strategies.

## Materiality

LOTTE ENERGY MATERIALS has a unique materiality assessment process to decide the impact of issues identified on its sustainability performance. We have not found any material topics left out in the process.

# THIRD-PARTY ASSURANCE STATEMENT

## Responsiveness

LOTTE ENERGY MATERIALS prioritized material issues to provide a comprehensive, balanced report of performance, responses, and future plans regarding them. We did not find anything to suggest that data and information disclosed in the Report do not give a fair representation of LOTTE ENERGY MATERIALS actions.

## Impact

LOTTE ENERGY MATERIALS identifies and monitors the direct and indirect impacts of material topics found through the materiality assessment, and quantifies such impacts as much as possible.

## Reliability of Specific Sustainability Performance Information

In addition to the adherence to AA1000AP (2018) principles, we have assessed the reliability of economic, environmental, and social performance data related to sustainability performance. We interviewed the in-charge persons and reviewed information on a sampling basis and supporting documents as well as external sources and public databases to confirm that the disclosed data is reliable. Any intentional error or misstatement is not noted from the data and information disclosed in the Report.

## Competence and Independence

KMR maintains a comprehensive system of quality control including documented policies and procedures in accordance with ISO/IEC 17021:2015 - Requirements for bodies providing audit and certification of management systems. This engagement was carried out by an independent team of sustainability assurance professionals. KMR has no other contract with LOTTE ENERGY MATERIALS and did not provide any services to LOTTE ENERGY MATERIALS that could compromise the independence of our work.

June 2024 Seoul, Korea

CEO *E. J. Hwang*



# GHG EMISSIONS ASSURANCE REPORT

## Introduction

DNV Business Assurance Korea Ltd. (hereinafter referred to as “DNV”) has undertaken the task of verifying the greenhouse gas (GHG) emissions and energy consumption of LOTTE ENERGY MATERIALS Corporation (hereinafter referred to as “LOTTE ENERGY MATERIALS”) for the year 2023, providing a reasonable level of assurance in this context.

## Verification Purpose and Scope

The primary objective of this verification process is to furnish an independent assurance statement concerning LOTTE ENERGY MATERIALS’ GHG emissions and energy consumption. The scope of this verification encompasses the following elements:

- Organizational Boundary: Buildings (owned/co-owned/leased), facilities, and vehicles associated with LOTTE ENERGY MATERIALS located in Korea
- Operational Boundary: Scope 1 (direct) emissions and Scope 2 (indirect) emissions
- Reporting Period: January 1, 2023–December 31, 2023

## Verification Approach

This verification was conducted in strict accordance with the principles and criteria outlined in the Guidelines on Reporting and Certification of Greenhouse Gas Emissions Trading System (Ministry of Environment Notice No. 2023-221) ensuring a reasonable level of assurance. DNV formulated a comprehensive verification plan designed to acquire the necessary information and data required to render a verification opinion on the reported GHG emissions and the completeness of the GHG inventory. The verification was executed based on a materiality threshold of 5%. The verification process included the following key components:

- Reviewing LOTTE ENERGY MATERIALS’ GHG emissions and energy consumption statement for the year 2023
- Examining the processes involved in the data management, collection, calculation, and reporting of GHGs and energy at LOTTE ENERGY MATERIALS

## Conclusion

The verification has confirmed that the GHG emissions and energy consumption figures for LOTTE ENERGY MATERIALS for the year 2023 are as follows. No evidence was found that would suggest the reported figures were improperly calculated or contained material errors in accordance with the established verification criteria.

| LOTTE ENERGY MATERIALS | GHG Emissions (ton-CO <sub>2</sub> equivalent) |         |         | Energy Consumption (Terajoule, TJ) |        |       |
|------------------------|--|---------|---------|------------------------------------|--------|-------|
|                        | Scope1   | Scope2  | Total   | Scope1                             | Scope2 | Total |
| 2023                   | 566  | 107,411 | 107,974 | 11                                 | 2,327  | 2,336 |

\* The GHG emissions figures presented above may exhibit slight differences from the sum of direct and indirect emissions due to rounding at the business site level.

May 28, 2024  
Jang-seop Lee CEO of DNV Business Assurance Korea Ltd.

# ESG INITIATIVE CERTIFICATIONS STATUS

## Korea Business Council for Sustainable Development (KBCSD)

KBCSD functions as a council dedicated to the formulation and implementation of sustainable management strategies. It organizes relevant academies and seminars, promotes best practices in sustainable management, and builds an international cooperation and response network for ESG management. LOTTE ENERGY MATERIALS joined the KBCSD in 2023, demonstrating its commitment to pursuing the establishment and implementation of sustainable management strategies.

## Korea Battery Industry Association (KBIA)

KBIA undertakes projects to enhance the awareness of the importance of standards and certifications related to the battery industry. It also undertakes projects designed to respond to immediate market demands. As a member of the KBIA, LOTTE ENERGY MATERIALS shares information on the development of standards and schedules and strives to establish a robust standardization response system.

## ISO 14001 (Environmental Management System)

- This certification defines the requirements for an environmental management system that aims to conduct effective environmental management and improve environmental performance.
- It defines the management method designed to achieve the corporate environmental policy by providing environmental information to top management, improving environmental performance, fulfilling compliance requirements, and accomplishing environmental objectives.
- It contributes to the prevention and minimization of environmental incidents, ensures compliance with environmental laws and regulations, and cost savings through the reduction of waste discharge and energy consumption.

## ISO 9001 (Quality Management System)

- This certification establishes a company-wide management system involving all organizational members, led by top management. It aims to meet customer requirements and ensure customer satisfaction through the planning, design, procurement, production, delivery, and service processes.
- It standardizes processes affecting quality and documents information.
- As the ultimate quality system that meets customer requirements, it builds a customer-oriented business management system to flexibly address any changes to the international environment according to standard international specifications.

## ISO 45001 (Occupational Health and Safety Management System)

- This certification defines the requirements for systematically managing occupational health and safety, enabling the prediction and prevention of various risks that may arise in workplaces.
- It aims to rapidly establish and continuously improve the occupational health and safety management system, providing preventive measures for occupational health and safety incidents by quantitatively assessing health and safety risks.
- It prevents occupational accidents and health issues for workers, thereby ensuring a safe workplace.



