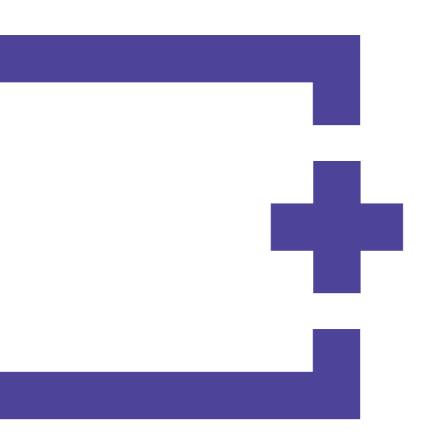
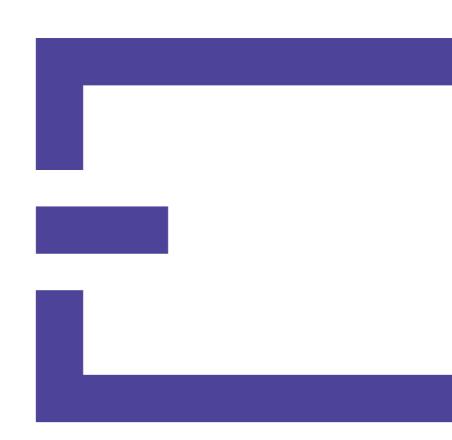
# LG Energy Solution ESG REPORT

Plus for Minus, Minus for Plus







#### =

# **About This Report**

#### Publisher

LG Energy Solution

#### Headquarters

108, Yeouidae-ro, Yeongdeungpo-gu, Seoul, Korea

#### **Publication Date**

June 2025

#### Department in Charge

Sustainaibility Cooperation Team, LG Energy solution esgteam@lgensol.com

#### Related Information

LG Energy Solution Website Kor Eng

Sustainability Management Website Kor Eng

IR (Investor Relations) Website Kor Eng

Battery Inside Kor Eng

#### Reporting Period

from January 1, 2024 - December 31, 2024

\* Some results and activities for the first half of 2025 are partially included.

#### Reference Data

Company Profile Kor Eng

Annual Report Visit Website

Ensolpedia Kor Eng

Code of Conduct for Suppliers Kor Eng

Supply Chain Sustainability Report Kor Eng

#### Interactive PDF

This report has been published as an interactive PDF that includes navigation to the relevant page within this report and/or shortcuts to related corporate website.

■ Return to Table of Contents

## Report Overview

LG Energy Solution has been publishing an ESG report annually since 2021 to communicate our ESG management system to our stakeholders. This report includes the annual financial and non-financial performance with a focus on ESG management strategy. We will continue to effectively manage ESG values and progress, transparently disclose them to the stakeholders, thereby fulfilling our ESG responsibilities.

## **Report Preparation Principles**

This report is written in accordance with the GRI (Global Reporting Initiative) Standards 2021, which are the standards for Sustainable Management reporting. The financial information aligns with the consolidated financial statement standards of K-IFRS. The non-financial information that follows different standards have been written by including the respective standards and scope. Also, we incorporated the globally recognized ESG disclosure standards such as the European Sustainability Reporting Standards (ESRS), and the Sustainability Accounting Standards Board (SASB) as well as, the disclosure standards recommended by the Task Force on Climate-related Financial Disclosure (TCFD) and the Task Force on Nature-related Financial Disclosure (TNFD) have been reflected. In addition, as a member of the United Nations Global Compact (UNGC). The report includes the principles and indicators of the Sustainable Development Goals (SDGs), adhering to the 10 principles of the UNGC.

# Reporting Period

This report covers quantitative and qualitative activities and achievements from January 1, 2024 to December 31, 2024. Some information contains activities conducted in the first half of 2025. For quantitative achievements, three years of data from 2022 to 2024 have been disclosed so that quantitative data can be compared.

## Reporting Scope

The reporting scope includes all business sites based on consolidated financial statements, both Domestic and Overseas. Domestic locations include the Seoul headquarters, the R&D campus in Daejeon, Gwacheon and Magok, Ochang Energy Plant 1 and Ochang Energy Plant 2. Overseas locations include production and sales sites in the U.S., China, Poland, Australia, Germany, Taiwan, Indonesia, India, and Japan. Detailed reporting scope can be checked on the 19 page. In some cases, if there is data with a different reporting scope, such as including some environmental performance or if there are changes from previous reporting data, it is indicated separately and can be checked on the 160 page.

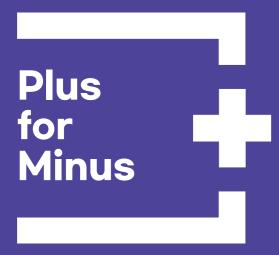
#### Report Assurance

This report has been conducted in accordance with the internationally recognized AA1000AS v3 standard and received third-party verification from BSI. The independent assurance statement can be found on page 173.

#### Report Inquiries

If you have any inquiries regarding the report, please contact us at the address below.

Sustainability Cooperation Team: esgteam@lgensol.com



ADD NAUTRE,
ADD RESPONSIBILITY
ADD COMMUNICATION

REDUCE CARBON FOOTPRINT
REDUCE DISCRIMINATION
REDUCE CUSTOMARY PRACTICE



ESG management with the belief that our business growth in the battery industry is the essence to green energy, contributing to a sustainable future for humanity.

In each area of ESG, we strive to reduce unnecessary elements and enhance essential ones through establishing a circular system of Plus for Minus and Minus for Plus, to build a better future.

- E Value nature and reduce carbon,
- S Embrace responsibility and ban discrimination,
- G Minimize customary practice and foster communication, working toward creating a sustainable society.

Unlocking our infinite potential for the future generation, we will contribute to the pursuit of ESG in the global battery ecosystem by boldly facing today's challenges.

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Independent Assurance

Glossary of Terms

Statement

# Company Overview



LG Energy Solution is a global battery company that is leading the way with cutting-edge technology by enhancing Advanced Automotive battery, Mobility & IT battery, Energy Storage System battery, EaaS(Energy as a Service) and BaaS(Battery as a Service) with a vision to lead the future green energy era.





# **CEO Message**

# Dear stakeholders of LG Energy Solution,

Over the past year, global battery manufacturers have faced unprecedented challenges that tested the industry's resilience. LG Energy Solution was no exception, seeing year-on-year declines in revenue and operating profit due to stagnant customer demand stemming from the market chasm, scaled-back production at major sites, and increased fixed costs associated with the initial ramp-up at new facilities.

Within this challenging environment, LG Energy Solution is determined to turn adversity into opportunity by using this time to prepare for a significant leap forward when demand returns.

Guided by the proverb "tiger's gaze, ox's pace," we are staying sharply focused while making steady progress. We are sharpening our competitive edge by strengthening our products and technological capabilities. I am confident these efforts will ensure that we capitalize on opportunities when demand returns and deliver positive results in the near future.

In 2025, we are firmly focused on reinforcing our competitiveness by enhancing our fundamental strengths and optimizing operational efficiency.

To reinforce our fundamental strengths, we will concentrate on ▲ enhancing product quality, ▲ securing structural cost competitiveness, and ▲ preparing next-generation technologies.

In terms of optimizing our operational efficiency, we will take a disciplined approach to capital expenditure, prioritizing investments based on their strategic importance and concentrating resources on winning products and technologies. This will help us rebalance our customer and product portfolios.

LG Energy Solution possesses commanding technological leadership showcased by approximately 70,000 patent applications filed across key global markets—far more than any competitor. Our world-class operational capabilities, differentiated technological and manufacturing expertise, and ability to win contracts based on deep customer trust and loyalty are other fundamental strengths. Building upon this strong foundation, we will pursue qualitative growth that amplifies our core strengths as we reinforce our leading position in the global battery industry.

Above all, the execution of our strategic initiatives will be further strengthened through sustainable ESG management.

With major markets such as the EU advancing regulatory frameworks on carbon emissions, human rights protection, and risk management across supply chains, sustainability is no longer a choice — it is a necessity.

Accordingly, LG Energy Solution aims to secure long-term competitiveness through comprehensive ESG management. To effectively respond to evolving global ESG regulations and ensure compliance with disclosure requirements, we are advancing our ESG disclosure governance and enhancing transparency. In particular, we are establishing a robust disclosure framework aligned with international standards by quantitatively measuring key data such as carbon emissions, energy consumption, and raw material sourcing. Through these efforts, we are providing stakeholders with timely and trustworthy information.

To manage ESG risks across the value chain, we are strengthening supply chain due diligence and offering ESG training programs to suppliers. In parallel, we are reinforcing our compliance system and promoting transparent management through proactive fair-trade initiatives. These efforts build trust with global investors, customers, and local communities, which in turn enhances our long-term corporate value and brand reputation.

LG Energy Solution has shaped the battery industry for over 30 years through relentless challenge and tenacity. This year, under the vision "Empower Every Possibility," we remain fully committed to laying the foundation for sustainable growth and enabling a better future for humanity.

We sincerely ask for your continued support and encouragement as we enter another defining moment in our company's future.

Thank you for your trust and partnership.

June 2025

LG Energy Solution CEO Kim, Dong Myung (David)



**LG Energy Solution E** 

**G REPORT 2024** 

LG Energy Solution embarked on our first battery development research since 1992 and has been dedicated to creating unparalleled material technologies and next-generation batteries. With outstanding technological capabilities in the fields of Advanced Automotive, Mobility & IT, and Energy Storage System (ESS) batteries, we are actively pursuing new product development and securing a world-class battery production capacity, expanding the next-generation energy market.

# **Company Overview**

Company Name LG Energy Solution Established December 2020

CEO Kim, Dong Myung (David)

Headquarters Parc.1 Tower 1, 108 Yeoui-daero, Yeongdeungpo-gu, Seoul

**Business Area** Advanced Automotive battery, Mobility & IT battery,

**Energy Storage System battery** 

Website Visit Website

LG Energy Solution has positioned the development of battery technologies for a sustainable future as a core strategic priority. We are is engaged in the research, development, manufacturing, and sales of battery-related products applied across a broad range of sectors, including electric vehicles (EVs), energy storage systems (ESS), IT devices, power tools, and light electric vehicles (LEVs). We operate under a single business division—Energy Solution—and has established a global network of production, sales, and R&D centers in key regions such as Korea, the U.S., Poland, and China to support its worldwide operations.

Production is carried out at both domestic (Korea) and overseas manufacturing subsidiaries, while product sales are executed through the headquarters, production and sales subsidiaries in overseas. A significant portion of sales revenue is generated through direct sales by the headquarters and overseas manufacturing sites.

On a consolidated basis, LG Energy Solution recorded KRW 25.6196 trillion in revenue and KRW 575.4 billion in operating profit in 2024. Through continuous R&D, the introduction of new products, and innovation in quality, we have has established itself as a leading global enterprise.

In the mid- to long-term, the EV battery market is expected to maintain its growth momentum as EV prices reach parity with internal combustion engine vehicles and concerns surrounding driving range and safety are progressively addressed. Simultaneously, the ESS market is anticipated to grow steadily, driven by the expanding adoption of renewable energy and the increasing power demands of big tech and Al companies. Beyond EVs and ESS, demand for LG Energy Solution's batteries is projected to continue rising with the expansion of emerging business areas.

To secure a leadership position in the rapidly growing battery market, LG Energy Solution is committed to proactive R&D investments, enhancing product safety and quality, and delivering optimal solutions tailored to each customer and portfolio. We also seek seeks to secure competitive advantage through global operational excellence to ensure reliable supply and will continue to advance its sustainability initiatives.

Looking ahead, LG Energy Solution will further embed eco-friendly technology development into the core of its business strategy, striving to drive both sustainability and corporate competitiveness in parallel.

# **Credit Rating**

|          | Evaluation Agency                               | Credit Rating |
|----------|---|---------------|
| W        | Korea Investors Service (KIS)                   | AA            |
| Korea    | National Information & Credit Evaluation (NICE) | AA            |
| Overseas | S&P   | BBB+          |
|          | Moody's   | Baa1          |

<sup>\*</sup> As of the end of December 2024

# **Financial Performance**

Annual Report Visit Website

[Financial Performance]

Unit: million KRW

| Category                | Amount            |
|-------------------------|-------------------|
| Sales                   | 25,619,585        |
| Operating Profit (Loss) | 575,387           |
| Net Income              | 338,602           |
|                         |                   |
| Category                | Amount            |
| Category<br>Liabilities | Amount 29,340,248 |
| <u> </u>                | 1 1111 2 1111     |
| Liabilities             | 29,340,248        |

#### [Sales Performance]

Unit: million KRW

| Туре    | ltem                |          | 2024       | 2023       | 2022       |
|---------|---------------------|----------|------------|------------|------------|
| Product | Advanced Automotive | Export   | 12,782,637 | 20,090,645 | 16,861,109 |
|         | ESS Batteries,      | Domestic | 12,836,948 | 13,654,825 | 8,737,500  |
|         |                     | Total    | 25,619,585 | 33,745,470 | 25,598,609 |

#### =

# [Consolidated Income Statement]

# Unit: million KRW

| Category   | 2024                  | 2023       | 2022       |
|--|-----------------------|------------|------------|
| Sales  | 25,619,585            | 33,745,470 | 25,598,609 |
| Cost of Goods Sold   | 22,213,605            | 28,802,437 | 21,308,077 |
| Gross Profit   | 3,405,980             | 4,943,033  | 4,290,532  |
| Other Operating Income   | 1,480,020             | 676,874    | -          |
| Selling and Administrative Expenses  | 4,310,613             | 3,456,673  | 3,076,813  |
| Operating Profit (Loss)  | 575,387               | 2,163,234  | 1,213,719  |
| Financial Income   | 1,048,343             | 984,984    | 385,537    |
| Financial Expenses   | 1,260,579             | 857,201    | 519,021    |
| Equity Method Income   | (49,118)              | (32,450)   | (36,641)   |
| Other Non-operating Income   | 858,811               | 1,125,846  | 1,349,485  |
| Other Non-operating Expenses   | 823,973               | 1,340,953  | 1,397,765  |
| Profit (Loss) before Corporate Tax   | 348,871               | 2,043,460  | 995,314    |
| Corporate Tax Expense (Income)   | 10,269                | 405,475    | 215,488    |
| Net Income (Loss)  | 338,602               | 1,637,985  | 779,826    |
| Attribution of Net Income (Loss)   |                       |            |            |
| Ownership Interest of the Controlling Company  | (1,108,741)           | 1,237,180  | 767,236    |
| Non-controlling Interests  | 1,357,343             | 400,805    | 12,590     |
| Income (Loss) per Share for the Ownership Interest of  | of the Controlling Co | mpany      |            |
| Net income (loss) attributable to common<br>shareholders and preferred shareholders<br>(unit: KRW) | (4,354)               | 5,287      | 3,306      |

# [Green Bond Status]

Unit: million KRW

| Round           | Date of entry | Disclosure of Fund Utili  | Disclosure of Fund Utilization Plan |   | details |
|-----------------|---------------|---|-------------------------------------|---|---------|
|                 |               | Operating funds   | 50,000                              | Operating funds   | 50,000  |
| 3-1st<br>Series | 2024.02.16    | Funds for Acquisition<br>of Securities of Other<br>Corporations | 130,000                             | Funds for Acquisition<br>of Securities of Other<br>Corporations | 130,000 |
|                 |               | Operating funds   | 170,000                             | Operating funds   | 170,000 |
| 3-2nd<br>Series | 2024.02.16    | Funds for Acquisition<br>of Securities of Other<br>Corporations | 490,000                             | Funds for Acquisition<br>of Securities of Other<br>Corporations | 490,000 |
|                 |               | Operating funds   | 100,000                             | Operating funds   | 100,000 |
| 3-3rd<br>Series | 2024.02.16    | Funds for Acquisition<br>of Securities of Other<br>Corporations | 470,000                             | Funds for Acquisition<br>of Securities of Other<br>Corporations | 470,000 |
| 3-4th<br>Series | 2024.02.16    | Funds for Acquisition<br>of Securities of Other<br>Corporations | 190,000                             | Funds for Acquisition<br>of Securities of Other<br>Corporations | 190,000 |

<sup>\*</sup> As of December 31, 2024

# [Status of Consolidated Subsidiaries]

# Subsidiaries

| Company Name                                      | Ownership<br>Stake | Location  | Industry   |
|---|--------------------|-----------|--|
| LG Energy Solution (Nanjing) Co., Ltd.            | 100%               | China     | Manufacture and sale of mobility & IT battery, etc                     |
| LG Energy Solution Michigan Inc.                  | 100%               | USA       | Research and manufacture of Advanced<br>Automotive batteries           |
| LG Energy Solution Battery (Nanjing) Co., Ltd.    | 100%               | China     | Manufacture and sale of Advanced<br>Automotive batteries               |
| LG Energy Solution Wroclaw sp. z o.o.             | 100%               | Poland    | Manufacture and sale of Advanced<br>Automotive batteries               |
| LG Energy Solution Australia Pty Ltd.             | 100%               | Australia | Sale of Energy Storage Systems (ESS)                                   |
| LG Energy Solution Technology (Nanjing) Co., Ltd. | 100%               | China     | Manufacture and sale of Advanced<br>Automotive batteries, etc.         |
| Ultium Cells Holdings LLC                         | 50%                | USA       | Manufacture and sale of Advanced<br>Automotive batteries, etc.         |
| Ultium Cells LLC                                  | 50%                | USA       | Manufacture and sale of Advanced<br>Automotive batteries, etc.         |
| LG Energy Solution Europe GmbH                    | 100%               | Germany   | Sale of Energy Storage Systems (ESS), etc.                             |
| LG Energy Solution (Taiwan) Ltd.                  | 100%               | Taiwan    | Sale of mobility & IT battery, etc                                     |
| Areumnuri Co., Ltd.                               | 100%               | Korea     | Facility management and general cleaning services                      |
| LG Energy Solution Fund I LLC                     | 100%               | USA       | Venture capital investment   |
| LG Energy Solution Vertech Inc.                   | 100%               | USA       | Installation contract for Energy Storage<br>Systems (ESS)              |
| LG Energy Solution Arizona, Inc.                  | 100%               | USA       | Manufacture and sale of mobility & IT battery, etc.                    |
| Baterias De Castilla, S.L.                        | 100%               | Spain     | Other  |
| L-H Battery Company, Inc.                         | 51%                | USA       | Manufacture and sale of Advanced Automotive batteries, etc.            |
| LG Energy Solution India Private Limited          | 100%               | India     | Sale of mobility & IT battery, etc                                     |
| LG Energy Solution Arizona ESS, Inc.              | 100%               | USA       | Manufacture and sale of Energy Storage<br>System (ESS) batteries, etc. |
| Nextstar Energy Inc.                              | 51%                | Canada    | Manufacture and sale of Advanced<br>Automotive batteries, etc.         |
| LG Energy Solution Fund II LLC                    | 100%               | USA       | Venture capital investment   |
| HL-GA Battery Company LLC                         | 50%                | USA       | Manufacture and sale of Advanced<br>Automotive batteries, etc.         |
| LG Energy Solution Japan Co., Ltd.                | 100%               | Japan     | Sale of Energy Storage Systems (ESS)                                   |
| PT. HLI Green power                               | 50%                | Indonesia | Manufacture and sale of Advanced<br>Automotive batteries, etc.         |

<sup>\*</sup> Based on the Annual Report announced in March 2025

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# **Company History**

Company History Visit Website

# The Start of Korea's Battery History

Beginning in 1992, lithium-ion battery research ushered in the start of Korea's battery history.



COMPANY OVERVIEW

1992

1996

1999

2000



Lucky Chemical Founded (start of LG Group)



Began Lithium-Ion **Battery Research** 



Began Lithium-Ion **Battery Development** 



Mass-Produced **Founded United States** Cylindrical Lithium-Ion R&D Office

2020

2018

2017

2015

2013

2012

2009

**Batteries** 

2004

**(1)** LG Energy Solution

LG Energy Solution Established



Developed the World's First Free-Form Battery



Completed Construction of EV Battery Plant in Poland



**Commercial Production** of Cells for ESS Applications



Developed the World's First Future Batteries\* \* Stepped, Curved, Wire Battery



Completed Construction of EV Battery Plant in the US



Supplied the World's First Mass-Produced EV Batteries (GM Volt)



**Completed Construction** of Nanjing Plant in China

2020

2021

2022

2023

2023

2024

2024



Established "HL-GA Battery Company" with Hyundai Motor Group in the US



Established "PT. HLI Green power" with Hyundai Motor Group in Indonesia



Established "NextStar Energy" with Stellantis in Canada



Signed MOU with Honda to establish a battery joint venture in the US



Established "HL-GA Battery Company" with Hyundai Motor Group in the US



Groundbreaking of Arizona Plant in the US



Launch of BMTS Brand 'B.around'\* \* Battery Management Total Solution

# **Advanced Automotive Battery**

# With our world-class battery technology and stable global production capacity, we will lead future mobility innovation and drive the widespread adoption of EVs.

We produce battery products worldwide which feature the latest technology such as longcell batteries with maximized energy density and increased mileage. Our unparalleled technological competitiveness has enabled us to form strategic partnerships with the world's leading automakers, positioning us as the leaders in the global EV market. In addition, we produce cell, module, and pack that feature highly advanced technologies, and total battery solution where technology support and Battery Management System (BMS) are optimized. Through our total battery solutions and unmatched battery performance, we are at the forefront of pioneering new markets such as electric buses, trucks, ships, and Urban Air Mobility (UAM), driving innovation in future mobility.

# Competitiveness

COMPANY OVERVIEW

| 1 | The ideal partner for global automakers                         |
|---|---|
| 2 | Optimal total solution through technological edge.              |
| 3 | Six-way global production system highly accessible to customers |

Advanced Automotive Battery Visit Website

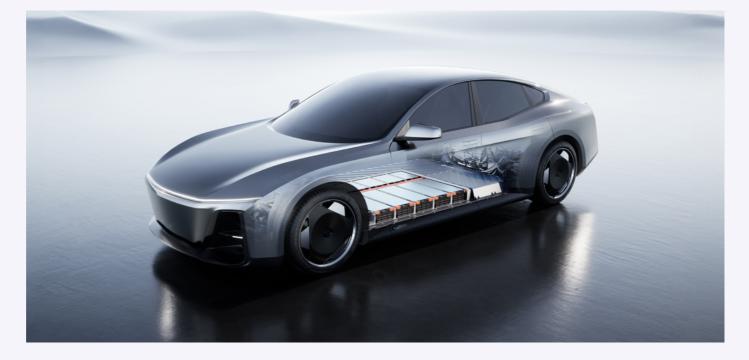
# Product





Module





# **Mobility & IT Battery**

# With exceptional battery performance and creative design for material technology, we have opened the era of Battery of Things (BoT) technologies, including IT devices and Light Electric Vehicles (LEVs).

Since successfully developing the first lithium-ion battery in Korea in 1999, we have continuously led the innovation of wireless devices, including laptops, power tools, and cordless vacuum cleaners. Our world's first freeform battery is a high-performance and standardized battery that can be integrated seamlessly into various products, such as IT devices, home appliances, and LEVs, with minimized constraints to size and shape. In addition, leveraging our product technology, which fulfills the demand for high capacity, high power, and ultra-slim design, we are at the forefront of creating the BoT era. We achieve the growth of BoT by incorporating batteries into everyday products with new technologies such as drones, robots, and electric vehicles.

## Competitiveness

| 1 | Applications in various sizes and shapes   |
|---|--|
| 2 | Battery design that utilizes maximum space   |
| 3 | Outstanding quality through materials technology high-capacity, high-density, and ultra-slim |

Mobility & IT Battery Visit Website

# Product



Cylindrical



Pouch



Freeform



# **ESS Battery**

# Based on our ESS product lineup, we will expand the supply of renewable energy and the Smart Grid era.

With our high-performance and high-quality battery production capabilities, LG Energy Solution has established close partnerships with customers who require ESS solutions for various applications such as power grids, commercial buildings, residential homes, and Uninterruptible Power Supply (UPS) systems. We are striving to achieve smart grid by securing technologies to repurpose end-of-life batteries into ESS and improving energy efficiency.

# Competitiveness

COMPANY OVERVIEW

| 1 | Produced with first-rate battery cell technology  |
|---|---|
| 2 | Providing total solution for customer convenience |
| 3 | Improved spatial efficiency through compact size  |

# ESS Battery Visit Website

# Product







Rack



#### XIC

# **New Business**

# By integrating battery lifecycle data with IT technology based on optimized battery lifecycle data, we are creating new value for batteries and opening up new possibilities for the Battery Circular Ecosystem.

LG Energy Solution is expanding its business through two service models: Energy-as-a-Service (EaaS) and Battery-as-a-Service (BaaS).

EaaS is a business model that enables the integrated management of renewable energy within the power grid. As a Virtual Power Plant (VPP) operator, LG Energy Solution participates in the Renewable Energy Bidding Scheme, thereby contributing to the widespread adoption of renewable energy and the stabilization of the power system.

BaaS, on the other hand, is a business that generates new value throughout the entire battery lifecycle. As part of this initiative, LG Energy Solution is developing a Battery Swapping Station (BSS) service platform for electric two-wheelers, and providing B-Lifecare, a continuous battery monitoring service tailored for EV users. In addition, we are advancing BMTS (Battery Management Total Solution)—a next-generation platform for Software-Defined Vehicles (SDVs)—which goes beyond traditional Battery Management Systems (BMS) by integrating cloud and Al technologies for enhanced safety diagnostics, degradation analysis, and lifecycle prediction.

# Competitiveness

COMPANY OVERVIEW

| 1 | Battery life and temperature monitoring through application of battery safety diagnosis technology            |
|---|---|
| 2 | Battery safety enhancement through battery control system and water cooling structure                         |
| 3 | Provision of optimal solutions for sites based on advanced simulation models                                  |
| 4 | The first power brokerage to possess a standalone energy storage system (ESS) linked to the distribution grid |

BaaS EaaS



G.Station



Battery pack in G.Station



# **EaaS**

LG Energy Solution is expanding into the renewable energy grid integration business to explore future growth opportunities and expand the battery business ecosystem. As a Virtual Power Plant (VPP) operator, LG Energy Solution participates in renewable energy bidding schemes to promote the adoption of renewable energy and contribute to grid stability. We activiely engage in national renewable energy policies and began a pilot project in August 2023 in Jeju, South Korea, integrating renewable energy generation forecasts with energy storage systems (ESS). Notably, efforts are focused on improving the predictability of wind power generation to ensure stable power supply and increase renewable energy utilization.

\* VPP (Virtual Power Plant): A system that integrates distributed Renewable Energy power plants into a virtual space and operates them as a single power plant.



\*BESS (Battery Energy Storage System): A rechargeable battery system capable of storing and discharging energy. It facilitates efficient distribution capacity management and enables peak load shifting, contributing to reductions in electricity costs.

#### Main Activities

End of 2022 -Beginning of 2023

COMPANY OVERVIEW

Memorandums of Understanding (MOUs) with Power Asset Owners and O&M Companies

LG Energy Solution signed MOUs with key power asset owners—including Jeju Energy Corporation, Korea South-East Power (KOEN), and Tamra Offshore Wind Power—as well as solar O&M (Operation & Maintenance) companies operating in Jeju. These agreements were established in preparation for the inclusion of wind power plants as VPP (Virtual Power Plant) resources ahead of the Jeju pilot project scheduled for June 2024. In parallel, LGES also entered into MOUs with inland wind and solar power generators and O&M providers outside Jeju to participate in the Renewable Energy Generation Forecasting Program

2023

Participation in the Renewable Energy Generation Forecasting Program August

> In August 2023, LG Energy Solution successfully passed the registration test for participation in the Renewable Energy Generation Forecasting Program, administered by the Korea Power Exchange. This program compensates participants based on the accuracy of their generation forecasts for renewable sources such as solar and wind power. To qualify, forecast error rates must remain below 10%, a criterion LGES met to gain entry into the program.

15

October Briefing Session for Solar Power Operators Participating in the Jeju Pilot Project for Electricity Market Reform

> Prior to the launch of the Jeiu pilot project, LG Energy Solution held a recruitment briefing session targeting the Korea Solar Power Association and major solar O&M companies. The session aimed to encourage participation from solar power plant operators in the pilot project designed to support reforms in the electricity market system.

Award of Long-Duration BESS Project in Jeju November

> Through the establishment and operation of a Special Purpose Company (SPC), LGES secured a contract for the long-duration Battery Energy Storage System (BESS) project in Jeju.

2024

Acquisition of Power Business License for Standalone ESS March

> LG Energy Solution became the first company in Korea to obtain a power business license for a standalone Energy Storage System (ESS).

June Participation in the Jeju Renewable Energy Bidding Pilot Project

> As of June 2024, LGES participated in the renewable energy bidding pilot project for the reformed electricity market system in Jeju. As the largest Virtual Power Plant (VPP) operator in Korea, LGES formed an aggregated resource pool that combines wind and solar power generation.

September Completion of Standalone ESS Installation

Following the acquisition of the power business license for a standalone ESS in March 2024, LGES completed its installation by September 2024. This ESS is integrated with local renewable energy sources and distribution networks to alleviate wintertime grid congestion in citrus greenhouse zones and to address output curtailment issues on Jeju Island. In addition, an MOU was signed with Korea Electric Power Corporation (KEPCO)

to further promote ESS deployment..

2025

Selection as the Renewable Energy Bidding Operator for the 100MW Hallim February Offshore Wind Farm in Jeju.

> LG Energy Solution was selected as the official operator for the renewable energy bidding program of the 100MW Hallim Offshore Wind Farm in Jeju. Going forward, LGES is expected to forecast generation output and provide real-time bidding services for the offshore wind farm.

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# **BaaS**

## KooRoo

KooRoo is engaged in the Battery Swapping Station (BSS) business for electric two-wheeler batteries, which is one of the new businesses under BaaS (Battery as a Service). The BSS service allows discharged electric two-wheeler batteries to be replaced with fully charged ones in under 30 seconds. Battery swapping stations are being installed to enable delivery riders to exchange batteries quickly without waiting time. In addition, KooRoo is collaborating with multiple domestic two-wheeler manufacturers to increase compatibility of the KooRoo battery packs across electric two-wheeler models (planning to expand to 10 electric models from 6 manufacturers).

Furthermore, KooRoo is expected to enhance the safety of both riders and the public by utilizing LG Energy Solution's proprietary battery total solution, B. around monitoring technology, which enables real-time assessment of battery conditions using data collected from the battery packs.

# [KooRoo Activity Goals]

As of the cumulative total in 2024, KooRoo has installed 440 BSS units nationwide, including 430 units in Seoul and the metropolitan area and 10 units in the Gyeongju/Ulsan region. In 2025, we aim to install an additional 300 units to strengthen its leadership in the domestic battery swapping service (BSS) sector.

KooRoo is expanding its business with two key objectives. First, the primary goal is to reduce carbon emissions from internal combustion engine two-wheelers used by 400,000 delivery riders nationwide. According to KooRoo's internal estimates, a 125cc internal combustion engine two-wheeler, commonly used by delivery riders, emits approximately 4.1 tCO<sub>2</sub>eq per year. Therefore, the total annual carbon emissions from 400,000 such vehicles nationwide are estimated to reach approximately 1.64 million tCO<sub>2</sub>eq. Starting with the electrification of delivery two-wheelers in Seoul, KooRoo aims to expand nationwide to contribute to the reduction of Korea's carbon emissions.

Second, KooRoo seeks to expand the BSS ecosystem by discovering various applications beyond electric two-wheelers, thereby promoting electrification in various areas of daily life. KooRoo's battery packs are equipped with continuous monitoring functions that allow the tracking of battery lifespan. Once the batteries reach a certain usage threshold, they are collected and reused for other purposes, thereby contributing to resource circulation and creating added value for the batteries.

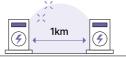
Going forward, KooRoo will make every effort to expand the BSS ecosystem, secure business viability, and lead the electrification of internal combustion two-wheelers to reduce carbon emissions.

Average Distance Between Stations Within Service Areas: 1 km

COMPANY OVERVIEW

Optimization of Station Deployment Locations Through AI Analysis of Driving Data and Battery Pack Replacement Frequency Strategic Station
Placement Aligned with
Rider Movement Patterns
(e.g., Near Convenience Stores

and Supermarkets)



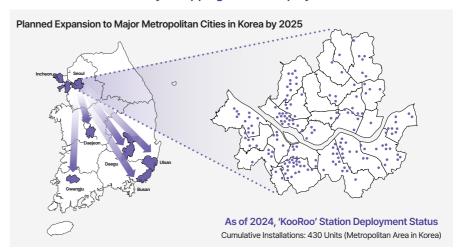






# Seamless Electric Scooter Use Without Concerns About Driving Range

# **Current Status of Battery Swapping Station Deployment**



Operation of Optimized Station Infrastructure

# **B-Lifecare**

B-Lifecare is a service that diagnoses the condition of electric vehicle (EV) batteries and enables real-time monitoring through a mobile application. By simply plugging an On-Board Diagnostics (OBD) device into a vehicle, data is collected every five minutes, and users can check various driving information such as driving distance, driving time, energy efficiency, and estimated remaining range directly from their mobile screens.

Moreover, the system analyzes users' battery charging habits and driving behaviors to calculate a "battery longevity score" and a "stress management score." Based on this analysis, users can also monitor regenerative braking efficiency and receive charging guidance messages depending on the ratio of fast to slow charging sessions. The service further provides predictive insights into future battery performance by analyzing battery condition and driving patterns, and issues a formal "battery certificate" that reflects an accurate evaluation of battery health. As the battery is the most critical component of an electric vehicle, this certificate offers valuable information regarding residual battery value, particularly in used EV transactions.



## **B.around**

COMPANY OVERVIEW

LG Energy Solution has launched the B.around brand, a comprehensive Battery Management Total Solution (BMTS), incorporating battery management software (e.g., safety diagnostics and degradation/lifespan prediction), hardware solutions, and software-defined vehicle (SDV) platforms. This solution is built upon LG Energy Solution's accumulated battery technology expertise, with the goal of delivering differentiated value to customers.

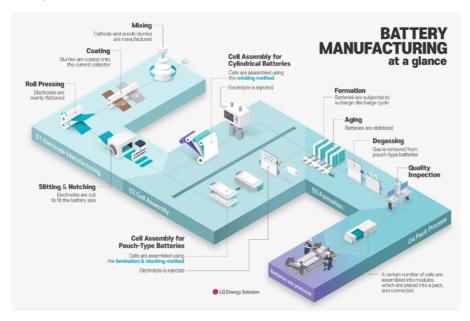
\*BMTS was developed based on empirical data obtained from the disassembly and analysis of over 130,000 battery cells and more than 1,000 modules.



# **Battery Manufacturing Process**

The battery manufacturing process consists of four main stages: electrode, assembly, formation, and pack.

# Battery Inside Visit Website



# **STEP 1: Electrode Process**

The electrode process is a very important step in lithium-ion battery manufacturing that creates the positive and negative electrodes that induce electrochemical reactions. It proceeds in the order of "Mixing", "Coating", "Roll Pressing", and "Slitting & Notching".

Looking at each process, mixing involves combining positive and negative electrode active materials and solvents to create a slurry, and also includes the "pre-mixing" step that manages the movement of the intermediate slurry. Once the intermediate slurry is completed through mixing, in the coating process, the positive electrode slurry is coated onto aluminum foil and the negative electrode slurry is coated onto copper foil to form the electrodes. After coating, the positive and negative electrodes are pressed flat and even in the roll pressing process, and finally, in the slitting and notching process, the electrodes are cut according to the designed battery dimensions and the V-shaped notches and positive/negative electrode tabs are created, completing the electrode process.

# **STEP 2: Assembly Process**

COMPANY OVERVIEW

The assembly process involves stacking the positive and negative electrodes produced in the electrode process with separators and injecting electrolyte, thereby forming the external shape of batteries such as cylindrical, pouch, and prismatic types. The assembly process begins by removing fine dust remaining on the positive and negative electrodes and stacking the electrodes. The methods for stacking the electrodes, including the order of electrolyte injection and sealing, vary depending on the battery type, and there are also differences in the technologies applied by each manufacturer. For example, the methods for stacking electrodes are divided into the "Winding" method, which winds the electrodes in a roll shape, and the "Stacking" method, which stacks the electrodes flat like tissue paper. The winding method is used for cylindrical and prismatic batteries, while the stacking method is used for pouch batteries.

After stacking the electrodes according to the battery type, the electrodes and separators are combined to create the first unit cell products, Mono-Cell and Bi-Cell, and then the electrolyte is injected. At this stage, all cylindrical and pouch batteries are injected with electrolyte and sealed.

#### STEP 3: Activation Process

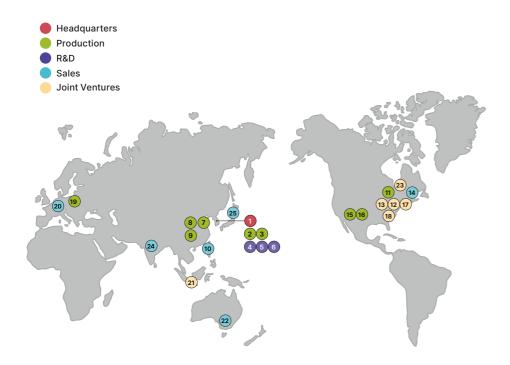
This process involves activating the electrical energy and confirming stability through repeated aging, charging, and discharging cycles. For pouch batteries, degassing is performed during this stage to remove gases generated by electrolyte side reactions during the initial charge. Afterward, quality inspections are conducted before the pack assembly process. During these charge/discharge cycles, the battery's performance (capacity, resistance) is checked. After a certain storage period, low-voltage batteries are identified via Open-Circuit Voltage (ocv) measurements. Finally, in the End of Line (EOL) process, performance is verified and appearance is inspected.

#### STEP 4: Pack Process

To mount the battery in an electric vehicle, it must be modularized to fit the vehicle model, so the pack process is carried out to assemble the batteries into packs. For this, multiple battery cells are connected in a "cell to cell" configuration and fixed in a module case. After connecting the fixed cells, the upper cover of the module is assembled to complete the module, and then the modules are connected in a "module to module" configuration and assembled into the battery. pack, completing the entire battery manufacturing process.

LG Energy Solution is expanding our R&D, production, and sales bases in major regions worldwide – in the US, the EU, China, and Korea. There are approximately 20,000 employees in the overseas sites. This number accounts for about 63% of our total workforce of approximately 32,000 employees (as of December 2023).

#### Global Network



| Total Employees                       |                                      |               | Overseas Empl                         | oyees                    | Countr        | ies                |  |
|---------------------------------------|--------------------------------------|---------------|---------------------------------------|--------------------------|---------------|--------------------|--|
| 32,071                                |                                      |               | 32,071 20,311                         |                          |               | 11                 |  |
| · · · · · · · · · · · · · · · · · · · |                                      |               | · · · · · · · · · · · · · · · · · · · |                          |               |                    |  |
|                                       | Total Pro                            | oduction      | Joint Ventures                        | Sales                    | R&D I         | Headquarters       |  |
|                                       | 25                                   | 9             | 6                                     | 6                        | 3             | 1                  |  |
| No                                    | Legal Nan                            | ne            | Abbreviation                          | Region                   | Separation    | Availability       |  |
| 1                                     | Headquarte                           | ers           | Headquarters                          | Seoul, South Korea       | Headquarters  | Operation          |  |
| 2                                     | Ochang Energy                        | Plant 1       | Ochang Energy Plant 1                 | Ochang,                  |               | Operation          |  |
| 3                                     | Ochang Energy                        | Plant 2       | Ochang Energy Plant 2                 | South Korea              | Production    | Operation          |  |
| 4                                     | R&D Campus Daejeo                    | n (Daejeon)   | R&D Campus Daejeon<br>(Daejeon)       | Daejeon,<br>South Korea  | R&D           | Operation          |  |
| 5                                     | R&D Campus Gw                        | acheon        | R&D Campus Gwacheon                   | Gwacheon,<br>South Korea | R&D           | Operation          |  |
| 6                                     | Magok R&D Ca                         | mpus          | Magok R&D Campus                      | Magok, South Korea       | R&D           | Operation          |  |
| 7                                     | LGESNJ                               |               | LGESNJ                                |                          | Production    | Operation          |  |
| 8                                     | LG Energy Solution<br>Co., Ltd.      | (Nanjing)     | LGESNJ                                | Nanjing, China           | Production    | Operation          |  |
| 9                                     | LG Energy Solution<br>(Nanjing) Co., |               | LGESNA                                |                          | Production    | Operation          |  |
| 10                                    | LG Energy Solution (T                | Taiwan) Ltd.  | LGESTW                                | Taipei                   | Sales         | Operation          |  |
| 11                                    | LG Energy Solution Michigan Inc.     |               | LGESMI                                | Michigan, USA            | Production    | Operation          |  |
| 12                                    | 1 llei: O - ll - 1 1 O               |               | Ultium Cells 1                        | Ohio, USA                | Joint Venture | Operation          |  |
| 13                                    | Ultium Cells LLC                     |               | Ultium Cells 2                        | Tennessee, USA           | Joint Venture | Operation          |  |
| 14                                    | LG Energy Solution \                 | /ertech Inc.  | LGESVT                                | Massachusetts, USA       | Sales, SI     | Operation          |  |
| 15                                    | LG Energy Solution A                 | Arizona, Inc. | LGESAZ                                | Arizona, USA             | Production    | Under construction |  |
| 16                                    | LG Energy Solution A                 | Arizona ESS,  | LGESAE                                | Alizolia, OSA            | Production    | Under construction |  |
| 17                                    | L-H Battery Comp                     | oany, Inc.    | L-H Battery Company, Inc.             | Ohio, USA                | Joint Venture | Under construction |  |
| 18                                    | HL-GA Battery Company LLC            |               | HL-GA Battery Company                 | Georgia, USA             | Joint Venture | Under construction |  |
| 19                                    | LG Energy Sol<br>Wroclaw sp. z       |               | LGESWA                                | Wroclaw, Poland          | Production    | Operation          |  |
| 20                                    | LG Energy Solution<br>Europe GmbH    |               | LGESEG                                | Zulzbach, Germany        | Sales         | Operation          |  |
| 21                                    | PT. HLI Green p                      | oower         | PT. HLI Green power                   | Karawang,<br>Indonesia   | Joint Venture | Operation          |  |
| 22                                    | LG Energy Sol<br>Australia Pty       |               | LGESAU                                | Victoria, Australia      | Sales         | Operation          |  |
| 23                                    | Nextstar Energ                       | y Inc.        | Nextstar Energy                       | Ontario, Canada          | Joint Venture | Operation          |  |
| 24                                    | LG Energy Sol<br>India Private Li    |               | LGESIL                                | New Delhi, India         | Sales         | Operation          |  |
| 25                                    | LG Energy Solution Jap               | pan Co., Ltd. | LGESJP                                | Tokyo, Japan             | Sales         | Operation          |  |

<sup>\*</sup> In this ESG report, both official corporate names and their abbreviations are used in accordance with internal classification standards as of the end of December 2024.

# **Business Highlight**

**LG Energy Solution in Numbers** 











# **Production Capacity**

LG Energy Solution is establishing and implementing a proactive global strategy to effectively respond to the increasing demand for Litium-ion batteries. We are steadily expanding our manufacturing capacity by establishing production facilities in the US and Poland with long-term plans to increase our capacity to the range of exceeding 500 GWh.

# Joint Venture (JV) Status

LG Energy Solution is strengthening core partnerships by establishing joint ventures (JVs) with suppliers to expand our global business presence. In 2020, we entered JV with General Motors (GM), starting with our first plant of Ultium Cells in Ohio, U.S In March 2022, we built a production plant in Ontario, Canada, through a joint venture with Stellantis, and in 2023, we decided to establish a JV with Hyundai Motor Group in Savannah, Georgia, the US, we currently reached a total of 6 JVs. We plan to expand strategic investments and further strengthen partnerships to secure our leadership in the global EV market.

#### [LG Energy Solution JV Establishment Status and Plans]

| Year | Content   |
|------|---|
| 2019 | Ultium Cells (GM) Plant 1 - Lordstown, Ohio, US   |
| 2021 | • Ultium Cells (GM) Plant 2 – Spring Hill, Tennessee, US  |
| 2022 | HLI Green Power (Hyundai Motor Group)     Karawang, Indonesia   |
| 2023 | NextStar Energy (Stellantis) – Ontario, Canada     L-H Battery Company (Honda) - Fayette County, Ohio, US |
| 2024 | HL-GA Battery Company (Hyundai Motor Group) – USA<br>Georgia State Savannah                               |

R&D Status Visit Website

# **R&D Status**

LG Energy Solution is delivering a wide range of innovative battery solutions across both EV (Electric Vehicle) and non-EV sectors. We are evolving beyond a battery manufacturer to become a Total Solution Provider by offering integrated solutions that span not only battery products and hardware technologies, but also diagnostic and management software, and shared service models.

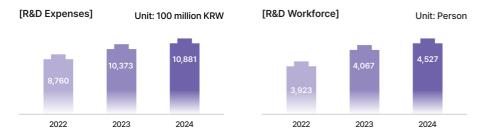
To maintain a strong competitive edge in the premium battery market, we are focused on securing core technologies for high energy density batteries—particularly enhancing fast-charging performance, improving safety, and advancing diagnostic accuracy. In parallel, we are building a diverse product portfolio with cost competitiveness to address the growing mid- to low-priced EV market. To fundamentally strengthen cost competitiveness, we are preparing and implementing key technologies aimed at reducing material and processing costs in a timely manner.

In particular, to commercialize BaaS (Battery as a Service), we are intensifying R&D efforts to support the expansion of used vehicle battery evaluations and EV inspection services. It is also accelerating investment in the research and development of next-generation batteries, recycling, and reuse technologies to secure future growth.

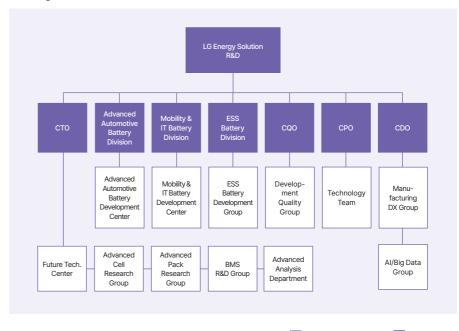
Furthermore, LG Energy Solution aims to contribute to a sustainable future by providing competitive solutions that minimize environmental impact across the entire battery value chain—from raw material extraction to parts and cell manufacturing—and by establishing a resource-circulating battery ecosystem through the development of reuse and recycling technologies for end-of-life batteries.

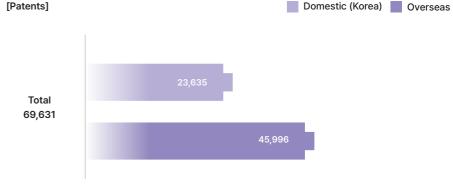
# **Expanding R&D Investment and Workforce**

In 2024, R&D investment amounted to KRW 10,881 million, a 5% increase compared to 2023, representing approximately 4.2% of total sales. To drive R&D initiatives, LG Energy Solution operates a comprehensive CTO R&D organization, including Future Tech. Center responsible for Cell predevelopment, Pack/BMS pre-development, and next-generation battery development. In addition, we manage domestic and overseas research units across each business domain—automotive batteries, small batteries, and ESS batteries. As of 2024, the number of R&D personnel increased to 4,527, reflecting continued efforts to secure top talent. Going forward, we will continue steady investments in R&D to contribute to a future era of sustainable and eco-friendly energy.



## [R&D Organization]





<sup>\*</sup> As of December 2024, this figure includes patents that are registered, awaiting examination, or currently under review.

# **R&D Sector and Application Status**

LG Energy Solution is enhancing business competitiveness by strengthening our research in the fields of Advanced Automotive Batteries, such as Battery Electric Vehicles (BEV) and Plug-in Hybrid Electric Vehicles (PHEV), along with mobility & IT batteries for smartphones, e-mobility, power grids, and residential energy storage systems (ESS).

# **Advanced Battery Technology Development**

# Cylindrical 46-Series Battery Technology

LG Energy Solution's 46-series battery significantly reduces energy resistance through next-generation core technologies and optimized structural design. This enables world-class energy density and fastcharging performance. Compared to existing products, it delivers at least 5x more cell energy, and by applying directional venting technology, it prevents thermal propagation (TP)—the transfer of heat to adjacent battery cells—thereby enhancing safety. The 46-series battery is expected to unlock new possibilities not only in mobility but also across various industrial sectors in the future.

# LFP Pouch Cell-to-Pack (CTP) Technology

Compared to the conventional Module-to-Pack (MTP) method, the Cell-to-Pack (CTP) approach reduces the number of components, thereby simplifying the manufacturing process and maximizing energy density at the pack level. With this structural improvement, LFP cell-based batteries can extend driving range by approximately 30% for packs of the same volume. This technology is expected to make a significant contribution to the popularization of electric vehicles.

# HV Mid-Ni Pouch-Type Cell Technology

The high-voltage (HV) Mid-Ni composition pouch-type battery cell raises the maximum usable voltage compared to conventional batteries, thereby increasing energy output while reducing cost. To achieve high energy performance, LG Energy Solution applies optimized cathode coating and highly durable electrolyte formulations. Through next-generation cathode manufacturing processes, we aim to secure both cost competitiveness and sustainability.

# **Battery Management Total Solution**

LG Energy Solution has enhanced its diagnostic and predictive capabilities for battery conditions by integrating cloud and AI technologies into its software, thereby achieving industry-leading data accuracy. We also became the first in the industry to develop a Safety Diagnostic Software, which enables the early detection and prevention of even minor risks. In addition, to prevent thermal propagation (TP), we are focusing on the development of various diagnostic technologies that enable the early detection of lithium plating—one of the primary causes of initial thermal runaway.

# Thermal Propagation (TP) Mitigation Technology

To support customized diagnostic solutions for each stage of thermal propagation (TP), LG Energy Solution provides a safe battery environment by preventing thermal runaway, enabling customers to use

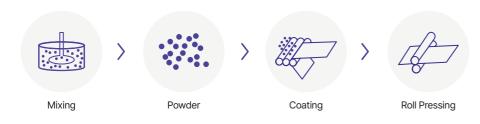
| batteries with con                            | ndence.   |
|---|---|
| Lithium<br>Plating<br>Diagnosis<br>Technology | Early detection of lithium plating, one of the primary causes of thermal propagation     Utilization of pulse analysis, algorithm development, and electrochemical impedance spectroscopy (EIS)  * EIS(Electrochemical Impedance Spectroscopy)  |
| EIS   | Cell temperature estimation and early anomaly detection through impedance measurement     Application of Battery Management IC (BMIC) integrated with EIS functionality  * BMIC(Battery Monitoring IC): A circuit responsible for battery capacity monitoring, cell balancing, and other battery management functions |
| Sensing<br>Technology                         | Detection of internal reactions prior to intercell heat transfer using gas and pressure sensors     Development of a pack-level gas and pressure sensing system (including integration with vehicle cooling systems)  |

# **Dry Electrode Technology**

Dry electrode technology is a next-generation electrode manufacturing process that does not use solvents, enabling reductions in both energy consumption and carbon emissions.

Unlike the conventional wet process, the dry electrode process does not require solvent drying and recovery, which is expected to reduce both capital investment in equipment and factory floor space. In addition, it allows for high-loading electrode production, contributing to improvements in energy density and driving range-factors that are considered essential for the realization of high-performance batteries. LG Energy Solution is not only applying this technology to existing lithium-ion battery manufacturing processes, but also preparing to expand its application to nextgeneration battery platforms, including solid-state batteries.

# [Dry Electrode Process]



#### [Advantages]









# Next-generation battery technology development

The future technologies being developed by LG Energy Solution encompass four nextgeneration innovations expected to dramatically enhance battery performance and safety. These technologies are anticipated to serve as game changers that will significantly contribute to the growth of the global battery market.

- 1) All-solid-state battery
- 2) Bipolar battery
- 3) Lithium-sulfur battery
- 4) Sodium-ion battery

First, solid-state batteries, which utilize solid electrolytes, are being developed to drastically reduce the risk of fire and substantially improve safety. By adopting high energy density materials, they are being optimized for long-range driving and high-power applications.

The bipolar battery introduces a series-connected internal cell structure that lowers internal resistance and enhances output. This design reduces heat generation and, through high-voltage integration, simplifies the overall pack structure and reduces component count—contributing to system-level simplification and weight reduction.

Lithium-sulfur batteries feature energy densities approximately 1.5 to 2 times higher than conventional lithium-ion batteries. Owing to their lightweight characteristics, they are emerging as next-generation solutions ideal for lightweight, high-performance mobility applications such as drones and Urban Air Mobility (UAM).

Sodium-ion batteries are being developed as a technology that delivers stable output performance even at low temperatures and utilizes cost-competitive raw materials, offering advantages in terms of economic feasibility and supply chain stability.

Through continued investment in R&D, LG Energy Solution is committed to establishing overwhelming technological leadership and expanding its influence in the future battery market.

# **Open Innovation**

LG Energy Solution is promoting technological collaboration with academia, industry, and global startups, while steadily reinforcing strategic investments to secure leadership in next-generation battery technologies. By operating various open innovation programs, we build networks with experts across different sectors, creating new value and competitiveness to deliver the highest level of customer value. It also supports the discovery and commercialization of innovative ideas. Through BRIDGE, we aim to achieve the following goals:

#### BRIDGE Visit Website

# Accelerating technological advancement

By embracing diverse ideas and technologies, we seek to create innovative solutions and explore new growth opportunities.

# 2. Strengthening collaboration

Through close cooperation with experts from academia and industry, LG Energy Solution maximizes synergies in technology development. Through BRIDGE, we will lead technological innovation for a sustainable future, serving as a bridge for collaboration and growth not only in battery technologies but across the entire energy industry.



BRIDGE

# **Battery Innovation Contest (BIC)**

LG Energy Solution operates the "Battery Innovation Contest (BIC)", a program that promotes battery-related technology development in collaboration with universities and research institutions around the world. As of 2024, the BIC program has selected 31 innovative battery research projects, providing support to enable project researchers to pursue more ambitious and challenging research initiatives.

# FRL(Frontier Research Lab) / Battery Science Center / Contract Department

Since 2021, LG Energy Solution has been operating the Frontier Research Lab (FRL), a long-term R&D program established by region (the U.S., Korea, and Europe), to collaborate with leading battery researchers from top universities and institutions around the world. Through FRL, we are conducting research on solid-state batteries, lithium-metal batteries, and other next-generation batteries in partnership with institutions including the University of California, San Diego (UCSD), the University of California, Santa Barbara (UCSB), Korea Advanced Institute of Science and Technology (KAIST), and Germany's MEET (Münster Electrochemical Energy Technology) and HIMS (Helmholtz-Institute Münster). In addition, since 2022, LG Energy Solution has been strengthening its R&D network and fostering top talent by establishing industry-academia research centers at Seoul National University and POSTECH (Pohang University of Science and Technology) for the development of lithium-ion and nextgeneration battery technologies. We have also launched contracted academic departments at Yonsei University and Korea University, through which it operates long-term collaborative research programs.

## **OSS**(Open Submission for Start-up)

COMPANY OVERVIEW

The OSS program is an open-call platform operated year-round to promote diverse technological collaboration with startups. It focuses on accelerating open innovation activities through active technical partnerships. Proposals submitted through this program are matched with LG Energy Solution's internal experts and undergo a thorough review process, including proof of concept and potential collaboration opportunities. Based on the results of the evaluation, participants may be offered opportunities for continued collaboration, such as joint research and development or equity investment with LG Energy Solution. Through OSS, we are strengthening its technological cooperation and investment activities within the battery industry, thereby enhancing its long-term brand value.

# Industry-Academia Collaboration Conference

In July 2024, LG Energy Solution successfully hosted the 2nd Industry-Academia Cooperation Conference at R&D Campus Daejeon with participation from over 200 graduate-level students and leading faculty members from 14 major universities in Korea. The event highlighted the importance of industry-academia collaboration for the sustainable advancement of the battery industry and featured the sharing of research outcomes across a wide range of battery-



The 2nd industry-academia cooperation conference

related fields, including battery materials, Battery Management Systems (BMS), intelligent manufacturing, and next-generation battery technologies. The conference focused on fostering synergies between battery technology innovation and academic collaboration. Graduate students actively presented their research during a dedicated poster session. In parallel, a recruitment session was held to introduce LG Energy Solution's long-term growth vision, strategic direction, job functions, and talent development programs, with the aim of attracting and securing future talent. Through such networking events, we aim to facilitate the exchange of real-world industrial experience and academic research ideas, thereby strengthening collaboration between academia and the corporate sector within the battery industry.

# Me Charge

LG Energy Solution pursues ESG management with the belief that our business growth contributes to a sustainable future for humanity.

Toward

# A Better Future













**Climate Action & Circular Economy** 

**Human Value** Management

Advanced EH&S

Responsible & **Impactful Business**  G

Good Governance

**ESG Disclosure** & Communication

Climate Action

2050 - Achieve Carbon Neutrality

**Circular Economy** 

Closed loop across global sites

**Human Rights** Management

Build human rights riskfree business sites **Human Capital** 

Promote diversity, equity and inclusion

Management

Product Stewardship

Continuing to expand the product sutainability

Environment, Health, and Safety

Zero serious EH&S accidents

Responsible supply chain management

Secure over 90% ESG low-risk group by 2030

Shared growth and **Local Community** Impact

Reinforce shared growth and cooperationcooperation

**Enhancement** of Compliance Management & Ethical Management

Strengthening the **Governance System**  **Transparent ESG** Disclosure

Strengthening the **Governance System** 

- · Carbon negative strategy
- · Achieve closed loop
- · Fostering diverse talent
- · Reinforcing product eco-friendliness
- · Health and safety management of business sites
- · Environment impact management
- · Biodiversity conservation

- · Sustainable value chain
- · Shared growth
- · Global social impact programs

8 Core areas

4 Enabler areas

To systematically address the growing demand related to ESG, LG Energy Solution established an internal ESG Committee in June 2021. We also organized dedicated ESG departments and ESG Working Council to enhance the execution of strategies and initiatives

# **ESG Committee**

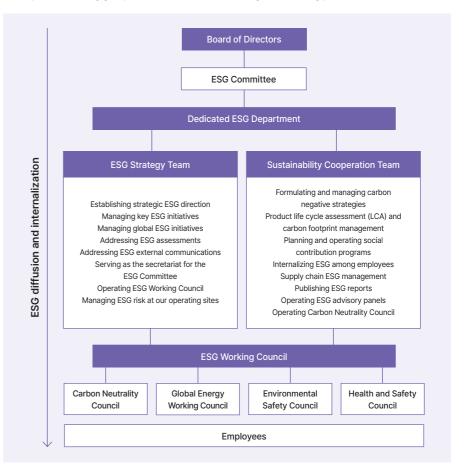
The ESG Committee is responsible for establishing and approving fundamental policies, strategies, and mid- to long-term goals related to ESG matters, including environment, human rights, health and safety, social responsibility, customer value, shareholder value, and corporate governance. The committee is composed of five members, including four outside directors, and convenes biannually. In the first half of 2025, the ESG Committee approved revisions to the ESG Information Management and Disclosure Policy and updates to Global Environmental Policy.

#### [ESG Committee Activities]

| Year Round Date |           | Data          | Attendance | Agenda    |   |  |   |          |         |         |         |         |  |           |   |   |
|-----------------|-----------|---------------|------------|-----------|---|--|---|----------|---------|---------|---------|---------|--|-----------|---|---|
| real            | Round     | Date          | /Member    | Туре      | Details   | result   |   |          |         |         |         |         |  |           |   |   |
|                 | 1         | 24            | 5/5        | Approval  | Approval of ESG guidelines and corporate governance charter   | Approval   |   |          |         |         |         |         |  |           |   |   |
|                 | '         | April         | 3/3        | Reporting | Report on 2023 ESG management direction and plans   | Reported   |   |          |         |         |         |         |  |           |   |   |
| 2023            |           | 20<br>October | 4/5        | Reporting | Report on 2023 ESG management performance   | Reported   |   |          |         |         |         |         |  |           |   |   |
|                 | 2         |               |            | Reporting | Report on second half of 2023 overall compliance management status  | Reported   |   |          |         |         |         |         |  |           |   |   |
|                 | 1         | 25<br>March   | 5/5        | Approval  | Appointment of ESG Committee Chairperson  | Approval   |   |          |         |         |         |         |  |           |   |   |
| 2024            | 2         | 23<br>April   | 5/5        | Approval  | Approval of mid- to long-term goals and policies for ESG management (1-1) Amendments of RE100 roadmap (1-2) Establishment of biodiversity policy  | Approval   |   |          |         |         |         |         |  |           |   |   |
|                 |           |               |            |           |   |  |   |          |         |         |         |         |  | Reporting | Report on 2024 ESG management direction and plans | Reported                                  |
|                 |           |               |            |           |   | Reporting  | Report on compliance key risk management status | Reported |         |         |         |         |  |           |   |   |
|                 | 3 October |               | October    | October   | October   | October  | October   | October  | October | October | October | October |  | 5/5       | Reporting   | Report on 2024 ESG management performance |
|                 |           | 25            | 3/3        | Reporting | Report on 2024 overall compliance management status   | Reported   |   |          |         |         |         |         |  |           |   |   |
| 2025            | 1         | 29<br>April   | 5/5        | Approval  | Establishment and Revision of ESG-Related Policies (1-1) Establishment of the ESG Information Management and Disclosure Regulation (1-2) Revision of the Global Environmental Policy (1-3) Revision of the Global Human Rights and Labor Policy | Approval   |   |          |         |         |         |         |  |           |   |   |
|                 |           |               |            |           | Reporting   | Report on 2024 ESG management direction and plans - Results of Double Materiality Assessment | Reported  |          |         |         |         |         |  |           |   |   |
|                 |           |               |            |           | Reporting   | Report on 2025 overall compliance management status  | Reported  |          |         |         |         |         |  |           |   |   |

# **ESG Secretariat and Working Group**

LG Energy Solution's dedicated ESG department is responsible for establishing the ESG strategy framework and managing the execution of key initiatives. It handles the company-wide ESG operational tasks in collaboration with relevant departments that assess risks associated with ESG disclosures and functional departments that manage ESG-related information. The ESG Working Group is composed of departments tasked with implementing our ESG vision and strategic enhancements. This group convenes quarterly to assess the implementation status of ESG strategic initiatives and to share key issues and insights. For the execution of core tasks, separate task-specific working groups are also formed and managed accordingly.



# **ESG Training Program**

LG Energy Solution is promoting change management initiatives for employees, who are the primary agents of execution, in order to strengthen the effectiveness and execution capability of ESG initiatives. Through training programs, internal campaigns, and newsletters, we foster an ESGoriented culture that raises awareness of evolving ESG environments and enables employees to identify and implement actionable tasks in their respective areas.

# [2024 ESG Training Programs]

| Separation      | Contents  | Cycle                    |
|-----------------|---|--------------------------|
| ESG Trend Focus | Overview of global ESG trends and on-going initiatives Interviews with ESG Committee members and Advisory panel   | On a Bi-monthly<br>basis |
| ESG Compliance  | ESG Regulatory Landscape and LG Energy<br>Solution's Response Strategies     ESG Disclosure Regulations, EU Battery<br>Regulation Overview, and Response Measures | Once a year              |

# [ESG Policy by Area]

| Commitment to Product Quality Visit Website        | Responsible Sourcing Policy Visit Website                                      |
|--|--|
| Code of Conduct for Suppliers Visit Website        | Global Environmental Policy Visit Website                                      |
| Global Human Rights and Labor Policy Visit Website | Diversity, Equity, and Inclusion Policy Visit Website                          |
| Global Safety and Health Policy Visit Website      | Code of Conduct Visit Website  |
| Anti-Bribery Policy Visit Website                  | Global Anti-Bribery Guideline Visit Website                                    |
| Privacy Policy Visit Website                       | Biodiversity Protection and Forest Destruction Prevention Policy Visit Website |



**ESG Trend Focus** 



ESG Regulatory Landscape and Our Response Strategy

# The head of **Communication Center Message**

Senior Vice President Kim, Woo Sub



In recent years, ESG-related regulations have had a direct and growing impact on the operation of global businesses. Compliance with requirements such as raw material sustainability, carbon footprint calculation, and mandatory recycling is becoming increasingly stringent. As a result, regulatory compliance has become essential across the entire value chain—from product design and raw material sourcing to production and distribution.

Furthermore, various national regulations are imposing strict oversight on the protection of human and labor rights within supply chains, significantly influencing our global supply chain management systems. Today, transparent and responsible supply chain operations are no longer just a matter of regulatory compliance—they are directly linked to corporate trust and credibility. While these regulations may pose short-term challenges in terms of costs and operational processes, they are emerging as a critical standard for securing long-term global competitiveness. LG Energy Solution views these evolving ESG regulatory environments not as risks, but as opportunities, and is proactively building systems to stay ahead of them. We have already established a clear ESG vision and strategy, and we are committed to putting them into practice.

With "Creating Sustainable Value" as our core vision, we are pursuing the following strategic directions: ▲ In the environmental domain: reducing carbon emissions and expanding the use of eco-friendly raw materials, ▲ In the social domain: ensuring human rights, safety, and diversity throughout the supply chain, A In the governance domain: building a transparent and accountable decision-making structure. We are also advancing our product carbon footprint data management system, institutionalizing supply chain due diligence, and enhancing ESG training programs for our suppliers. In addition, we are implementing projects to increase the ratio of recycled and reused materials, in order to build a sustainable circular resource system. These ESG management efforts not only provide a foundation for regulatory compliance, but also serve as essential conditions for becoming a trusted partner to our customers, investors, and local communities. Looking ahead, we will respond to the changing global business landscape and further strengthen our companywide ESG governance. We will support all business units in thoroughly adhering to ESG standards.

At the same time, we will enhance partnerships with our suppliers to promote sustainability across the industry and continue investing in the development of environmentally friendly technologies. LG Energy Solution's ESG strategy goes beyond regulatory compliance—it is grounded in our longterm commitment to creating corporate value and fulfilling our social responsibility. With a strong determination to lead a sustainable future as a global leader in the battery industry, we will continue working together with all stakeholders to advance ESG value creation.

# **Global External Relations/ESG Department Leader Message**

Vice President Chun, Dong Wook



LG Energy Solution is advancing both corporate growth and its environmental and social responsibilities by building a sustainable battery ecosystem based on its ESG vision: "We CHARGE toward a better future."

By linking ESG performance with business outcomes, we are shifting from short-term profitoriented management to a long-term, value-driven approach.

In particular, as ESG-related regulations have a direct impact on business operations, LG Energy Solution integrates ESG risks and opportunities into major decision-making processes. During this year's Double Materility Assessment, interviews with internal and external stakeholders led to the identification and prioritization of the following our key initiatives:

First, the battery industry plays a central role in addressing climate change.

LG Energy Solution has set clear reduction targets for Scope 1 and 2 greenhouse gas (GHG) emissions and is committed to achieving RE100 by 2030. In addition, we are proactively responding to the EU Battery Regulation and global carbon regulations by continuously calculating Product Carbon Footprints (PCFs) for its products.

Second, circularity of resources is critical to the sustainability of the battery industry.

LG Energy Solution is enhancing its battery collection and recycling systems to maximize the efficiency of raw material use and minimize waste generation.

By increasing the use of recycled raw materials, we not only reduce environmental impacts but also contribute to resource security within our supply chain.

Lastly, in terms of product responsibility, we prioritize the development and supply of safe and reliable batteries.

It evaluates the environmental and social impacts across the entire product lifecycle and aims to provide batteries that meet stringent quality standards, are supported by responsive customer service, and incorporate robust product safety measures—ensuring peace of mind for end users.

Grounded in its ESG strategy, LG Energy Solution will continue to balance technological innovation with social and environmental responsibility, leading the global battery industry toward a more sustainable future.

# **ESG Summary**

LG Energy Solution is implementing a range of improvement initiatives based on its ESG strategic tasks to prevent potential risks and ensure sustainable growth. In response to climate action, we have established a greenhouse gas (GHG) inventory system based on ISO 14064-1 (Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals). To strengthen carbon accounting capabilities across our value chain, we also developed and distributed carbon footprint calculation guidelines for suppliers. To mitigate potential supply chain risks, we conducted ESG assessment on 20 key raw material suppliers from 2023 to 2024. In addition, through support programs related to the EU Carbon Border Adjustment Mechanism (CBAM), we have helped our suppliers establish systems to respond to global ESG regulatory risks. Lastly, to prepare for ESG disclosure regulations such as the EU Corporate Sustainability Reporting Directive(CSRD), we have established the ESG Information Management and Disclosure Policy, thereby reinforcing the ESG oversight and supervisory role of the Board of Directors—the company's highest decision-making body.





Acquired company-wide ISO 14064-1 certification

(Quantification and Reporting of Greenhouse Gas **Emissions and Removals)** 



Developed and distributed carbon footprint calculation guidelines for suppliers



Added 9 new EPD (Environmental Product Declaration) certifications

# S Social



Conducted third-party assessment on 20 key raw material suppliers (2023-2024)



**EU CBAM support program** for suppliers



Reduced employee LTIFR (Lost Time Injury Frequency Rate) from 0.25 in 2023 to 0.22 in 2024



**Established ESG Information Management** and Disclosure Policy



Acquired ISO 37001 certification in Korea (Anti-Bribery Management System)

LG Energy Solution defines all organizations and individuals affected by or having an impact on our business activities as stakeholders. we engage with each stakeholder group through a variety of communication channels and reflects their expectations in our ESG management practices.

# **Advancement of ESG Strategy through Stakeholder Communication Process**

# Analysis of ESG Trend and Stakeholder needs

- Collecting feedback through general shareholder meetings, customer surveys, labormanagement councils, etc.
- · Identifying ESG issues raised by ESG rating agencies and global initiatives

# Analysis of Key ESG Issues and Prioritization

- Deriving key ESG agendas based on collected feedback and identified issues
- · Selecting priority tasks through review by the ESG Committee and executive management

# **Establishment and Execution** of ESG Strategy

- Setting sustainability management goals that reflect prioritized ESG tasks
  - Applying these goals across business operations

# **Performance Monitoring** and Disclosure

- Monitoring ESG performance
- · Sharing results through ESG reports, website, and others

# Feedback and Integration

• Updating ESG goals and strategies based on regulatory changes and stakeholder feedback

# **Stakeholder Expectations and Communication Channels**

|                         |   | 20                             | 00  |                   |  |  |  |                    |
|-------------------------|---|--------------------------------|---|-------------------|--|--|--|--------------------|
|                         | Shareholders/Investors  | Customers                      | Customers   |                   | Employees  |  | <b>Business Partners</b>   |                    |
| Purpose/<br>Expectation | Long-term Growth<br>Transparent Disclosure  | •                              | Communication Facilitation, Addressing Climate Change,<br>Business Innovation and R&D                     |                   | Human Capital Management, Labor Management Relations<br>Enhancement of Welfare Benefits, Strengthening Safety,<br>Health and Respecting Human Rights |  | Building Strategic / Collaborative / Partnerships<br>Management Support and Training Activities          |                    |
| Communication<br>method | Shareholder Meeting, Conference Calls<br>Financial / Non-financial data disclosure        | _                              | Receiving Customer Feedback, CDP Reporting<br>Annual / Business Report, Industry Conference / Exhibitions |                   | EnTalk (CEO Hotline), Labor-Management Council<br>Junior Board, Employee Satisfaction Surveys<br>Industrial Safety and Health Committee              |  | Business Partner Seminars<br>Business / Technical Support Programs                                       |                    |
|                         |   |                                |   |                   |  |  |  |                    |
|                         | (P)   | <u>F</u>                       | O C   |                   |  |  |  |                    |
|                         | Local Communities / NGOs  | Academia / Experts             | Academia / Experts Industry Ass   |                   | Industry Associations Government   |  |  | Global Initiatives |
| Purpose/<br>Expectation | Establishing Social Contribution, Strategies<br>Community Engagement                      | Industry-Academia Cooperation  | Adapting to Ne  | ew Regulations    | Fair Trade and Regulatory<br>Compliance Shared Growth  |  | Collaboration for<br>Global ESG Standard Compliance  |                    |
| Communication<br>method | Conducting Surveys and Gathering Opinions<br>Collaborative Social Contribution , Projects | Joint Research and Development | Industry and Sec  | ctor Associations | Industry Policy Advisory Participa<br>in Government Pilot Projects   |  | Improving Opinions through Working<br>Groups and BOD Participation,<br>Disclosure and Reporting Progress |                    |
|                         |   |                                |   |                   |  |  |  |                    |

LG Energy Solution operates a variety of communication channels—including its official website, Battery Inside (corporate blog), and social media platforms such as Facebook, YouTube, and LinkedIn—to actively engage with customers and a broad range of stakeholders. we also participate in domestic and international industry exhibitions, conferences, and forums to enhance stakeholder engagement and broaden opportunities for meaningful dialogue.



Homepage Visit Website https://www.lgensol.com/en/index





Facebook https://www.facebook.com/p/LG-Energy-Solution-100068195618451/?locale=ko\_KR



Visit Website



Youtube www.youtube.com/lgenergysolution



**Battery Inside** https://inside.lgensol.com/en/





Interbattery

Visit Website

Visit Website



Virtual Experience virtual.lgensol.com

Visit Website



# **ESG Activities and Achievements**

# **FSG Scorecard**

LG Energy Solution actively responds to ESG rating systems conducted by both domestic and global capital market institutions, including MSCI, S&P Global (DJSI), Sustainalytics, CDP Climate Change, and the Korea Institute of Corporate Governance and Sustainability (KCGS). Recognizing that these assessments are largely based on publicly available data disclosed through corporate reports, official websites, and institutional publications, we are committed to enhancing its ESG disclosures. By strengthening the transparency of its ESG strategies and performance outcomes, LG Energy Solution aims to ensure that its ESG management maturity is accurately reflected in external evaluations.

# ESG Ratings Visit Website

| <b>Evaluation Agency</b> | Rating System                   | FY2021                 | FY2022  | FY2023  |
|--------------------------|---------------------------------|------------------------|---|---|
| MSCI                     | AAA, AA, A,<br>BBB, BB, B, CCC  | ВВ                     | BB  | BBB   |
| S&P Global<br>ESG Score  | 100 ~ 0                         | 47<br>(percentile 93%) | 54<br>(percentile 94%)<br>Incorporated into DJSI<br>Korea | 66<br>(percentile 95%)<br>DJSI Asia Pacific/Korea<br>"Industry Mover" |
| Sustainalytics           | 0 ~ 50                          | -                      | 24.1<br>(Medium risk)                                     | 22.1<br>(Medium risk)   |
| KCGS                     | S, A+, A, B+, B, C, D           | -                      | -   | A*  |
| CDP<br>Climate change    | A, A-, B, B-,<br>C, C-, D, D, F | В                      | A-  | В   |

<sup>\*</sup> Newly included in Korea Institute of Corporate Governance and Sustainability evaluation in 2024 (FY2023)

# **Achievements**

LG Energy Solution has achieved outstanding results in recent global sustainable management evaluations and is recognized as a leading company in ESG management.

# Industry Mover by S&P Global

LG Energy Solution was named an Industry Mover in S&P Global's 2024 Corporate Sustainability Assessment (CSA), conducted by the global credit rating agency S&P Global. This designation is awarded to companies within each industry category whose sustainability scores have improved by 5% or more compared to the previous year.\* We were the only company selected in the Electrical Equipment industry, recognized for our strong performance in areas such as climate strategy, supply chain management, and product responsibility.

# 100 Most Sustainable Corporations in the World 2025 by Corporate Knights

LG Energy Solution was ranked 12th overall and 1st in the battery manufacturing sector in the list of 100 Most Sustainable Corporations in the World 2025 announced by Corporate Knights, a Canada-based sustainable economy media and research group. This annual ranking evaluates 8,359 global companies based on 25 key performance indicators, including sustainable revenue and investment, resource and human capital management, financial performance, and supply chain sustainability. We received perfect scores in both sustainable revenue and investment, and was highly recognized for our efforts to reduce GHG through energy efficiency improvements and renewable energy transition in battery manufacturing processes. These achievements reflect LG Energy Solution's strong commitment to sustainability and leadership in ESG, and reinforce its dedication to advancing the era of clean energy and building a sustainable battery ecosystem.

<sup>\*</sup> In 2024, only 56 companies worldwide were selected for this recognition.

# **Leveraging Global Network and Partnership**

Leveraging Global Network and Partnership Visit Website





# **UN Global Compact**

LG Energy Solution joined the United Nations Global Compact (UNGC) in April 2022, pledging to adhere to the ten principles of the UNGC in the areas of human rights, labor, environment and anti-corruption in all business activities. In addition, we support the achievement of United Nations Sustainable Development Goals (SDGs) and intend to disclose the related activities and achievements.



# **Global Battery Alliance**

LG Energy Solution participates as a member on the Board of Directors in the Global Battery Alliance (GBA), a multi-stakeholder collaboration platform of industry actors, governments, international organizations, non-governmental organizations, and other stakeholders aimed at building a sustainable battery value chain, and provides oversight to the Secretariat and all GBA activities representing the battery manufacturing industry. Through GBA activities, we monitor and respond preemptively to global policy and regulatory landscape of battery value chain contribute to establishing ESG standards, including on battery carbon footprint, human rights and child labor, and participate in the development of the GBA Battery Passport system.



RE100 (Renewable Electricity 100%), EV100 (Electric Vehicle 100%)

In April 2021, LG Energy Solution became the first in the battery industry to simultaneously join the RE100 and EV100 initiatives, aiming to achieve RE100 and EV100 by 2030.



## TCFD (Task Force Climate-related Financial Disclosures)

LG Energy Solution has disclosed information about our climate change management system in the ESG reports in accordance with TCFD recommendations, and, as of February 2023, was the first Korean battery manufacturer to officially declare support for the TCFD. We will continue to analyze business opportunities and risks caused by climate change and take the lead in climate action through various measures to achieve RE100 by 2030 and carbon neutrality by 2050.





#### RBA (Responsible Business Alliance)

LG Energy Solution is the first Korean battery manufacturer to join Responsible Business Alliance (RBA). RBA is the world's largest industry coalition dedicated to corporate social responsibility in global supply chains and comprised with over 250 global firms. We fully support the vision and goals of the RBA and are committed to driving sustainable value for workers, the environment and business throughout the global battery supply chain. We seek to progressively align our operations with the provisions of the RBA Code of Conduct and collaborate with suppliers and stakeholders to improve working and environmental conditions and business performance through leading ESG standards and practices.



# RMI (Responsible Minerals Initiative, Responsible Minerals Sourcing and Supply Chain Management Coalition)

LG Energy Solution has also joined RMI to procure minerals in ethical and transparent manner. RMI, an initiative under RBA, was established in 2008 to respond to human rights and environmental issues in the procurement process of minerals such as cobalt. Currently, over 400 companies worldwide have participated in this initiative. LG Energy Solution requires its suppliers to report the use of conflict minerals and provide smelter information using the RMI Conflict Minerals Reporting Template (CMRT), thereby enhancing traceability and responsible sourcing practices across its supply chain.



#### RLI (Responsible Labor Initiative, Responsible Labor Coalition)

To improve the labor conditions and protect human rights in the global supply chain, LG Energy Solution is the first Korean battery company to participate in RLI. RLI, an initiative under the RBA, was established in 2017 to respond to issues regarding forced labor, child labor, and working conditions. More than 270 global companies are participating members.



#### Fair Cobalt Alliance

LG Energy Solution is the first Korean company to join FCA in May 2022 with a view to contributing to the eradication of forced labor and child labor in artisanal and small cobalt mines in the Democratic Republic of the Congo and to bringing sustainable changes to the local socioeconomic systems through community support activities.

# **Environmental**

Various environmental risk, such as global warming, have become immediate realties, LG Energy Solution is committed to addressing global environmental issues like climate change, resource depletion, and ecosystem destruction through our environmental management philosophy of 'Reduce Carbon Footprint and Add Nature.











| Climate Action Focused Issue              | 36 |
|---|----|
| Circular Economy Focused Issue            | 49 |
| Environmental Management                  | 56 |
| Safeguarding Focused Issue Natural System | 60 |
| Biodiversity Conservation                 | 67 |

# Climate Action

LG Energy Solution aims to achieve carbon neutrality throughout our entire value chain by 2050. Ultimately, we strive to go beyond carbon neutral and contribute to carbon reduction of various stakeholders by targeting carbon negative.

Beyond Carbon Neutrality Visit Website

# **Climate Management Governance**

The establishment of LG Energy Solution's carbon neutrality goals and carbon reduction activities are determined and operated based on a transparent and efficient governance system.

# [Climate Management Organization Chart]



#### Role of the Board of Directors

The Board of Directors, the highest decision-making body, makes the final decisions on climate change response strategies, investments, and major activities. Additionally, the Board has an ESG Committee that reviews the direction of climate change response strategies semi-annually and manages the approval and implementation of major tasks.

# The Carbon Neutrality Council

The council, composed of departments related to climate change response, develops and executes policies to achieve carbon neutrality. The Sustainability Cooperation Team, acting as the secretariat, collaborates with global departments to monitor performance in emissions reduction and renewable energy transition. It also conducts climate risk and opportunity analysis based on the Task force on Climate-related Financial Disclosures (TCFD) framework, thereby enhancing communication with stakeholders in line with global climate disclosure standards.

## **Executive and Functional Teams**

Executive and functional teams within the Carbon Neutrality Council are responsible for implementing the carbon-negative strategy and managing GHG emission and Energy usage. They set climate-related goals, monitor implementation, and manage performance by aligning with them to departmental Key Performance Indicators (KPIs)

# Reporting and Approvals by the ESG Committee

Since 2022, major agendas in climate-related strategies have been reported to the ESG Committee. In April 2024, the Committee approved the RE100 implementation roadmap. In April 2025, progress on carbon-negative strategy implementation was reported.

#### [Major agendas in climate-related response strategies]

| Year  | Туре     | Contents                                    |
|---|----------|---|
| April 2024  | Approval | RE100 Implementation Roadmap                |
| April 2025 Report Progress report on carbon negative strategy |          | Progress report on carbon negative strategy |

Climate Action COMPANY OVERVIEW ENVIRONMENTAL SOCIAL GOVERNANCE FACTBOOK APPENDIX = 37

# **Climate-related Risks and Opportunities**

LG Energy Solution categorized climate-related risks and opportunities, in particular, "Physical Risk" arising from the failure to respond to climate change and "Transition Risk" arising from social and economic changes in the process of implementing climate change responses, by referring to the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) and the EU Taxonomy climate-related risk table.

# Business Impact and Managerial Approach based on Scenario Analysis

LG Energy Solution identifies climate-related risks and opportunities and conducts scenario analysis from a multidimensional perspective based on the STEEP\* model. Through this approach, we aim to establish a strategies to respond to an uncertain future by climate change and to strengthen our integrated management system for climate risks and opportunities. For transition risk analysis, we utilize the Net Zero Emissions (NZE) scenario developed by the International Energy Agency (IEA), which is aligned with the global target of achieving carbon neutrality by 2050. For physical risk analysis, we apply Representative Concentration Pathways (RCP) 2.6, 4.5, and 8.5—as defined by the Intergovernmental Panel on Climate Change (IPCC)—to assess the business impacts under various climate conditions.

### [Climate Change Scenario]

| Scenario   | 1.5°C   | 2.0°C  | 4.0°C   |
|--|---|--|---|
| Overview   | A global transition to a net-zero carbon economy begins immediately, and the rise in earth's temperature is controlled to below 1.5°C in line with the Paris Agreement. | Policy measures are implemented to achieve the currently declared national targets for emission reductions, but more advanced policies are not enacted, resulting temperature rise of over 2°C | Due to limited influence and effects of currently implemented policies and measures, temperature rise of over 4°C expected.   |
| Key assumption   | The entire world cooperates for carbon neutrality, and various efforts to reduce emissions are underway   | Relatively gradual and continuous policy implementations are carried out, but the frequency and impact of climate physical risks become evident.   | Since policy measures that could cause transition risks are not implemented, transition risks are relatively low, but physical risks due to climate change occur more frequently in more extreme phenomena. |
| Temperature<br>Increase by 2100<br>Compared to Pre-<br>Industrial Levels | 1.5°C temperature rise  | 2°C or higher temperature rise   | 4°C or higher temperature rise  |
| Risk orientation   | More Transition Risk  | Intermediate level   | More Physical Risk  |
| Transition   | The transition risk analysis was cond   | ducted using the Net Zero Emissions (NZE) scenario developed by  | the International Energy Agency (IEA).  |
| Physical   | RCP 2.6   | RCP 4.5  | RCP 8.5   |

<sup>\*</sup> STEEP: Social, Technological, Economic, Environmental, and Political factors.

# Short-, Medium-, and Long-term Climate-related Risk and Opportunity

## **Transition Risk Analysis**

LG Energy Solution conducts scenario analysis of risks arising from the transition to a low-carbon economy by considering the climate policies, macroeconomic trends, and energy demand and mix of countries where its facilities are located, based on scenarios from the International Energy Agency (IEA).

As the global transition to a low-carbon society accelerates, climate-related regulations are expected to increase, leading to rising carbon prices and demand for renewable energy. At the same time, costs for low-carbon raw materials are expected to rise due to increased demand. In response, LG Energy Solution has established a carbon-negative strategy that includes an RE100 roadmap, aiming to use 100% renewable electricity all sites by 2030. In addition, we plan to promote carbon neutrality at business sites through energy efficiency measures and consider adoption of eco-friendly fuels such as Bio-based gas or hyrogen for long-term preparation.

With new regulations such as the EU Battery Regulation, mandatory carbon footprint disclosure will be enforced, and under the Corporate Sustainability Reporting Directive (CSRD), Scope 1, 2, and 3 GHG emission disclosures will become mandatory. As a result, companies are expected to expand their public reporting on carbon reduction efforts. We are preparing to disclose such activities transparently by establishing a climate-related disclosure framework, calculating carbon footprints, and obtaining third-party verification of GHG inventories.

|            | Risk/Opportunity  | Short-<br>term | Mid-<br>term | Long-<br>term | Business Impact  | Current Response   | Financial<br>Impact |
|------------|---|----------------|--------------|---------------|--|--|---------------------|
|            | ① Increased total cost due to rising carbon credit prices   | 0              | •            | •             | Increased purchasing cost of emission allowance  | Minimizing GHG emissions through carbon credit monitoring, energy efficiency improvements and renewable energy transition  | Cost↑               |
|            | ② Introduction and Expansion of GHG regulations to reduce GHG emission  | 0              | •            | •             | Increased CapEx/OpEx due to comply with GHG regulations or switching raw materials   | Continuous monitoring of newly introduced carbon regulations in global markets, as well as advancements in carbon reduction technologies.                                    | Cost↑               |
|            | Strengthening of Climate-Related Disclosure     Obligations   | •              | •            | •             | Increased internal data management and verification costs to meet growing demands for climate-related disclosures.   | Enhancing internal carbon management systems based on ISO 14064 and the GHG Protocol to comply with mandatory climate-related disclosure regulations across jurisdictions.   | Cost↑               |
| Transition | Increased requirements for product carbon footprint disclosure and reduction activities                                     | 0              | •            | •             | Potential revenue loss in the event of failure to meet customer expectations.  | Responding to stakeholders and customers expectations by communicating progress and plans for carbon reduction.  | Sales↓              |
|            | ⑤ Rising procurement costs due to increased<br>renewable energy demand and price volatility.                                | 0              | •            | •             | Procuring renewable energy is essential for achieving RE100 and carbon neutrality targets; however, if procurement costs increase, it may adversely affect business profitability. | While prioritizing energy efficiency, we strive to secure renewable energy sources that enable stable midto long-term procurement, such as power purchase agreements (PPAs). | Cost↑               |
|            | Failure to achieve carbon neutrality or meet targeted emission reduction goals may result in investment and business risks. | 0              | •            | •             | Potential risks of shareholder activism, including shareholder letters and proposals, and in severe cases, divestment or reduction in equity holdings.                             | Strengthen and maintain a leading position in the carbon reduction industry, while actively expanding communication channels with shareholders.                              | Equity↓             |

<sup>○:</sup> Low impact, •: Medium impact, •: High impact

LG Energy Solution is enhancing its global response centered on facilities subject to emissions trading schemes (ETS). In Korea, six sites—including HQ, R&D Campuses in Daejeon, Gwacheon, and Magok, and Ochang Energy Plants 1 and 2—were designated as Korean Emissions Trading System (K-ETS) entities in 2021. Overseas, LGESWA (Poland) is operating under the EU ETS, and from 2025, we plan to join the GX League, Japan's voluntary GHG reduction initiative. We monitor the GHG emissions of these business sites in accordance with each country's ETS and report to the relevant government authorities after third-party verification or in preparation for future compliance. According to the IEA's World Energy Outlook 2024, the price of carbon credits is expected to rise continuously to achieve global carbon neutrality. As a result, the financial burden from procuring carbon credits is also anticipated to increase. We analyze the supply and demand situation (shortage/surplus) by analyzing the price impact due to changes in government policies and market demand, and formulates a strategy for purchasing emission credits based on this. At the same time, we are working to reduce actual GHG emissions by improving energy efficiency at each site, thereby minimizing carbon credit purchasing costs.

## Transition Risk 2 Introduction and Expansion of GHG regulations to reduce GHG emission

LG Energy Solution continuously monitors global climate policies and carbon neutrality targets based on its operation location and integrates them into corporate carbon-negative strategy. We will strengthen our global climate response capabilities by establishing region-specific carbon neutrality strategies that reflect climate-related policies and business characteristics unique to each region.

| Region | Climate-related policies and regulations  |
|--------|---|
| Korea  | • Framework Act on Carbon Neutrality and Green Growth for Climate Crisis Response • K-ETS (Emissions Trading System)  |
| US     | Inflation Reduction Act (2022)     Providing Reliable, Objective, Verifiable Emissions Intensity and Transparency Act (PROVE IT)  |
| EU     | European Climate Law (2050 net-zero goal)  EU CBAM (Carbon Border Adjustment Mechanism)  EU ETS (Emissions Trading System)  |
| China  | <ul><li>"30·60 Targets" (Carbon peak by 2030, neutrality by 2060)</li><li>National ETS (全国碳排放权交易市场)</li></ul>   |
| Canada | <ul> <li>Canadian Net-Zero Emissions Accountability Act (2050 target)</li> <li>Ontario EPS (Emissions Performance Standards)</li> <li>Federal Fuel Charge and OBPS (Output-Based Pricing System)</li> </ul> |
| Japan  | Act on Promotion of Global Warming Countermeasures (2050 neutrality goal)     GX Promotion Act (2023)     GX League   |

#### Strengthening of climate disclosure obligations Transition Risk 3

Starting with the LGESWA in 2028, LG Energy Solution will be required to disclose climate-related company-wide consolidated information-including carbon neutrality strategy and GHG emissions by 2029 under the EU Corporate Sustainability Reporting Directive (CSRD). To ensure compliance with relevant regulations, we continuously monitor global climate disclosure regulations and have established a corporate GHG inventory system based on ISO 14064-1 and the GHG Protocol. In addition, we also plan to secure energy usage and GHG emissions data reliability and quality through third-party verification.

## Transition Risk (4) Increased requirements for product carbon footprint disclosure and reduction activities

Sustainability requirements for batteries have been tightening especially in the EU and major developed countries. This is taking shape through mandatory disclosure of carbon footprints, the introduction of battery passports, and the strengthening of recycling regulations, which requires ESG regulatory responses throughout the supply chain. The EU Battery Regulation [Regulation (EU) 2023/1542], effective from 2025, will require all batteries released in the EU market to diclare carbon footprint data based on Life Cycle Assessment (LCA). In addition, After labelling, a maximum emission threshold will be set, and batteries exceeding this threshold will be restricted form being placed on the EU market. To respond increase demand for product carbon footprint information from customers, LG Energy Solution has developed a product carbon footprint calculation system that integrataes internal activity data such as energy usage, production data, wastewater, and waste data. This

system also strengthens our internal data quality management. In addition, to reduce carbon emissions from our supply chain, we aim to complete energy transition with 100% renewable electricity on raw material production process from all Tier-1 suppliers by 2030. This is not only limited to the main materials such as cathode materials, anode materials, copper foil, and separators, but also electrolytes, aluminum foil, etc. We plan to expand to materials and parts partners to achieve RE100 across the supply chain.

#### Transition Risk 5 Rising procurement costs due to increased renewable energy demand and price volatility

LG Energy Solution is pursuing a transition to renewable energy through various methods—including on-site generation (solar), Renewable Energy Certificates (RECs), and green pricing programs—with the goal of achieving RE100 across all sites by 2030. As a result, we achieved 56% RE conversion rate in 2024 despite the increase in energy consumption driven by global site expansion. Furthermore, to ensure a stable supply of renewable energy and secure the additionality of carbon reduction, we are gradually expanding renewable energy adoption through Power Purchase Agreements (PPAs) at global production sites. In 2024, we implemented On-site PPAs at Ochang Energy Plant 2 (Korea) and PT. HLI Green Power (Indonesia), a Direct PPA at Ochang Energy Plant 1 (Korea), and a Virtual PPA at LGESWA (Poland). For new production sites to be established, We are considering integrating PPAs from the initial design stage. Through these efforts, we not only ensure a stable supply of renewable electricity to our sites, but also contribute to the global energy transition by reducing carbon emissions and expanding renewable energy infrastructure.

# Transition Risk 6 Failure to achieve carbon neutrality or meet targeted emission reduction goals may result in investment and business risks.

LG Energy Solution has declared carbon neutrality for Scope 1 and 2 by 2040 and is striving to establish a leadership position in the area of carbon reduction industry. In recent years, inquiries from various stakeholders regarding our carbon management system and emissions status have increased. In response, we aim to enhance communication on our carbon neutrality strategies and actions through various channels such as the Climate Disclosure Project (CDP), ESG Report, and our website.

## **Physical Risk Analysis**

To assess physical risks associated with climate change, LG Energy Solution utilized the Climate Impact Explorer adopted by the Network for Greening the Financial System (NGFS) and the Aqueduct Water Risk Atlas developed by the World Resources Institute (WRI). These tools were used to evaluate both acute risks (e.g., typhoons, hurricanes) and chronic risks (e.g., temperature changes, sea level rise). Among them, prolonged high-temperature conditions and increase in frequency of cyclones were identified as major risks with significant potential business impact.

| Risk/0   | Risk/Opportunity Short- Mid- Long-<br>term term term |   | Business Impact | Current Response | Financial<br>Impact  |   |            |
|----------|--|---|-----------------|------------------|--|---|------------|
|          | ① Prolonged high temperature conditions              | 0 | •               | •                | Increased HVAC costs<br>for cooling/humidity<br>control     Risk of heat-related illness<br>in workers, leading to<br>reduced productivity or<br>shutdowns   | Optimize utility and<br>HVAC system efficiency,<br>maintain appropriate<br>indoor temperatures  | Cost<br>↑  |
| Physical | 2 Increase<br>in fre-<br>quency of<br>cyclones       | 0 | •               | •                | Damage to production<br>facilities, supply chain<br>disruptions, increased<br>insurance premiums,<br>and revenue loss due<br>to business interrup-<br>tions, along with high-er<br>disaster response costs<br>resulting from cyclones. | Establish response<br>committee per company-<br>wide risk management<br>rules; build preemptive<br>response and rapid<br>recovery systems | Sales<br>↓ |

#### ○ : Low impact, ① : Medium impact, ② : High impact

## Physical Risk 1 Prolonged High Temperature Conditions

Using the Climate Impact Explorer, LG Energy Solution analyzed the median values of mean air temperature at the regional level under various climate scenarios, based on the baseline period from 1986 to 2006. The results show that prolonged high temperatures can lead to increased energy costs for cooling and dehumidification systems, as well as a higher risk of heat-related illnesses among workers, potentially reducing productivity. Such physical risks were found to increase significantly under the RCP 8.5 scenario, which assumes a 4.0°C rise in global temperature, compared to the RCP 2.6 scenario (1.5°C rise), both in terms of likelihood and severity. According to the IEA's Energy Efficiency 2023 report, a 1°C increase in average temperature is expected to raise electricity consumption for cooling by approximately 2% to 4%. In response, we plan to optimize the efficiency of HVAC systems, minimize energy cost increases, and improve workplace conditions by maintaining proper indoor temperatures—thereby preventing productivity loss caused by climate change.

## [Median average temperature by scenario]

| Business site            | Country   |      | RCF  | 2.6  |      | RCP 4.5 |      |      |      | RCP 8.5 |      |      |      |
|--------------------------|-----------|------|------|------|------|---------|------|------|------|---------|------|------|------|
| business site            | Country   | 2025 | 2030 | 2040 | 2050 | 2025    | 2030 | 2040 | 2050 | 2025    | 2030 | 2040 | 2050 |
| Ochang Energy<br>Plant 1 | Korea     |      |      |      |      |         |      |      |      |         |      |      |      |
| Ochang Energy<br>Plant 2 | Korea     |      |      |      |      |         |      |      |      |         |      |      |      |
| LGESNJ                   | China     |      |      |      |      |         |      |      |      |         |      |      |      |
| LGESNA                   | China     |      |      |      |      |         |      |      |      |         |      |      |      |
| LGESNB                   | China     |      |      |      |      |         |      |      |      |         |      |      |      |
| LGESWA                   | Poland    |      |      |      |      |         |      |      |      |         |      |      |      |
| LGESMI                   | USA       |      |      |      |      |         |      |      |      |         |      |      |      |
| Ultium Cells 1           | USA       |      |      |      |      |         |      |      |      |         |      |      |      |
| Ultium Cells 2           | USA       |      |      |      |      |         |      |      |      |         |      |      |      |
| PT.HLI Green<br>power    | Indonesia |      |      |      |      |         |      |      |      |         |      |      |      |
| Nextstar Energy          | Canada    |      |      |      |      |         |      |      |      |         |      |      |      |

## Physical Risk 2 Increase in Cyclone Frequency

Using the Climate Impact Explorer, LG Energy Solution analyzed the national-level cyclones occurrence frequency and the corresponding estimated annual expected damage under climate scenarios. The results forecast an overall increase in the occurrence of tropical cyclones such as typhoons and hurricanes. This increase could result not only in damage to assets at certain sites but also in a higher likelihood of operational disruptions such as production stoppages. In response to such physical risks, we have established a Emergency Committee in accordance with company-wide crisis management regulations. We have developed preemptive response plans and rapid recovery systems tailored to both the pre-event and post-event phases of climate-related disasters. In the event of an actual occurrence, we will activate a decision-making process centered around the committee to minimize damage and will continue to enhance resilience across its sites and supply chains.

#### [Cyclone frequency by Scenario]

| Business site               | 0         |      | RCF  | 2.6  |      |      | RCF  | 4.5  |      |      | RCF  | 8.5  |      |
|-----------------------------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|
| busilless site              | Country   | 2025 | 2030 | 2040 | 2050 | 2025 | 2030 | 2040 | 2050 | 2025 | 2030 | 2040 | 2050 |
| Ochang Energy<br>Plant 1, 2 | Korea     |      |      |      |      |      |      |      |      |      |      |      |      |
| LGESNJ                      | China     |      |      |      |      |      |      |      |      |      |      |      |      |
| LGESNA                      | China     |      |      |      |      |      |      |      |      |      |      |      |      |
| LGESNB                      | China     |      |      |      |      |      |      |      |      |      |      |      |      |
| LGESMI                      | USA       |      |      |      |      |      |      |      |      |      |      |      |      |
| Ultium Cells 1              | USA       |      |      |      |      |      |      |      |      |      |      |      |      |
| Ultium Cells 2              | USA       |      |      |      |      |      |      |      |      |      |      |      |      |
| PT.HLI Green power          | Indonesia |      |      |      |      |      |      |      |      |      |      |      |      |
| Nextstar Energy             | Canada    |      |      |      |      |      |      |      |      |      |      |      |      |

<sup>\*</sup> Poland not analyzed due to lack of available scenario data



## **Analysis of Climate-Related Opportunities**

Given the nature of LG Energy Solution's business structure, the industry-wide transition driven by climate change is expected to lead to increased demand for low-carbon solutions such as electric vehicles (EVs) and energy storage systems (ESS). In addition, we anticipate further expansion of new battery applications within smart mobility platforms.

| Risk/            | Opportunity   | Short-<br>term | Mid-<br>term | _ | Business Impact  | Response Status   | Finncial<br>Impact |
|------------------|---|----------------|--------------|---|--|---|--------------------|
| Oppor-<br>tunity | Expansion<br>of demand<br>for EVs, ESS,<br>and other<br>carbon-<br>reducing<br>technologies | 0              | •            | • | Driven by the transition<br>to green industries,<br>demand is expected<br>to rise for electric<br>vehicle batteries and<br>ESS to supplement<br>the intermittency of<br>renewable energy | Timely expansion<br>of production capacity;<br>joint ventures<br>established with our<br>partners to respond to<br>surging demand | Sales<br>↑         |

○ : Low impact, • : Medium impact, • : High impact

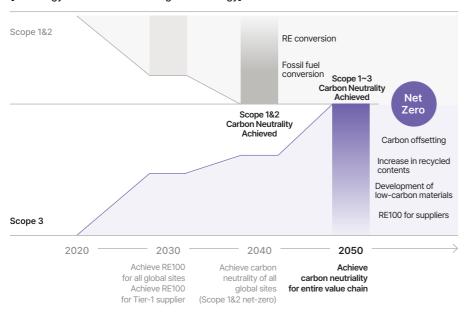
# **Carbon Negative Strategy**

In 2015, 196 countries around the world signed the Paris Agreement, agreeing to limit the rise in global average temperature to within 1.5°C compared to the pre-industrial era (1850-1900). Accordingly, a global pathway was presented to reduce greenhouse gas (GHG) emissions by at least 45% by 2030 compared to 2010 levels and to achieve carbon neutrality (Net Zero) by 2050. In response to these global climate goals, countries including Korea, the EU, and Japan declared targets to achieve carbon neutrality by 2050 and voluntarily submitted their Nationally Determined Contributions (NDCs) to the United Nations Framework Convention on Climate Change (UNFCCC), To actively participate in global climate change response efforts, LG Energy Solution has established its own carbon neutrality strategy based on long-term forecasts of battery market demand and business plans through 2050. We set 2021, the year following our spin-off from LG Chem in December 2020, as the baseline year for GHG emissions and established implementation targets. Through reduction activities including the achievement of RE100 at all business sites by 2030, we aim to reduce GHG emissions by 53% compared to 2021, achieve carbon neutrality (Net Zero) for Scope 1 and 2 emissions within our own sites by 2040, and achieve carbon neutrality across the entire value chain (Scope 1, 2, and 3) by 2050.

Through these strategies, we will achieve carbon neutrality in line with the Paris Agreement pathway.

 Carbon Negative Strategy Application Business Scope: All Global Production, Sales, R&D, JV (Joint Venture)

#### [LG Energy Solution's Carbon Negative Strategy]

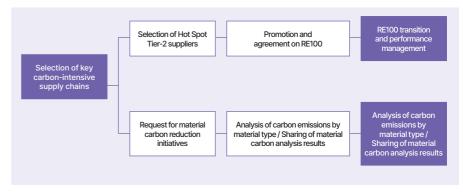


# **Carbon Neutrality Strategy by Phase**

Most of the GHG generated in battery manufacturing processes come from the use of heat and electricity in the processes. Approximately 70 ~ 80% of LG Energy Solution's total GHG emissions fall under indirect emissions (Scope 2) from electricity use, and the remaining 20 ~ 30% are direct emissions (Scope 1) from fuel combustion such as Natural gas and Gasoline etc. Accordingly, to achieve carbon neutrality (Net Zero), LG Energy Solution is continuously identifying reduction measures to minimize energy usage within its processes, and is promoting the conversion of electricity previously used to renewable energy sources. The carbon neutrality strategy and reduction targets are updated periodically each year, reported to the ESG Committee, and company-wide implementation reviews and actions are promoted in collaboration with relevant departments through the Carbon Neutrality Council

In particular, the supply chain carbon reduction strategy is essential to meet regulatory and customer carbon reduction requirements. To establish this strategy, we conducted hotspot analysis based on Life Cycle Assessment (LCA) that quantitatively evaluates environmental impacts across the life cycle of products—from raw material extraction to processing, transportation, use, and disposal—to identify supply chains with high carbon emissions. As a key initiative in 2024, we are promoting RE100 adoption and low-carbon material sourcing among Tier-1 suppliers of critical materials and high-impact Tier-2 suppliers (e.g., cathode materials, precursors etc.), to support the achievement of carbon reduction targets across the supply chain.

### [Key supply chain carbon reduction Initiatives]



#### 2030 Goals

## LG Energy Solution (Scope 1, Scope 2)

In April 2021, LG Energy Solution becames the first in the global battery industry to join the RE100 and EV100 initiatives at the same time. We committed to transitioning 100% renewable electricity used in all operations, including new business sites, and to convert 100% of the owned and leased vehicles under 3.5 tons and 50% of vehicles between 3.5 and 7.5 tons to eco-friendly vehicles. In order to achieve RE100 by 2030, we installed on-site solar generation system within production sites and procured renewable energy certificates (RECs) and green tariffs to achieve a companywide RE100 conversion rate of 56% in 2024. Furthermore, we will continue to explore and expand power purchase agreements (PPAs) to securely sourcing renewable electricity in-long-term and to contribute carbon emissions reductions. To contribute GHG emission in the transportation sector, we plan to gradually replacing vehicles used in business sites for work-related and executive to electric vehicles, expanding the proportion of electric vehicles to the total number of vehicles operated at our business sites from 7% in 2021 to 24% in 2024, and improving related infrastructure by installing electric vehicle charging stations expanding to all global sites.

## Suppliers (Scope3)

LG Energy Solution plans to ensure that 100% of the electricity used to produce raw materials and components supplied by all Tier-1 suppliers is converted to renewable energy by 2030. We intend to support RE100 implementation not only among suppliers of key battery materials such as cathodes, anodes, copper foil, and separators, but also for other components and materials such as electrolytes and aluminum foil. In addition, we monitor whether key material suppliers have established mid- to long-term renewable energy transition plans, including their projected annual transition rates and the specific means of renewable energy adoption starting from 2025.

#### [Carbon Reduction Activities for Suppliers]

| Year | Activities   |
|------|--|
| 2024 | To promote co-prosperity between large corporations and SMEs, LG Energy Solution supported CBAM-related consulting and verification for small and medium-sized suppliers, thereby strengthening their carbon accounting capabilities and export competitiveness. To improve supplier understanding and response to the EU Battery Regulation (Article 7: Carbon Footprint), we developed and distributed the Supplier Carbon Footprint Calculation Guideline, and held an EU Battery Regulation Carbon Footprint Response briefing session. Additionally, LG Energy Solution collected LCA results by supplied material (e.g., cathodes, anodes, electrolytes) and systematically organized carbon emission data from the supply chain, laying the foundation for compliance with the EU Battery Regulation. |
| 2025 | LG Energy Solution plans to participate in government-led programs to support suppliers in preparing for CBAM-related consulting and verification. To ensure effective compliance with the EU Battery Regulation (Article 7: Carbon Footprint), we will update the "Supplier Guidelines on Calculation of the Carbon Footprint" in line with the latest standards and begin collecting and monitoring Life Cycle Assessment (LCA) data with verified reliability for key materials such as cathode materials, anode materials, and electrolytes. Starting in 2026, we plan to gradually expand the scope of monitoring.  |

#### 2040 Goal

#### LG Energy Solution (Scope 1, Scope 2)

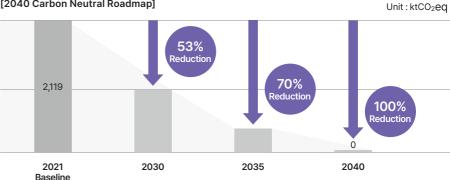
ENVIRONMENTAL

To achieve carbon neutrality across LG Energy Solution's operations by 2040, we need to put effort to reduce consumption of primary energy sources such as fuel (e.g., LNG). To this end, LG Energy Solution plans to optimize consumption by improving energy system efficiency, and to convert major heat source systems such as steam boilers to alternative energy sources such as biogas and hydrogen. For residual emissions, we intend to implement external offset projects to neutralize remaining GHGs.

| Energy     | Process Efficiency & Energy | Renewable   | Low-carbon / zero-carbon fuel conversion and electrification |
|------------|-----------------------------|-------------|--|
| Efficiency | Optimization                | Electricity |  |
| Energy     | On-site Generation, PPAs,   | Carbon      | External carbon reduction development                        |
| Transition | RECs, Green Tariffs         | Offset      |  |

<sup>\*</sup>Subject to change depending on policy and market conditions.

#### [2040 Carbon Neutral Roadmap]



#### Suppliers (Scope 3)

LG Energy Solution is continuously conducting Life Cycle Assessments (LCA) across the value chain. In this process, Tier-2 + suppliers with high carbon emissions in the value chains of key materials used in battery production are designated as carbon reduction hot-spot. So we plan to support these suppliers in fully transitioning to 100% renewable electricity in their respective production processes.

<sup>\*</sup>Hot Spot: Cathode active materials Precursors, Metal refining, separators, etc.

COMPANY OVERVIEW

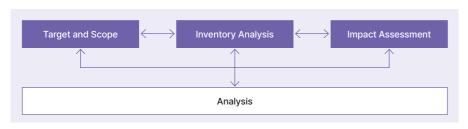
After LG Energy Solution completed carbon neutrality by 2040 in all business sites, carbon reduction in the value chain is the next crucial step to achieve the 2050 goal. Therefore, we plan to expand the monitoring boundary of Tier-N suppliers (mining, etc.). GHG emission, (mining, etc.), and support their participation in RE100 and carbon reduction activities. In addition, we will contribute to carbon reduction in batteries by gradually increasing the proportion of recycled raw materials with lower environmental impact than virgin materials, and strive to build a closed loop of battery raw materials. In addition, we aim to achieve carbon neutrality by 2050 through external carbon reduction activities. In particular, we will contribute to the climate change response and welfare of local communities by developing renewable energy and installing ESS near our global sites. Also, we will implement support projects for vulnerable regions in the global climate change with various stakeholders such as customers, NGOs, and local communities.

# **Battery Carbon Footprint Management**

## Life Cycle Assessment(LCA) Overview

Life Cycle Assessment (LCA) is a technique used to comprehensively assess the environmental impacts of energy and mineral resource use throughout a product's entire lifecycle, from raw material extraction to disposal (Cradle-to-Grave). LG Energy Solution has adopted LCA since 2019, before spin-off, to evaluate the potential impacts associated with our products. Based on these assessments, we engage with key stakeholders, including customers, to communicate the results. Internally, the results of LCA assessment serve as crucial criteria and tools for calculating the carbon footprint of products, identifying hot spots in raw materials and value chains, and developing medium to long-term strategies for achieving carbon neutrality.

#### [LCA Process(ISO 14040)]

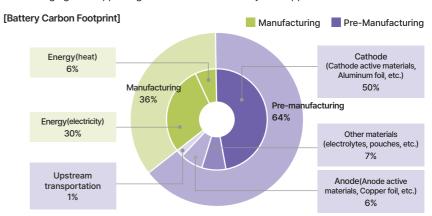


#### [A step-by-step Process(in detail)]

| Target and Scope   | Inventory Analysis  | Impact Assessment  | Analysis  |
|--|---|--|---|
| Defining the target and<br>scope of LCA     Defining the evaluation<br>Scope for each stage of<br>the product life cycle | Collecting data on energy and material inputs and outputs throughout the product life cycle     Calculating and documenting the results of the inventory analysis | · Scientifically-derived<br>environmental impacts,<br>such as global warming,<br>caused by the inputs and<br>outputs are analyzed in<br>step 2 | Interpreting the results<br>of the inventory analysis<br>and impact assessment<br>according to research<br>purposes |

## **Battery Carbon Footprint**

Based on LCA results measured since 2019, LG Energy Solution has obtained Environmental Product Declaration (EPD) certifications—9 newly acquired in 2024, 25 in total. According to the carbon footprint assessments, although results vary depending on product, supplier, and production location, about 35% of total GHG emissions occur during the cell manufacturing process (electrode, cell assembly, activation, module/pack assembly), while about 65% occur during raw material production and transportation. Therefore, in addition to reducing GHG emissions through energy efficiency and renewable energy use in battery manufacturing, we are also managing and supporting GHG reduction efforts by our suppliers.



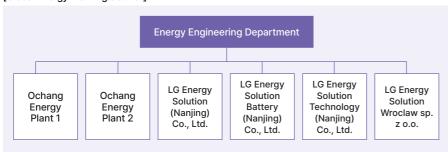
#### **EPD(Environmental Product Declaration)**

The certification system that labels product environmental impact information quantified through Life Cycle Assessment (LCA) results is known as Environmental Product Declaration (EPD). It involves third-party certification that inspects the product's quantified environmental impacts throughout the product's life cycle, including global warming potential, resource use, water and air pollution, among others. To ensure alignment with global product environmental standards and policies, EPD is developed by applying the internationally recognized standards such as ISO 14020, ISO 14025, ISO 14040 series, ISO/TS 14027, ISO 14046, ISO 14064 series, and ISO 14067.

# Energy and Greenhouse Gas(GHG) Management System

LG Energy Solution has established the Global Energy Working Council participating energy and greenhouse gas (GHG) related leaders from each of global sites and relevant department. The Council is dedicated to developing and sustaining an energy and GHG management system and has been operating on a monthly basis meeting to ensure continuous improvement and facilitates sharing of best practices among entities within the corporation.

#### [Global Energy Working Council]



## **Energy Management System**

LG Energy Solution has obtained ISO 50001 certification, the energy management system standard, for Korea (Ochang Energy Plant 1 & 2) and three plants in Nanjing, China and plan to expand to other sites such as Poland by sharing energy management know-how through the Global Energy Working Council.

#### [Acquisition and Validity of Energy Management System(ISO 50001) Certification]

| Country | Business Site                                     | Certification Validity   |
|---------|---|--------------------------|
| Korea   | Ochang Energy Plant 1                             | Integrated Certification |
| Korea   | Ochang Energy Plant 2                             | (2028-03-16)             |
|         | LG Energy Solution (Nanjing) Co., Ltd.            | 2026-12-31               |
| China   | LG Energy Solution Battery (Nanjing) Co., Ltd.    | 2026-03-22               |
|         | LG Energy Solution Technology (Nanjing) Co., Ltd. | 2026-03-25               |

## **Energy Consumption Management**

LG Energy Solution has established corporate level-of energy management regulations that comply with the requirements of ISO 50001 (Energy Management System), an international standard, in order to manage energy consumption efficiently and achieve its energy transition goals. These regulations are published in the Enterprise Standard Management (ESM) system, enabling all business sites to manage energy under consistent criteria. To monitor energy consumption and

manage performance, we operate a corporate level of Energy & Utility Management System (EUM). This system measures and records energy usage at the production equipment level in real time, and through energy consumption analysis and trend between equipment, it systematically identifies inefficient equipment and potential energy savings. Energy consumption is calculated based on legally certified metering data within our sites. To aggregate total energy usage, we reflect the characteristics of energy sources used at each site and apply standard energy conversion factors disclosed by each country's energy regulations or the International Energy Agency (IEA). The collected data is aggregated on a monthly basis and is regularly reported to the ESG Committee and the Carbon Neutrality Council. It is also reflected in performance reviews of GHG reduction efforts and the establishment of future implementation strategies, including renewable energy transition planning.

3-Year Energy Consumption Status Go to page

## **GHG Emissions Management**

LG Energy Solution systematically calculates and manages GHG emissions at its business sites by collecting monthly energy consumption data through the corporate level of Energy & Utility Management System (EUM) and applying emissions factors.

## **GHG Measurement Approach**

To calculate GHG emissions, LG Energy Solution follows the GHG Protocol (2004) and has established a corporate GHG inventory. The calculation boundary is based on the Operational Control approach guided by the GHG Protocol's control criteria, which includes GHG emissions from subsidiaries and joint ventures (JVs).

\* Operational Control: Refers to cases in which a business operator or subsidiary has full authority to implement its operational policies at a given business site.

In accordance with the IFRS S2 (Climate change), GHG emissions are primarily calculated using the GHG Protocol. However, if required by a supervisory authority or a listed exchange, companies may use alternative methods. So, we use the GHG emissions calculation methods in Emission Reporting and Verification Guidelines under the Emissions Trading Scheme in Korea; the EU-ETS's calculation method in LGESWA (Poland).

#### [Measurement Approach]

| Scope 1, 2 | The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition) The Greenhouse Gas Protocol: Scope 2 Guidance Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis (Emissions Trading Scheme Reporting and Verification Guidelines, Korea) Calculation standards required by regulatory authorities or stock exchanges |
|------------|---|
| Scope 3    | GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011)     Scope 3 Calculation Guidelines for Secondary Battery Industry (Korea Environmental Industry & Technology Institute)   |

### **GHG Input Variables and Assumptions**

To calculate GHG emissions, LG Energy Solution uses the 100-year Global Warming Potential(GWP) values assessed by the most recent report of the Intergovernmental Panel on Climate Change(IPCC). Emissions from seven GHG types—CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, and NF<sub>3</sub>—are converted into CO2-equivalents.

| 01    | :::  | Input variable  |  |  |
|-------|--|---|--|--|
| CI    | assification                                   | Activity data   | Emission factor  |  |
| Scope | Stationary<br>Combustion                       | LNG, diesel, kerosene, propane  | Korea : National emission factors<br>(e.g., Energy Act)                  |  |
| 1     | Mobile<br>Combustion                           | Gasoline, diesel, LPG   | Overseas : Country-specific emission factors, IEA emission factors, etc. |  |
| Scope | Purchased<br>Electricity                       | Electricity consumption   | Korea: National emission factors<br>(e.g., Energy Act)                   |  |
| 2     | Purchased<br>Steam                             | Steam consumption   | Overseas: Country-specific emission factors, IEA emission factors, etc.  |  |
|       | Purchased<br>Goods and<br>Services             | 2024 raw material<br>purchase data                                      | Korea : National emission factors<br>(e.g., Energy Act)                  |  |
|       | Capital Goods                                  | Investment data by entity   | Overseas: Country-specific emission factors, IEA emission factors, etc.  |  |
|       | Fuel- and<br>Energy-Related<br>Activities      | Energy usage  | Emission factor of steam supplier or national steam emission factors     |  |
| Scope | Upstream<br>Transportation<br>and Distribution | Raw material purchase records, supplier and delivery site ad-dresses    | Emission factors by transportation mode(land, sea, air)                  |  |
| 3     | Waste<br>Generated in<br>Operations            | Waste volume<br>by type and disposal method                             | Emission factors by waste type and treatment method                      |  |
|       | Business Travel                                | Travel records (mode of transport such as air, train, bus and distance) | Emission factors by transport type                                       |  |
|       | Employee<br>Commuting                          | Vehicle usage status and mile-age                                       | Emission factors for road transport                                      |  |
|       | End-of-Life<br>Treatment of<br>Sold Products   | Battery production volume   | Emission factors for end-of-life battery pro-cessing                     |  |

<sup>3-</sup>Year GHG Emissions Status Go to page

## **Energy Efficiency**

LG Energy Solution sets annual energy reduction targets at the corporate level to raise awareness of energy and GHG reduction among employees and to activate practical reduction initiatives. The target has increased each year, from 1,430 TJ in 2021 to 1,767 TJ in 2024, and actual reductions have exceeded planned levels since 2022. Yearly Energy saving

#### [Annual Energy Reduction Performance]

| Year   | 2022     | 2023     | 2024                |
|--------|----------|----------|---------------------|
| Plan   | 1,679 TJ | 1,741 TJ | 1,828 TJ            |
| Actual | 1,744 TJ | 2,309 TJ | 2,593 TJ            |
| CapEx  | -        | -        | 4,634 million KRW   |
| OpEx   | -        | -        | 431,259 million KRW |

<sup>\*</sup> Energy-saving investment and cost data have been managed and disclosed starting in 2024.

## [Energy saving achievements examples]

| Country | Site                     | Initiative                                    | Performance   |
|---------|--------------------------|---|---|
| Korea   | Ochang Energy<br>Plant 1 | Cooling pump impeller cutting                 | Reduced electricity use via optimization of pump head and flow rate                       |
|         | Ochang Energy<br>Plant 2 | Applied low-temp desiccant rotor to HVAC      | Reduced electricity by eliminating need for electric heater                               |
| China   | LGESNJ                   | Reuse of steam condensate                     | Reduced power use in chilled water<br>generation and reduced process<br>water consumption |
|         | LGESNA                   | Reuse of dehumidified air from dust collector | Reduced electricity and steam consumption through air reuse                               |
|         | LGESNB                   | Applied natural cold air system               | Reduced chiller power consumption in winter   |
| Poland  | LGESWA                   | Applied DC distribution in formation process  | Reduced power loss from discharging process   |

## **Investment Cases for Energy Efficiency Improvement**

## Case 1. Reducing Electric Heater Usage by Applying Low-Temperature Desiccant Rotors to Dehumidification HVAC Units

In dehumidification HVAC systems that continuously supply low-humidity air to Dry Rooms, hightemperature steam and electric heaters were previously used together to heat the regeneration rotor for moisture removal. With the adoption of new low-temperature desiccant rotor technology, only steam is now used as the energy source for heating the rotor, resulting in reduced electric heater usage.

## Case 2. Reducing Water Consumption by Recovering Steam Condensate Generated On-site (Investment Project)

High-temperature steam condensate and wastewater generated after cylindrical washing processes were previously discharged without reuse. To enable reuse, LG Energy Solution introduced a process that utilizes high-temperature steam condensate in the cylindrical washing stage, thereby recovering water generated within the plant and contributing to energy savings.

## Case 3. Introducing Renewable Energy to Reduce External Energy Consumption

To improve energy efficiency and reduce GHG emissions, LG Energy Solution is actively introducing on-site renewable energy generation systems. Solar power systems have been installed at Ochang Energy Plant, R&D Campus in Daejeon in Korea and at the Nanjing plant in China. The generated electricity is used to reduce grid power consumption.

#### Ensol E(Energy)-Bank

To encourage all employees to actively participate in energysaving initiatives, LG Energy Solution operates an internal platform called ENSOL E(Energy)-Bank. This platform allows employees to freely propose and participate in energy-saving ideas. Each idea is evaluated for its improvement impact, and monthly rewards are given based on the results.



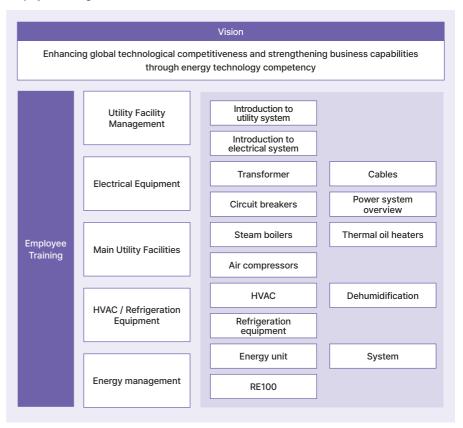
E-Bank

## **Employee Energy Training**

To cultivate specialized knowledge on energy equipment and raise awareness about energy saving, LG Energy Solution conducts company-wide employee training programs.

The training courses consist of: 1) Utility Facility Management, 2) Electrical Equipment, 3) Main Utility Facilities, 4) HVAC/Refrigeration Equipment, 5) Energy Management

#### [Employee Training]



## **Integrated Supply Chain Information System**

In the second half of 2025, LG Energy Solution will establish an Integrated Supply Chain Information System capable of collecting and processing carbon emissions data from Tier-1 to Tier-N suppliers. This will enable effective monitoring of GHG emissions from N-tier suppliers. In addition, we plan to gradually improve the accuracy of carbon emissions data by reflecting company-specific data based on LCA results across the upstream supply chain.

## **Carbon Reduction Support Program for Suppliers**

## Support for suppliers to Establish Infrastructure for EU Carbon Border Adjustment Mechanism

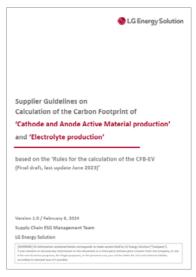
As part of its shared growth initiative with small and medium-sized enterprises (SMEs), LG Energy Solution supported 9 suppliers (3 pack suppliers and 6 equipment suppliers) in participating in the CBAM consulting and verification project conducted by the Korea SMEs and Startups Agency in collaboration with the Korean government in 2024. Through this, partner companies strengthened their carbon emissions calculation capabilities, LG Energy Solution enhanced its CBAM response capacity, and both contributed to overcoming international carbon trade barriers and enhancing export competitiveness. LG Energy Solution plans to continue supporting SMEs in responding to CBAM regulations in 2025.

#### Establishment of RE Conversion Performance Recognition Process

As suppliers begin implementing RE100 in earnest from 2025, LG Energy Solution completed the establishment of the renewable electricity (RE) Conversion Performance Recognition Process in 2024. Under this process, suppliers are required to convert their production electricity to renewable energy and provide proof by conversion method. Based on this, LG Energy Solution will officially recognize suppliers' RE100 implementation performance beginning in 2025.

## Distribution of Supplier Guidelines on Calculation of the Carbon Footprint

In February 2024, LG Energy Solution developed and distributed the Partner Company Carbon Footprint Calculation Guidelines to help suppliers respond effectively to the EU Battery Regulation. These guidelines clearly outline the purpose, methodology, and reporting requirements for carbon footprint calculation, allowing suppliers to establish carbon accounting practices that comply with EU Battery Regulation standards.



Supplier Guidelines on Calculation of the Carbon Footprint

#### **Supplier Training**

To prepare for the mandatory carbon footprint disclosure for EV batteries starting in 2026, LG Energy Solution recognizes the importance of improving partner companies' understanding of and response to Article 7 (Carbon Footprint) of the EU Battery Regulation. In August 2024, we hosted a "Carbon Footprint Response Briefing for the EU Battery Regulation" to explain the regulation, introduce the calculation guidelines, and share LG Energy Solution's support and roadmap for supplier compliance. LG Energy Solution also plans to build a joint response system moving forward.

# **Circular Economy**

LG Energy Solution is dedicated to establishing a circular battery ecosystem through the reuse, diagnostics, sorting, refurbishing, and recycling of End-of-Life batteries. We are committed to developing business models the optimize these processes.



# **End-of-Life Batteries as Resources**

# **Battery Circular Ecosystem**

As policies and regulations regarding batteries are being introduced in Europe, the US, China, and other countries, the EU requires that batteries placed on the EU market demonstrate environmental friendliness and safety throughout their entire lifecycle, from production to recycling, through the EU Battery Regulation. Accordingly, batteries sold in Europe have different minimum standards for recycled materials and mandatory collection rates for each type of battery, including portable, LMT (Light Means of Transport), industrial, and electric vehicles. To comply with these emerging regulations, we are building the closed-loop resource circulation system that covers the entire value chain, from the production of raw materials for batteries to consumption, disposal, and recycling. In addition, we are collaborating with local partners to reuse and recycle End-of-Life batteries and recycle process scrap that meets global environmental standards.

# **Battery Recycling**

# **Recycling Governance**

To strengthen its sustainable operations such as battery recycling, LG Energy Solution has established a dedicated organization with expertise in recycling and a Board-level governance structure. Through the ESG Working Group, we regularly monitor our recycling business. These efforts are intended to fulfill our environmental responsibilities and serve as a foundation for longterm sustainable growth.

## [Battery Recycling Organization Chart]



# Strengthening the Battery Raw Material Circulation System

LG Energy Solution is strengthening its battery resource circulation system in response to the recycled metal requirements of the EU Battery Regulation, we place particular emphasis on increasing the recycling rates of key battery materials such as lithium, nickel, and cobalt. This approach helps reduce waste generated during the battery production process and maximizes resource recirculation. Since the supply of recycled metals from production scrap alone does not satisfy regulatory standards, we are expanding our recycling network and enhancing cooperation across Europe, North America, and Asia. Starting in 2027, LG Energy Solution plans to operate localized pre-processing facilities through partnerships with local companies at global sites. This Closed-Loop system secures a stable supply of recycled metals

## [Closed Loop Diagram]

| Collecting the production scrap and End-of-Life batteries   | Pre-Processing  | Post-Processing  | Precursor,<br>Cathode material | Battery production                                   |
|---|---|--|--------------------------------|--|
| LG Energy Solution's production scrap   | Pre-processing  | Post-processing Cathode Material partners Suppliers  | Cathode Material               | LG Energy Solution                                   |
| Partner's EoLB* collection  | partners  |  | Production site                |  |
| LG Energy Solution is securing<br>large-scale battery collection<br>channels in key regions of the EU<br>and NA | Plans are underway<br>to establish pre-<br>processing facilities<br>in collaboration with<br>local partners in the<br>EU and NA | Discussions are ongoing to establish partnerships with leading companies that have mass production experience. | the battery cells pro          | are being applied to<br>duced by LG Energy<br>Ition. |
| * EoLB: End-of-Life Batterys  |   |  |                                |  |

COMPANY OVERVIEW

#### Case 1) Establishment of Battery Recycling Joint Venture with DBG (Derichebourg Environment)

In April 2025, LG Energy Solution established a battery recycling joint venture (JV) with DBG (Derichebourg Environment) in France. This marks the 1st recycling JV established between Korea and Europe. The JV aims to begin operations in 2027 and will have the capacity to process over 20,000 tons annually of endof-life batteries and scrap (defective batteries and cathode material production byproducts). The joint venture will operate a pre-processing facility that collects end-of-life batteries and production scrap from battery production within the region, crushes them, and produces black mass, an intermediate product. LG Energy Solution's Wrocław plant in Poland will supply production scrap, while DBG will collect end-of-life batteries from France and neighboring regions.

#### Case 2: Establishment of Battery Recycling Joint Venture with Toyota Tsusho

In May 2025, LG Energy Solution and Toyota Tsusho held a signing ceremony to establish a battery recycling joint venture named GMBI (Green Metals Battery Innovations, LLC). Located in Winston-Salem, North Carolina, GMBI will be a pre-processing plant specializing in safely crushing and processing end-of-life batteries and battery production scrap into black mass. The plant will production scrap generated from LG Energy Solution's U.S. facilities producing batteries for Toyota, as well as used batteries and scrap collected by Toyota Tsusho across North America. The resulting black mass will undergo post-treatment processes to extract lithium, cobalt, and nickel. These metals will then be used to manufacture cathode materials and batteries, ultimately recycled into electric vehicle batteries for Toyota. GMBI is expected to have an annual processing capacity of up to 13,500 tons, equivalent to over 40,000 EV battery packs.

Recycled metals secured through this system are expected to meet EU-mandated content requirements while also contributing to the development of a global recycling network. In the midto long-term, LG Energy Solution aims to increase the proportion of recycled metals used by more than 20% compared to current levels.

## [EU Battery Regulation Requirements for minimum content of recycled materials recovered from end-of-life batteries (Art. 8)]

| Type                                       | Compliance deadlines               |                                     |  |
|--|------------------------------------|-------------------------------------|--|
| туре                                       | 2031. 8. 18. From                  | 2036. 8. 18. From                   |  |
| Industrial<br>batteries<br>(2 kWh or more) | Cobalt 16%, Lithium 6%, Nickel 6%  |                                     |  |
| EV Battery                                 | Cobait 10%, Littlium 0%, Nickei 0% | Cobalt 26%, Lithium 12%, Nickel 15% |  |
| SLI Battery                                |                                    |                                     |  |
| LMT Battery                                | Not applicable                     |                                     |  |
|  |                                    |                                     |  |

EV : Electric Vehicle SLI: Start, Light, Ignite LMT: Light Means Vehicle

# **Development of a Transparent Data-Based Recycled Material Tracking System**

Once the EU Battery Regulation releases detailed guidelines for calculating recycled content, LG Energy Solution plans to develop a metal usage traceability system through a company-wide task force. This system will enable tracking of recycled metal usage by production site and customer on an annual shipment basis. LG Energy Solution will use this transparent data-based system to comply with regulatory requirements. The system is expected to improve the efficiency of recycling activities and support the achievement of sustainability goals.

# **Battery Reuse**

LG Energy Solution is promoting a company-wide battery reuse strategy through the processes of collecting, diagnosing, reassembling, and reusing End-of-life batteries. From the perspective of this reuse strategy, we expect to maximize resource circulation and create new business opportunities. To utilize reused batteries, various demonstration projects are being pursued globally for gridscale, commercial & industrial, and UPS applications.

## **Battery Reuse Process**

Batteries that are discharged and collected after being used in EVs still retain approximately 70-80% of their usable energy. SoH(State of Health) is the main factor which determine whether retired battery could be reusable or not. LG Energy Solution is building a reuse process that enables endof-life batteries to be utilized as valuable energy resources.

#### SoH(State of Health)

SOH is an indicator of battery performance. It is the ratio of usable capacity to the production time of the battery and generally decreases with time and use.

#### Collection of End-of-Life Batteries

The batteries which are no longer be used in EVs due to reasons such as end of vehicle life and unexpected accidents are collected through regional collection systems. An initial diagnosis is conducted to sort out for reusable batteries; and remaining batteries are then recycled. Once classified as "reuse" batteries are going to be separately transported and stored complying with regional policy.

## Reconditioning

This stage is a part of collection of End-of-Life batteries. The visual inspection for determining external condition are conducted to pre-classification for reuse; and technical diagnostics including electrical tests and lifespan assessments are performed to examine their internal condition. Classified reusable batteries are then categorized into several grades based on their condition mainly considering their remaining lifespan. Batteries that do not meet the criteria are sorted out for recycling process.

## Refurbishing (Repurposing)

Refurbishing is similar to repair process. Degraded components within the collected battery are identified and replaced to restore the performance. Repurposing is system re-building process based on new applications which are different from original purpose, mostly requiring less demanding performance than EV. This stage includes not only solution development to being satisfied with expected system performance, quality standards, certification regulations required to be cost competitive, but also emphasis on safety through optimal design and streamlining of manufacturing processes.

#### **Battery Recycling Process**



## **Pilot Projects for Battery Reuse**

LG Energy Solution is leading a range of strategic initiatives globally to create proven battery reuse solutions and propose innovative business models. Examples of these projects include: A battery reuse Energy Storage System (ESS) linked to an electric vehicle (EV) fast-charging station at Ochang Energy Plant 1 in Chungcheongbuk-do, South Korea, A grid-scale battery reuse ESS project in North America, Development of battery reuse ESS systems for UPS (Uninterruptible Power Supply) and telecommunications, A commercial battery reuse ESS (BESS) project with a partner company in Norway. Through these trials and ongoing refinements, we are steadily building up our battery reuse expertise. We also play an role in shaping policies and frameworks for End-of-Life batteries by region, collaborating with key customers and industry partners.

#### UPS (Uninterruptible Power Supply, Uninterruptible Power Source Equipment)

A device that provides stable power supply in the event of power outages or faults, ensuring uninterrupted electricity flow.



Installation and Operation of Reuse ESS System in Texas through Collaboration with a North Automotive Battery Modules American Partner



48V Backup Power Reuse Pack Utilizing Recovered

# **Packaging Strategies for Recycling**

LG Energy Solution not only standardizes the use of various packaging materials for product packaging but also utilizes recycled packaging materials made from recycled raw materials.

# **Packaging Material Recycling Status**

## **Development and Utilization of Recoverable Packaging Materials**

External packaging containers used for transporting products are designed to be compatible across various product models. To minimize the amount of packaging waste generated during the transport of products or materials, LG Energy Solution develops and utilizes returnable packaging. For the transport of cells and electrodes, we use specially developed returnable boxes and steel racks, and has also produced returnable containers applicable to certain pack products. When external transport packaging is delivered to customers, the empty containers—excluding the products—are reloaded onto transport vehicles prepared by LG Energy Solution. These returned containers are then washed, undergo inspection and sorting for damage or contamination, and are subsequently reused after being returned to the facility.

Plastic Tray Used for Battery Cell Packaging

# [Shipping] [Returning]



Specification of returnable packaging for electrode



Specification of returnable packaging for cell

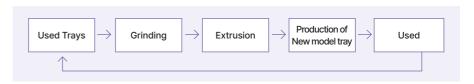


Specification of returnable packaging for pack

# Plastic Trays for Cell Packaging

Plastic trays used for packaging battery cells are primarily employed in the shipment of automotive and ESS batteries. These trays are marked with appropriate recycling symbols to ensure proper disposal and recycling. While the trays are manufactured in specific shapes tailored to each cell model, they are recycled into packaging materials for other models once the production of a given cell model is discontinued, following LG Energy Solution's plastic recycling process.

#### [Plastic Tray Recycling Process]



Starting in 2024, LG Energy Solution has been applying more than 70% recycled materials—either commercially sourced or recovered—across all internal packaging used for newly developed cell models. We are continuously exploring ways to further increase the use of recycled packaging by monitoring emerging technologies and market trends and evaluating their applicability on an ongoing basis.

# **Waste Discharge Management**

With growing global concerns over resource depletion and waste generation, increasing the reuse and recycling of materials to minimize the consumption of natural resources has become a core element of ESG management. LG Energy Solution is committed to minimizing waste incineration and landfill disposal while promoting a transition toward a circular resource system through the recycling of waste generated at its business sites. To ensure rigorous control of battery-related waste, we are focusing on the development of a waste tracking and information management system, the operation of dedicated collection facilities, and the advancement of innovative technologies. By prioritizing environmental protection and resource recovery, LG Energy Solution aims to set a best-practice standard in battery waste management.

## **Definition of Waste**

LG Energy Solution classifies and defines waste generated at each stage of the battery manufacturing process and applies optimized management practices tailored to each type. This approach enables the company to accurately assess the characteristics of generated waste, establish efficient treatment and recycling strategies, promote resource circularity and minimize environmental impact.

## [Types of Waste]

| Division         | Occurrence pro-cess                           | Definition   |
|------------------|---|--|
| Battery<br>waste | Electrode, Assembly,<br>Formation             | Battery production waste refers to waste materials generated during the manufactur-ing process that contain mineral metals such as nickel (Ni), lithium (Li), and aluminum (Al). This category includes anode and cathode electrodes, charged cells, and similar components. |
| Slurry<br>waste  | Electrode                                     | Liquid waste containing fine solid particles generated during the manufacturing process includes waste organic solvent (N-Methyl-2-Pyrrolidone, NMP) and waste anode/cathode slurry.   |
| Other<br>waste   | Electrode, Assembly,<br>Formation, packag-ing | Other waste types, excluding waste batteries and slurry, are classified into hazardous waste and general (non-hazardous) waste, depending on their characteristics.  |

<sup>\*</sup> NMP (N-Methyl-2-Pyrrolidone): A solvent used as a binder in the production of cathode materials during the lithium-ion battery manufacturing process.

# **Waste Discharge Management**

LG Energy Solution identifies and manages resource circulation initiatives across the entire product life cycle—from manufacturing to disposal—in order to systematically manage waste and reduce its generation at the source. As part of this effort, we conduct annual audits to analyze the previous year's performance and establish annual waste generation and treatment plans, allowing for accurate forecasting of expected volumes. During storage, we strictly comply with legal standards to minimize environmental impact.

In addition, LG Energy Solution does not treat waste in-house but outsources all waste treatment to third-party contractors in full compliance with relevant regulations. Waste treatment vendors are selected based on internal procedures that include environmental assessments, legal compliance reviews (e.g., Waste Control Act in Korea, RCRA in North America, and the EU Waste Framework Directive), and an evaluation of treatment suitability by waste category. Selected vendors undergo regular environmental performance assessments (once per year) to ensure continued compliance and oversight. Particularly for waste batteries (e.g., rechargeable cells and modules), we enforce strengthened management measures to mitigate legal risks and potential damage to corporate reputation in the event of external leakage. LG Energy Solution has adopted internal deactivation methods such as brine treatment and electrical discharge—to minimize such risks. Furthermore, a Waste Disposal System (WDS) is operated to ensure that all waste is legally managed and processed by qualified vendors under continuous monitoring. This system prevents unauthorized outflows of discarded cells and modules and supports the establishment of a safe and compliant waste management structure.

Finally, all treated waste is transparently managed through Korea's "Allbaro System" for waste tracking, supported by proper reporting and documentation procedures. Through this approach, we ensure not only regulatory compliance but also the implementation of a sustainable waste management system.

## [Waste Processing Process]



# Waste management training

LG Energy Solution not only mitigates the risk of unauthorized outflows of waste batteries through its Waste Disposal System(WDS), but also continuously monitors waste battery generation and discharge volumes to analyze emission trends and develop effective reduction strategies. To ensure the effective operation of this system, user training is provided at newly established production sites, with additional training conducted as needed. These efforts aim to enhance employee awareness regarding waste generation and reduction.

## Pursuit of Zero Waste to Landfill

LG Energy Solution is actively promoting the recycling of waste generated at its sites in pursuit of achieving zero waste to landfill. Three facilities in Nanjing, China have been certified by the global certification body UL (Underwriters Laboratories) with a 100% recycling rate, earning the highest recognition level of Platinum. In Korea, the Ochang Energy Plant 1 has achieved a recycling rate of over 95%, earning the Gold level certification. In the United States, LG Energy Solution Michigan Inc. received Landfill Zero certification from the National Sanitation Foundation (NSF), acknowledging that less than 1% of total waste is sent to landfill. LG Energy Solution aims to obtain Zero Waste to Landfill (zwtl) certification for all company-owned global production facilities by 2026.

Zero Waste to Landfill (ZWTL) Certification Plans by Site

Korea(Ochang Energy Plant 1): 2024 99.48 (Gold) 2026 Plan (Platinum)

Korea(Ochang Energy Plant2): 2026 Plan (90% Silver)

China Nanjing 3 business sites: 2024 100%, 2026 Plan 100% (Platinum)

Poland business site: 2026 Plan (90% Silver),

U.S. business site (LG Energy Solution Michigan Inc.): NSF certified and maintained in 2022, 2023, and 2024

## **Reduction of Incinerated Waste**

At LG Energy Solution's three manufacturing sites in Nanjing, China, technical improvements were made in the treatment liquid waste from anode production. By optimizing the operations of inhouse wastewater treatment facilities— adjusting the flocculant formulation—the facilities were able to effectively remove impurities such as graphite from the wastewater. These improvements have significantly contributed to reducing the volume of burning waste like graphite in anode slurry.

## Reduction of Hazardous Waste Through Resource Circulation

The Nanjing sites also developed new technologies to recycle waste organic solvent, N-Methyl-2-pyrrolidone (NMP), a solvent used in electrode manufacturing that accounts for approximately 85% of their hazardous waste volume. Through lab scale tests, the effectiveness of thin-film evaporation technology was verified, leading to an increase in the NMP recycling rate from 80% to 97%. In 2024, this technology was extended to LG Energy Solution's Ochang Energy Plant in Korea and its LGESWA facility in Poland, expanding waste reduction efforts through resource circulation across global production sites. Following the commissioning of a new thinfilm evaporation system in September 2024, the Ochang Energy Plant 1 recovered a total of 117,100 tons of waste NMP over a four-month period, representing 61.7% of the total waste NMP generated, thereby significantly enhancing resource circularity.

# **Waste Recycling Targets**

LG Energy Solution aims to obtain Zero Waste to Landfill(ZWTL) certification for all global production sites by 2026, achieving a recycling rate of 95% in accordance with ZWTL standards. By 2028, we plan to further elevate its efforts to reach a 100% recycling rate under ZWTL certification through a wide range of initiative.

3-Year Waste Discharge and Recyling Rate Go to page

# **Environmental Management**

LG Energy Solution has an environmental management system for sustainable business operations, including establishing environmental management governance involving the highest decision-making body. This system manages and monitors the implementation of company-wide environmental management in accordance with environmental policies, making every effort to protect the local environment and create eco-friendly business sites.

# **Environmental Management System**

# **Environmental Management Governance**

LG Energy Solution has organized and operated environmental management governance to managing environmental impacts arising from the operations and production activities in compliance with regulations, continuously improving environmental performance. The Board of Directors is the body responsible for managing and supervising environment-related risks and the environmental management system, and annually discusses major issues, achievements, and future plans to provide leading environmental safety policy directions and strengthen responsible management.

#### [Environmental Management Organization Chart]



Across all global sites, LG Energy Solution operates dedicated environmental management organizations, on-site environmental specialists at each site, and frontline departments within business units responsible for executing environmental practices. Through close collaboration and communication among these entities, each fulfills its role in pursuit of the unified goal of environmental management.

## The Role of the Board of Directors

Board of Directors is responsible for managing and overseeing environmental risks and the overall environmental management system. BOD deliberates and makes decisions on key issues such as the environmental management system, processes and procedures, and investments.

## **Management and Functional Departments**

The environmental management staffs and relevant departments are responsible for implementing the relevant policies and the environmental management system. They establish environmental indices as well as targets, and monitor progresses. Additionally, they manage environmental goals and performance by linking them to the Key Performance Indicators (KPIs) of key executives and departments. The staff's ongoing dedication to enhancing environmental performance is evidenced by the environmental health and safety policy



# **Global Environmental Policy**

LG Energy Solution is committed to minimizing the negative environmental impacts of our business activities, thereby efforts to fulfill our social responsibilities to create a sustainable future. This policy applies to our headquarters, global production sites, R&D centers, and sales subsidiaries. We also encourage our stakeholders, including suppliers, service providers, and contractors, to comply with the policy and engage in related activities.

Global Environmental Policy Visit Website

# **Establishment of Environmental Management System**

LG Energy Solution has obtained ISO 14001 (Environmental Management System) certification for 100% of its wholly owned production sites, excluding joint ventures currently in operation, thereby establishing a reliable environmental management system. Based on this system, we systemetically and effectively implement measures to assess environmental impacts and mitigate negative effects through regular certification audits conducted by third-party institutions and internal diagnostic evaluations. Furthermore, to ensure the efficient operation of the environmental management system, LG Energy Solution has established and operates management procedures for air, water, soil, waste, and chemical substances. Through these processes, we prevent environmental risks at its business sites and realizes sustainable environmental management.

| Items            | Details   |
|------------------|---|
| Air, Water, Soil | LG Energy Solution evaluates consequence and likelihood of environmental aspects through environmental impact assessments. The measures taken to mitigate identified environmental impacts and the status of related improvements are documented and managed for each site.   |
| Waste            | We utilize a waste management system at the site level to track and manage the generation and recycling of all waste produced at our facilities. Additionally, we have established and operate a separate management system for Battery wastes with high resource value, systematically managing the entire process from generation to collection, storage, and final disposal. |
| Chemicals        | For the management of hazardous chemicals, we have established and operate chemical management regulations. By implementing an integrated chemical management system, we manage the material information of raw and auxiliary materials used at our facilities.   |

#### Acquisition and Validity of Environmental Management System (ISO 14001) Certification

| Country | Business site                                     | Certification Validity        |  |
|---------|---|-------------------------------|--|
|         | Headquarters                                      |                               |  |
|         | Ochang Energy Plant 1                             | -<br>Integrated Certification |  |
| Korea   | Ochang Energy Plant 2                             |                               |  |
| Korea   | R&D Campus in Daejeon                             | (2024-12-01)                  |  |
|         | R&D Campus in Gwacheon                            |                               |  |
|         | R&D Campus in Magok                               |                               |  |
|         | LG Energy Solution (Nanjing) Co., Ltd.            | 2027-11-03                    |  |
| China   | LG Energy Solution Battery (Nanjing) Co., Ltd     | 2025-05-13                    |  |
|         | LG Energy Solution Technology (Nanjing) Co., Ltd. | 2026-06-06                    |  |
| Poland  | LG Energy Solution Wroclaw sp. z o.o              | 2026-11-16                    |  |
| the US  | LG Energy Solution Michigan Inc.                  | 2025-01-30                    |  |

<sup>\*</sup> All currently operating in-house production sites are 100% certified to ISO 14001.

# **Environmental Management Performance and Operational Results**

LG Energy Solution establishes and manages internal pollutant emission targets for each site that are more stringent than legally permitted levels. These targets cover air pollutants (dust, NOx, SOx, THC) and water pollutants (TOC, TP, BOD, SS). To improve environmental performance at each site, internal pollutant targets are reflected in site-level KPIs. Monthly emissions are monitored, and for sites that exceed targets, root causes are analyzed and corrective actions are implemented. To minimize environmental impact, we invested approximately KRW 37.3 billion in 2024 in environmental initiatives, including maintenance of environmental facilities and the establishment of air pollution control monitoring systems across water, air, and waste management areas. An additional KRW 31.2 billion was spent on environmental operations. Furthermore, prior environmental impact assessments are conducted for all capital expenditures unrelated to the environment to identify and manage critical environmental and safety issues in advance. Before executing an investment, the responsible department completes an environmental and safety checklist. Based on this checklist, the Environment, Health, and Safety (EHS) department conducts a review to identify potential risks and provides guidance on specific EHS measures. The executing department then establishes an implementation plan for the prescribed EHS measures and continues to share its progress with the EHS department throughout the project. The results are incorporated into the overall project management process.

# Environmental, Health, and Safety (EHS) Awards Program

LG Energy Solution operates an annual award program to foster a proactive environmental, health, and safety (EHS) culture among employees, enhance awareness of eco-friendly workplace practices, and strengthen environmental and safety capabilities. This award program is not limited to EHS departments; it is open to all employees across all business sites and is conducted at the corporate level, including executive leadership participation. In accordance with our EHS reward and disciplinary guidelines, awards are granted at the project, site, and employee levels. Through this multi-tiered recognition system, we not only reward individual excellence but also promote a culture of continuous improvement and collaboration in environmental and safety management at the organizational level.

| Scope                    | Unit          | Contents  | Award<br>Presenter |
|--------------------------|---------------|---|--------------------|
|                          | Best Project  | Awards are presented for best projects recognized during the Environmental, Health, and Safety (EHS) Performance Sharing Session.   |                    |
| All employees (including | Best Site     | Awards are presented for site-level accident prevention activities and key performance indicators.  | SEO                |
| executive)               | Best Employee | Awards are presented to individuals who, through their innovative attitude, promote an EHS mindset and demonstrate excellence in environmental and safety activities, serving as role models. |                    |

2024 Environmental, Health and Safety (EHS) Performance Sharing Session

# **Environmental Impact Reduction Activities**

To minimize the environmental impact of business operations, LG Energy Solution actively promotes initiatives to reduce environmental pollutants. For air and water pollutants, we have installed optimal pollution prevention facilities to reduce emission volumes. In addition, to reduce the use of hazardous chemicals and the generation of waste in manufacturing processes, raw material recovery systems and waste recycling facilities have been developed and implemented. Waste and chemical substances are managed efficiently through dedicated systems such as the Waste Disposal System and the Hazardous Substance Management System. At facilities designated for soil contamination management, soil protection systems have been installed to thoroughly prevent the release of pollutants into the soil.

# **Environmental Awareness Training**

Beyond efforts to reduce environmental impact, it is essential to raise environmental awareness among employees. During onboarding, new employees are educated on the Material Safety Data Sheet (MSDS) system to recognize the hazards of chemicals used in the manufacturing process. They also receive training on confined space working environments to understand the importance of maintaining safe and environmentally sound working conditions.

# **Environmental Training Performance**

|   | Training  | Target   | People |
|---|---|--|--------|
| Training for Administrators of<br>Hazardous Chemicals                           |   | Manager of Hazardous Chemicals   | 42     |
|   | r Workers Handling<br>Ious Chemicals                  | Handler of Hazardous Chemicals   | 850    |
|   | Employees Working ardous Chemicals                    | All Employees at Licensed Hazardous Chemicals Business Sites   | 4,292  |
| Training for  | r Waste Generators                                    | Business sites that generate waste, waste treatment companies, waste treatment registrants, operators of waste treatment facilities                                | 3      |
| Specialized Training for Chemical<br>Accident Prevention and<br>Management Plan |   | Personnel responsible for drafting chemical accident prevention and management plans or for responding to chemical accidents at sites handling hazardous chemicals | 2      |
|   | dated Environmental<br>ian Training (Air)             | Technicians at facilities with Class 1, 2, and 3 emission sources; technicians at Class 4 and 5 facilities that operate shared prevention systems                  | 6      |
|   | dated Environmental<br>n Training (Water)             | Technicians at facilities with Class 1, 2, and 3 discharge sources; technicians at Class 4 and 5 facilities that operate shared water prevention systems           | 3      |
| LG<br>Academy   | Introductory Training<br>on Safety and<br>Environment | -  | 3      |
| Academy   | ESG Management<br>Practical Training                  | -  | 1      |
|   |   | Total  | 5,202  |

# **EHS Management System**

LG Energy Solution operates an Environment, Health, and Safety (EHS) system to enhance the efficiency and accuracy of its EHS management. The system enables the systematic and integrated management of a wide range of data related to environmental and safety matters. It encompasses various EHS functions such as emergency preparedness and response, risk assessment, work permit issuance, incident management, and non-conformance handling. By leveraging the accumulated data, the system supports prompt and informed decision-making.

# Environmental Information Disclosure System(ENV-INFO System) **Data Disclosure**

The Environmental Information Disclosure System(ENV-INFO System) is implemented under the Environmental Technology and Industry Support Act. This system enhances our voluntary commitment to environmental management, establishes a foundation for overall societal environmental management, and supports green loans and green investments by providing verified environmental information to financial institutions. As we are subject to environmental information disclosure, LG Energy Solution publishes key information, including environmental management systems, resource and energy savings, and targets and achievements in pollutant reduction.

# **Environmental Impact Assessment**

To evaluate and systematically manage the actual and potential environmental impacts of our business activities, LG Energy Solution has established "Environmental Impact Assessment Policy". This policy mandates regular six-step environmental impact assessments across all activities, products, and services at global sites. Specifically, the Pre-Environmental Safety Review Operating Policy requires technical reviews of environmental and safety aspects for new installations, purchased hazardous equipment, fire safety, hazardous materials, gas, and related equipment before any new installations, modifications, or closures. This ensures compliance with legal regulations.

**Target Areas and Frequency** of Assessment

**Environmental impact** assessments are conducted separately for production and non-production sectors. The production sector is assessed annually, while the nonproduction sector is assessed every three years. However, if there is an initial assessment due to the construction of a new factory or changes in production processes, equipment, or procedures, we conduct evaluations as necessary.

#### Scoping of Relevant **Environmental Impacts**

We distinguish between production and nonproduction activities and conduct a thorough analysis to identify all environmental impact factors directly or indirectly related to our business activities.

#### Identification of **Environmental Impact** Factors

We prepare material balance sheets throughout the entire process, from raw material intake to product shipment. These material balance sheets help us identify and quantify potential environmental impacts at each stage of the process.

4

#### **Environmental Impact** Assessment

We review the adequacy of the assessment results and improvement measures and conduct re-evaluations if needed.

5

#### Review of the Assessment Results

The results from the previous steps are incorporated into our achievements, and we develop improvement plans and conduct follow-up management. Additionally, we share these results with employees to enhance their awareness of environmental impacts.

6

#### Target Setting an Implementation Monitoring

The results from the previous steps are incorporated into our achievements, and we develop improvement plans and conduct follow-up management. Additionally, we share these results with employees to enhance their awareness of environmental impacts.

# **Environmental Regulation Response**

LG Energy Solution identifies and regularly conducts preventive measures to mitigate environmental compliance risks. The preventive measures are categorized into five main areas: 1 policies/standards, 2 education, 3 audits/survey, 4 regulatory trend monitoring, and 5 system development. In this process, a total of 44 environmental regulatory risks were identified in 2024, including 20 high-impact and risk items identified through the impact assessment process. We continuously monitor areas with significant financial and external impacts, such as air and water quality, industrial waste, pollution/chemical substances, and soil.

#### [Environmental Regulation Example]

| Country | Regulations   |
|---------|---|
| Korea   | [Water Quality] Water Environment Conservation Act [Air Quality] Clean Air Conservation Act [Waste] Waste Control Act [Hazardous Chemicals] Chemical Substances Control Act, Act on Registration and Evaluation, etc. of Chemical Substances [Soil] Soil Environment Conservation Act |
| U.S.    | [Water Quality] Clean Water Act [Air Quality] Clean Air Act [Waste] Resource Conservation and Recovery Act (RCRA) [Hazardous Chemicals] Toxic Substances Control Act (TSCA)   |
| China   | [Water Quality] Water Pollution Prevention and Control Law [Air Quality] Air Pollution Prevention and Control Law of the People's Republic of China   |
| Canada  | [Air Quality] Ontario regulation 419/05   |
| Poland  | Environmental Protection Law  |

# **Safeguarding Natural System**

LG Energy Solution manages pollutants generated during production activities in accordance with internal standards that are more stringent than global regulatory requirements.

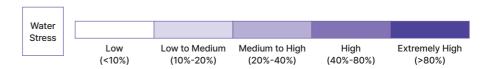
Safeguarding Natural System Visit Website

# **Water Resource Management**

With the growing importance of water resource management globally due to climate change, LG Energy Solution has improved water usage and wastewater management by a water resource risk management system.

# **Water Stress Analysis**

Due to climate change, LG Energy Solution has utilized the World Resources Institute's (WRI) Aqueduct program to analyze "water stress" an indicator of future regional water scarcity impacts. This analysis was conducted for regions where our global production facilities are located, using the Shared Socioeconomic Pathways 3 (SSP3) and Representative Concentration Pathways 7.0 (RCP 7.0) scenarios based on the Business as Usual (BAU) standard for the year 2030.



#### [2030 Water Stress Risk]

| Categories       | Manufacturing Site  |
|------------------|---|
| 1 Low            | LG Energy Solution (Nanjing) Co., Ltd. (China) LG Energy Solution Battery (Nanjing) Co., Ltd. (China) LG Energy Solution Technology (Nanjing) Co., Ltd. (China) Ultium Cells 1 (US) Nextstar Energy Inc. (Canada) |
| 2 Low-Medium     | LG Energy Solution Wroclaw sp. z o.o. (Poland)  |
| 3 Medium-High    | LG Energy Solution Michigan Inc. (US)   |
| 4 High           | Ochang Energy Plant 1 (Korea) Ochang Energy Plant 2 (Korea) PT. HLI Green power (Indonesia)   |
| 5 Extremely High | Ultium Cells 2 (US)   |

<sup>\*</sup> As of the end of December 2023, based on the operational production plants.



# **Water Management System**

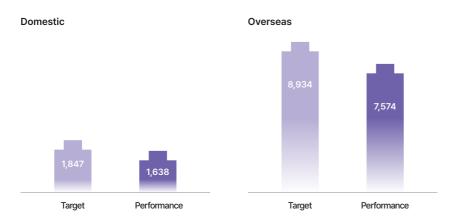
In order to secure a stable supply of water used in business activities, LG Energy Solution has established the "Environmental Impact Assessment Regulation" and is identifying the feasibility of water supply and analyzing various risks in advance, such as water-related laws and regulations, before the installation of business sites. All business sites of LG Energy Solution do not extract groundwater and receive treated water (industrial water, tap water) from water supply companies designated for each site, which is defined as water intake.

# **Water Efficiency**

3-Year Water Withdrawl Status Go to page

LG Energy Solution continuously monitors and inspects its water usage to enable systematic water management and improve operational efficiency. To support this, we analyze water usage processes within its operations, identifies key areas for improvement, and implements optimization measures to enhance overall water use efficiency. Furthermore, we utilize the Energy & Utility Management System (EUM) to monitor water usage in real time. This system allows for the immediate detection of abnormal usage patterns, enabling swift corrective actions when necessary. By doing so, LG Energy Solution not only prevents unnecessary water consumption but also maximizes the operational efficiency of its facilities. In addition, we set and manage and manages water intake targets for its global sites to optimize water usage tailored to the specific conditions of each location.

[Water withdrawl in 2024] Unit: kton



## Water Use Reduction

LG Energy Solution monitors company-wide water usage and implements water-saving measures at its sites based on short- and mid-to-long-term targets. These efforts are part of response to waterrelated risks identified through water stress analysis and aim to secure a sustainable water supply. To reduce water usage, LG Energy Solution has improved heat exchange efficiency by descaling chiller system equipment, which requires a large volume of water, thereby optimizing chilled water operations. We also recover steam condensate for reuse in washing processes and as boiler feedwater, applying a variety of water-saving measures.

## Case 1. Reuse of Steam Condensate in Washing Processes

Steam that has transferred heat during the production process is fully recovered as condensate and reused as process water in washing operations.

#### Case 2. Reuse of Boiler Feedwater

Hot water discharged at 60°C is exchanged with high-temperature condensate from air-handling units and reused as boiler feedwater, effectively reducing overall water consumption.

[Water reuse] Unit: ton

| 2023  | Steam<br>supply | Recovery rate | Condensate recovery | 2024  | Steam<br>supply | Recovery rate | Condensate recovery |
|-------|-----------------|---------------|---------------------|-------|-----------------|---------------|---------------------|
| 1Q    | 83,649          | 70.04%        | 58,576              | 1Q    | 83,195          | 79.00%        | 65,723              |
| 2Q    | 79,169          | 62.91%        | 50,996              | 2Q    | 72,913          | 69.34%        | 50,556              |
| 3Q    | 81,665          | 72.16%        | 58,929              | 3Q    | 76,892          | 81.90%        | 60,061              |
| 4Q    | 86,010          | 73.13%        | 62,896              | 4Q    | 84,054          | 76.47%        | 64,273              |
| Total | 330,494         | 69.66%        | 231,397             | Total | 317,054         | 76.81%        | 240,612             |

<sup>\*</sup> Based on Ochang Energy Plant 1

COMPANY OVERVIEW

# Fostering a Water Conservation Culture through Employee **Participation**

LG Energy Solution operates a variety of training and engagement programs to raise employee awareness on reducing water consumption. These efforts aim to communicate the importance of water conservation and encourage active participation in practical reduction initiatives. In particular, we run idea proposal programs such as "ENSOL E-Bank," which allows employees to directly suggest water-saving ideas. Creative proposals are actively reviewed and collected, and selected ideas go through an evaluation process. Outstanding suggestions are then shared company-wide through internal announcements and promotional channels, enabling them to be expanded and implemented across various business sites.

# **Water Pollutant Management System**

LG Energy Solution classifies and manages wastewater and sewage separately, and in accordance with its internal "Water Quality Management Regulation," defines Biochemical Oxygen Demand (BOD), Suspended Solids (SS), and Total Organic Carbon (TOC) as water pollutants. we apply water quality management targets that are more than 50% stricter than the legal limits set by relevant laws such as the Water Environment Conservation Act. By doing so, LG Energy Solution minimizes the impact of its water discharge on local public treatment facilities and surrounding water bodies.

#### [Internal Water Pollutant Management Standards]

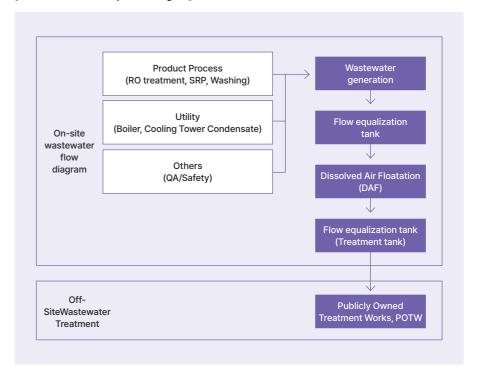
| Туре | Unit | Legal Standard | In-house Standard |
|------|------|----------------|-------------------|
| BOD  | mg/L | 100 or less    | Below 50          |
| SS   | mg/L | 100 or less    | Below 50          |
| тос  | mg/L | 100 or less    | Below 50          |

3-Year Water Pollutant Discharge Status Go to page

## Wastewater treatment process within our sites

High-concentration wastewater generated during the battery manufacturing process is not discharged into nearby water bodies, but is instead treated at on-site wastewater treatment facility as a primary step. The wastewater produced from various stages of the battery manufacturing process is first collected in a holding tank, then subjected to pressurized flotation to remove suspended and particulate matter. Following this, biological treatment is conducted to oxidize organic substances through microbial degradation. Subsequently, ozone oxidation is applied to further break down any remaining organic compounds, after which the treated water is discharged to a public wastewater treatment plant.

#### [Wastewater treatment process diagram]

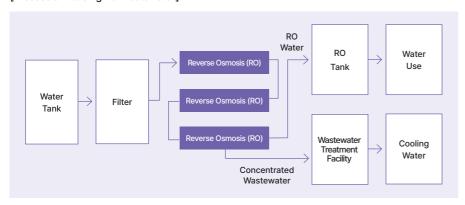


COMPANY OVERVIEW

## **Wastewater Reduction and Management Activities**

To minimize the environmental impact of wastewater, LG Energy Solution operates our own wastewater treatment facilities and shared treatment facilities that comply with stricter standards than legal requirements. The total amount of wastewater discharged across the entire manufacturing facilities is managed daily. For the water pollutants listed under industrial wastewater permit criteria and restricted substances, a water quality monitoring system is implemented. This system ensures that managers regularly measure water pollution based on approved protocols or commissions outsourced measurement agencies to conduct evaluations at least once a year according to environmental assessment standards. Additionally, to reduce the discharge of pollutants, improvements such as washing and condensing wastewater treatment systems for waste gases and dust from manufacturing and industrial facilities, and reusing cooling tower water from reverse osmosis (RO) wastewater, are made to minimize the environmental impact of wastewater.

#### [Process of Reusing RO Wastewater]



In addition, at some overseas sites, wastewater generated from processes such as the Solvent Recovery Plant (SRP), which recovers NMP, is not discharged into the wastewater stream but is instead recirculated back into the process itself, fundamentally minimizing wastewater generation at the source.

# **Air Pollution Management System**

LG Energy Solution manages air pollutants emitted from air emission facilities—regulated under the Clean Air Conservation Act in Korea and international regulations such as the U.S. Clean Air Act—based on its internal Air Quality Management Regulation. We have established and apply and applies internal standards that are more stringent than legally permitted limits for pollutants such as dust, Nitrogen oxides (NOx), Sulfur oxides (SOx), formaldehyde, ethylbenzene, and others.

#### [Internal air pollution control standards]

| Pollutants      | Unit  | Legal      | Internal   | Index                                     |
|-----------------|-------|------------|------------|---|
| Dust            | mg/m3 | 30 or less | 15 or less |   |
| Sulfur oxides   | ppm   | 10 or less | 5 or less  | Installation standards applied since 2020 |
| Nitrogen oxides | ppm   | 40 or less | 25 or less | Installation standards applied since 2015 |

3-Year Air Pollutant Emission Status Go to page

## **Air Pollutant Control Process**

LG Energy Solution operates air pollution control facilities tailored to each stage of the battery manufacturing process to effectively manage air pollutants and minimize environmental impact. Particulate and gaseous pollutants generated at each stage are treated through appropriate technologies and systems.

## Electrode process

In the mixing and coating stages of the electrode process, particulate pollutants are captured using filtration and dust collection systems, while gaseous pollutants are removed through adsorption systems, thereby minimizing emissions. In particular, NMP (N-Methyl-2-pyrrolidone), a solvent used in the coating process, evaporates into gaseous pollutants. These are purified and recovered through the Solvent Recovery Process (SRP) and reused as raw material, thereby reducing air pollution and enhancing resource efficiency.

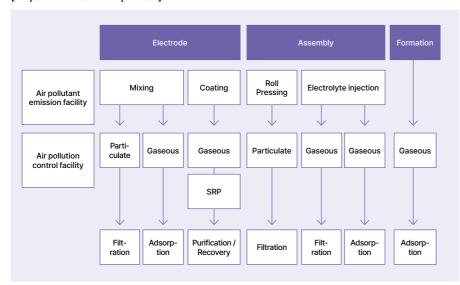
## Assembly process

During the assembly process, which involves assembling electrodes and injecting electrolyte, both particulate and gaseous pollutants are generated. Air pollution control facilities using filtration and adsorption methods are applied to effectively remove these pollutants.

## Formation process

The formation process involves charging the battery cells after electrolyte injection. In the degassing stage, where gas generated during charging is released, gaseous air pollutants are emitted. To address this, adsorption-type air pollution control equipment is used to safely remove pollutants. we also conduct continuous monitoring and process improvement to minimize emissions during operation.

#### [Air pollutant treatment process]



# Air pollutant emission reduction activities

LG Energy Solution systematically operates and manages air pollution control facilities to reduce air pollutant emissions, and thoroughly controls emission levels through regular inspections and continuous monitoring. To ensure the efficient operation of these facilities, we conduct a comprehensive range of activities including air quality inspections, operation and maintenance of control equipment, and monitoring efforts.

#### Operation management of air **On-site Inspections** Monitoring activity pollution prevention facilities Compliance risk Timely replacement of inspections (annual) consumables Odor monitoring operation Voluntary inspections : Activated carbon(semi-annual), TMS operation (as needed)

#### Filter bag(annual) · Regular inspections (annual)

## · Regular dust monitoring

- Continuous monitoring of air pollution prevention facilities linked with the Smart Factory (using differential pressure gauges, temperature gauges, flow meters, etc.)

# **Air Pollution Control Facility Monitoring System**

LG Energy Solution utilizes its smart factory system to monitor the operational status of air pollution control facilities in real time, enabling efficient management and optimization of their performance. Key operational indicators are continuously measured by installing differential pressure gauges, thermometers, and airflow meters on the control equipment. These devices allow us to verify that the facilities are operating under optimal conditions. The differential pressure gauge is used to assess filter collection efficiency and determine appropriate replacement timing, while the thermometer ensures that adsorption systems are maintained at proper temperatures to maximize adsorption efficiency. In addition, the airflow meter monitors whether air pollutants are being properly treated and discharged; any anomalies can be detected and addressed immediately. LG Energy Solution will continue to advance its smart factory-based monitoring framework and further enhance the efficiency of air pollution control facilities through real-time data analysis.

# **Voluntary Air Pollutant Reduction Initiatives**

LG Energy Solution engages in voluntary agreements with local governments and relevant institutions to reduce air pollutant emissions. The Ochang Energy Plant 1 has signed two key agreements: the Chungcheongbuk-do Voluntary Fine Dust Reduction Agreement (2021-2024) and the Central Region Total Air Pollutant Emissions Control Voluntary Agreement (2023-2024). Under these agreements, the plant establishes annual reduction targets and implements corresponding action plans to reduce air pollution. As a result of these efforts, the Ochang Energy Plant was recognized for its excellence in environmental management and was designated a Green Company in 2024. The Green Company designation is granted by the Ministry of Environment under the Environmental Technology and Industry Support Act to companies that contribute to environmental improvement through resource and energy savings and pollutant reduction. This recognition demonstrates LG Energy Solution's commitment to sustainable environmental practices. Going forward, LG Energy Solution will continue to expand its voluntary reduction initiatives to improve air quality and will strengthen its proactive measures to further reduce emissions.

# **Hazardous Chemical Substance Management**

As environmental regulations on products and customer requirements for environmental management continue to tighten-particularly in Europe-environmental management is becoming increasingly important. LG Energy Solution continuously monitors evolving environmental regulations and strives to comply with relevant requirements while providing environmentally friendly products to customers. To this end, we apply our its internal Green Supply Chain Management Guidelines not only within the organization but also to suppliers, thereby strengthening the management of hazardous substances across the supply chain. It also ensures regulatory compliance by selecting appropriate materials from the raw material stage.

# **Hazardous Chemical Substance Management Process**

The definition and management of hazardous chemical substances vary by country, but most nations provide official lists of regulated substances. When using such substances, companies must comply with specific handling requirements.

Korea: Chemical substances control act, Act on Registration and Evaluation, etc. of Chemical

China: Measures of Environmental Management and Registration of New Chemical Substances, MEE Order 12

U.S.: Toxic Substances Control Act (TSCA)

EU: Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

In Korea, the Chemicals Control Act defines toxic substances, authorized substances, restricted substances, accident preparedness substances, and prohibited substances—all of which are categorized as "hazardous chemicals." LG Energy Solution strictly manages the usage and emissions of these chemicals in accordance with applicable laws and reports annually to relevant authorities. Currently, we use 4-types of hazardous chemicals in our battery manufacturing processes, along with seven types of general chemicals that are subject to legal reporting requirements.

#### [Types of Hazardous Chemicals]

| Classification         | CAS No.  | Substance name         | Amount                                      | Material                 |  |
|------------------------|--|------------------------|---|--------------------------|--|
| Hazardous<br>Chemicals | 1,2-Octanediol,<br>2,2-Dioxycide                 |                        | Content of 0.1% or more                     | Electrolyte              |  |
|                        | 182442-95-1 Acid cobalt lithium manganese nickel |                        | 0.1% or more content                        | Cathode active materials |  |
|                        | 872-50-4   | 1-methyl-2-pyrrolidone | 0.3% or more content                        | NMP                      |  |
|                        | 78-93-3  | Metal ethyl ketone     | (Used battery waste)<br>25% or more content | lnk                      |  |

<sup>\*</sup> Chemical Substances Control Act applicable target: Ochang Energy Plant 1

### [2024 Raw Materials Usage and Chemical Emissions\*]

| Sites                 | Raw Material Usage (ton)** | Chemical Emissions (kg) |
|-----------------------|----------------------------|-------------------------|
| Ochang Energy Plant 1 | 24,272                     | 0.9                     |
| Ochang Energy Plant 2 | 297                        | 0.8                     |
| Total                 | 24,569                     | 1.7                     |

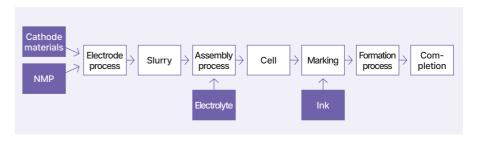
- \* Based on domestic business sites subject to permits under the Korean Chemicals Control Act (Ochang Energy Plant 1 and Ochang Energy Plant 2)
- \*\* Includes 11 types of major raw materials (cathode active material, anode active material, separator, electrolyte, etc.) and sub-materials

#### **Types of General Chemical Substances**

- Nickel and its compounds
- 1.3-Propanesultone
- Aluminum and its compounds
- Manganese and its compounds

- Cobalt and its compounds
- Copper and its compounds
- Zinc and its compounds

#### [Hazardous Chemicals Purchase Process]



| Pre-inspection details  | Relevant laws and regulations | Relevant documents  |
|---|-------------------------------|---|
| Does it correspond to Hazardous Chemicals?  |                               | MSDS, LOC   |
| Is it a substance that has completed the Hazardous Chemicals business permit?             | Chemical<br>Substances        | Hazardous Chemicals business permit certificate                             |
| Has the application/permit for toxic/prohibited/<br>restricted substances been completed? | Control Act                   | Toxic/prohibited/restricted<br>substances application/permit<br>certificate |

When the purchase of a hazardous chemical substance is planned, the chemical management personnel review the intended use and designated facility to verify that the material will be handled at a properly licensed facility. If a new hazardous substance is to be used for the first time, or if the substance will be handled at a new facility not previously permitted, LG Energy Solution ensures that all necessary permit revisions are completed prior to use, so that the substance can be managed in a safe and compliant environment. Only after this review is complete can the chemical material be purchased. Hazardous chemical substances are permitted for use only in designated facilities. Facilities and processes that handle hazardous chemicals are installed and managed in compliance with legal facility standards, and operators conduct their work in accordance with prescribed handling guidelines. The Materials Operation Team collects annual inbound and outbound records of chemical substances, and uses the Hazardous Substance Management (HSM) system to compile composition data for each material. This allows to track material-specific inflow and outflow data at each site. Such data is used for pollutant release and transfer reporting (PRTR), statistical surveys, and performance reporting.

#### [Processes for handling hazardous chemicals]



LG Energy Solution is committed to eliminating the risk of chemical accidents, with a target of "zero chemical leaks or spills" in accordance with the Chemicals Control Act. To achieve this goal, we conduct monthly inspections of facilities used to handle and store hazardous chemicals in order to identify and resolve any equipment-related issues in advance. Each facility undergoes an annual inspection for chemical leaks or spills, while outdoor storage and containment areas are inspected monthly. Additionally, chemical leak and spill response drills are conducted twice a year to ensure the safety of employees and strengthen emergency preparedness.



Training for Chemical Spill and Leak Incident

# Efforts to Reduce Hazardous Substances Within the Supply Chain

LG Energy Solution specifies the responsibilities and obligations of suppliers regarding the management of hazardous substances and overall environmental impact in its Supplier Code of Conduct. Suppliers that fail to comply may be subject to penalties. Those receiving low ratings in regular assessments may face sanctions such as restrictions on new business development or reduction in order volume, with corrective actions implemented to continuously improve environmental management standards. To enhance suppliers' environmental management capabilities, LG Energy Solution conducts in-depth assessments during both initial onboarding and regular evaluations. As part of this process, we check whether suppliers hold international environmental certifications such as ISO 14001, ISO 45001, and ISO 50001.

# **Management of Soil Contaminants**

LG Energy Solution manages facilities designated for soil contamination control in accordance with the Soil Environment Conservation Act and its internal Soil Management Procedure. All such facilities are equipped with preventive infrastructure such as aboveground installations, steel plates, protective walls, and oil storage tanks, along with additional safeguards including leak-proof tanks and anticorrosion treatments to fundamentally eliminate the risk of soil contamination or chemical leakage. In terms of operations, we conduct frequent in-house inspections, including visual checks. In the event of a leak or environmental incident, LG Energy Solution has established response procedures under its Emergency Response Regulation, Environmental Incident Response Manual, and department-specific protocols to ensure prompt and effective action.

# **Biodiversity Conservation**

To preserve biodiversity, products must be produced in a sustainable manner that does not disrupt the balance of ecosystems. In line withe this principles, LG Energy solution is committed to reducing the consumption of natural capital and ensuring that used resources can be returned to nature. To this end, we have established a Biodiversity Protection and Deforestation Prevention Policy based on Kunming-Montreal Global Biodiversity Framework and the Science Based Targets Network (SBTN), and is actively carrying out biodiversity conservation initiatives in collaboration with local communities.

# **Biodiversity Management Roadmap**

LG Energy Solution is committed to addressing the interlinked global environmental crises such as climate change, biodiversity, and deforestation, recognizing the need for comprehensive and complementary solutions. As part of this commitment, LG Energy Solution has identified biodiversity conservation as one of its key ESG strategic priorities and actively manages it. In 2024, LG Energy Solution established Biodiversity Protection and Deforestation Prevention Policy that demonstrates its commitment, principles and approach to biodiversity protection and the prevention of deforestation and an implementation roadmap that elaborates action plans to fulfil the commitment. By 2025, LG Energy Solution plans to evaluate biodiversity risks and opportunities across its global production sites, disclose the findings through its website and ESG report, and lay the groundwork for nature-related disclosures by assessing risks and opportunities at all global production sites. For the future, LG Energy Solution aims to conduct evaluations across its entire value chain and issue disclosures in alignment with the TNFD (Taskforce on Nature-related Financial Disclosures) guidance.

Biodiversity Protection and Deforestation Visit Website

[LG Energy Solution Biodiversity Management Roadmap]

## Setting the Scene for Management

- Establishment of a Biodiversity Management System
- Governance Establishment
- ESG Task Selection('22)
- Policy Development('24)
- LEAP-based Assessment (Pilot)
- Targeting Production Sites (FY2024)
- Disclosure of Pilot Assessment

## Advanced Risk Management

- · Quantitative Evaluation of Risk and Opportunity Factors
- Quantitative Evaluation of Risk and Opportunity Factors
- Identification of Detailed Key task for establishing the targets

## Establishing a Disclosure System

- Strengthening the **Biodiversity Management**
- Establishing Biodiversity Targets (Metrics & Targets)
- Value-chain Risk Assessment
- Disclosures Based on TNFD Guidance

# **Biodiversity Management Governance**

LG Energy Solution acknowledges that environmental, social and governance considerations shall be integrated into the company's planning and decision-making processes. To that end, the governing bodies overseeing the identification and management of risks and opportunities related to biodiversity and deforestation consist of ESG Committee under the Board of Directors; and executive management and relevant departments.

### 1) Executive Management & Relevant Departments

The executive management and relevant departments are responsible for the execution of Biodiversity Protection and Deforestation Prevention Policy. They establish and implement strategies and processes for biodiversity and forest conservation; operate management programs; set relevant indicators and targets; and monitor progress towards those goals.

#### 2) Board of Directors and ESG Committee

The Board of Directors and its ESG Committee is responsible for management and oversight of risks related to biodiversity and forests. It deliberates and resolves key issues by monitoring, discussing, and advising on the adequacy and effectiveness of risk management systems, strategies, processes, and programs related to biodiversity and forest conservation

#### [LG Energy Solution Biodiversity Governance Structure]

| Governing Bodies                            | Major Roles  |  |  |  |  |
|---|--|--|--|--|--|
| Executive Management & Relevant Department  | Establishment and implementation of strategies and processes, operation of management programs, and setting the indicators and goals |  |  |  |  |
| Board of Directors and the ESG<br>Committee | Management and Oversight Risks   |  |  |  |  |

# **Biodiversity Management Strategy**

Understanding impacts and dependences related to natural capital and biodiversity is crucial to effectively identify, assess and manage the resulting risks and opportunities. In accordance with its biodiversity management roadmap, LG Energy Solution conducted a pilot assessment of nature-related dependencies and impacts of its production sites. We intend to expand such assessment across the entire value chain, further enhancing its unique biodiversity risk analysis scenarios. Its strategy will further evolve as its understanding of the risks and opportunities connected to nature-related impacts and dependencies deepen.

LG Energy Solution refers to TNFD recommendations to assess the risks and impacts of its business activities on nature and biodiversity. To understand the linkage between its business and nature, the TNFD "LEAP" approach was applied, consisting of four phases, i.e. "Locate," "Evaluate," "Assess," and "Prepare."

The LEAP approach involves identifying interfaces with nature (Locate), evaluating the naturerelated dependencies and impacts (Eyaluate), analyzing risks and opportunities (Assess), and establishing plans to address these risks and opportunities and report thereof (Prepare: Prepare to respond and report). In the Locate phase, the geographical connections of the business are identified, and the characteristics of the associated natural capital are defined. During the Evaluate phase, tools such as ENCORE are used to diagnose the business's dependencies and impacts on natural capital. The Assess phase involves a comprehensive evaluation of the nature-related impacts and dependencies including financial impacts. Finally, in the Prepare phase, specific goals are established focusing on nature-related areas such as marine environments, land, and biodiversity. LG Energy Solution has developed its own biodiversity assessment methodology and continues to enhance it through engagement with global initiatives and external expert consultations.



LG Energy Solution's Methodology for Assessing Nature-related Dependencies and Impacts

## Scope of the Assessment

For the purpose of the pilot assessment, LG Energy Solution carried out the steps of "Interface with sensitive locations (Locate)", "Impact materiality assessment (Evaluate)", and "Risk and opportunity materiality assessment (Assess)" across all its global production sites.

LG Energy Solution applied various tools for quantitative analysis during the Locate and Evaluate phases. In the Assess phase, it identified risks and opportunities through qualitative interpretation of the analyzed data. The Prepare phase, which includes the establishment of targets and disclosures, are presented in the ESG report along with qualitative plans. The comprehensive overview of the assessment scope and tools applied in the respective phase of LEAP approach is outlined in the below.

#### [Scope of assessment based on the LEAP approach]

| n Nature     | Assess Risks and Oppor   | tunities  |  |  |
|--------------|--|---|--|--|
| Quantitative | A1 Risk and opportunity identification   | Qualitative   |  |  |
| Quantitative | A2 Adjustment of existing risk mitigation and risk and opportunity management                                  | Qualitative   |  |  |
| Quantitative | A3 Risk and opportunity measurement and prioritization   | Qualitative   |  |  |
| Quantitative | A4 Risk and opportunity materiality assessment   | Qualitative   |  |  |
| k Impact     | Prepare to Respond & Report  |   |  |  |
| Quantitative | P1 Strategy and resource allocation plans  | Qualitative   |  |  |
| Quantitative | P2 Target setting and performance management   | Qualitative   |  |  |
| Quantitative | P3 Reporting   | Qualitative   |  |  |
| Quantitative | P4 Presentation  | Qualitative   |  |  |
|              | Quantitative  Quantitative  Quantitative  Quantitative  Quantitative  Quantitative  Quantitative  Quantitative | Quantitative A1 Risk and opportunity identification  A2 Adjustment of existing risk mitigation and risk and opportunity management  A3 Risk and opportunity measurement and prioritization  A4 Risk and opportunity materiality assessment  Prepare to Respond & I  Quantitative P1 Strategy and resource allocation plans  P2 Target setting and performance management  Quantitative P3 Reporting |  |  |

## I FAP Assessment

#### Locate The Interface with Nature

LG Energy Solution has defined "Sensitive Locations" to analyze the connection between its production sites and a site contributing significantly to the global persistence of biodiversity. LG Energy Solution mapped the locations of its global production sites against sensitive locations using buffer distances of 5km, 10km, and 20km.

A buffer distance is a spatial radius used to evaluate the potential impacts of industrial activities or operations on surrounding ecosystems and environments. To conduct this analysis, LG Energy Solution utilized the Integrated Biodiversity Assessment Tool (IBAT), a commercial tool for biodiversity assessment. The buffer distances were set based on industrial characteristics, with the battery manufacturing industry categorized under the "Other" sector, which applies a 20km buffer distance.

For this pilot assessment, LG Energy Solution adopted the 20km buffer distance as a guideline to standardize its analysis criteria and ensure a comprehensive evaluation of its impacts. This approach aligns with LG Energy Solution's commitment to conducting robust and inclusive biodiversity assessments.

#### [Overlapping Areas with Sensitive Locations for each Production Site]

| Site                     | 5km | 10km | 20km |
|--------------------------|-----|------|------|
| Ochang Energy<br>Plant 1 | •   | •    | ••   |
| Ochang Energy<br>Plant 2 | •   | •    | ••   |
| LGESNJ                   | -   | -    | •    |
| LGESNA                   | -   | -    | •    |
| LGESNB                   | -   | -    | •    |
| LGESWA                   | •   | ••   | •••  |
| LGESMI                   | •   | •    | •••  |

Note1: The unit is km2, and 5km, 10km, 20km represent the buffer distance applied.

Legend for buffer area: ● = Low (≤30 km²), ●● = Medium (30–100 km²), ●●● = High (≥100 km²)

## **Evaluate Dependencies and Impacts**

#### Impacts

LG Energy Solution evaluated the impacts of its production sites on ecosystems and natural capital by considering overlapping areas and additional indices (ecosystem integrity index and ecosystem importance index). MSA Loss (Mean Species Abundance Loss) was applied as the Ecological integrity metric, while IBAT's STAR (Species Threat Abatement and Restoration) served as the Ecological Significance metric. The results of these metrics and their associated Impacts Factor are presented in [Table 2].

#### [Key Evaluation Indices and Impacts Factor for each Production Site]

| Site                     | Overlapping         | Ecological              | Ecological S          | Impacts               |                      |
|--------------------------|---------------------|-------------------------|-----------------------|-----------------------|----------------------|
| Site                     | Areas <sup>1)</sup> | Integrity <sup>2)</sup> | (STARt) <sup>3)</sup> | (STARt) <sup>4)</sup> | Factor <sup>5)</sup> |
| Ochang Energy<br>Plant 1 |                     |                         | ••                    | ••                    | ••                   |
| Ochang Energy<br>Plant 2 | ••                  | ••                      | ••                    | ••                    | ••                   |
| LGESNJ                   | •                   | •                       | •                     | ••                    | •                    |
| LGESNA                   | •                   | •                       | •                     | ••                    | •                    |
| LGESNB                   | •                   | •                       | •                     | ••                    | •                    |
| LGESWA                   | •••                 | ••                      | •                     | •                     | •                    |
| LGESMI                   | •••                 | ••                      | •                     | •                     | •                    |

The values in this table are provided as categorized relative levels, and the actual quantitative figures are separately managed based on internal assessments and risk analysis data.

- 1) Overlapping Area: Represents the area where the business location overlaps with sensitive areas (in
- 2) Ecological Integrity(MSA Loss): Indicates the level of ecosystem disruption caused by human activities, with higher values signifying greater disruption.
- 3) Ecological Significance(STARt): An index that evaluates the potential value of a specific area in contributing to biodiversity conservation (reduction of threats).
- 4) Ecological Significance(STARr): An index that reflects the risk of biodiversity loss in a specific area, indicating the need for restoration and management efforts.
- 5) Impact Factor :√(Overlapping Area × Ecosystem Integrity (MSA Loss) × (Ecological Significance (STARt) + Ecological Significance (STARr)))

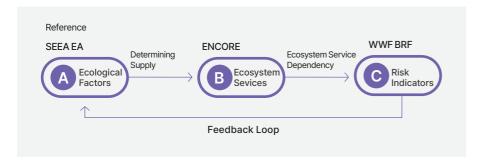
<sup>&</sup>quot;-" indicates no overlapping area.

COMPANY OVERVIEW

#### **Dependencies**

LG Energy Solution has developed a structured methodology to assess nature-related dependencies, ensuring both industry-wide and location-specific evaluations. It integrates multiple tools and frameworks to provide a comprehensive understanding of how business operations rely on and interact with ecosystem services. The methodology consists of two key stages: an industry-level dependency assessment using ENCORE to identify sector-wide ecosystem service dependencies, followed by a location-based dependency assessment using WWF BRF to incorporate site-specific geographic characteristics. The methodology also incorporates SEEA EA (System of Environmental-Economic Accounting - Ecosystem Accounting) Ecological Factors, which serve as a link between ENCORE's sectoral dependencies and WWF BRF's location-based risks. This model illustrates how Ecological Factors influence Ecosystem Services, which in turn shape Risk Indicators. By incorporating this feedback loop, LG Energy Solution ensures that its nature-related dependency assessments reflect both industry- and location-specific characteristics and develops an actionable strategy to manage dependencies at facility level.

#### [Dynamic Feedback Loop in Ecosystem Services and Risks]



The first stage of the assessment focuses on identifying the dependencies of the battery and accumulator manufacturing industry on ecosystem services using the ENCORE framework. It covers all stages from raw material extraction to manufacturing, operation, and disposal. As shown in below table, the industry is more dependent on water cycle-related services, including water flow regulation, water purification, and water supply, which support stable operations and long-term resource management, and climate-related services, such as flood mitigation, rainfall pattern regulation, and storm mitigation, among other ecosystem services. These services are key to production stability and logistics infrastructure resilience. With regard to environmental impacts of the battery manufacturing, the ENCORE assessment highlighted factors such as disturbances, which may affect local biodiversity and surrounding communities, as well as emissions of pollutants to water and soil, which could influence the availability and quality of ecosystem services.

|              | Ecosystem components   | Atmosphere | Land geomor-<br>phology | Minerals | Ocean<br>geomor-<br>phology | Soils and sediments | Species  | Structural and biotic integrity | Water    | Materiality<br>Rating |
|--------------|--|------------|-------------------------|----------|-----------------------------|---------------------|----------|---------------------------------|----------|-----------------------|
|              | Air-filtration services  |            |                         |          |                             |                     | Very Low | Very Low                        |          | Very Low              |
|              | Flood mitigation services*   |            | Medium                  |          |                             |                     |          | Medium                          |          | Medium                |
|              | Global climate regulation services   | Very Low   |                         |          |                             | Very Low            | Very Low | Very Low                        | Very Low | Very Low              |
|              | Local (micro and meso) climate regulation services                             | Low        |                         |          |                             |                     | Low      | Low                             | Low      | Low                   |
|              | Noise attenuation services   | Very Low   |                         |          |                             |                     | Very Low | Very Low                        | Very Low | Very Low              |
|              | Other regulating and maintenance service-Mediation of sensory impacts          | Very Low   |                         |          |                             |                     | Very Low | Very Low                        | Very Low | Very Low              |
|              | Rainfall pattern regulation services (at sub-continental scale)* Medium        |            |                         |          |                             |                     |          | Medium                          | Medium   | Medium                |
| Dependencies | Soil and sediment retention services   |            | Low                     |          | Low                         | Low                 |          | Low                             |          | Low                   |
|              | Solid waste remediation  |            |                         |          |                             | Low                 | Low      |                                 | Low      |                       |
|              | Storm mitigation services*   |            | Medium                  | Medium   |                             |                     | Medium   |                                 | Medium   |                       |
|              | Water flow regulation services* Medium   |            | Medium                  |          |                             |                     | Medium   | Medium                          | Medium   |                       |
|              | Water purification services*   |            |                         |          |                             |                     | Medium   | Medium                          | Medium   | Medium                |
|              | Water supply*  |            |                         |          |                             |                     |          |                                 | Medium   | Medium                |
|              | Other regulating and maintenance service-Dilution by atmosphere and ecosystems | Low        |                         |          | Low                         |                     |          | Low                             | Low      | Low                   |
|              | Area of land use   | Low        | Low                     | Low      | Low                         | Low                 | Low      | Low                             | Low      | Low                   |
|              | Disturbances*  |            |                         |          |                             | Medium              | Medium   | Medium                          | Medium   | Medium                |
|              | Emissions of GHG   | Very Low   | Very Low                | Very Low | Very Low                    | Very Low            | Very Low | Very Low                        | Very Low | Very Low              |
| Impact       | Emissions of non-GHG air pollutants  | Low        | Low                     | Low      | Low                         | Low                 | Low      | Low                             | Low      | Low                   |
|              | Emissions of toxic pollutants to water and soil**                              | High       | High                    | High     | High                        | High                | High     | High                            | High     | High                  |
|              | Generation and release of solid waste  | Low        | Low                     | Low      | Low                         | Low                 | Low      | Low                             | Low      | Low                   |
|              | Volume of water use  | Low        | Low                     | Low      | Low                         | Low                 | Low      | Low                             | Low      | Low                   |

Note: An asterisk(\*) indicates ecosystem services with a "Medium" level of dependencies and impacts on ecosystems. A double asterisk (\*\*) indicates ecosystem services with a "High" level of dependencies and impacts on ecosystems.

The second stage incorporates WWF BRF to refine the assessment by integrating geographic and site-specific characteristics. The results from the ENCORE were recalibrated to factor in location-based characteristics of each operation site. The most relevant ecosystem services for each site are as follows:

- Ochang Energy Plant 1, 2 (Ochang, South Korea) & LGESMI (Michigan, USA)
- : Water flow regulation services
- LGESNJ, LGESNA, LGESNB (Naniing, China)
- : Local (Micro and Meso) climate regulation services
- LGESWA (Wrocław, Poland)
- : Solid waste remediation services

At Ochang Energy Plant 1, 2, and LGESMI, water flow regulation services were identified as the most critical. These services play an essential role in ensuring stable water availability for production processes, including cooling, cleaning, and humidity control. Given that Ochang is located inland, water resource management is crucial, as fluctuations in rainfall and potential droughts could impact operations. Similarly, while Michigan benefits from its proximity to the Great Lakes, increasing environmental regulations on water use and wastewater discharge require enhanced management strategies to ensure compliance and operational resilience.

In LGESNJ, LGESNA, and LGESNB, local climate regulation services were found to be the most relevant ecosystem service. As battery manufacturing processes are sensitive to temperature and humidity fluctuations, maintaining stable environmental conditions is crucial for production efficiency. Additionally, sites located in urban or industrial clusters may be more affected by the urban heat island effect, highlighting the need for effective climate control measures to support operational stability.

LGESWA in Wrocław demonstrated the highest dependency on solid waste remediation services, reflecting the importance of waste management and recycling in this region. With the European Union's stringent environmental regulations, including mandatory recycling requirements for battery production waste, ensuring effective waste treatment and resource circularity is a key priority. Establishing efficient waste management systems will be essential for meeting regulatory standards and enhancing sustainability efforts.

#### [Assessment of Nature-related Dependencies with its Factor]

| Ecosystem Services   | Ochang<br>Energy<br>Plant 1 | Ochang<br>Energy<br>Plant 2 | LG<br>ESNJ | LG<br>ESNA | LG<br>ESNB | LG<br>ESWA | LG<br>ESMI |
|--|-----------------------------|-----------------------------|------------|------------|------------|------------|------------|
| Air-filtration services  |                             |                             |            |            |            |            |            |
| Flood mitigation services  |                             |                             |            |            |            |            |            |
| Global climate regulation services   |                             |                             |            |            |            |            |            |
| Local (micro and meso) climate regulation services                             |                             |                             | *          | *          | *          |            |            |
| Noise attenuation services   |                             |                             |            |            |            |            |            |
| Other regulating and maintenance service-Mediation of sensory impacts          |                             |                             |            |            |            |            |            |
| Rainfall pattern regulation services (at sub-continental scale)                |                             |                             |            |            |            |            |            |
| Soil and sediment retention services   |                             |                             |            |            |            |            |            |
| Solid waste remediation  |                             |                             |            |            |            | *          |            |
| Storm mitigation services  |                             |                             |            |            |            |            |            |
| Water flow regulation services   | *                           | *                           |            |            |            |            | *          |
| Water purification services  |                             |                             |            |            |            |            |            |
| Water supply   |                             |                             |            |            |            |            |            |
| Other regulating and maintenance service-Dilution by atmosphere and ecosystems |                             |                             |            |            |            |            |            |

<sup>\*</sup>Note: The values in this table are provided as categorized relative levels, and the actual quantitative figures are separately managed based on internal assessments and risk analysis data. An asterisk (\*) indicates the ecosystem dependencies with the highest value calculated for each ecosystem site. Calculation Formula: .

#### [Overall Key Factor Based on Impacts Factor and Dependencies Factor]

Each production site has been comprehensively evaluated for its impacts and dependencies on ecosystem services to identify priority locations. To manage risks and use its resources more effectively, LG Energy Solution assessed the Overall Key Factor of each site by considering both impacts and dependencies.

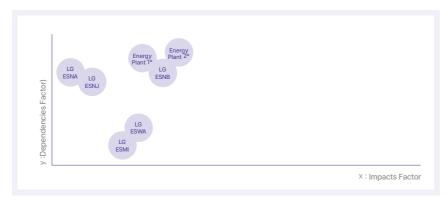
To provide a structured classification of risk levels, LG Energy Solution has established a Risk Index based on the STAR score for impacts (Impacts Factor), the WWF BRF dependency assessment, and the ENCORE materiality rating (Dependencies Factor). According to the Risk Index, All sites are classified as the Lower Risk(non-high risk) category.

#### [Overall Key Factor by site]

| Factors        | Ochang Energy<br>Plant 1 | Ochang Energy<br>Plant 2 | LGESNJ | LGESNA | LGESNB | LGESWA | LGESMI |
|----------------|--------------------------|--------------------------|--------|--------|--------|--------|--------|
| Overall Factor | Lower                    | Lower                    | Lower  | Lower  | Lower  | Lower  | Lower  |

Risk index: Lower Risk(non-high risk) High Risk Very High Risk

#### [Impacts X Dependencies]



Note1: The x-axis represents Impacts Factor, and the y-axis represents Dependencies Factor. Both factors have no units.

Note2: An asterisk(\*) indicates the Priority Locations

#### **Overall Materiality by sites**

COMPANY OVERVIEW

#### **Setting the Priority Locations**

The designation of Priority Locations is based on the Overall Key Factor assessment, which evaluates both Impacts Factor and Dependencies Factor to identify sites that require enhanced environmental management. In light of their strategic role as Mother Factories within LG Energy Solution's global production system, Ochang Energy Plant 1 and Ochang Energy Plant 2 have been chosen as priority management sites.. As the central hub for technological development, production standardization, and process optimization, Ochang Energy Plant 1 and 2 facilitates the transfer of expertise and best practices to overseas production sites, ensuring consistency in production quality and efficiency. If ecosystem services were to deteriorate, the high ecological sensitivity of the Ochang Energy Plant 1 and 2 could hinder the adoption of new technologies and the optimization of processes, which could ultimately lead to a decline in the competitiveness of the entire production network. Given its operational significance, any changes in ecosystem services could impact aspects of technology adoption and process optimization, which may, in turn, affect the broader production network. Taking into account both its reliance on ecosystem services and its strategic role, Ochang Energy Plant 1 and 2 has been designated as a Priority Location, requiring proactive monitoring and management to support stable and efficient operations.

<sup>\*</sup> Overall Key Factor =  $\sqrt{(\text{Impacts Factor})} \times (\text{Dependencies Factor})$ 

In this phase, LG Energy Solution integrated the results from the evaluation of dependencies and impacts into the company-wide risk management process. This exercise helps to identify and prioritize the nature-related risks and opportunities and measures to address them. Based on the ENCORE analysis results as outlined, LG Energy Solution assessed the nature-related risks and opportunities at its production sites, focusing on factors rated as "Low" Materiality or above. The below table aims to provide a comprehensive overview of nature-related risks and opportunities, relevant financial impacts and mitigation measures and shows how these risks and opportunities are fully integrated into the company-wide risk management framework.

#### [LG Energy Solution's Risk and Opportunity Factors]

| Risk/<br>Opportunity | Risk/<br>Opportunity Type                       | Associated Ecosystem Services<br>Dependencies/Impacts  | Risk/Opportunity Description   | Financial Impacts   | Related Measures  |
|----------------------|---|--|--|---|---|
|                      | Water Resource<br>Scarcity and Insta-<br>bility | [Dependency]<br>Flood mitigation services<br>Rainfall pattern regulation services  | Floods and droughts, along with unstable water cycles, lead to production stoppages and infrastructure damage.     Droughts or floods caused by changes in rainfall patterns lead to difficulties in production processes and securing water resources.  | Costs of production stoppage and infrastructure restoration   | Establishment of a water reuse system     (Example 1: Reuse of water in washing     processes through the recov-ery of steam     condensate) (Example 2: Reuse of boiler     feedwater) |
|                      | Soil Degradation and<br>Erosion                 |  |  | <ul> <li>Increased raw material costs due to</li> </ul>   | Establishment of a recycling/reuse circular<br>system for raw materials   |
| Physical             | Extreme Climate<br>Conditions                   | [Dependency]<br>Storm mitigation services  | Storms and strong winds cause damage to factories and logistics<br>facilities, leading to supply chain disruptions.  | Facility restoration costs and revenue loss<br>due to supply chain disruptions.   | Development of an emergency response plan<br>to address supply chain risks  |
| Risk                 | Operational Disruptions from Climate Change     | [Dependency] Local (micro and ceso) climate regulation services  | Strengthening carbon neutrality targets and expanding reduction obligations.   | Increased burden of carbon taxes and<br>rising investment costs for carbon emission<br>reduction facilities                             | Implementation of carbon neutrality goals     Adoption of energy efficiency technologies  |
|                      | Air Quality Degra-<br>dation                    | [Dependency] Other regulating and maintenance service-Dilution by atmosphere and ecosystems (Impact) Emissions of non-GHG air pollutants | missions of non-greenhouse gas air pollutants lead to deteriorating air quality in nearby areas, affecting the ecosystem and the health of local residents.     The reduced ability of the atmosphere and ecosystems to disperse pollutants accelerates their accumulation, increasing the risk of environmental regulation violations and potential community complaints. | Increased costs for pollution remediation<br>and regulatory compliance  | Process improvements to reduce pollutant emissions Monitoring of pollutant emission levels  |
|                      | Water Resource<br>Scarcity and Insta-<br>bility | [Dependency] Water flow regulation Services Water Purification Services [Impact] Volume of water use                                     | Increased production costs due to water usage restrictions and strengthened water management regulations.     Contaminated water resources lead to additional purification costs and the potential for regulatory violations.  | <ul> <li>Increased costs for wastewater treatment<br/>facilities and fines/litigation expenses for<br/>regulatory violations</li> </ul> | Enhancement of wastewater treatment processes on-site     Wastewater reduction and management activities  |
|                      | Ecosystem Degra-<br>dation and Land Use         | [Impact] Area of land use  | Land degradation and ecosystem destruction occur due to<br>mineral mining and factory expansion, leading to long-term<br>corporate image and legal risks   | Rising mining costs and increased expenses<br>for land use permits  | Ecosystem restoration projects (Example     Community biodiversity conservation     activities)   |
| Transition<br>Risk   | Waste Disposal Issue                            | [Impact] Generation and release of solid waste   | Strengthening of waste disposal regulations and increased costs<br>due to mandatory recycling.   | Waste disposal costs and fines/litigation<br>expenses for regulatory violations   | Waste emission management     Promotion of zero waste to landfill and waste reduction activities  |
|                      | Reputational Risk                               | [Impact] Emissions of toxic pollutants to water and soil   | Increased criticism of the company's environmental responsibility<br>due to pollutantemissions, risking loss of investor and customer<br>trust   | Loss of customers and investors.  | Transparent disclosure of hazardous substance emission data Introduction and operation of hazardous substance emission reduction programs   |
|                      | Disturbances                                    | [Impact] Disturbances  | Strengthened Environmental Impact Assessments Regarding<br>Habitats and Protected Species  | Increased Facility Investment Costs for<br>Regulatory Com-pliance   | Strengthening Pre-Monitoring of Ecosystem<br>Disruption Factors (Including Environmental<br>Impact Assessments)   |
| Opportunity          | -   | [Impact] Generation and release of solid waste   | Recycling of waste through the adoption of a circular economy<br>(including the recycling of rare metals)  | Reduction in raw material purchasing costs.     Mitigation of supply chain risks  | Establishment of a battery recycling system   |

COMPANY OVERVIEW

#### **Prepare to Respond and Report**

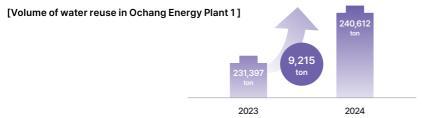
LG Energy Solution has established key objectives and indicators(Targets&Metrics) for Ochang Energy Plant 1 and Ochang Energy Plant 2, designated as priority locations. We aim to develop and operate an integrated response framework that comprehensively encompasses risk assessment, implementation activities, and performance management.

#### [Targets and Metrics]

| Key objectives                                   | s Description Targets   |   | Metrics                        |  |
|--|---|---|--------------------------------|--|
| Water resource usage efficiency                  | Establishment of water<br>reuse processes, process<br>improvement     | 10% reduction in water consumption in 2025 compared to the previous year  | Water usage/water reuse volume |  |
| Contribution to regional biodiversity protection | Promotion of regional ecosystem restoration and protection activities | Disclosure of endangered species<br>(Muljanguns)<br>protection activities near Ochang<br>Energy Plant(since 2022) | -                              |  |

Through prior evaluations, it was confirmed that the Ochang Energy Plant sites exhibit a high dependency on water resource ecosystem services, such as water flow regulation, which indicates a significant potential impact on the local communities and natural environment.

Accordingly, LG Energy Solution has set targets focused on reducing water consumption, centered around the Ochang sites, and is continuously managing these goals to minimize adverse effects on regional water resources. Notably, in 2024, we increased its volume of water reuse by approximately 9,200 tons (from 231,397 tons in 2023 to 240,612 tons), thereby reducing reliance on external water sources and alleviating the burden on local communities and ecosystems. This volume corresponds to the amount of water that roughly 30,000 adults about half of the population of Ochang-eup-would consume in one day, making a tangible contribution toward ensuring the sustainability of regional water resources. LG Energy Solution will adopt mitigation hierarchy principles in determining responses to identified nature-related issues to reduce negative impacts on nature and related risks to us, as well as new opportunities for growth and contributions to nature-positive outcomes. It will also leverage the network and partnership with local and municipal governments and NGOs to incorporate their deep knowledge of regional ecosystems, ensuring that conservation strategies are more effective and sustainable. A concrete example of such partnership is a biodiversity conservation program in the vicinity of EP1 and EP2 in collaboration with local government and environmental agencies. (see [Case Study] for more details).



#### Biodiversity Conservation Activities (Case Study) -1

LG Energy Solution's Ochang Energy Plants (Plant 1 and Plant 2) actively engage in biodiversity conservation efforts within the Chungcheongbukdo Urban Natural Park Areas to minimize the negative impacts of business activities on the local environment.

Notably, LG Energy Solution has signed Memorandums of Understanding (MOUs) with the Geum River Basin Environmental Office and Cheongju City to support conservation efforts for endangered species in the Cheongju area, specifically focusing on the giant water bug "Muljanguns" (Lethocerus devrollei), a Class II endangered insects in South Korea.



A class II endangered specie

The Muljanguns faces habitat destruction as its primary threat due to urbanization. To address this, LG Energy Solution has developed conservation plans to protect habitats and support the population growth of the species, which has significantly declined due to urban development. When selecting new habitats for the reproduced Mulianguns, LG Energy Solution considers factors such as human interference, light pollution, and water supply levels. Additionally, LG Energy Solution monitors whether the species has successfully adapted to the new habitats by observing their breeding activities. The results of these monitoring efforts are incorporated into future habitat selection processes. LG Energy Solution is committed to continuing its efforts to preserve ecosystems and coexist with local communities sustainably

#### Biodiversity Conservation Activities (Case Study) -2

Fourteen biodiversity protected species listed on the IUCN Red List inhabit the areas surrounding LG Energy Solution's Ochang Energy Plant 1 and Energy Plant 2. Among these, nine species have been identified as dependent on freshwater ecosystems.

| Biodiversity Species     | Red List<br>Category | IUCN Red List               | Habitat                 |
|--------------------------|----------------------|-----------------------------|-------------------------|
| iweon Treefrog           | EN                   | B2ab(i,ii,iii,v)            | Terrestrial/Freshwater  |
| eun-yeon-yeong-cho       | EN                   | A4cd                        | Terrestrial             |
| caly-sided Merganser     | EN                   | C2a(ii)                     | Terrestrial/Freshwater  |
| ouriko                   | EN                   | A2ad                        | Terrestrial             |
| ellow-bellied Treefrog   | EN                   | B1ab(i,ii,iii,iv,v); C2a(i) | Terrestrial/Freshwater  |
| ater Deer                | VU                   | A2cd                        | Terrestrial/Freshwater) |
| berian Musk Deer         | VU                   | A2d+3d+4d                   | Terrestrial             |
| old-spotted Pond Frog    | VU                   | A4c                         | Terrestrial/Freshwater  |
| mur Stickleback          | VU                   | A2c                         | Terrestrial/Freshwater  |
| sser White-fronted Goose | VU                   | A2bcd+3bcd+4bcd             | Terrestrial/Freshwater  |
| stern Imperial Eagle     | VU                   | C2a(ii)                     | Terrestrial/Freshwater  |
| stic Bunting             | VU                   | A2abcd+3bcd+4abcd           | Terrestrial/Freshwater  |
| termusseron              | VU                   | A2c+3c+4c                   | Terrestrial             |
| mchatka Trillium         | VU                   | A4cd                        | Terrestrial             |

<sup>\*</sup>Marine species with low physical proximity and ecological connectivity were excluded from the scope, as they have limited direct relevance to the business site.

To protect the habitats of these endangered species, LG Energy Solution has entered into a "One Company, One Stream Cleanup Agreement" with Cheongju City. An employee volunteer group has been organized to conduct regular activities such as litter collection and removal of invasive plants around the Ochang Gak-ri Stream area. In recognition of these biodiversity conservation efforts, LG Energy Solution was selected as an outstanding company in the "One Company, One Stream Love Movement" in 2024 and was awarded a commendation from the Mayor of Cheongju.

# **Biodiversity Risk Management**

LG Energy Solution strives to assess and identify environmental impacts throughout its business activities, supply and value chains, including biodiversity and deforestation-related impacts. It adheres to the mitigation hierarchy, by avoiding key biodiversity areas (KBA), minimizing any negative impact, and, when environmental impact is unavoidable, pursuing restoration and offsetting projects. The same applies when establishing and developing new operating sites. Key considerations embedded in the process are as follows:

#### 1) Identification Risks and Opportunities

LG Energy Solution collaborates with experts to identify factors that influence biodiversity and deforestation, and implements site-specific conservation activities aimed at preserving biodiversity and preventing deforestation in the vicinity of our operating sites and local communities.

#### 2) Mitigation Hierarchy

LG Energy Solution strives to avoid protected areas, minimize, restore/compensate and offset any negative impact, considering IUCN protected area management categories (Category I ~ IV) and relevant domestic and international biodiversity-related laws and regulations...

#### 3) Collaboration and Partnership

LG Energy Solution collaborates with local environmental agencies, municipalities, habitat conservation organizations, and local communities to operate programs aimed at conserving biodiversity and forests.

#### 4) Stakeholder Engagement

LG Energy Solution strives to raise awareness of biodiversity and forest conservation among employees and stakeholders. LG Energy Solution actively establishes social responsibility policies and prioritizes communication and collaboration with stakeholders, including suppliers, companies within the value chain, civic organizations, governments, and academia.

# **Biodiversity Metrics & Targets**

With a view to effectively managing nature-related dependencies and minimizing environmental impacts, LG Energy Solution has set three key objectives:

#### 1) Contributing to a low-carbon economy

According to ENCORE-based dependency assessment, the battery and accumulator manufacturing industry is dependent on climate-related services, particularly flood mitigation, rainfall pattern regulation, and storm mitigation services. LG Energy Solution aims to protect and enhance these services by implementing strategies that support climate resilience and carbon neutrality.

#### 2) Reducing environmental impact

The ENCORE-based assessment also revealed that the industry is relatively more dependent on water cycle-related services and has impacts on the environment in terms of disturbances. and emissions of toxic pollutants to water and soil. To address these dependencies and impacts, we seek to continuously reduce its environmental impact by implementing initiatives focused on water resource protection, pollutant emission reduction.

#### 3) Monitoring the environmental impact of the supply chain

Managing nature-related dependencies and impacts requires a broader approach that extends beyond own operations to the entire supply chains. LG Energy Solution aims to systematically monitor and manage greenhouse gas emissions, water resource utilization, and pollutant discharges within its supply chain, ensuring the development of a sustainable and environmentally responsible supply chain.

The below outlines the strategic alignment between key objectives and relevant dependencies and impacts to be addressed.

#### [Strategic Alignment Between Nature-Related Dependencies, Impacts, and Key Objectives]

| Key Objectives  | Relevant Dependencies/Impacts  | Ecosystem Services   |  |
|---|--|--|--|
| Contributing to a low-carbon economy                              | Climate-related services   | Flood mitigation<br>Rainfall pattern regulation<br>Storm mitigation  |  |
| Reducing<br>environmental<br>impact                               | Water cycle-related services   | Water flow regulation Water purification<br>Water supply   |  |
|   | Disturbances   | -  |  |
|   | Emissions of toxic pollutants to water and soil  | <u>-</u>   |  |
| Monitoring the<br>environmental<br>impact of<br>our supply chains | Key dependencies and material impacts - Climate-related services - Water cycle-related services - Disturbances - Emissions of toxic pollutants to water and soil | All relevant ecosystem ser-vices - Flood mitigation - Rainfall pattern regulation - Storm mitigation - Water flow regulation - Water purification - Water supply |  |

Further, LG Energy Solution has established its approach to nature-related considerations based on its key objectives. This approach outlines specific targets and performance metrics aimed at achieving the key objectives of climate change response, environmental impact reduction, and monitoring and improving environmental risks across the supply chain. Through this framework, LG Energy Solution seeks to effectively manage nature-related dependencies, minimize environmental impacts across its operations and supply chain, to strengthen its commitment to sustainability.

#### **Ambition**

LG Energy Solution is committed to managing nature-related dependencies and minimizing nature-related impacts to enhance sustainability by integrating nature-related considerations into its operations and supply chain management.

|   | Key Objectives  | Objectives Targets  |  | Metrics & Pe   | Metrics & Perfor-mance   |  |
|---|---|---|--|--|--|--|
| Contributing to<br>a low-carbon<br>economy                        | Identifying, measuring, monitor-ing, managing and reporting sustainability and climate risks (including nature-related risks). Continue integrating sustainability and climate risk regulatory requirements into risk management and frameworks.  Embedding climate considerations into our financing, investment and capital markets offering.   | Achieving carbon neutrality across the entire value chain by 2050 and becoming carbon negative.      Scope 1 & 2     RE100 by 2030 (53% abatement from baseline 2021)     Scopes 1 & 2 net-zero by 2040(100% abatement from baseline)   | Scope 3<br>Scope 3 net-zero by 2050<br>(100% abatement from baseline)  | The first battery manufacturer to join RE The highest RE transition rate amongst campaign (Source: RE100 2023 Annual ISO 50001 on energy management syst S. Korea and China Increased suite of products covered in LEnvironmental Product Declaration (EPE                 | Korean firms affiliated with RE100 Disclosure Report)  em acquired at manufacturing facilities in  life Cycle Assessment (LCA) and   |  |
| Reducing<br>environmental<br>impact                               | Minimizing our own operational footprint and utilizing resources in an efficient and sustainable way.     Identifying and managing environmental impacts, risks, and opportunities.     Measuring and managing our travel footprint, including reduction of air-travel-related emissions.     Implementing policy-based programs that effectively reduce pollutants, promote sustainable utilization and management of natural resources, and minimize toxic emissions and waste.               | Zero waste to landfill certification at all production sites* by 2025     Production facilities wholly owned by LG Energy Solution and in operation   | Based on ISO 14001, specific environmental<br>targets(e.g. waste recycling rate increase) has<br>established   | Zero waste to landfill certification     Achieved UL Platinum Grade at our     Nanjing production facilities (CN)     Achieved UL Gold Grade at our     Ochang Energy Plant (KR)     Achieved Landfill-Free Certification     at our Michigan production facility     (US) | Policy-driven activities     Toxic emissions and waste reduction programs     Endangered Species Protection project in progress near Ochang Energy Plant, S. Korea   |  |
| Monitoring the<br>environmental<br>impact of our<br>supply chains | Promoting due diligence and carbon reduction activities, prioritizing regulatory compliance and stakeholder  Monitoring the environmental impact of our supply chains, engaging suppliers on emissions reductions, and ensuring responsible management.  Engaging our suppliers on emissions reductions and managing our supply chain responsibly  Engaging with global initiatives to establish management standards and work collectively to address environmental and nature-related issues. | Addressing Climate Change  Carbon Neutral Roadmap  2030: Achieve RE100 for all Tier-1 suppliers  2040: Extend RE100 for core value chains  2050: Realize carbon neutrality across the entire value chain  Management of Carbon Reduction Performance and Sourcing of Low-Carbon Materials | Responsible Supply Chain Management  Operation of environmental management system aligned with global regulatory requirements  Securing traceability of materials  Due diligence and certification standards expanded to include environmental impacts | Supply Chain Due Diligence Based on a Risk-Based Approach     Annual ESG Self-Assessment Questionnaire (SAQ) and Third-Party Due Diligence for Tier-1     Third-Party Due Diligence of Core Raw Materials (20+Suppliers for 2024)  | Conducting Life Cycle Assessments (LCAs) to quantitatively analyze and evaluate the environmental impact that occurs in the life cycle - from raw material collection to processing, - transportation, use and disposal and identified key carbon-intensive supply chains. |  |

# **Going Forward**

LG Energy Solution is committed to advancing nature-related disclosures by aligning with the Task Force on Nature-related Financial Disclosures (TNFD) framework. Biodiversity-related targets and annual disclosures will allow for more transparency and accountability in natural capital management. Additionally, biodiversity management strategies will be aligned with the Kunming-Montreal Global Biodiversity Framework (GBF), with reinforced monitoring systems to track progress effectively.

Through the continuous refinement of assessment methodologies, expansion of evaluation scope, and strengthening of biodiversity management systems, LG Energy Solution will ensure to proactively manage nature-related risks and contribute to global biodiversity conservation efforts.

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| Sustainable Value Chain Focused Issue | /9  |
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**Information Security** 

# Sustainable Value Chain

The scope of ESG management is expanding globally beyond individual companies to encompass their supply chains. In particular, the EU Corporate Sustainability Due Diligence Directive (CSDDD) and the EU Battery Regulation—especially the Battery Due Diligence requirements concerning raw material supply chains—are strengthening due diligence obligations on supply chains. As a result, the importance of consistent and rigorous supply chain management systems is growing.

Building Sustainable Battery Ecosystem Visit Website

# **Supply Chain ESG Risk Management Framework**

### **Supply Chain ESG Governance**

LG Energy Solution systematically manages ESG risks across its entire supply chain by collaborating with relevant departments such as the ESG Strategy Team, Sustainable Cooperation Team, and Fair Trade Team, centered on the Supply Chain ESG Management Team under the CEO-affiliated Procurement Center.

The Supply Chain ESG Management Team is responsible for establishing and implementing supply chain due diligence policies and carbon reduction strategies, strengthening communication with partner companies, and overseeing shared growth activities.

### Supply Chain ESG risk management policy

To minimize ESG risks within its supply chain, LG Energy Solution has established and operates the Responsible Sourcing Policy which incorporates the core principles of major global norms. This policy is grounded in international standards and frameworks such as the OECD (Organisation for Economic Co-operation and Development), the UN Guiding Principles on Business and Human Rights (UNGP), and the International Labour Organization (ILO). The policy outlines fundamental principles essential for sustainable supply chain operations, including respect for human rights and labor, ethical business conduct, occupational health and safety, environmental sustainability, and the responsible sourcing of raw materials from conflictaffected and high-risk areas. In addition, LG Energy Solution operates a grievance mechanism that allows concerns or inquiries related to ESG risks in the supply chain to be reported freely and anonymously.

Responsible Sourcing Policy Visit Website

### Code of Conduct for Suppliers

Since 2016, LG Energy Solution has established and operated a Code of Conduct for Suppliers that outlines principles and standards for responsible supply chain management. It encompasses all principles embedded in responsible supply chain policies, including human rights and labor, ethical business practices, workplace health and safety, environmental sustainability, responsible mineral sourcing, grievance systems, and more. All suppliers transacting with LG Energy Solution must annually commit to adhering to the Code of Conduct as a prerequisite for business transactions. They must diligently adhere to the provisions, and their compliance history is managed through our procurement portal.

Code of Conduct for suppliers Visit Website

[Supplier Code of Conduct]



Prohibition of child and forced labor Non-discrimination based on DEI\* principles Recognition of freedom of association. Protection of minority community rights, etc.



**Business Ethics** 

Ethics management and Anticorruption Compliance management, etc



Compliance with legallymandated precautionary measures, Regular education and emergency training



### Environmental Sustainability

Minimizing adverse impacts of environment, Establishing data on energy/ greenhouse gas (GHG) emissions, etc.



#### Responsible Mineral Sourcing

Compliance with the OECD Due Diligence Guidance and the UN Guiding Princi-ples on Business and Human Rights

<sup>\*</sup> DEI(Diversity, Equity, and Inclusion)

In response to the growing number of global supply chain ESG regulations—such as the EU Corporate Sustainability Due Diligence Directive (CSDDD), the EU Forced Labour Regulation, and the U.S. Uyghur Forced Labor Prevention Act (UFLPA)—LG Energy Solution is making continuous efforts to mitigate risks across its entire battery supply chain. For more detailed information. please refer to the 2024 LG Energy Solution Supply Chain Sustainability Report.

Supply Chain Sustainability Report Visit Website

### **Managing Battery Supply Chain Risks**

To build a sustainable battery ecosystem, it is essential to extend ESG oversight beyond Tier 1 suppliers with direct business relationships to include N-tier suppliers. LG Energy Solution ensures continuity of management (chain of custody) by evaluating the ESG management capabilities of its suppliers through the implementation of the Supplier Code of Conduct and regular ESG assessments. Iln addition, from the perspective of global regulations and customer response, we are gradually expanding the scope of due diligence for supply chain risk verification, focusing on key raw material supply chains that are of high importance.

Starting in 2024, LG Energy Solution has been developing an integrated Supply Chain Traceability System system to collect supply chain mapping data by material, based on a subtier supplier database. Through this system, Tier 1 suppliers are required to provide ESG due diligence results and third-party certification outcomes from their own suppliers. The results of these assessments and certifications are tracked via a dedicated dashboard, and suppliers are required to submit Corrective action plans and supporting evidence for any identified nonconformities. This enables LG Energy Solution to proactively manage supply chain risks.

### Monitoring and Managing Conflict Minerals (3TG) Processes

LG Energy Solution operates an internal process to continuously monitor and mitigate risks related to conflict minerals that may be sourced from conflict-affected and high-risk areas, in addition to managing supply chain risks for core raw materials. This formalized procedure includes evaluating necessity of mineral use by assessing feasibility of material substitution and identifying risk mitigation measures. As part of this process, LG Energy Solution requires all Tier-1 suppliers to submit the Conflict Minerals Reporting Template (CMRT) on an annual basis. Through this requirement, the company ensures transparency regarding the origin of minerals contained in the products supplied and requests disclosure of related smelter and country information. The submitted CMRT data is collected and stored within LG Energy Solution's hazardous substance management IT system, which also verifies the consistency and credibility of supplier responses. As of March 2025, the number of registered CMRT cases is 7,494, and the number of CRT is 6,651 in the system.

#### What are Conflict Minerals?

Conflict minerals refer to the four major minerals (tin, tantalum, tungsten, and gold) mined in the Democratic Republic of Congo (DRC) and its surrounding countries, including Sudan. Rwanda, Burundi, Uganda, Congo, Zambia, Angola, Tanzania, and Central African Republic. These regions are often controlled by armed groups, government forces, and militias that exploit mineral mining and trading to fund their illicit activities and perpetuate conflicts. This situation leads to severe human rights abuses, including forced child labor and exploitation of local communities during mineral extraction, as well as environmental degradation and other social issues. In response to these challenges, the Dodd-Frank Wall Street Reform and Consumer Protection Act, passed by the US Congress in July 2010, included provisions on conflict minerals regulation. This regulation affects not only US-listed companies, but also non-US. Korea's companies that are part of the US-listed companies' supply chains which ultimately serve these markets. In short, the conflict mineral reporting ensures compliance and transparency regarding the company's conflict mineral usage in the upstream supply chain.

### Targeting 100% RMAP\* Certification for Cobalt Smelters

(Responsible Minerals Assurance Process)

LG Energy Solution is strengthening its responsible sourcing system across the supply chains of four key battery minerals—nickel, cobalt, lithium, and natural graphite—which are critical to battery manufacturing. To ensure more transparent and verifiable supply chain management, we identify the sourcing paths and smelter information of these minerals based on Conflict Minerals Reporting Templates (CMRT) collected from Tier-1 suppliers. We then establish supply chain management targets accordingly and operate related programs. LG Energy Solution aims to ensure that all cobalt smelters identified in its supply chain obtain certification under the RMI's Responsible Minerals Assurance Process (RMAP) by 2026. Furthermore, we plan to gradually expand the scope of smelters and minerals subject to certification. RMAP is an internationally recognized assurance framework that verifies whether smelters operate a responsible mineral supply chain management system. It is considered a global standard for securing the reliability and sustainability of mineral supply chains. LG Energy Solution will continue collaborating with a wide range of stakeholders and utilizing recognized standards to advance sustainable raw material sourcing and build a responsible supply chain.

# **Supplier Training Program**

To enhance suppliers' understanding of supply chain ESG activities and strengthen their capabilities, LG Energy Solution operates supplier training programs covering key content such as major global regulations, the latest ESG trends and implications in the battery industry, and the company's supply chain ESG management strategies and core initiatives. The main components of the supplier training program are also incorporated into internal training sessions provided to procurement personnel, ensuring alignment across the value chain.

#### [Supplier Training]

| Schedule | Contents   |
|----------|--|
| 2023     | Introduction to global ESG trends and LG Energy Solution' ESG policies.     Global regulatory trends and implications related to responsible supply chains and carbon reduction     Current status of key supply chain ESG tasks and requests for implementation           |
| 2024     | Response to global ESG regulations     Trends and implications of supply chain due diligence, EU Battery Regulation, supply chain traceability management systems     Shared Growth     Compliance with the Subcontracting Act, self-development, technological innovation |

## **Enhancing Communication and Collaboration with Stakeholders**

To comply with global regulations that mandate supply chain due diligence and to proactively address human rights and environmental risks, LG Energy Solution is strengthening communication and collaboration with its stakeholders. We engage in close cooperation with each stakeholder group to implement measures that prevent and mitigate potential adverse impacts. As a company that connects upstream and downstream actors within the battery ecosystem, LG Energy Solution incorporates the expectations and requirements of various stakeholders into its decision-making for supply chain ESG management, making every effort to foster a sustainable supply chain ecosystem.

# Monitoring ESG Risks in Our Supply Chain

LG Energy Solution annually conducts ESG evaluation to assess our suppliers' compliance with the Code of Conduct. We also monitor improvement tasks and results linking the onsite assessment. The ESG Risk Assessment for suppliers is conducted in two main types: 1 New Supplier assessment and 2 Regular assessment. We evaluate new supplier candidates against ten ESG risk indicators as part of the selection process. The New Supplier Evaluation is a diagnostic evaluation consisting of 10 ESG risk indicators for new supplier candidates. For the suppliers that are already in our supply chain, supplier ESG evaluation proceed in conjunction with regular evaluation. ESG evaluation factors account for 15% of the total supplier regular evaluation, which is strictly managed in conjunction with the supplier purchasing evaluation.

# **ESG Evaluation for suppliers**

LG Energy Solution has developed its own Self-Assessment Questionnaire (SAQ) consisting of 64 questions across key ESG domains—including working conditions and human rights, ethical business practices, supplier CSR, energy and greenhouse gas management, and safety, health, and environment. The SAQ is based on internationally recognized standards such as the OECD Due Diligence Guidance, the Responsible Business Alliance (RBA), the EU Corporate Sustainability Due Diligence Directive (CSDDD), and the EU Battery Regulation. We regularly conduct written self-assessments using the SAQ for its suppliers.

#### [Regular Evaluation]

| Steps                    |   | Contents   |
|--------------------------|---|--|
| Step<br>1                | Desk-based assessment                   | Suppliers conduct ESG Self-assessment (SAQ) through LG Energy Solution's procurement system  |
| Step Risk Level Analysis |   | After conducting self-assessments, the results are analyzed to categorize risk levels into high-risk, medium-risk, and low-risk groups |
| Step<br>3                | Scoping of<br>On-Site Audit<br>Subjects | Based on our internal criteria, suppliers identified as high-risk or with potential ESG risks are selected for the on-site audit       |
| Step<br>4                | On-Site<br>Audit                        | Visits with third-party assurance providers are made to identify major non-<br>compliance items and areas for improvement              |
| Step<br>5                | Improvement<br>Requests                 | Remediation plans are constructed and manage/support are provided to implement improvement-related findings                            |

In 2025, ESG evaluations were conducted for 115 Tier 1 suppliers subject to regular assessment. The average score from the self-assessment questionnaire (SAQ) was 85.3 points, which is 8.9 points lower than the 2024 average of 94.2 points, and the number of high-risk suppliers increased to 37. This decline is attributed to the following changes in this year's assessment method and content: 1) Revision of the SAQ to reflect key requirements of the EU CSDDD, RBA 8.0, and the EU Battery Regulation (EUBR); 2) Introduction of mandatory supporting document submission for key survey items; 3) Standardization of scoring weights and bonus point system for major items.

In particular, from 2025, to enhance the reliability of written assessments, LG Energy Solution has mandated the submission of supporting documentation for 24 key management items\* selected from the total 64 questions—where legal violations or potential risks may arise in case of non-compliance. If documentation is not submitted, no points are awarded. Accordingly, the evaluation criteria have shifted from being response-oriented to evidence-based, focusing on actual implementation through quantitative verification.

\* Key items include: child labor, legal violations concerning protected workers (minors, students, pregnant women, workers with disabilities, etc.), working hours, conflict mineral management, permit and license management, safety-health-environment (SHE) management, and hazardous chemical management.

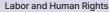
Based on the results of the written evaluation, LG Energy Solution selects and manages high-risk suppliers according to internal criteria. Suppliers with weak performance in HS&E management are also provided with separate training. In addition, on-site assessments are being carried out for over 20 global suppliers through third-party verification bodies. These on-site assessments go beyond document review to directly check on-site management practices. For human rights matters, 1-on-1 confidential interviews are conducted between auditors and employees. If non-compliance is identified during inspections, suppliers voluntarily analyze root causes, establish improvement plans, and implement corrective action plan (CAP) in agreement with the verification body and LG Energy Solution. The status of improvement implementation is monitored and updated monthly, and additional support is provided to suppliers as needed.

Tier-1 Suppliers' ESG Assessment Results Go to page

#### [Supplier ESG SAQ Items]

COMPANY OVERVIEW







Health, Safety, and Environment



Supplier CSR

- · Prohibition of Child Labor
- · Protection of Vulnerable Workers
- · Prohibition of Forced Labor
- · Human Treatment
- · Grievance mechanism
- Non-discrimination
- · Working hour compliance
- · Wages and Benefits
- · Freedom of Association
- · Respect for the rights of Indigenous peoples

- · Licensing
- Appointing of Manager and **Operating Commitee**
- · Education & Training
- · Risk Management
- · Accident Management
- · On-site Management
- · Health care Management
- · Hazardous chemical Management

- · Supplier CSR Management
- · Conflict Minerals Management



Energy / GHG

- · Energy Management
- · GHG Management



**Ethical Management** 

- Anti-Corruption
- · Whistleblower Protection
- · Information Security



**ESG Management** 

· ESG Management System

## **Due Diligence on Core Raw Materials**

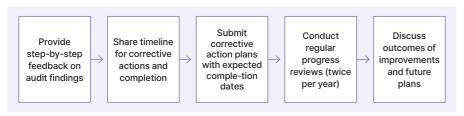
In response to the EU Battery Regulation, LG Energy Solution conducts supply chain due diligence using independent third-party agencies to identify and manage human rights and environmental risks within the supply chains of key battery raw materials—namely cobalt, lithium, nickel, manganese, and graphite. From 2023 to 2024, third-party audits were carried out at more than 20 key production sites of Tier-1 & 2 suppliers of cathode and anode materials. These suppliers represent 94% of all Tier-1 cathode suppliers and 100% of Tier-1 anode suppliers. The audits found no immediate human rights or environmental risks that required urgent corrective actions at the supplier sites or within their supply chains. However, areas for improvement were identified in terms of: responsible supply chain management policies, risk identification and management systems, execution of due diligence, and external disclosure of due diligence activities. Suppliers were requested to develop corrective action plans and submit objective evidence of implementation, which LG Energy Solution continues to monitor and verify. Going forward, we plan to expand its due diligence programs—based on international standards—to include further upstreams of the supply chain, such as smelters and mines, through third-party certification and audit mechanisms.

### Follow-up Measures and Corrective Action Monitoring

Following supplier audits, LG Energy Solution holds individual meetings with each supplier to discuss and agree upon corrective action plans. During these meetings, the supplier's responsible sourcing personnel are directly involved in developing the improvement plans. Progress on the implementation of these plans is reviewed and discussed on a regular basis.

#### **Kev Follow-up Actions**

Audit Status and Improvement Monitoring through 1:1 Regular Meetings with Suppliers



Mandating Tier-1 suppliers to perform due diligence on Tier-2 suppliers and introducing gradual transition to certified smelters and mines

- Advised the use of RMI-certified smelters for cobalt with plans for gradual increase in their usage percentage
- Recommended utilizing mines participating in IRMA

#### Grievance Mechanism

LG Energy Solution operates grievance channels that allow various stakeholders, including all suppliers within the supply chain, to report concerns related to human rights, health and safety, the environment, and corporate ethics. By explicitly including supplier grievance systems in its Responsible Sourcing Policy, LG Energy Solution has established procedures to promptly and fairly resolve issues that may arise within the supply chain, such as potential or actual negative impacts related to battery mineral supply chains. In addition, we check whether suppliers have grievance mechanism in place during due diligence, and if they do not, we recommend that they establish such mechanism and confirm that they are actually implemented. The confidentiality of the informant's identity and report content is strictly guaranteed, and no form of retaliation is tolerated against individuals who report misconduct or participate in subsequent investigations.

#### **Grievance Channel**

Supplier Grievance E-mail grievance@lgensol.com

LG ethics hotline Visit Website Website Visit Website

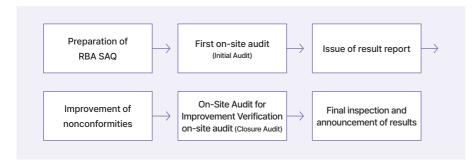
Procurement system Visit Website

# **On-Site ESG Risk Management**

### Regular RBA VAP Assessments Conducted at Production Sites

To manage ESG risks at each production site, LG Energy Solution conducts regular inspections using the Validated Assessment Program (VAP) developed by the Responsible Business Alliance (RBA). The RBA VAP evaluates risk status, management practices, and mitigation measures across five key areas: Environment, Human Rights and Labor, Occupational Health and Safety, Ethics, and Supply Chain Management. The assessment scope includes not only directly employed workers, but also indirectly hired workers such as subcontractors(non-employee workers) and partner company employees. Eligible sites are production facilities with more than one year of operational history. The evaluation consists of both a self-assessment (SAQ, Self-Assessment Questionnaire) and an on-site audit conducted by independent third-party auditors. While the on-site RBA VAP audit is conducted biennially, the RBA SAQ is completed annually to ensure ongoing identification and mitigation of ESG risks at the site level. In addition to the ESG department, the evaluation process includes participation from relevant teams in human resources, environment, occupational health and safety, procurement, and ethics, contributing to more robust and integrated site-level risk management. As of now, a total of six production sites are subject to this assessment process. LG Energy Solution plans to gradually expand the assessment scope in line with mass production schedules at new sites and its joint venture management strategy.

#### [RBA VAP Process]



### Global ESG Workshops with Global Operations

In addition to conducting RBA VAP assessments to manage ESG risks at each production site, LG Energy Solution hosts an annual Global ESG Workshop to strengthen companywide sustainability capabilities and promote active discussions on ESG risk management and improvement initiatives between headquarters and global sites. Held annually, the workshop serves as a platform for sharing each site's ESG management status and key challenges across sites, identifying and disseminating best practices, and enhancing the on-site implementation capacity of ESG initiatives. It also fosters working-level networking among ESG personnel, thereby enhancing their professional competencies, encouraging the development of sitespecific ESG action items in line with global trends, and ensuring consistency in external ESGrelated communications. Furthermore, the workshop provides an opportunity to discuss practical challenges and improvement needs faced by each site, thereby contributing to the continued advancement of LG Energy Solution's global ESG risk management framework across its worldwide operations.

# Annual ESG Risk Assessment Results and Follow-up Actions at **On-sites**

In 2023, LG Energy Solution conducted ESG risk assessments at five production sites located in Ochang Energy Plant (Korea), LGESNJ, LGESNA, LGESNB (China), and LGESWA (Poland). In 2024, the assessment was extended to include the U.S.-based production subsidiary, LGESMI, based on the initial RBA VAP audit. For 2025, ESG risk assessments are scheduled for a total of five sites located in Korea, China, and the United States. Notably, the 2025 evaluation of LGESMI will also cover the implementation status of corrective action plan taken in response to non-conformities identified during the most recent on-site audit. Based on the 2023-2024 ESG risk assessments, all sites were found to be performing well in the areas of environment, health and safety, ethics, and supply chain management. However, in the labor category, some gaps were identified with respect to compliance on working time regulations particularly regarding consecutive working days and overtime hours. To address these issues, LG Energy Solution is implementing short-term measures such as policy and system reforms to institutionalize employee protection measures. In the long term, we are working to foster a healthy and sustainable workplace culture by building mutual understanding and consensus with employees regarding labor practices. No critical human rights violations—such as forced labor or child labor—were identified at any of the sites.

# **Shared Growth**

### **Fair Trade**

### Installing and Implementing a Fair Trade

LG Energy Solution is building a fair trade system by incorporating compliance activities such as education, inspections, and consultations. In doing so, we are dedicating efforts to minimize fair trade risks in all business areas and establish a robust fair trade compliance culture. Reporting the status of fair trade risk management to the ESG Committee aims to secure the trust of stakeholders. We strive to foster a culture of fair trade compliance among employees through annual fair trade compliance pledges. Additionally, to establish fair and transparent business practices with small and medium-sized suppliers in subcontracting transactions, we publicly disclose the Fair Trade Commission's four practices on our procurement portal.



Fair Trade Compliance Pledge

| 대중소기업간 상생협력을 위한 바람직한 계약체결 실천사항  |
|---|
| 최조리국인<br>는 설찬사람은 주시되시 LO에너지요중선(이라 "당시가의 중소기업인 계약 제합에 없어 중소기<br>업비 이익을 합된다가 선생들 수 있게 되고 당시가 중소기업지의 기계에서 무용한 고설약을 난<br>중되어 계약 자원하는 현객을 계대하는 것을 당시되어 되었습니다. 제작 경우에 증수하여 및 내용을 부시점<br>도써는 중시점이고 관한 가게만으로 무취하면 의적이 있다. |
| 제2조(제약체결 선택기준)<br>당시의 구매는 경향구매에 의해 대상업체를 선정하는 것을 원칙으로 한다. 단 본조 3회의 요건<br>에 해당하는 경우 단역 구매 방식으로 대상 업체를 선정하는 것이 가능하다.  |
| 1. 건평구에<br>- 지점간병제약 : 당시에 등록되어 있는 업체로서 신용과 기술, 설비, 거래실적 등에 되어서<br>수병능병에 합당하다고 인칭되는 혹칭 다수를 지경하여 소침의 참자에 되기 개약자를 신칭하고 계약을 배결하는 법식을 일반다.   |
| <ul> <li>달시에 등록되어 있는 점류보지 선물과 기용, 설비, 기계설적 등에 있어서 수행능력이 참당<br/>하다고 전설되지 않으면 제한권병제학을 실시한다.</li> <li>제한권병제학: 입찰시 자리를 제한하여 권병에 부인 후 낙찰자를 결정하여 계약을 제결하<br/>는 방식을 말한다.</li> </ul>                                      |
| <ul> <li>자원경용계약의 제산경용계약에 해당되지 않을 때 달만경용계약을 실시하다.</li> <li>의산경문계약: 제한 또는 지점 없이 집절을 통해 자유로운 경쟁을 무신 후 낙영지를 결정<br/>하여 계약을 제결하는 방식을 일한다.</li> <li>안목구에(수에게약)</li> </ul>  |
| <ul> <li>- 경험구에 방법에 의하지 않고 특천인을 개약한대로 선정하여 개약을 배결하는 것으로 특수한<br/>시청대 있는 경약에 한하여 제용한다.</li> <li>3. 다음 각 초에 해당하는 강우에는 단독구에(우리개역)가 가능하다.</li> <li>- 구에 대상 등본의 설정 또는 목적의 의하여 독선한 운정, 구운, 공사, 기술 등이 요구되어</li> </ul>     |
| 경영인물을 할 수 있는 경우  - 동발시고, 비실적에, 건강적인 등 간관실확으로 경쟁에 부분 여유가 있을 경우 - 입함에 피해 신청한 합대가 동일한 계약내용을 계속 집행하는 것이 경제적인 것으로 인칭되<br>거나 법확에 먼저 안간되었다면 해결되어 있는 경우   |
| <ul> <li>당시 되산 기자재의 직산화를 위하여 대체 개발품을 제조하게 하여 미용철값을 추구하고자하는 경우</li> <li>동절보증을 위하여 독점 전도회사로부터 물품을 구매하는 것이 당시에 전치하게 무리한 경</li> </ul>   |
| <ul> <li>구<br/>금급시장에 수급성함, 물거에 변동, 관련합규 또는 정부점에상 수에게약이 당시에 유리하다<br/>고 완전되는 경우</li> </ul>  |

Practical Guidelines for Contract Formation to Foster Cooperation between Large, Medium, and Small Enterprises

### **Initiating Fair Trade Processes**

To enhance external trust and transparency and to reinforce ESG management, LG Energy Solution continuously monitors amendments to relevant laws and regulations—including the Fair Trade Act and the Subcontracting Act—and incorporates these changes in its internal processes and policies. To ensure that employees are fully aware of applicable legal requirements and internal guidelines, we conduct both regular and ad-hoc training, audits, and improvement activities throughout the year. All qualified suppliers are given equal opportunity to participate in transactions. Supplier registration and evaluation are conducted based on objective and reasonable criteria under a defined process that is applied consistently. To prevent violations of fair trade regulations during business operations, legal counsel is provided to employees as needed. In March 2023, we established the Dispute Mediation Organization to resolve potential disputes with suppliers in a transparent manner based on mutual trust and cooperation. As of March 2025, no disputes have been filed with the committee. To further encourage fair trade compliance, we conduct annual and ad-hoc inspections of subcontracting practices and use the results to continuously improve internal processes. In addition, we has been actively updating its supplier technology protection system and purchasing portal to ensure compliance with revised regulations. In 2024, we expanded our Competitor Contact Reporting process—designed to prevent collusion risks—to overseas subsidiaries such as LGESMI (USA) and LGESWA (Poland). Under this process, employees who anticipate contact with competitors are required to report such instances in advance.

#### [Fair Trade Process]

| Risk Prevention   | Inspections  | Improvement  |
|---|--|--|
| Company-wide education     Prevention activities     Legal advisory | Regular / occasional inspections     Online / offline monitoring | Requests for improvement     Provision of improvement     measures |

### **Fair Trade Capacity Building Program**

In 2023, LG Energy Solution developed and distributed "a Collusion Prevention Guidebook" at its subsidiaries in Poland, Germany, and Michigan (USA) to ensure compliance with each country's competition laws. In 2024, the guidebook was also distributed to LGESNJ (China) and Ultium Cells (USA), accompanied by training sessions based on the respective local fair trade regulations. Additionally, we revised and distributed an updated Internal Subcontracting Manual that reflects the amendments to the Subcontracting Act and provides practical guidance for day-to-day operations. In 2024, LG Energy Solution published fair trade-related content in its compliance newsletter on three occasions to enhance employees awareness and capabilities. The featured topics include: enhanced incentives for companies with excellent CP (Compliance Program) ratings from the Korea Fair Trade Commission, a case study on collusion in emissions reduction technologies, and employee compliance obligations when using suppliers' technical data.

#### [2024 Fair Trade Education and Training]

| Date        | Name  | Number<br>of Par-<br>ticipants | Training<br>Time per<br>participants | Total Training Time                       |
|-------------|---|--------------------------------|--------------------------------------|---|
| Mar         | SME Technology Retention Law Violation<br>Prevention Training                 | 1,219<br>people                | 1 hour                               | Total 1,219 hours                         |
| Apr         | Overseas or Global Corporation (LGESNJ) Target Training                       | 192<br>people                  | 1 hour                               | Total 192 hours                           |
| Oct         | Information exchange integration and communication guideline for JV personnel | 10,111<br>people               | 8 minutes                            | Approximately<br>1,348 hours<br>8 minutes |
| Oct         | Integrated preventive training for JV stakeholders                            | 63<br>people                   | 1 hour                               | Total 63 hours                            |
| In progress | LBA Academy<br>(Understanding of Fair Trade Act)                              | 10<br>people                   | 2 hours                              | Total 20 hours                            |







Chinese legal entity training

Collusion Prevention Guidebook (Chinese version)

2024 In-house Subcontracting Manual

# **Supporting Shared Growth with Suppliers**

LG Energy Solution has established and implemented the following strategies to foster a culture of fair trade and promote mutual growth with its suppliers. In addition, preferential access to mutual growth programs is granted to high-performing suppliers selected based on criteria such as regular evaluation grades. Through this approach, we aim to build a virtuous cycle of shared growth between LG Energy Solution and its suppliers.

#### [Core Strategies for Shared Growth]

|  | Strategy  | Shared Growth program   |
|--|---|---|
| Fostering a Fair<br>Trade Culture                                | LG Energy Solution manages the entire supplier transaction process to ensure compliance with applicable laws and regulations.   | The Subcontracting Review Committee The dispute mediation organization Shared Growth Day Event Mutual Growth VOCs (Voice of Customers) Management   |
| Improving<br>Suppliers Finance                                   | LG Energy Solution operates financial support programs to help suppliers respond to rapidly changing business environments.   | <ul> <li>Shared Growth Investment Support<br/>Fund</li> <li>Joint Project Guarantee Programs</li> <li>Improvement of Payment Conditions</li> <li>Shared Growth Payment System</li> <li>Payment Monitoring System</li> </ul> |
| Enhancing<br>Capability of<br>Suppliers                          | LG Energy Solution operates capacity-<br>building programs to strengthen<br>the management capabilities of its<br>suppliers and support their sustainable<br>growth.  | Support for Management Diagnostic<br>Consulting     Participation in the Infrastructure<br>Support Program for SME CBAM<br>Compliance     Support for Technical Data Escrow<br>Costs  |
| Supporting<br>Suppliers'<br>Recruitment and<br>Capacity Building | LG Energy Solution operates support programs to help suppliers overcome recruitment challenges and enhance the job competencies of their employees, thereby enabling them to attract and retain top talent. | Smart Learning Programs suppliers'     Online Recruitment Platform for suppliers     Strategic Industry Talent Retention Mutual Aid Program   |

Shared Growth COMPANY OVERVIEW ENVIRONMENTAL SOCIAL GOVERNANCE FACTBOOK APPENDIX = 8

### **Fostering a Fair Trade Culture**

#### The subcontracting review committee

Prior to initiating any subcontracting transactions, LG Energy Solution convenes a preliminary review committee to verify whether suppliers have been selected fairly and whether contract terms have been appropriately established. In addition, all preliminary review items are subject to follow-up review one year later. We also conduct an annual comprehensive audit of all subcontracting transactions to examine whether relevant legal requirements—such as timely payment—were properly followed throughout the transaction process. In 2024, the Subcontracting Review Committee convened quarterly, holding a total of four sessions. Starting in 2025, the committee has transitioned to a monthly meeting schedule.

### The dispute mediation organization

LG Energy Solution has established and operates the dispute mediation organization to proactively resolve potential disputes arising during or after business transactions, such as price adjustments or delayed payments. The organization holds both regular and ad-hoc meetings. The regular meeting is convened once a year to appoint the committee chair and members and to deliberate on any amendments to the committee's operational guidelines. Ad-hoc meetings are held as needed to promptly deliberate and make decisions on submitted agenda items. As of 2024, no cases were submitted to the committee through ad-hoc meetings, and there have been no legal disputes related to delivery price adjustments or delayed payments.

### "Shared Growth DAY" Event

LG Energy Solution holds an annual Mutual Growth Day to provide training for supplier employees on subcontracting laws and other relevant regulations. In 2024, we provided training to 118 employees from 60 supplier companies, focusing on compliance with the Subcontracting Act in transactions between Tier 1 and Tier 2 suppliers, as well as the prevention of technology misappropriation and misuse. Through this initiative, LG Energy Solution aims to promote mutual communication among supplier employees and foster a culture of fair and ethical business practices across its supply chain.



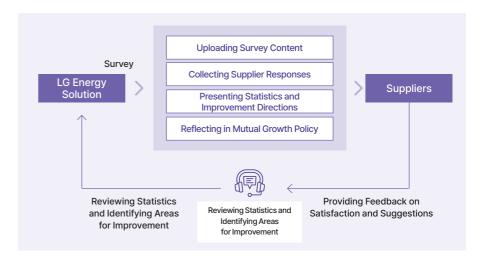


Shared Growth DAY

### **Shared Growth VOC Management**

LG Energy Solution continuously seeks to improve its mutual growth policies by collecting suppliers' feedback on satisfaction levels and suggestions for improvement. To enable dispute resolution and open communication, we operate a dedicated supplier grievance channel—"Supplier Collaboration Portal"—within its purchasing portal system.

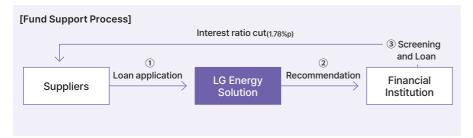
Supplier Collaboration Portal Visit Website



# **Improving Suppliers Finance**

### Shared Growth Investment Support Fund

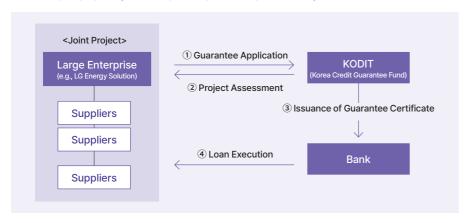
Since 2020, Shared Growth VOC Management has established a loan fund worth KRW 150 billion to provide interest benefits to suppliers based on funds deposited with financial institutions, enabling them to borrow at low interest rates.



- ① Desired supplier submits application to LG Energy Solution's procurement department.
- ② LG Energy Solution's Fair Trade Team reviews and recommends banks → Bank assesses and supplier submits documents.
- (3) Bank assessment confirmed and loan executed

### **Joint Project Guarantee Programs**

LG Energy Solution participates in a joint project guarantee program to provide collective credit quarantees for suppliers involved in its projects. This initiative helps address suppliers' collateral limitations, simplify the guarantee process, and offer preferential guarantee fee rates.



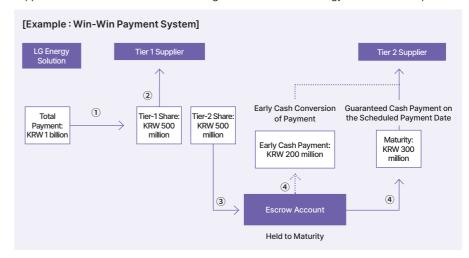
#### Improvement of Payment Conditions

LG Energy Solution ensures that payments to small and medium-sized suppliers are made within 60 days. In addition, for high-performing suppliers, we have improved the payment process to allow cash payment within 10 days of invoice closing. As of 2024, this accounts for 84% of all subcontract payments.

\*Details regarding information on payment method, amount of payment by period, and the dispute mediation organization are disclosed biannually through the electronic disclosure system.

### **Shared Growth Payment System**

LG Energy Solution supports its suppliers in reducing financial costs by enabling them to discount their accounts receivable at the same interest rate applied to LG Energy Solution. This allows suppliers to benefit from favorable financing terms based on LG Energy Solution's credit profile.

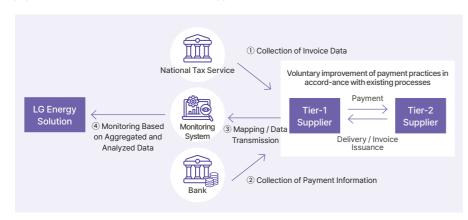


- ① LG Energy Solution pays the Tier-1 supplier through the Win-Win Payment System. At this point, the Tier 1 supplier may choose to convert the payment into cash before the scheduled payment date.
- 2) Based on the amount to be received from LG Energy Solution the Tier-1 supplier pre-allocates and sets up advance payment instructions to the Tier 2 supplier via Shared Growth Payment System.
- 3 The payment allocated to the Tier-2 supplier is held in a designated escrow account managed by the Korea Commission for Corporate Partnership until the official payment date.
- 4 The Tier-2 supplier may choose one of the following options to utilize the funds:
  - Hold the amount until the payment date and receive 100% in cash
  - Receive early cash payment prior to the payment date
  - Prepay to its own suppliers before the scheduled payment date

Shared Growth COMPANY OVERVIEW ENVIRONMENTAL SOCIAL GOVERNANCE FACTBOOK APPENDIX = 89

### **Cash Payment Monitoring System**

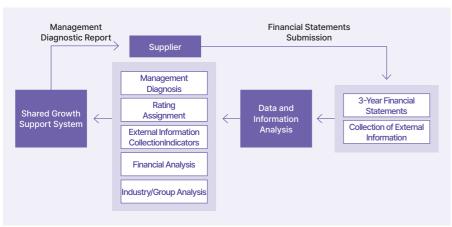
LG Energy Solution has implemented a cash payment monitoring system to encourage improved payment terms between Tier 1 and Tier 2 suppliers.



## **Enhancing Capability of Suppliers**

### **Management Diagnostic Consulting Support**

LG Energy Solution has introduced and operated a consulting system that provides suppliers with management diagnostic reports.



# Participation in the Infrastructure Support Program for SME CBAM Compliance

LG Energy Solution is participating in a support program to assist small and medium-sized supplier suppliers in responding to the EU Carbon Border Adjustment Mechanism (CBAM). we provide end-to-end support—from carbon emissions calculation and reduction consulting to international verification—thereby helping SME partners reduce emissions and ease the financial burden imposed by CBAM regulations. Through this initiative, LG Energy Solution aims to enhance the export competitiveness of its SME suppliers to CBAM-implementing countries.

### **Support for Technology Escrow Costs**

LG Energy Solution fully covers the costs associated with technology escrow services when small and medium-sized suppliers choose to deposit their core proprietary technologies with accredited institutions that offer verified security and reliability. This initiative is intended to help reduce the risk of technology leakage and to support the protection of intellectual property for SME.

# Supporting Suppliers' Recruitment and Capacity Building

### Smart Learning for Suppliers' Employees

LG Energy Solution provides free access to smart learning programs for employees of its domestic suppliers, covering approximately 40,000 contents across 21 categories, including mandatory compliance training, environmental and industrial safety, job competency, technical skills, office automation, and language education. In particular, training in critical areas such as technology protection and environmental safety is strongly recommended to be completed by all relevant personnel.



Smart Learning

Program example

### **Online Recruitment Platform for suppliers**

LG Energy Solution operates an exclusive online recruitment platform for its suppliers, enabling them to promote their organizations and attract talent. The platform supports functions such as talent search and candidate screening, helping partner companies efficiently secure qualified human resources.



Online Recruitment Platform

### Strategic Industry Talent Retention Mutual Aid Program

To help attract and retain skilled personnel in small and medium-sized suppliers, LG Energy Solution participates in a government-backed mutual aid program. Under this program, we provide financial support to SME when their key employees enroll in the "Tomorrow Filling Deduction (내일채움공제)\*" scheme, thereby promoting long-term employment and workforce stability.

### Large and Small Business Safety and Health Partnership Program

In 2024, LG Energy Solution participated in the Safety and Health Partnership Program for Large and Small suppliers, led by the Ministry of Employment and Labor. Through this initiative, we undertook a range of activities to strengthen the safety and health capabilities of suppliers. The program is a government-supported initiative that aims at preventing industrial accidents and supporting the establishment of autonomous safety and health management systems among partner companies. It is operated with the objective of fostering mutual growth between large corporations and SME.

#### [2024 Main Activities and Achievements]

| Category   | Activities and Achievements  |
|--|--|
| Support for enhancing<br>occupational<br>safety and health<br>standards for partner<br>organizations | <ul> <li>Implementation of occupational safety and health education for Partner Companies in the production sector (5 production Partner Companies)</li> <li>Support for Risk Assessment certification and inspection (2 Partner Companies)</li> <li>Sharing accident and incident cases through the "Safety and Health Festival," and promoting a safety and health mindset through superior proposal awards, etc. (Approximately 750 employees and Partner Company employees participated)</li> <li>Providing BM support for emergency response training and emergency response know-how through joint emergency response training (Approximately 300 employees and suppliers' employees)</li> <li>Fire safety facility operation site inspection conducted (14 Partner Companies at the site)</li> <li>Establishing a pleasant work environment through support for work environment improvement (Twice a year, 3 companies)</li> </ul> |
| Operation of the<br>Safety and Health<br>Council   | Total 6 meetings held in 2024 (March, May, June, July, August, October 2024)   |
| Actual amount of<br>support for safety and<br>health cooperation<br>activities                       | Approximately 120 million KRW (LG ENERGY SOLUTION Daejeon Technology Center single business site standard execution amount)  |

<sup>\*</sup> a Korean government-led savings and retention incentive program for SMEs

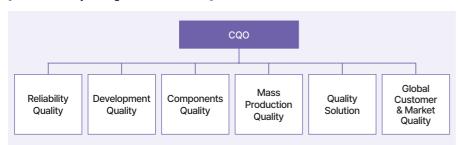
LG Energy Solution is committed to delivering products and solutions that exceed customers' expectations. To that end, we have put in place a rigorous quality management system and programs to ensure product quality and safety throughout all manufacturing processes and continuous improvement in collaboration with all members and suppliers.

Product Stewardship Visit Website

# **Quality Management System**

To strengthen trust in product quality, LG Energy Solution operates a product quality management system under the leadership of the Chief Quality Officer (coo). The system is implemented across multiple specialized departments—including Advanced/Reliability Quality, Development Quality, Component Quality, Mass Production Quality, Quality Solution, and Customer Quality—and is based on the international standards IATF 16949:2016 (Automotive Quality Management System) and ISO 9001:2015 (Quality Management System). Each year, we evaluate whether our quality management objectives have been achieved. Based on the results, it refines its quality control processes and standards to ensure the effective and efficient operation of the quality management system.

#### [Product Quality Management Governance]



## **Status of Certifications Acquired**

At LG Energy Solution, the headquarters, manufacturing plants in operation and R&D centers are certified with IATF 16949:2016 Automotive Quality Management System and ISO 9001:2015 Quality Management System standards. As part of certification process, we conduct third-party audits of quality management system, including surveillance or maintenance audits and re-certification audits. Further, we conduct internal audits, annually, to ensure facility-level compliance with company-wide regulations and standards and continuous improvement, thereby exceeding stakeholder expectations. LG Energy Solution has obtained the international certificate of quality system for 100% of its wholly-owned manufacturing plants in operation (as of March 2025).

| Classification | Business sites                                    | Certifications       |
|----------------|---|----------------------|
|                | Headquarters                                      | IATF 16949, ISO 9001 |
|                | Ochang Energy Plant 1                             | IATF 16949, ISO 9001 |
| Korea          | Ochang Energy Plant 2                             | IATF 16949, ISO 9001 |
|                | R&D Campus Daejeon                                | IATF 16949, ISO 9001 |
|                | R&D Campus Gwacheon                               | IATF 16949, ISO 9001 |
|                | LG Energy Solution (Nanjing) Co., Ltd.            | IATF 16949, ISO 9001 |
| China          | LG Energy Solution Battery (Nanjing) Co., Ltd.    | IATF 16949           |
|                | LG Energy Solution Technology (Nanjing) Co., Ltd. | IATF 16949           |
| Poland         | LG Energy Solution Wroclaw sp. z o.o.             | IATF 16949, ISO 9001 |
| US             | LG Energy Solution Michigan Inc.                  | IATF 16949, ISO 9001 |
| Canada         | Nextstar Energy Inc.(Stellantis Joint Venture)    | IATF 16949, LOC*     |

<sup>\*</sup> To qualify for IATF 16949 certification, organizations must demonstrate a minimum of one year of production and operational performance, or obtain a Letter of Conformity (LOC) from the certification body if their operational history is less than one year.

### **Capacity Building in Quality Management**

Through LG Energy Solution Battery Academy (LBA), we offer a comprehensive training and capacity development program designed to enhance employee skills and capabilities in assuming respective role. The program is offered to all employees regardless of their position or employment contract type. In particular, the quality managers across all our facilities worldwide are regularly provided with specialized training in various areas, including quality management, product safety, reliability & statistics, and relevant global regulations. The training courses are complemented with on-site hands-on training and education to further enhance their understanding and capability in quality management. Further, to promote awareness and foster a culture of quality assurance in each member's daily work, all employees are offered with Compliance Training Programs, including a "Quality Assurance for Customer Satisfaction and Quality Mindset" course which is mandatory for all employees and is conducted twice a year.

### **Quality Management Framework**

LG Energy Solution established a company-wide, comprehensive quality assurance framework to ensure rigorous quality management. Our internal quality standards are designed to not only meet but exceed international standards. Such stringent standards serve as the foundation for systematic verification of product quality at each stage of entire value chain, encompassing procurement, development, production, and distribution. Furthermore, exhaustive quality and safety testing, including precautionary testing for emerging quality and safety concerns, is conducted across all products, while various supply stability management strategies are in place to proactively identify, prevent and mitigate any potential risk within our supply chains.

#### [Customer-Oriented Quality Management Process]

#### Process Contents Securing a stable supply of parts and materials is one of key elements of product safety and quality management. LG Energy Solution puts in place various strategies to mitigate risk associated with disruption in parts and materials sourcing. Potential emergency cases are categorized by factor that causes supply chain disruption, including natural disaster, workplace accident, suppliers' management issue such as bankruptcy, layoff or strikes, geopolitical events and related price fluctuation. For each category of emergency case, a formalized process and manual is put in place that encompasses case classification, reporting protocol, operation of emergency taskforce, and mitigation Procurement and remediation planning. Mitigation measures are planned in a phased manner – in the short-term, mitigation measures include temporary sourcing of alternative, production plan adjustment; in the mid- to long-term, mitigation measures vary ranging from dual sourcing, alternative/new supplier identification, to the change of manufacturing site. The category-specific processes and manuals are reviewed and updated on a regular basis to ensure effectiveness of product safety and quality management process and to minimize any adverse impact and prevent recurrence of such event. At the product development stage, LG Energy Solution follows a rigorous "Product Quality Planning Process" to ensure the design of products meets customers' quality requirements and international standards. With in-house capacity to test product performance, safety, reliability from the design to materials & parts approval phases, we identify and mitigate potential or emerging quality and safety concerns in a preemptive Development manner. Each of newly developed products, before mass production, should undergo relevant international certification process. At LG Energy Solution, we maintain strict quality control measures throughout the production process, conducting thorough inspections of all parts and products at each step. We have put in place various risk mitigation process such as dual sourcing, to mitigate potential risks caused by unexpected changes in the project volume and/or in supply chains. Further, to mitigate potential risk caused by unexpected issue or disrution Manufacturing in the production line, we secure backup manufacturing sites. This helps to maintain

operational reliability and business continuity.



Supply

At LG Energy Solution, outgoing quality controls are conducted in accordance with quality assurance protocols tailored to the respective customer requirements. We adhere to stringent transportation and storage standards, carefully considering product specifications and logistical conditions to ensure optimal quality. The packaging design takes into account factors that may affect product safety and quality, such as temperature and humidity variations and potential external impacts during delivery. In addition, a varied range of robust supply chain stability management strategies are in place to mitigate potential risks such as a sudden surge in customer demand and raw material supply imbalances. These include dual sourcing, securing external warehousing, utilizing Vendor Managed Inventory (VMI), and optimizing safety stock.

### Comprehensive Product Quality and Safety Assurance

LG Energy Solution is committed to ensuring that its products meet the highest standards of quality and safety throughout their lifecycle. This is demonstrated through rigorous product reliability, environmental, and safety testing during the development phase, followed by regular inspections during mass production phase.

Reliability testing ensures product performance consistency during its intended usage period. Environmental testing evaluates a product's ability to function in conditions like extreme temperatures, humidity, vibration, and shock. Safety testing is performed to verify the product's resilience in abnormal situations that may arise during its usage period. It simulates scenarios, including collision, drop, short circuit, overcharge and over-discharge.

Through these comprehensive testing protocols, LG Energy Solution guarantees that its products are safe, reliable, and of the highest quality for end customers.

# **Quality Risk Response Process**

Quality issues can arise at any stage of business, including product development, components or parts sourcing, inventory storage, and product delivery. Therefore, it is crucial to establish a company-wide system and process that enables to promptly identify, respond to and efficiently mitigate any quality risk. LG Energy Solution's approach to quality risk response is:

#### [Quality Risk Response Process]

- 1) Operate a company-wide risk management system to proactively identify, prevent, mitigate and effectively respond to potential and/or actual risks in various aspects of business
- 2) Apply different processes and protocols including crisis management, business continuity management, and risk management, depending on the type and root cause of risk.

#### Business Continuity Management System (BCMS)

LG Energy Solution is dedicated to maintaining the quality of all products and services and ensuring timely delivery to customers during and after disruptions. Our Business Continuity Management System (BCMS) is established based on and certified with ISO 22301 to validate and enhance the continuity, consistency, and effectiveness of our risk management system. Further, all of our operating sites undergo internal evaluation based on our own risk management criteria, which align with ISO 22301 standards.

### **Operation of Quality Risk Communication Channel**

In the quality sector, LG Energy Solution receives customer requirements and complaints through regular and ad-hoc meetings and emails. These are recorded and managed through internal systems such as the Quality Management System (QMS) and Customer Pain Point Management (CPPM) to ensure continuous improvement. In addition, customer satisfaction surveys are conducted to assess current quality levels and identify customer needs and concerns.

LG Energy Solution's quality management integrates a systematic supplier quality management, which aims to ensure consistency and stability in quality and continuous improvement of suppliers' capability in quality assurance and control. Through a "Supplier Quality Management System," we monitor real-time data on various indicators of suppliers quality and carry out product reliability risk management.

### **Supplier Quality Assurance System**

LG Energy Solution operates a comprehensive "Supplier Quality Assurance System" that regularly assesses the quality management level of all our suppliers. Key assessment criteria includes customer requirements and global standards, and the scope of assessment is suppliers' quality management systems and processes. The assessment framework is regularly reviewed and updated to ensure that our products meet the expectations from our global customers. In addition to the regular assessments, we conduct ad-hoc evaluations of our suppliers' quality assurance capacity and quality improvement programs. This approach enables us to continuously strengthen our "Supplier Quality Assurance System" and ensure that our products consistently meet the highest standards of quality and reliability.



# Supplier Quality Certification Process and Capacity Building **Program**

In order to achieve the highest level of product quality and safety, it is crucial to assess and manage suppliers' product quality and enhance their quality management capacity. LG Energy Solution runs a supplier quality assessment program on a quarterly basis, the results of which are tied with certification, incentive/penalty programs and capacity building initiatives. The assessment program is designed to evaluate each supplier's quality management system, quality performance and preventive quality control, and rank them in five levels - S, A, B, C and D - based on the score (Q-Score). LG Energy Solution issues certificates and the record of certification is archived and tracked through our Supplier Quality Management System (QMS).

Those suppliers designated with two lowest ranks are required to participate in the "Supplier Quality Rank & Rank Up Program," designed to address their weaknesses and areas for improvement. LG Energy Solution also utilizes this ranking system for the "Supplier New Biz. Hold (SNBH)" program. Under this program, suppliers who receive the lowest D for two consecutive years are excluded from our vendor pool and restricted from entering into new business contracts with LG Energy Solution. This measure ensures that we maintain a high standard of quality and performance from our suppliers, and encourages suppliers' continuous improvement and adherence to our quality management requirements.

### Rank up programs





Manufacturing Process Management System Improvement



Lean Six Sigma based Chronic Defect Improvement



Digital transformation

### **Supplier Quality Conference**

At the "Supplier Quality Forum" held for suppliers, LG Energy Solution shares the current status of component quality and quality management policies, while presenting best practices of improvement activities. Through this initiative, we strengthen collaborative relationships with suppliers.

# **Enhancing Customer Satisfaction and Product** Safety in ESS

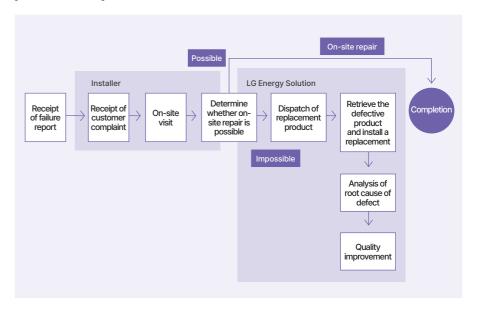
### **Quality-Related Risk in ESS**

LG Energy Solution's ESS (Energy Storage System) products are classified into two categories: Residential ESS, used in homes, and Grid ESS, which connects to the power grid for largescale energy storage. These systems are composed of thousands of battery cells. In the event of system misuse or a defective cell, there is a risk of fire due to the release of intense heat exceeding 500°C and large volumes of flammable gas. To mitigate fire risks at an early stage, we have introduced the ESS Management and Analysis System (EMAS) to enhance operational control. Additionally, we have implemented a selective water-spraying mechanism that targets only the affected module in the event of thermal runaway, thereby improving customer safety and confidence in the product.

### **Customer Response Process**

Based on past respose customer service cases, LG Energy Solution has established and operates a structured customer response system to quickly address any ESS product malfunctions. When an issue arises, customers can initiate a Return Material Authorization (RMA) request to receive repair, replacement, or refund services. Once a fault is reported for a sold product, the designated installer visits the site to determine whether immediate on-site repair is possible. If so, repairs are carried out on the spot. If on-site repair is not feasible, we directly retrieve the defective product and install a replacement. The retrieved defective products are used for root cause analysis and technical improvement research. Moreover, we operate a cross-functional Quality Council that includes business divisions to address various quality issues and incorporate customer feedback into product enhancements, thereby striving to deliver the highest quality ESS products to its customers.

#### **[ESS RMA Process]**

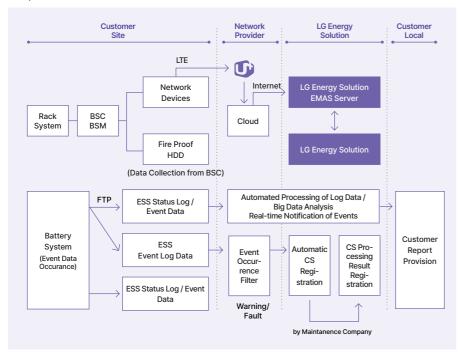


### Establishing RMA Standard Guidelines and Enhancing Customer Response **Capabilities**

LG Energy Solution is standardizing and formalizing processes to enhance the ability of local installers to understand the product and independently assess failures during on-site visits. Local installation partners are required to complete online training and pass a certified test to ensure adequate technical competence. To facilitate prompt RMA responses, we operate local service centers that perform product repairs and diagnostics. These service centers help reduce RMA process lead times by enabling swift, localized support. In parallel, we are investing in technical quidance and facility upgrades for its local service centers. To improve service quality and ensure process consistency, we develop and manage standardized operating documents such as Standard Operating Procedures (SOPs) and check sheets.

# **ESS Product Management System "EMAS"**

LG Energy Solution supports the stable operation of ESS (Energy Storage System) systems and provides quality management services by implementing the EMAS (ESS Management and Analysis System), an advanced system for ESS operation and management. Portable LTE communication devices are installed at customer sites to collect and analyze data generated by the battery system on cloud servers. This enables real-time email and SMS notifications in case of incidents and various aftersales customer quality management services such as automatic after-sales customer service (cs) reception.



#### Battery Section Controller (BSC)

The BSC is a software that manages the entire battery, monitors and diagnoses the battery system's status, the modules, and records related information as data

#### Battery System Monitoring (BSM)

Software that monitors and records data related to battery systems without a user interface

## **ESS Battery Module Fire Suppression Process**

The National Fire Protection Association (NFPA) in the US, FM Global's safety management standards (FMDS), and the International Code Council's fire-related code IFC1206 all require the installation of sprinkler systems for ESS installation and maintenance. We reduce the risk of fire spread by selectively extinguishing the modules affected by thermal runaway inside the ESS battery. We also have an Active Vent System to rapidly exhaust combustible gases that may be produced during fire suppression.

#### [Fire Extinguishing Process in Case of Fire]



With increasingly stringent product and environmental regulations at national level, it has become all the more important to identify and manage chemicals in products and ensure the required level of environmental friendliness. LG Energy Solution is a global company that leads the future of the energy industry through our battery business, which will be integral to the upcoming era of green energy. We have grave responsibility for the health, safety, environmental, and social impacts of our products and are thus fully committed to minimizing adverse impacts.

LG Energy Solution limits harmful substances to below regulatory level in the respective country to minimize their adverse impacts on the environment and public health and to provide our customers with green and competitive solutions. Also, for this end, we are operating a product stewardship process to continuously monitor and manage in compliance with evolving product and environmental regulations, and providing a guideline for suppliers to manage supply chains in an environmentally friendly manner. As such, we ensure ecofriendliness of all chemicals from the purchase of raw materials to production and sales. We also strictly manage the environmental hazards of materials and products. Further, we strive to quantify environmental performances of products through Life Cycle Assessment (LCA) and transparently disclose reliable information through third-party verification.

## Hazardous Substance Management System (HSM)

With a view to ensuring compliance with product and environmental regulations for strengthening product safety, LG Energy Solution operates Hazardous Substance Management system (HSM) to strictly manage environmental hazards throughout the entire process - from raw materials purchase and warehousing to use and disposal. Through HSM, we aim to manage any compliance risk in a preemptive manner by thoroughly reviewing chemical compositions and compliance assurance of each and every raw material as well as information on any environmental hazard and related legal response before making orders from suppliers.

# **Environmental Regulation Monitoring**

LG Energy Solution constantly examines and monitors environmental laws, regulations, and relevant accident cases in the countries and regions we operate. Relevant regulations include the Act on Registration and Evaluation of Chemical Substances, the Chemical Substances Control Act, and the Occupational Safety and Health Act in Korea, The Regulation on the registration, evaluation, authorisation and restriction of chemicals (REACH), Restriction of Hazardous Substances Directive (RoHS), in EU and Toxic Substances Control Act (TSCA) in the US. We preemptively respond to chemical regulations in the conduct of our global business to minimize any associated risks.

## Life Cycle Assessment (LCA)

Life-Cycle Assessement is an integrated methodology for assessing environmental impacts by analyzing an inventory of the energy and materials required in all stages of the product life cycle (cradle-to-grave) from raw material extraction processing, manufacturing, assembly, transportation, use, to recycling or disposal, and calculating the corresponding emissions to air, water, land, among other. We have been conducting LCA since 2019. While we communicate with external stakeholders, including customers. the information and the results of on the products' environmental impacts serve as an important criterion and tool to measure the product carbon intensity, identify hotspots (i.e. the most relevant drivers of the assessed impacts), and establish mid- to long-term strategies to achieve carbon neutrality.

### **Environmental Product Declaration (EPD)**

Environmental Product Declaration (EPD) is a certification program through which the information on the environmental performance of the product – GHG emissions, resource uses, water pollutant discharge, air pollutant emissions, and other releases - is reported, verified by a third party, registered and displayed on the product based on the results of the LCA assessment. Through EPD certification, we are committed to measuring and reducing the environmental impacts of our products and keen to communicate with customers the information in a transparent manner

#### Hazardous Substance Reduction in Products

LG Energy Solution is continuously strengthening its efforts to reduce hazardous substances in order to minimize the environmental impact of its products and reduce human health risks. we have established hazardous substance control standards based on national regulations and international agreements. and promotes reduction activities in a systematic manner. In addition to complying with the EU Battery Regulation, which restricts the use of lead, cadmium, and mercury, LG Energy Solution also manages its products to eliminate the use of ten substances regulated under the EU RoHS (Restriction of Hazardous Substances) Directive across all cells, modules, and pack components. To proactively respond to evolving global hazardous substance regulations and international conventions, we regularlh monitor relevant laws and regulatory updates. This enables LG Energy Solution to operate a proactive compliance system that anticipates and addresses hazardous substance risks in advance.

#### Product Hazardous Substance Control Standards

- Level 1 (Prohibited Substances EU RoHS): Ten hazardous substances banned from use in electrical and electronic equipment under the EU RoHS Directive.
- Level 2(Prohibited Substances Non-EU RoHS): Hazardous substances banned under regulations of countries or international conventions outside the scope of EU RoHS.
- Level 3 (Substances Under Observation): Substances Substances suspected to pose risks to human health or the environment. While not currently banned, they are subject to future phase-out plans.

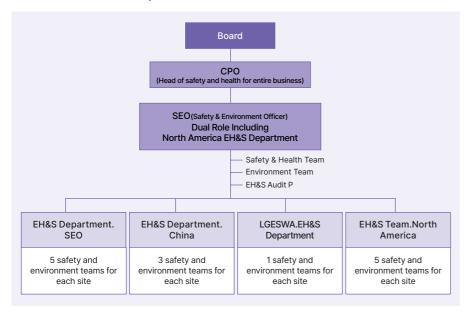
SOCIAL

LG Energy Solution places safety and health of all employees, staffs, and suppliers, as top priority in our business. We are dedicated to creating a safe and healthy workplace, and we are committed to making every effort to protect the local community.

Keeping the Workplace Safe and Healthy Visit Website

# **Establishing Safety and Health Management Systems** Safety and Health Governance

To strengthen its company-wide safety and health management system, LG Energy Solution has appointed a Chief Safety and Health Officer (CPO) as Head of safety and health for entire business with Board approval. The CPO oversees all matters related to occupational safety and health across the company. Under the CPO, we operate an Environmental Safety Group Leader and a dedicated safety and health organization to manage legal obligations and serve as a central control tower for safety and health issues.



LG Energy Solution also operates a Corporate Environmental and Safety Council composed of the CPO and key executives. This council convenes annually to deliberate on major issues, review key performance outcomes, and discuss future plans. Through this forum, LG Energy Solution sets strategic directions for global best-in-class safety and health policies and reinforces responsible management.

At each site, LG Energy Solution operates a Labor-Management Joint Occupational Safety and Health Committee, composed of an equal number of representatives from labor and management. This committee deliberates and makes decisions on major safety and health issues. Additionally, site-specific safety and health organizations are established. and supervisory personnel as well as dedicated safety officers are designated to prevent potential risks in the workplace and oversee employee health management. Furthermore, LG Energy Solution has formed a Safety and Health Council that includes partner companies and subcontractors. This council conducts regular joint inspections, listens to improvement suggestions from partner employees, and works to identify and eliminate on-site hazards to create a safe working environment. Best practices and improvement measures related to environmental and occupational safety are also shared and discussed through company-wide practitioner workshops.

### Global Safety and Health Policies and Strategies

LG Energy Solution has developed a global safety and health policy centered on two key visions: "Integrating Business Activities with Health & Safety" and "Enhancing Health & Safety Competitiveness and Implementation." We strictly comply with applicable safety and health regulations and legal requirements across all global business sites. A dedicated team is in place to ensure that LG Energy Solution's safety practices exceed international standards such as International Electrotechnical Commission (IEC), International Organization for Standardization (ISO), Conformité Européenne (CE), Underwriters Laboratories (UL), Nationally Recognized Testing Laboratory (NRTL), and Recognized And Generally Accepted Good Engineering Practices (REGAGAP). To prevent injuries and illnesses among all personnel, we identify, elimnate, substitute, or control harmful and hazardous factors. It also works continuously to enhance safety and health infrastructure. We extend our safety and health practices beyond employees to include contractors, visitors, local communities, and the general public. This includes comprehensive management of facilities, raw materials, and products. Moreover, we transparently disclose our safety and health performance to internal and external stakeholders.

Global Safety and Health Policy Visit Website

# Safety and Health Management

LG Energy Solution establishes an annual safety and health budget that includes expenditures for equipment and facility safety inspections, employee safety and health training, provision of safety equipment and personal protective gear, safety diagnostics, improvements to the working environment, regular health checkups, and recognition campaigns for outstanding safety practices. We have implemented site-specific occupational health and safety management systems and has acquired ISO 45001 (Occupational Health and Safety Management System) certification. In 2023, We completed integrated ISO certification across all domestic sites, and in 2024, it successfully maintained the certification for all sites through external surveillance audits. To demonstrate its commitment to Environment, Health, and Safety (EHS) and to ensure consistency in policy implementation, we have revised its EH&S Policy. Based on this policy, we have developed detailed operational procedures aligned with its environmental and safety regulations and internal rules. In addition, leadership-led site management activities and organization-specific initiatives are actively conducted to prevent incidents. We also reflect the severity of EHS incidents in employee performance evaluations, thereby enhancing awareness and strengthening execution of safety responsibilities.

# EH&S Policy Policy shall be a top level document of manage

Policy shall be a top level document of management system that means Corporation mission and direction officially announced by the CEO

#### Tier-II EH&S Standard

Requirements shall regulate specific methods or measures for detailed or general procedure set in Standards.

#### Tier-I EH&S Standard

Standards shall regulate responsibilities, requirements and general procedures applicable to all sites.

#### Tier-III EH&S Standard

Procedures shall be independent standards for individual sites including corporate HQ. Those Rules shall be practice document linked with SE regulations and practices.

#### [Acquisition and Validity of Health and Safety Management System (ISO 45001) Certification]

| Country | Business Site                                     | Certification Validity |
|---------|---|------------------------|
|         | Headquarters                                      |                        |
|         | Ochang Energy Plant 1                             | Integrated             |
| Korea   | Ochang Energy Plant 2                             | Certification          |
| Korea   | R&D Campus in Daejeon                             | (2027-12-01)           |
| _       | R&D Campus in Gwacheon                            |                        |
|         | R&D Campus in Magok                               |                        |
|         | LG Energy Solution (Nanjing) Co., Ltd.            | 2027-11-03             |
| China   | LG Energy Solution Battery (Nanjing) Co., Ltd.    | 2025-05-13             |
|         | LG Energy Solution Technology (Nanjing) Co., Ltd. | 2026-06-06             |
| Poland  | LG Energy Solution Wroclaw sp. z o.o.             | 2026-11-16             |
| US      | LG Energy Solution Michigan Inc.                  | 2025-07-14             |

# Establishment of Mid-to-Long-Term Quantitative Goals for Occupational Safety and Health Management

LG Energy Solution has established new mid-to-long-term quantitative goals for occupational safety and health management to eliminate serious accidents and cultivate a more effective safety culture. We have set a target to achieve a Loss Time Incident Frequency Rate (LTIRF) of 0.13 by 2029 and has identified 13 key areas for critical risk prevention. Through this, we will focus on implementing fundamental safety measures to mitigate potential hazards at the source.

# $\begin{tabular}{ll} [Mid-to Long-Term Quantitative Targets for Occupational Health and Safety Management (LTIFR)] \end{tabular}$

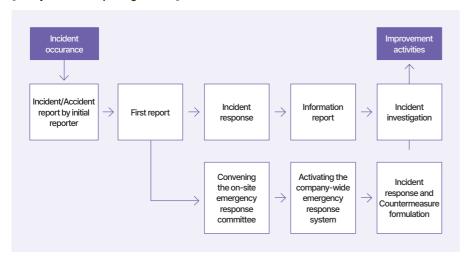


3-Year LTIFR (Lost Time Injury Frequency Rate) Status Go to page

To achieve this goal, LG Energy Solution is promoting the development of global-level safety standards, the establishment of an operational framework, and its deployment across the organization. As part of this effort, we are enhancing safety specifications for equipment according to identified risk factors, advancing pre-approval systems, and conducting environmental and safety diagnostics and pre-inspections. We are also supporting the stabilization of new global business sites by securing safety-related permits and implementing construction safety management measures to ensure safe working environments abroad. Furthermore, we are allocating and executing safety and health budgets to support the establishment of smart factories, improvements to EHS infrastructure, regulatory compliance, and employee health management. To strengthen execution, these initiatives are regularly monitored on a company-wide basis.

Given the operation of numerous manufacturing facilities in the battery production process, incidents such as injuries related to entanglement and cuts, as well as the one involving chemical leakage & spillage (electrolytes) which can lead to fire & explosion, and toxic incidents causing illness, may occur. Hence, under corporate crisis management regulations, an emergency communication system has been established, and annual emergency response drills are conducted at all business sites. Particularly, a grading system for accident reports related to environmental, health and safety (such as injuries, fire & explosion, leakage & spillage, infectious diseases, occupational diseases, and regulatory violations) has been established and operationalized. Depending on the severity of incidents, corporate/site emergency response committees are convened, and scenarios of actual environmental safety incidents are simulated to enhance overall response capabilities. In the event of an incident, all actions taken, root causes, and corrective measures are promptly reported through IT systems. Notifications are quickly disseminated via automated mobile text and messaging alerts to ensure rapid response. In 2024, LG Energy Solution carried out a corporate-led emergency simulation at domestic sites in Korea, based on a scenario involving fire, personal injury, and production disruption. This drill was designed to mirror real-world conditions and tested the end-to-end emergency response process, contributing to the enhancement of enterprise-wide incident readiness.

#### [Safety Accident Reporting Process]



### **Business Site Risk Assessment**

LG Energy Solution conducts comprehensive risk assessments across all processes, equipment, chemical substances, and tasks in order to proactively identify potential hazards and prevent accidents at its worksites. Based on the results of these assessments, identified hazards are analyzed by estimating the frequency and severity of potential loss events to determine their risk level. Corresponding corrective and preventive measures are then established in line with the assessed risk ratings. All risk assessments and related corrective actions are systematically managed through Environmental, Health and Safety (EHS) system to ensure complete traceability and oversight. In addition, risk levels are quantitatively measured both before and after the implementation of mitigation measures to evaluate the effectiveness of improvements.

[2024 Risk Assessment Implementation Status (Korea)]

| Business  | Evaluation Target | Towns |                     | Number of cases <sup>3)</sup> |                         |                         |       | Improvement                                   |
|-----------|-------------------|-------|---------------------|-------------------------------|-------------------------|-------------------------|-------|---|
| site      | Туре              |       | Conduct<br>Processt | Grade A<br>(15~20point)       | Grade B<br>(15~20point) | Grade C<br>(15~20point) | Total | Completed<br>Number of<br>Cases <sup>4)</sup> |
| Energy    | Regular 1)        | 430   | 430                 | 1                             | 15                      | 256                     | 272   | 262   |
| Plant1    | Occasional 2)     | 10    | 63                  | -                             | 4                       | 44                      | 48    | 37  |
| Energy    | Regular           | 144   | 144                 | -                             | 1                       | 49                      | 50    | 46  |
| Plant2    | Occasional        | 17    | 17                  |                               |                         | 12                      | 12    | 11  |
| Daejeon   | Regular           | 258   | 258                 | -                             | -                       | 9                       | 9     | 9   |
| Daejeon   | Occasional        | 105   | 104                 | -                             | -                       | -                       | -     | -   |
| Gwachon   | Regular           | 111   | 111                 | _                             | _                       | 1                       | 1     | 1   |
| Gwaciioii | Occasional        | 3     | 3                   | -                             | -                       | -                       | -     | -   |
| Magok     | Regular           | 13    | 13                  |                               |                         | 3                       | 3     | 3   |
| Wagok     | Occasional        | -     | -                   | -                             | -                       | -                       | -     | -   |
| HQ        | Regular           | 253   | 245 5)              |                               |                         | -                       |       | -   |
| HQ        | Occasional        | -     | -                   | -                             | -                       | -                       | -     | -   |

<sup>1)</sup> Conducted once annually

<sup>2)</sup> Performed upon occurrence of an incident or changes in equipment, work procedures, or materials

<sup>3)</sup> Develop improvement plans for hazardous risk factors rated C or higher, and reduce them to low-risk levels(D or E grade)

<sup>4)</sup> Items not yet completed are currently under improvement

<sup>5)</sup> Risk assessments for eight newly established processes were completed in January 2025

Safety and Health Management COMPANY OVERVIEW ENVIRONMENTAL SOCIAL GOVERNANCE FACTBOOK APPENDIX = 100

#### Measures to Ensure Safe Work Practices

LG Energy Solution operates a permit-to-work system to ensure the safety and health of workers. Prior to initiating any task, we identify hazardous risk factors that may lead to serious accidents and verify that appropriate safety measures are in place. Once the work begins, continuous onsite inspections are carried out by the Safety Police to identify and rectify potential occupational safety and health hazards during operations. Additionally, we guarantee the right to stop work for all employees and partner company workers. If a hazardous situation is identified, any individual at the site has the authority to immediately halt the work until corrective measures are taken to ensure safety.

### Establishing a Company-wide Environmental Safety Smart Factory

LG Energy Solution is constructing smart environmental safety factories across the sites to create safer and healthier workplaces. By implementing real-time remote monitoring of various risk signals, such as abnormal temperature/pressure conditions and hazardous material leakage, we can quickly identify and respond to potential issues. Additionally, we have established automatic control systems for the equipment to prevent deviations from normal operating ranges and to contain any potential damage, ensuring a secure and controlled work environment.

### **Embedding a Safety Mindset**

The most crucial aspect of safety and health management is fostering a safety-conscious mindset among employees. We provide personal protective equipment (PPE) to all employees and works to enhance safety awareness by identifying and mitigating near-miss incidents and other risk factors. Incident reports and videos are utilized in pre-work hazard prediction training sessions. Also, regular safety inspections are conducted annually, along with special safety inspections and accident-specific assessments as needed. Additionally, biannual inspections are carried out to comply with the Serious Accidents Punishment Act in Korea. On-site self-inspections are performed at each facility to identify non-conformance risks, which are then logged and tracked in our Environmental Health and Safety Management System. In particular, at the R&D campus in Daejeon, a Safety Festival is held to build a shared understanding of safety among employees and partner company staffs. The festival includes activities such as safety quizzes, near-miss incident contests, and hands-on experiences with protective equipment, encouraging participants to embrace the safety and health culture. Safety-related information is also disseminated through the company blog to improve safety awareness.





Safety Festival in R&D Campus in Daejeon

### Safety Education and Progress Sharing Events

To enhance employee safety awareness, we have established and distributed safety management procedures for chemicals and machinery at each workplace. In addition to mandatory safety training, experiential training centers have been set up and are in operation. These Safety Experience Education Centers at each site offer immersive training to heighten safety awareness and engagement. The Centers include various training themes, such as protective gear safety for hazard prediction training, equipment safety experiences to prevent entrapment accidents, virtual reality (VR) safety experiences, and emergency response and first aid training. Furthermore, we offer compliance training to strengthen safety and health competencies. In 2023, all employees were trained on the Serious Accidents Punishment Act, incident grading and reporting systems, chemical regulations, and compliance with chemical handling protocols. We also conducted 17 sessions of the environmental safety school, a group training program for team leaders and managers, to improve their safety capabilities and awareness. Annual performance sharing meetings are held to disseminate environmental safety improvement cases across the company, rewarding outstanding examples and implementing them at other workplaces. Environmental safety personnel from overseas operations also participate in fostering exchange and enhancing their skills

#### [Employee Environmental Safety Training]

| Tailored programs<br>for employees by<br>job functions and<br>positions | Programs for<br>employees at all<br>business sites | Programs for new<br>hires and related<br>employees                             | Training programs<br>for special task<br>workers        | Programs for<br>Employees of<br>Suppliers             |  |
|---|--|--|---|---|--|
| Introductory / Basic /<br>Professional Courses                          | Fostering an environmental safety mindset          | Before-work safety<br>and health<br>precaution training<br>for field employees | Training programs for employees in hazardous conditions | Supplier safety<br>management<br>enforcement training |  |

# **Employee Health Promotion Activities and Workplace Environment Improvement**

LG Energy Solution has established Occupational Healthcare center to provide professional medical services to its employees, resident suppliers, and visitors, and is promoting the health of its employees by providing an environment where they can manage their mental health by operating the "Green Mind Counseling Room". In addition, we periodically conduct musculoskeletal surveys and work environment measurements to investigate hazards to workers' health due to work burdened by employees and hazardous substances or the environment, and shares the results of the surveys with employees in various ways such as the Occupational Safety and Health Committee, sharing bulletin boards, and distributing booklets.

# List of Laws and Internal Guidelines for Workplace Health and **Safety Management Systems**

LG Energy Solution operates a standardized safety and health management system in accordance with the Industrial Safety and Health Act. This system includes two primary safety and health management quidelines and 20 internal regulations related to safety and industrial hygiene. By adhering to these guidelines and regulations, we establish a safe and comfortable working environment, preventing industrial accidents within our facilities. Through these measures, we mitigate injuries and property losses resulting from accidents and minimize the overall impact. Additionally, we focus on the early detection and prevention of common and occupational diseases among our employees, thereby maintaining and protecting their health.

## **Employee Health Prevention and Promotion Activities**

### Implementation of smart automated external defibrillators (AEDs)

LG Energy Solution has implemented and operates smart Automated External Defibrillators (AEDs) across all Korea sites to ensure the provision of these life-saving devices. The smart AEDs allow for real-time monitoring of the device's operational status, location, battery condition, door open status, and attachment state. With these smart AEDs, automatic device checks are done for history management are possible, and emergency SOS alerts are linked to the Emergency Response Center. This integration strengthens our Golden time emergency response system. We are continually expanding this infrastructure to safeguard the lives of our employees.

#### Occupational Healthcare center and Health Management program

LG Energy Solution established Occupational Healthcare center at headquarters, Ochang Energy Plant 1, and R&D Campus in Daejeon to manage employee health. These clinics offer a variety of services, including medical consultations, prescriptions, health check-ups, health counseling, and wellness programs. For sites handling hazardous chemicals, we provide extensive health screenings to prevent occupational diseases. These include comprehensive employee health checks, regular and special health screenings, cancer screenings, pre- and post-deployment health assessments for new hires and department transfers, and health evaluations for overseas assignees. Health consultations are also available for employees with noted health concerns. Additionally, to ensure high-quality medical services for employees visiting these clinics, we conduct various wellness programs at each site annually.

#### 01. Health Diagnosis and Post-Care Management

- Comprehensive health check-ups and General examinations for employees
- Specialized examinations, Cancer screenings, Pre and Post-placement examinations for new hires and Department Transfers (workplaces handling hazardous chemicals)
- 1:1 Consultations with specialists for employees with high-risk conditions (hypertension, diabetes, dyslipidemia, liver Disease)

#### 02. Concentrated Management for High-Risk Groups

- Identification of Individuals Requiring Intensive Management Based on Health Diagnosis Results (Cancer, Cardiovascular Disease Patients, etc.)
- 1:1 Consultations with Specialists for High-Risk Individuals
- Emergency Care and Transport Support for Emergency Patients

#### 03. Health Promotion Facility Operations

- Occupational Healthcare center (Headquarters, Ochang Energy Plants, R&D Campus in Daejeon)
- Internal health management offices (Ochang Energy Plant 1, R&D Campuses in Daejeon/Gwacheon/Magok)
- Internal psychological counseling rooms (Green Mind Counseling Room)

#### 04. Support for Overseas Staff Health Management

- · Remote medical services for overseas staff (coordinated with domestic comprehensive hospitals)
- · Health assessments conducted before dispatching candidates for overseas assignments
- Quarterly health status monitoring for expatriates with noted health conditions
- · Safety management services provided for overseas staff, business travelers, and accompanying family members

#### **Health Promotion Programs**

- Walking campaign "Walk for 30 Days"
- · Smoking cessation activity "BYE hyperlipidemia"
- Physical: 60 (60-day weight-loss challenge)
- Smoking cessation program "NO Cigarette"





Physical: 60

Walk for 30 Days

# **Supplier Safety and Health**

### **Enhancement of Safety and Health System for suppliers**

LG Energy Solution is committed to enhancing the safety and health of not only our own employees but also our suppliers. To achieve this, we operate a regular Safety and Health Council with our suppliers once a month. During these meetings, we share safety incident cases and risk assessment results. Additionally, we conduct joint contractor-subcontractor inspection every two months and on-site patrol every two days with our suppliers. We also utilize a smartphone app (SANDI) to gather feedback from supplier workers, addressing the issues raised and implementing improvements. A notable improvement is the installation of air conditioners and heaters in electric forklifts to prevent heat & cold - related illness for supplier workers who operate these vehicles outdoors during extreme heat and cold conditions.

### Safety Education and Evaluation for suppliers

LG Energy Solution has conducted construction safety training, including risk assessment, for approximately 11,178 supplier workers at Korea sites. Continuous refresher training is provided to instill a strong safety culture. Special safety training is also given to suppliers with a high number of non-compliance issues and frequent recurring problems. Additionally, we conduct biannual evaluations (in the first and second halves of the year) of 418 contracting, service, and subcontracting companies (138 general contractors and 280 construction contractors). These evaluations cover safety and health management, job performance suitability, field feedback, and site safety management. We monitor and ensure the implementation of actions based on the evaluation results.

# **Empowering Our People**

LG Energy Solution respects the human rights of its employees and all relevant stakeholders, and strives to uphold its responsibility to protect human rights in all business activities.

Empowering Our People Visit Website

# **Human Rights Governance**

Under the corporate management principle of "People-Oriented Management", LG Energy Solution is committed to fulfilling its fundamental responsibility to uphold, respect, and embed the rights to human dignity, freedom and happiness. To effectively identify and manage risks and opportunities related to human rights management, we have established and operates an integrated governance structure involving the ESG Committee under the Board of Directors, executive management, and relevant departments.

### **Board of Directors and ESG Committee**

The Board of Directors and its ESG Committee is responsible for management and oversight of risks related to human rights and labor management. It deliberates and resolves key issues by monitoring, discussing, and advising on the adequacy and effectiveness of risk management systems, strategies, processes, and programs related to human rights and labor management.

# **Management and Functional Departments**

The executive management and relevant departments are responsible for the execution of this Policy. They establish and implement strategies and processes related to human rights and labor management; operate management programs; set relevant indicators and targets; and monitor progress towards those goals.

#### [Main Functions and Responsibilities of relevant departments]

| Main Functional<br>Departments     | Roles and Responsibilities   |
|------------------------------------|--|
| ESG Strategy Team                  | Establishment of mid- to long-term goals for sustainable management, including human rights, and monitoring of implementation progress     Establishment of global partnerships through participation in international initiatives (UNGC, GBA, RBA, FCA, etc.)     Operation of the ESG Committee and ESG Working-Level Council     ESG risk management across all global sites (including regular RBA VAP audits)     Development and implementation of a human rights due diligence process     Stakeholder engagement on human rights issues (including customers, investors, NGOs, etc.)     Monitoring and analysis of major global regulatory trends |
| Sustainability<br>Cooperation Team | Regular ESG Assessments and Third-Party Audits for Tier-1 Suppliers  Monitoring and analysis of key global regulatory developments   |
| Supply Chain ESG<br>Team           | Establishment and implementation of supply chain management policies     Setting of supply chain sustainability goals and KPIs, execution, and performance monitoring     Oversight of capacity-building programs and shared growth initiatives for procurement staff and partner companies  |
| HR Planning Team                   | Planning and operation of HR systems for employees     Management and operation of HR policies and the Evaluation Talent Committee   |
| Employee Relations<br>Team         | · Labor management planning and management · Identification and analysis of global labor-management trends   |
| Business Ethics<br>Office          | Operation of sexual-/non-sexual harassment prevention center Development<br>and operation of Jeong-Do Management training and awareness raising<br>programs Conducting audits and follow-up investigations on reports received via<br>the LG Ethics Hotline  |
| Compliance                         | · Operation of the Compliance Management System and Oversight of Compliance<br>Control Activities  |
| SEO                                | · Support for implementation of workplace safety, health, and environmental standards and on-site departments  |

LG Energy Solution supports all internationally recognized standards on human rights and labor. including the UN Universal Declaration of Human Rights, the UN Global Compact's Principles on human rights and labor, the UN Guiding Principles on Business and Human Rights, and the fundamental conventions of the International Labor Organization. We comply with the laws and regulations of the countries and regions in which we operate, and when there is a conflict between local laws and international standards, the more stringent standard is applied.

Recognizing that human rights can be interpreted in various ways depending on the contextual environment and that they are inherently linked to multiple domains, LG Energy Solution incorporates these perspectives into its human rights management. We embed human rights considerations into policies and documents across different operational areas under a unified human rights management framework, ensuring that employees, partner company workers, and all supply chain stakeholders are protected from human rights violations.

Among these, the "LG Energy Solution Global Human Rights and Labor Policy" articulates our commitment to human rights management, detailing our responsibilities and obligations in line with human rights principles and due diligence. Since the company's spin-off from LG Chem in December 2020, we have inherited LG Chem's global human rights and labor policy and have revised it regularly to reflect updates to global standards, including the RBA Code of Conduct.

In the version 3.0, revised in June 2024, we reorganized the "Detailed Human Rights Principles" to align with the company's responsibility in human rights management and expanded its application across all business sites. This revision was approved by the CEO, reinforcing executive accountability and authority for human rights management. It also added specific content on grievance mechanisms, human rights due diligence, and stakeholder engagement, declaring our commitment to identifying and remedying potential and actual adverse human rights impacts throughout the business. Furthermore, LG Energy Solution practices the fundamental value of respecting human dignity not only for its employees but also for customers, suppliers, service providers, contractors, key partners, and local communities across its entire value chain. We are committed to preventing any adverse human rights impact on these stakeholders.

This policy is updated as needed in response to changes in industry and regulatory trends. The revision process includes consultation with relevant internal departments as well as external experts and stakeholders. The most up-to-date version is made available through our internal portal and LG Energy Solution's official website.

#### Global Human Rights and Labor Policy Visit Website

#### **Human Rights Policy Framework**

- · Global Human Rights and Labor Poliy
- · Global Safety and Health Policy
- · Diversity, Equity, and Inclusion Policy
- · LG Code of Ethics
- · Global Environmental Policy
- · Responsible Sourcing Policy
- · Guidelines on the Expertise and Diversity of the Board of Directors
- · Code of Conduct for Suppliers

- · Informant Protection Policy
- · Anti-Bribery Policy and Guidelines for Employee

#### [Global Human Rights and Labor Policy]

| Categories  | Contents  |
|---|---|
| Prohibition of<br>Forced Labor  | We prohibit unfair confinement of mental or physical freedom or forced labor against the will of the employees either by intimidation or threat, or by physical confinement, human trafficking, modern slavery, or any other means.   |
| Prohibition of<br>Child Labor   | We strictly follow local and national laws restricting the employment of underage workers. Regardless of local laws, no workers at a facility or location that provides materials, products or services to LG Energy Solution may be under the age of 15. Any worker under the age of 18 (young workers) shall be removed from hazardous work (including night shift and overtime).   |
| Prohibition o<br>Discrimination and<br>Harassment                               | We prohibit all types of discrimination on the basis of sex, sexual orientation, gender expression or identity, age, race, nationality, ethnicity, religion, creed, union membership, disability, medical condition, marital status, pregnancy, social status or any other characteristic protected by law, regulation or ordinance. We provide all employees equal opportunities for employment, promotion, wage, compensation, and training. Women and men are given equal pay for equal work and wage discrimination based on sex is prohibited.  Any type of workplace harassment – sexual or non-sexual – is prohibited and a zero-tolerance policy is enforced. In the event of any violation, appropriate remedial action shall be taken.  |
| Compliance with<br>Labor Standards  | All employees are paid with wages that exceed the minimum wage set by the laws of applicable jurisdictions. We comply with the regulations regarding working hours, holidays, and leave as stipulated by applicable national and local laws and avoid excessive working hours or overtime. Employees are not forced to work beyond standard working hours, and when overtime is necessary, overtime pay is provided within legal limits and in accordance with relevant laws.   |
| Recognition of Freedom<br>of Association and<br>Collective Bargaining<br>Rights | We respect freedom of association and the right to collective bargaining as guaranteed by applicable national and local laws. We foster an environment where employees can communicate freely with the employer without fear of intimidation or retaliation. Employees will not be subjected to unfair treatment for forming, joining, or participating in labor unions and their activities.   |
| Guarantee of Safety and<br>Health   | We create a safe and hygienic working environment for all workers, including employees and suppliers. We conduct regular health checks for employees, including vulnerable workers who are more susceptible to potential safety and health risk, such as pregnant, newly born or breastfeeding workers, those with disabilities, and older workers. In assigning work tasks, we consider the health conditions and physical capabilities of each worker to ensure their well-being and safety. Proactive health management is employed to prevent safety and health risks in advance, including health promotion activities, workplace hazards assessment, and near miss incidents reporting and improvement. We perform proactive maintenance of facilities, equipment, raw materials and products to prevent disasters within the local community and among citizens. |
| Personal Information<br>Protection  | We protect personal information of our employees, visitors, contractors, suppliers, and anyone in contractual relationship with the company. We strive to protect stakeholders from human rights risks associated with the misuse and leakage of personal information by checking for any privacy breaches, compliance issues, and other related concerns.  |
| Management of Human<br>Rights Impact within<br>Supply Chains                    | We ensure responsible sourcing of raw materials by establishing the "Responsible Sourcing Policy" and "Supplier Code of Conduct," which outlines the fundamental principles of supply chain management for LG Energy Solution and its suppliers. Based on these principles, we systematically manage the human rights impact within our supply chains. All principles outlined in this Policy are applied to each and every stage of battery value chain, from raw materials extraction, processing to components production and procurement thereof. A zero-tolerance policy is enforced to respect and protect human rights throughout supply chains.   |
| Protection of Community<br>and Indigenous Peoples'<br>Rights                    | We respect the rights of local communities and indigenous peoples and ensure the right to grant or withhold free, prior, and informed consent (FPIC) in the relevant decision-making processes associated with our business.  |

# **Human Rights Due Diligence**

As a member of the United Nations Global Compact (UNGC), LG Energy Solution participated in the "Business and Human Rights Accelerator" program in the first half of 2024 in collaboration with SHIFT, an international human rights organization. Through this initiative, we established a human rights due diligence process applying the human rights impact assessment methodology based on the UN Guiding Principles on Business and Human Rights (UNGPs).

The human rights due diligence process is designed to identify, prevent, and mitigate any actual or potential adverse human rights impacts that may arise throughout the value chain, and to develop appropriate response measures. LG Energy Solution is committed to identifying all actual and potential human rights risks arising from its business operations and seeks to address these across its value chain, including not only directly operated entities such as manufacturing sites and sales offices, but also vulnerable stakeholders impacted by our operations, including subcontractors, suppliers, and local communities—particularly at-risk groups such as indigenous peoples and migrant workers. Furthermore, our policy and due diligence scope encompass production and operational facilities, products and services, distribution and logistics, suppliers, service providers, contractors, and key business partners. Human rights considerations are reviewed as part of major management decision-making processes to identify and address significant risks related to human rights.

#### [Human Rights Due Diligence Process]

#### Scoping Human Rights Impact and **Identifying Risks**

We identify stakeholder groups that may be affected by our business activities and utilize appropriate risk identification tools catered to characteristics of groups. We identify risks by collecting primary data from stakeholders through the RBA's Validated Assessment Program (VAP), grievance reports, surveys and focus group interviews; as well as secondary data from research materials such as industry/country-specific indices, public reports from academia and NGOs, etc.

#### Setting Risk Priorities

We prioritize the identified human rights risks based on criteria such as severity and likelihood of occurrence.

# Risk Prevention, Mitigation, and

Based on the identified human rights risks and their prioritization, we develop plans and targets to prevent, mitigate and remediate risks. We will designate responsible individuals with the authority to address these risks and develop actionable tasks to ensure their implementation.

#### Implementation Monitoring and Results Integration

We continuously monitor the post-risk actions to ensure they are effectively implemented to achieve our goals. We will track feedback from affected stakeholders to evaluate the adequacy of remedial actions. Key findings will be integrated into our due diligence process and prevention/mitigation action plans to progressively enhance the human rights due diligence process.

# 2024 Pilot Human Rights Impact Assessment Results and Mid-to-Long-Term Human Rights Management Goals

In line with our management philosophy of "Creating Value for Customers" and "People-Oriented Management," LG Energy Solution has established a human rights due diligence process based on the UN Guiding Principles on Business and Human Rights (UNGPs) to strengthen and systematize existing human rights management initiatives and ongoing programs. During the reporting period, we conducted a pilot human rights impact assessment to test the functionality of the newly established due diligence framework and to evaluate the overall management system. The assessment considered the nine Principles outlined in LG Energy Solution's Human Rights and Labor Policy as part of the company's scope of management and identified key priority areas requiring enhanced attention. In addition, we developed a "Human Rights Principles Check-list"\* to analyze the internal status external trends of each principle and assess the potential impact on the company, thereby enabling the identification of areas for improvement. Moving forward, LG Energy Solution aims to progressively refine its human rights impact assessment methodology, continuously monitor and map potential risks across all management areas, and place stronger focus on identifying and managing specific human rights risks in high-priority areas.

#### \* Human Rights Principles Checklist

The Human Rights Principles Checklist was developed based on internationally recognized frameworks such as the UNGC's "Business & Human Rights Navigator" and the Korean Ministry of Justice's "Guidelines on Business and Human Rights." The checklist consists of 90 items and is designed to assess the presence and effectiveness of policies, governance structures, management systems, and operational activities aligned with each human rights principle. This checklist comprehensively reflects the nine principles outlined in LG Energy Solution's Human Rights Policy, including the prohibition of forced labor (including human trafficking), child labor, freedom of association, equal remuneration, and non-discrimination.

In addition to the checklist, LG Energy Solution conducts human rights impact assessments by quantifying the severity and likelihood of human rights risks associated with each principle.

| Primary Data   | Data collected directly on site - Site's RBA assessment results, Supplier ESG risk assessment results, compliance risk assessment results, grievance reports, etc. |
|----------------|--|
| Secondary Data | Data collected indirectly - Media reports, NGO and academic reports, etc.  |

As a result of the prioritization assessment, three principles were identified as highest-priority areas. indicating the need for more proactive risk management; prohibition of forced labor, prohibition of child labor, and management of human rights impacts within the supply chain. In the review of the company's internal management status, it was found that the company's directly employed workforce is governed by policies and processes that meet global standards, and therefore, human rights risks for directly employed personnel were assessed as relatively low. On the other hand, areas for improvement were identified in relation to indirectly employed workers, such as workers employed by parent companies or subcontractors, particularly with regard to working hours, where LG Energy Solution's legal authority to intervene is limited. As a short-term corrective measure, internal guidelines for recruiting agencies are being strengthened. No critical human rights violations requiring immediate remedial action were identified. Where issues were identified—such as in occupational health and safety regulations or initiatives to improve workplace culture—corrective actions have been implemented as part of follow-up measures from RBA site assessments and ESG supplier evaluations.

### Prohibition of Forced Labor, Prohibition of Child Labor, and Management of Human Rights Impacts in the Supply Chain

#### [Issue Description]

Child labor and forced labor pose a relatively higher risk in developing countries, where living wages are low and access to education is limited. In contrast, countries such as Korea and other regions where LG Energy Solution operates have relatively lower human rights risks associated with forced and child labor. Accordingly, these issues are less frequently highlighted within direct operations compared to global supply chains, resulting in a relatively low level of risk awareness despite their significance. However, regulations such as the EU Forced Labor Regulation (EU FLR) and the U.S. Uyghur Forced Labor Prevention Act (UFLPA) are increasingly enforcing direct sanctions on companies or products associated with forced or child labor. Consequently, it is becoming increasingly important for LG Energy Solution to manage human rights risks not only within its own operations but also throughout the entire supply chain.

#### [Assessment Result]

As a global mid-stream supply chain management entity, LG Energy Solution is committed not only to proactively mitigating compliance risks that could directly impact its business operations, but also to protecting the human rights of a wide range of stakeholders—including indirectly employed workers, supply chain participants, and local communities—while striving to create sustainable social value.

#### 1) Management of Human Rights Risks for Indirectly Employed Workers

LG Energy Solution actively manages human rights risks for workers in production sites who are particularly vulnerable—such as those employed by subcontractors or service providers—through regular on-site assessments and third-party interviews. Additionally, we continuously enhance relevant institutional frameworks to promote ethical recruitment, including strengthening internal guidelines for recruitment agencies.

#### 2) Management of Forced Labor Risks in the Supply Chain

To minimize risks related to forced labor, LG Energy Solution operates a dedicated taskforce that conducts ongoing monitoring and inspections. Furthermore, we have established a continuous management system by developing a risk assessment framework based on supply chain mapping data, Al tools, and publicly available information.

#### [Supply Chain Information Collection] [Risk Identification] Accuracy Verification Increased Obligation to Provide Supplier Collecting Information **Conducting Estimated** Mapping Information Mandating Information Disclosure Collecting Full Supply Chain Mapping Information Pledging to comply with the Code of Conduct for Using AI ToolsInformation Suppliers Compliance with global regulations and provision of country of origin Purpose 1 Verifying Information Consistency Cooperation in providing supply chain traceability information and extending responsibilities to upstream suppliers Purpose 2 Identifying Potential Risks Establishing / Implementing InformationDisclosure Processes Estimating and Mapping Uncollected Purpose 3 - Mandating suppliers to submit information on Information upstream supply chains - Updating regular ESG evaluation with Confirming Transactional Relationships new criteria on forced labor risk assessment and Purpose 4 and Ownership Structures Tier-N supply chain mapping [Risk Analysis and Management] Risk Management Public Risk Analysis On-site Due Disclosure Diligence Risk Analysis Related to Forced Labor Response Process by Risk Type - Consider transaction suspension or Analyzing risks using AI tools and public data\* High Risk termination - Promptly secure alternative suppliers Direct trading relationship - Request clarification on risks Medium with companies suspected If addressed: Maintain transactions. Risk but review alternative options If not addressed: Consid Low - Maintain transactions while Risk continuously monitoring risks Direct or indirect ownership Medium relationship with companies suspected of forced labor Due Diligence for Medium- and Low-risk Supply Chains Conduct investigations based on the forced labor checklist Low Risk not identified by Al tool If a high risk of forced labor is identified, require 2 third-party audits and submission of results Require submission and review of CAPs

\* e.g. relevant reports issued by government authorities, academia, research institutions or NGOs

# Major Findings and Remedial Actions from Production Sites (2023 - 2024)

LG Energy Solution regularly conducts RBA VAP (Validated Assessment Program) assessments to evaluate ESG risks—including those related to human rights, occupational health and safety, environment, and business ethics—at its production sites. These assessments cover not only directly employed personnel but also indirectly employed workers such as those from partner companies and subcontractors. In particular, the RBA VAP also focuses on vulnerable worker groups such as female employees, young workers, persons with disabilities, and migrant workers, and assesses whether local communities and indigenous peoples are appropriately considered within the company's management systems. The on-site RBA VAP audit is conducted biennially, while the RBA SAQ (Self-Assessment Questionnaire) is carried out annually.

In 2023, LG Energy Solution conducted RBA VAP assessments at its site in Ochang, Korea and three sites in China. In 2024, the assessments were carried out at production sites in the United States and Poland. Going forward, we plan to gradually expand the scope of assessments to include joint ventures in accordance with agreed roles and responsibilities (R&R) for business operations and site management with its partners. The number of findings and corresponding remedial actions related to labor and human rights, as well as occupational health and safety issues identified during the on-site audits, are outlined below.

| Country          | Business site            | On-site<br>Assessment<br>date | Findings | Improvement measures | R  | esidential issue  |  |
|------------------|--------------------------|-------------------------------|----------|----------------------|----|---|--|
| Korea            | Ochang Energy<br>Plant 1 | October<br>2023               | 9        | 9                    | 0  | -   |  |
|                  | LGESNJ                   | December<br>2023              | 5        | 3                    | 2  |   |  |
| China            | LGESNA                   | December<br>2023              | 3        | 1                    | 2  | Working Hours and                                       |  |
|                  | LGESNB                   | December<br>2023              | 4        | 1                    | 3  | Working Hours and<br>Continuous Working<br>Days Related |  |
| North<br>America | LGESMI                   | September<br>2024             | 2        | In<br>Progress       | 2  | (Common)  |  |
| Poland           | LGESWA                   | July 2024                     | 4        | 2                    | 2  |   |  |
|                  | Total                    |                               | 27       | 16                   | 11 |   |  |

A recurring issue identified across LG Energy Solution's production sites is related to working hours. Specifically:

- ① Exceeding the RBA standard for total working hours (where discrepancies exist between local labor laws and the RBA Code, the stricter standard is applied), and
- 2 Consecutive working days exceeds 6 days.

As a corrective measure, LG Energy Solution issued formal letters to labor recruitment agencies, requesting strict compliance with the RBA Code of Conduct. In addition, all health and safety issues—such as insufficient facility signage or inadequate safety instructions—have been fully resolved through appropriate corrective actions. The effectiveness of these improvements and their ability to prevent recurrence are continuously monitored through regular on-site inspections.

LG Energy Solution recognizes the potential gap between national labor laws, RBA standards, and actual labor practices. During the audit process, worker interviews confirmed that no involuntary overtime was occurring. Nevertheless, we acknowledgy the possibility that voluntary overtime may stem from workplace culture or wage structure and are actively reviewing ways to improve working conditions. Continuous engagement with labor representatives is ongoing to support such improvements.

Looking ahead, LG Energy Solution will continue to utilize the RBA VAP assessments as a key tool for collecting human rights impact data and for identifying and implementing necessary improvements and remedial actions. We are committed to communicating progress transparently on these matters.

## **Human Rights Management Targets for Production Sites**

LG Energy Solution aims to preemptively manage human rights risks at its production sites and to progressively expand its management scope by obtaining and maintaining RBA VAP Medals (Silver, Gold, Platinum) for each site. For newly established production entities and joint ventures (JVs), we are committed to establishing human rights management systems aligned with global standards and identifying potential adverse human rights impacts, thereby fulfilling its responsibilities in human rights management.

| Indicator                      | 2024 | 2025 | 2026 | 2027 |
|--------------------------------|------|------|------|------|
| Certified with RBA VAP Medals* | 5    | 6    | 7    | 8    |
| Actual                         | 5    | -    | -    | -    |

<sup>\*</sup> Number of business sites with valid RBA VAP Silver, Gold, Platinum ratings within the reporting period

# **Grievance Mechanism**

# **Scope of Grievance Mechanism**

LG Energy Solution's grievance mechanism is operated for all stakeholders across the value chain, including employees, indirectly employed workers, suppliers, service providers, contractors, key partners, NGOs, and local communities. The mechanism addresses a wide range of grievances across various categories.

| Main Types                | Main Reported Content  |
|---------------------------|--|
| Whistleblowing            | Corporate misconduct such as corruption, bribery, etc. (including whistleblowing)  |
| Worker Grievance          | Unethical behavior (e.g., sexual harassment, workplace bullying) and general HR-related grievances   |
| Supplier Grievance        | Complaints related to corporate policies and operations concerning suppliers (e.g., delayed payments, unethical conduct by the company or its employees)   |
| Customer Grievance        | Complaints regarding products and services   |
| Local Community Grievance | Negative impacts on local communities near business site (e.g., pollutant emissions, noise)  |
| 3rd Party Grievance       | Concerns raised by third parties* regarding business operations, supply chains, and environmental and social impacts *Includes NGOs, 2- to N-tier suppliers, and other stakeholders in the value chain |
| Others                    | Other stakeholder complaints and grievances  |

In order to implement an effective grievance process, each case is handled by the Department in Charge and the process may differ, but is generally conducted as follows.

| Receive and register grievance      | Receive/register grievance through channels such as those below - Email, letter, fax, phone - Meeting - Proactive outreach - Others   |  |
|-------------------------------------|---|--|
| 2. Acknowledge,<br>Assess, Assign   | Acknowledge receipt to the reporter and outline the grievance handling process     Determine the eligibility of the complaint     Assignment of responsible person and responsible department   | ₽°   |
| 3. Propose response plan            | Propose a response plan in the following formats  a Direct response and correction by the company b Stakeholder Assessment and Engagement c Referral to a more appropriate mechanism d If determined to be inelligible, proceed to 6) Investigation | <u>@</u>   |
| 4. Agreement on response            | Progress of agreement on proposed response plan **Agreement with the informant is also required regarding ©, @  |  |
| 5. Implementation agreed response   | If agreement fails, 6) Conduct investigation  | (\$\overline{\phi}\)   |
| 6. Review                           | After reviewing the results of item 5, determine whether to revise the remediation method (response plan), whether referral to another agency/mechanism is necessary, or whether the grievance has been resolved                                    |  |
| 7. Grievance referred or closed out |   | <b>\(\begin{array}{c} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\</b> |

In order to quickly receive reports on human rights impacts from directly and indirectly related stakeholders and to provide effective redress and mitigation, various grievance channels such as LG Shinmungo, Employee Hotline, and company website are being operated. By operating not a single channel but multiple reporting channels, an environment has been created where reporters can select a channel according to the type of reporter and human rights impact or risk type. In accordance with the whistleblower protection policy, the confidentiality of the informant and the content of the report is strictly protected during the grievance handling process, and responsibility is taken to ensure that there is no disadvantage or retaliation regarding the report.

The grievance handling reception channel, which is disclosed externally and accessible to anyone, is as follows.

#### LG Ethics Hotline

A comprehensive grievance channel for reporting unethical behaviour by employees or certain departments, as well as customer complaints about products and services in relation to environmental and social footprint and business ethics. In addition to online channel, employees and other stakeholders can report via telephone, mail, fax, and other methods.

- · Online: https://ethics.lg.co.kr/
- E-mail: Igesethics@lgensol.com
- Tel: +82-2-3773-4123 (FAX: +82-2-3773-4084)
- Post: Business Ethics Office, 62F, Tower 1, Parc1, 108 Yeoui-daero, Yeongdeungpo-qu, Seoul, Korea

#### Supplier Grievance system

A grievance channel for stakeholders from supply chains, including suppliers, service providers and contractors, to report any instance of violation in human rights, safety and health, environment, and business ethics or raise potential concerns. All stakeholders have the right to report the violation occurring in LG Energy Solution's premises and along its supply chains.

· E-mail: grievance@lgensol.com

#### **Company Website**

Stakeholders can also report or inquire about a variety of topics, including human rights issues, through the dedicated page at our website

Online: https://www.lgensol.com/kr/cs

#### **Voluntary Dispute Mediation Committee**

In April 2023, LG Energy Solution established the Voluntary Dispute Mediation Committee to provide a formal channel through which suppliers can resolve grievances that may arise during business transactions. If mediation is required, suppliers may submit a dispute mediation request to the Committee through the channels listed below.

· Email: esfairtrace@lgensol.com

• Tel: 02-3773-4677

## **Labor Relations Management**

LG Energy Solution recognizes employees and labor unions as important partners and fosters a culture of growth and cooperation based on mutual trust, building a community-oriented labormanagement relationship. Employees are free to join and participate in labor unions, and we engage in business-focused and productive collective bargaining.

#### Labor unions

LG Energy Solution has labor unions established both domestically and internationally in accordance with applicable laws. We conduct regular collective bargaining with the domestic labor union for the purpose of building a cooperative labor-management relationship. Each year, the labor union and the company negotiate and conclude agreements on collective bargaining clauses and wages, with the most recent agreement being signed on December 23, 2024. All decisions negotiated are promptly communicated to the employees and reported to Administrative Agencies In accordance with Article 31 of the Trade Union and Labor Relations Adjustment Act, Among overseas operations, the China entity has a staterecognized employee organization in accordance with local labor regulations. While there is no separate labor union at the Poland entity, we listen to employees' opinions through employee representatives.

3-Year Labor Union Membership Status Go to page

## Securing Workers' Rights and Identifying Risks

To ensure the protection of workers' rights and to mitigate compliance risks, LG Energy Solution's Employee Relations Department regularly monitors relevant regulatory trends and engages in compliance activities. As part of company-wide compliance efforts, we identify and monitor risks related to human resources and labor-management issues, ensuring ongoing adherence to legal requirements.

LG Energy Solution complies with labor relations laws based on mutual trust between labor and management, and as such, no business sites have been identified as being at risk of infringing upon the freedom of association or the right to collective bargaining.

## **Talent Management and Training**

LG Energy Solution has established and operates a talent recruitment and development system that is organically aligned with its business goals and strategies. This system is grounded in the LG's management principles of "Creating Value for Customers and People-oriented Management" and is guided by its ideal talent profile persons of action with belief in LG Way and execution capabilities, and who possess a goal-oriented mindset with an aim to extending our capacities, LG Energy Solution inspires talents with growth, challenge, action, and collaboration who EMPOWER EVERY POSSIBILITY of the world with our technologies.

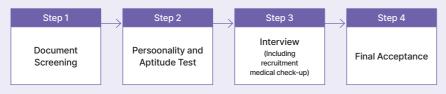
Ideal Employee Visit Website Job Opportunities Visit Website

## Recruiting and Growing Talents based on HR Philosophy and Value

### **Recruitment Process**

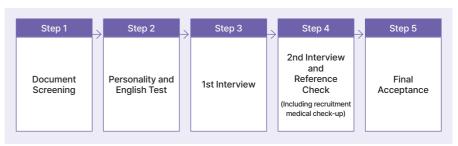
By taking account of the changing business environment, LG Energy Solution conducts ongoing new employee recruitment to strategically place diverse talents in suitable positions. HR, team leaders, and members collaborate to secure excellent talents aligned with job responsibilities. Particularly in the R&D field, specialized recruitment processes are implemented to attract top talents. To enhance candidates' understanding of job opportunities, we organize job-specific online live recruitment sessions that reflect detailed job postings.

#### [New employee process]



| Step.1<br>Document<br>Screening                                    | Applications are reviewed based on the applicant's preferred business division, job function, and work location.     The applicant's overall competencies are evaluated. (For R&D master's and doctoral candidates, additional review is conducted based on thier research materials (e.g., papers) to assess job suitability.)   |
|--|---|
| Step.2<br>Persoonality and<br>Aptitude Test                        | <ul> <li>A personality test aligned with LG Energy Solution's talent profile is conducted to<br/>comprehensively assess the applicant's disposition and fit with the organization.</li> <li>Job-specific performance capabilities are measured to evaluate problem-solving skills<br/>and growth potential.</li> </ul>  |
| Step.3<br>Interview<br>(Including recruitment<br>medical check-up) | Job Fit Interview     Based on a job-specific presentation, this interview assesses the applicant's ability to analyze issues and solve problems, as well as the essential competencies required for the role.     Culture Fit Interview     Assesses alignment with LG Energy Solution's talent profile, cultural fit within the organization, and overall growth potential. |
| Step.4<br>Final Acceptance   | · Final decisions are made based on a comprehensive evaluation of all selection results.  |

#### [Experienced employee process]



| Step.1 Document Screening   | Applications are reviewed based on the applicant's preferred business division, job function, and work location.     The applicant's overall competencies are evaluated. (For R&D master's and doctoral candidates, additional review is conducted based on research materials to assess job suitability.)   |
|---|--|
| Step.2<br>Personality and<br>English Test   | LG Way Fit Test: A personality assessment designed to reflect LG Energy Solution's talent profile, used to evaluate the applicant's disposition and cultural fit.     English Oral Test: An Al-based English speaking test to assess business communication proficiency.   |
| Step.3<br>1st Interview   | Evaluation of the applicant's ability to perform the role based on technical expertise and relevant work experience.     Interviews are focused on job-specific competencies and may vary depending on the position (e.g., presentation-based interviews, situational interviews, coding tests).     For R&D positions, relevance and suitability of academic background and research experience are assessed. |
| Step.4 2nd Interview and Reference Check (Including recruitment medical check-up) | Comprehensive evaluation of cultural fit, growth potential, and collaboration skills, based on LG Energy Solution's talent profile.     Online reference checks are conducted during in this step.   |
| Step.5 Final Acceptance   | Post-offer HR terms will be discussed after the final acceptance, based on a comprehensive evaluation of the applicant's performance.  |

COMPANY OVERVIEW ENVIRONMENTAL

LG Energy Solution follows a fair recruitment process based on various checklists and have enhanced their internal recruitment management system for efficient talent acquisition. Each department validates competencies tailored to specific job roles through tailored application essays, job-fit interviews, coding tests for certain roles, and English oral tests. The HR Business Partner (HRBP) teams across business units ensure that the voices of operational departments are considered in the recruitment process. We also support onboarding and training for new employees at business sites.

LG Energy Solution provides equal opportunities to all applicant who meets the requirements, operating a job competency-focused rolling recruitment process that excludes personal abilities such as gender, age, etc. We strive for healthy and sustainable growth based on diversity and make efforts to expand recruitment opportunities for various talents, including those covered by regulations for persons with disabilities and veterans, as part of their social responsibility efforts.

3-Year Newly Hired Statuts Go to page

#### **Excellent Talent Recruitment Process**

#### Battery Tech Conference (BTC)

LG Energy Solution hosts the Battery Tech Conference (BTC) as a key initiative to engage outstanding master and Ph.D talents in the R&D sector, which is fundamental to its future business. Through this event, we introduce our its vision for battery technology and business, while providing opportunities for networking between invitees and employees. In 2024, BTC was held in North America (May) and Korea (September). Participants interested in joining LG Energy Solution are given guidance on a special recruitment track, which significantly shortens the usual hiring process—from several months to about one month—thereby enhancing candidate satisfaction and enabling the company to secure top talent quickly and efficiently.

In May 2024, LG Energy Solution hosted BTC in in New York, U.S., inviting more than 40 Korean master's and Ph.D. candidates selected from leading U.S. universities and research institutes including MIT, Princeton, Cornell, and Argonne National Laboratory. We exchange the various technologies and on-site executive-level interviews were conducted. In September 2024, BTC in Seoul was held, complemented by Target Lab visits have to do with our current business. These efforts are part of LG Energy Solution's proactive strategy to build a strong pipeline for top future talent.

#### Contract Departments and Industry-Academia Collaboration

talent with world-class capabilities in battery technology.

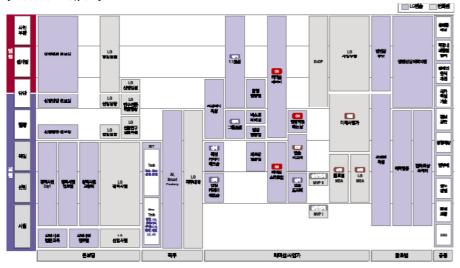
LG Energy Solution operates contract departments and industry-academia cooperation programs in collaboration with leading domestic universities to cultivate and secure top-tier talent in the domestic battery sector. In March 2022, we established two new contract-based academic programs conditional on employment: Department of Battery-Smart Factory at Korea University and the Interdisciplinary Program in Secondary Battery Convergence Engineering at Yonsei University. Furthermore, since September 2022, we have been running an industryacademia program with the Department of Battery Engineering at Hanyang University. Each year, we have organized various events and lectures for students in these programs, such as InterBattery exhibition invitations, headquarters tours, and baseball park visits. In particular, during the Industry-Academia Cooperation Conference held in July 2024 at R&D Center in Daejeon, 120 participants involved in joint research projects were invited to present their research outcomes and exchange technologies through poster sessions and networking events. Those selected as outstanding presenters were given special hiring incentives linked to employment opportunities. Through these initiatives, we strive to foster shared growth and build strong ties between academia and industry. This allows the company to proactively secure exceptional

## **Employee Education**

#### Valuing Human Capital Visit Website

Based on the belief that "Diverse talent is the source of our competitive edge," LG Energy Solution is committed to nurturing achievement-oriented individuals who possess the capabilities of growth, challenge, execution, and collaboration. To this end, we have established a competency development program that is organically aligned with our business goals and strategies, and is designed to support employees throughout their entire lifecycle—: joining, employment, and retirement. Training programs are structured according to a multi-level framework, including: Common and mandatory training for all employees, Onboarding programs for new hires and leaders to ensure early adjustment, Leadership development programs for position holders who are responsible for organizational performance, Future business leader development initiatives, Job-specific professional training to build role-based expertise across the organization, both domestically and globally. In addition to company-led initiatives we also support various self-development opportunities through internal and external channels, in alignment with the LG Group's management philosophy that prioritizes customer value. These efforts aim to foster self-directed talent who contribute to the organization's performance, while annual quantitative and qualitative investment indicators are monitored to manage the effectiveness of talent development

#### [Education Diagram]



## **Common and Mandatory Training**

#### **Ensol Campus**

LG Energy Solution supports all employees with job expertise and leadership development, and aim to establish a self-directed learning culture by operating an online learning platform, "Ensol Campus" which is systematically built in-house. At Ensol Campus, we offer a variety of learning contents (as of 2024: 1,480 job-related, 387 leadership, and 813 language courses). Structurally, we are divided into three categories: "Battery College" for job expertise, "Leader's Academy" for leadership, onboarding, strategy, management, and career development, and 'Language School' for foreign language proficiency, providing diverse internal and external content (Korean/Chinese/English) to actively support the growth and development of all global employees.

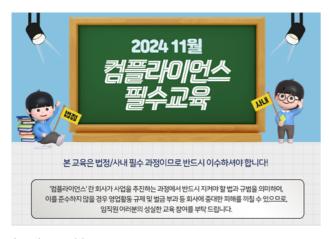


**Ensol Campus** 

3-Year Employee Education Status Go to page

#### Compliance training

LG Energy Solution supports Compliance training so that all employees can recognize the importance of compliance required by laws/regulations and code of ethics and effectively internalize related knowledge to practice it in the work environment. Every year, we provide compliance training in accordance with Code of Conduct including legal requirements: prevention of sexual harassement in the workplace, improvement of awareness of disabilities in the workplace, information security and pravacy, protection of national core technologies/industrial security strategies and internal requirements: prevention of workplace bullying, compliance regulations, ESG, quality, EH&S, fair trade, and strictly manage employees' completion results according to legal requirements and ISO audit standards. Through this, we help employees prevent risks such as criminal penalties, compensation for damages, and disciplinary actions at the company/individual level, and support them to practice the spirit of principle-center and respect for others.



Compliance training

## Support for Reemployment of Voluntary Retirees

In preparation for an aging society, LG Energy Solution provides reemployment training in accordance with the Act on the Prohibition of Age Discrimination in Employment and Elderly Employment Promotion, targeting employees aged 50+ who are facing involuntary retirement (e.g., mandatory retirement due to age). This legally mandated training focuses on career and life planning, helping individuals prepare in a timely and structured manner to successfully transition into the next phase of their lives after retirement.

## **Employee Onboarding Support**

#### New Hire On-boarding

LG Energy Solution operates a structured onboarding program to help new employees quickly integrate into the organization and lay the foundation for early contribution and long-term growth planning. This program is designed to instill an understanding of the importance of work, the meaning of value creation, and to support the acquisition of essential work competencies. It covers key topics such as: Understanding LG Energy Solution's vision, businesses, and internal systems, Learning fundamental work practices, Establishing career visions, Emphasizing passion for work, professionalism, and the importance of teamwork. Upon completion of the onboarding program, employees are assigned to their respective departments where they continue their development through mentoring with senior colleagues, helping to build human networks and strengthen job capabilities. As a continuation of the onboarding program, LG Energy Solution offers the Institute of Battery Technology (IBT) training exclusively for new employees to deepen their technical and functional expertise. The IBT program is divided into two key sessions: ① Battery Basic Training: This session aims to equip new hires with essential foundational knowledge across: Basic battery science, Overview of LGES businesses, Fundamentals of financial accounting, Core technical concepts in production, process, manufacturing, and R&D, 2 Function-Specific Training: This session is tailored by job function and provides practical knowledge required for each domain, including: Manufacturing engineering, R&D, General management and Function-specific process, systems, and tools. Through these targeted programs, LG Energy Solution ensures that new employees can quickly adapt to their roles and contribute effectively to the organization's success

#### [IBT Process]

#### 1 Battery Basic

- Understanding of Battery and Manufacturing Process Technology
- Understanding of Trends in the Battery Industry
- Basic Knowledge of Quality, Data, and Jobspecific Domains

#### 2 Function-Specific Training

- Foundational Knowledge for Each Job Function
- **Business Process** System & Software Tool Usage Techniques Basic Knowledge of Tax-related Functions

## New Executives/Leaders On-boarding

This program is designed to clearly communicate the roles and performance expectations of newly appointed executives and leaders in a timely manner. It also helps them understand the meaning and methods of delivering results as organizational leaders by focusing on related practical experiences and insights. Operated across all global sites—including Korea headquarters, North America, Europe, and China—the program enables participants to reflect on their current leadership capabilities and desired direction. It further cultivates insight into setting aligned visions and goals with business objectives and recognizing their roles in fostering growth-oriented leadership and organizational culture.

#### **Newly Appointed Team Leaders Onboarding Program**

Aimed at helping new team leaders understand their roles and enhance leadership skills, this program provides training on role transitions, strategic decision-making, organizational performance management, self-awareness, coaching, and feedback skills. Following the offline sessions, a structured e-learning curriculum is offered to reinforce key competencies in the field. In addition, a specialized guidebook is developed and distributed to offer practical methods and case studies needed for successful team management and effective role execution.

## **Leadership Capability Development**

#### **Team Leader Value-up**

To cultivate a performance-driven and professional organizational culture, LG Energy Solution supports team leaders through the Team Leader Value-up Program. This initiative ensures team leaders clearly understand their expected roles in driving company-wide performance and helps them build core leadership competencies. The program covers: Setting ambitious goals and managing performance on an ongoing basis, Providing constructive feedback and conducting effective 1-on-1 conversations, Coaching for employee development, Self-assessment of current leadership competencies and personal development planning. In addition to this program, various other leadership development initiatives are in place to further enhance team leader capabilities. Program effectiveness is monitored through multiple indicators, including a company-wide leadership survey that evaluates leadership scores and informs the improvement or development of new training programs.

- Completion Rate: First half 91% (715 participants), Second half 87% (672 participants)

#### Part Leader Value-up

The Part Leader Value-up Program is designed for mid-level managers to raise awareness of the importance of effective leadership and to motivate their leadership development. The program enables part leaders to: Reflect on their current role, leadership style, and organizational context, Develop leadership and problem-solving skills required for achieving performance, Enhance strategic communication aligned with goal execution, Build leadership development plans based on the company's vision and strategic direction. This program fosters leadership growth and equips part leaders to contribute meaningfully to organizational success.

#### Women Leaders' Leadership Workshop

This program is designed to support female leaders—including executives, team leaders, and managers—by enhancing their communication competencies (e.g., public speaking, conversational techniques) within the organizational context. It also helps participants recognize their unique strengths and values as women leaders, fostering the development of a strong leadership identity and motivation for continued growth. Through this initiative, LG Energy Solution actively promotes leadership development regardless of gender and is committed to empowering female leaders to expand their positive influence across the organization.

## **Entrepreneurial Talent Development**

#### Performer

This program targets high-potential mid-level employees identified for their entrepreneurial capabilities. It aims to enhance their foundational business and leadership skills required of future business leaders. Participants engage in intensive training that includes new business item discovery, capability-building sessions, and simulation-based experiences to develop entrepreneurial competencies. Throughout the program, participants' performance and growth potential are continuously assessed, with individual development guidance provided. The goal is to nurture a pipeline of next-generation entrepreneurs who can lead future businesses.

- Completion Rate: 100% (36 participants)

#### Dreamer

This program supports senior-level employees who demonstrate both the potential and desire to grow into entrepreneurial roles. Through a structured learning journey, participants build entrepreneurial mindset, understand key roles and responsibilities, and develop fundamental business skills. The program enables them to broaden their perspectives and business acumen based on practical experiences. It includes sessions with prominent internal and external role models to help participants chart a personalized roadmap for entrepreneurial growth. Additionally, through Design Thinking workshops focused on customer experience innovation, participants practice generating and refining ideas like real entrepreneurs.

#### **B-College**

To manage and strengthen job-specific capabilities, LG Energy Solution offers systematic education programs tailored to the practical needs of the field. These programs are structured by job function—R&D, production/engineering, and general management—and refined into levelspecific learning roadmaps. By providing customized skill recommendations and training courses based on individual competency levels, B-College supports timely learning for job performance, enabling employees to effectively enhance their professional expertise through personalized career roadmaps and strategic reskilling and upskilling pathways.

#### [Job Training Courses]

| Division                                     | Course      |
|--|-------------|
| R&D  | 181 courses |
| Manufacturing/Technology/<br>Product Quality | 200 courses |
| Management                                   | 168 courses |
| Common                                       | 100 courses |

#### **Language Programs**

To systematically support employees requiring global language proficiency for their roles, LG Energy Solution offers diverse language courses tailored to specific roles—including executives, team leaders, expatriates, and general employees—based on their individual learning objectives. In particular, selected employees such as those preparing for overseas assignments or being groomed as global business experts are provided with intensive language training for strategic development. Korean language courses are also offered to cultivate local global managers. For all employees, flexible and diverse learning formats-e-learning, Al speaking tools, telephone/video classes, and in-person sessions—are made available, empowering them to develop global capabilities effectively.

#### [Language Program]

| Target                           | Program  |  |
|----------------------------------|--|--|
| Team Leader                      | Team Leader Language Training                              |  |
| Expatriate Assignment Candidates | (Selection) High-Density Language Training for Expatriates |  |
|                                  | (Selection) Intermediate/Advanced Biz Language Training    |  |
| Employees                        | Telephone / Al Business Foreign Language                   |  |
|                                  | E-learning Language  |  |

## **Certification Acquisition Support System**

LG Energy Solution supports employees in obtaining certifications related to their current roles or organizational needs, with the aim of enhancing individual competencies to drive organizational performance. This includes encouraging and assisting with the acquisition of certifications in legally required fields such as safety management, firefighting, environment, health, hazardous materials, electricity, and energy-covering levels such as craftsman, technician/industrial engineer, master craftsman, and professional engineer. In addition, employees are actively encouraged to obtain certifications essential to their job responsibilities in areas such as quality and mechanical engineering.

COMPANY OVERVIEW

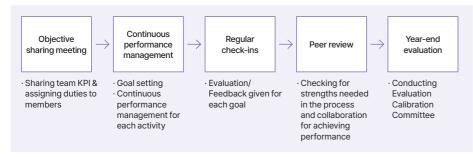
## **Fair and Transparent Performance Management**

LG Energy Solution implements fair and transparent performance management through the process of continuous performance management, regular check-ins, peer review, and evaluation calibration committees. Additionally, we operate a performance-based incentive system (personal and on-spot) that is based on individual performance. Furthermore, we support competency development and growth through job competency assessment, growth support programs, leadership surveys, and consultation program for leaders.

#### Performance Evaluation

Based on the objective sharing meeting held at the beginning of the year, LG Energy Solution establishes individual goals aligned with organizational objectives. We conduct continuous performance management and regular check-ins to support performance management and coaching/feedback centered around actual job responsibilities/tasks. We also implement a fair and transparent performance management process through year-end evaluations with reference to evaluation calibration committees. Additionally, we regularly offer performance management training and guidance for leaders to help them effectively manage and support their team members' performance.

#### [Performance Evaluation Process]



## **Peer Review**

To enhance the objectivity and fairness of evaluation and promote competency development focused on the strengths of our members, we have implemented an annual peer review policy.

## **Job Competency Evaluation**

LG Energy Solution conducts annual job competency assessment for employees to manage human resources based on job competencies and to strengthen their competencies. The results are available in the HR system to applied to promotion and training.

## **Leadership Survey**

Leadership surveys are conducted to assist leaders in identifying their strengths and areas for improvement, as well as to provide practical support for their leadership development and performance management. We collect feedback from leaders, seniors, colleagues, and other members and provide coaching to those who need it to help them develop their leadership skills.

## **Performance-based Compensation Programs**

LG Energy Solution operates performance-based compensation program. In addition to competitive base pay that accounts for individual performance, the employees are offered with various incentives including business performance-based incentive, personal incentives, and onspot incentives. This allows us to properly compensate our members for their contributions. We comply with all compensation-related laws, including the minimum wage, and operates for all workforce without discrimination based on gender, nationality/ethnicity, religion, and social status.



**Business** performance-based incentives

Rewarded based on the business performance (financial results and management indicators)



Personal Incentive (PI) Rewarded differentially based on individual performance grade



On-Spot Incentive (OSI) Rewarded immediately to individuals at the time of their contribution

Employee' happiness is an important value that leads to corporate trust. To realize this value, LG Energy Solution has a number of programs to help employees have positive experiences and emotional stability. By creating an infrastructure that enables employees to fully and healthily immerse themselves in their work, we introduce programs that support not only their individual work lives, but also their personal life cycles and family members, we are striving to create a company they want to commute and a company they want to work for.

## **Joyful Workplace Activities for Employee Engagement** and Pride

A "Joyful Workplace" refers to LG Energy Solution's unique organizational culture founded on LG's management philosophy of "People-Oriented Management." Since 2022, LG Energy Solution has been actively promoting various initiatives to ensure a joyful and fulfilling work experience for all employees. In 2024, we provided a range of infrastructure and wellness programs to help employees maintain physical and mental well-being and fully engage in their work. Additionally, LG Energy Solution focused on offering care initiatives at the individual, family, and team/department levels to foster a sense of pride and belonging among employees.

## Physical & Mental Wellness Support for Employee Engagement

To ensure that employees can remain mentally and physically well and stay fully engaged in their work, LG Energy Solution has established a comprehensive wellness infrastructure and supports a variety of programs including Group Exercise (G.X), meditation, and healing sessions

- Care programs for targeted groups (long-term business travelers, issue resonders, major project or TFT members, etc.)
- Team/unit and individual-level mind care programs
- Various G.X programs such as yoga, pilates, and meditation
- Individual nutrition care service
- Employee communication and healing space "Entral-Park"
- Psychological counseling infrastructure







Healing Trip

Spring picnic - family event

Mission En-possible team event

## Various Care Initiatives to Enhance Employee Pride and Morale

LG Energy Solution supports a range of programs aimed at fostering personal and family well-being, as well as strengthening camaraderie and collaboration among colleagues. These efforts are designed to help employees take pride in their work and feel a strong sense of belonging within the company.

- Family and Friend company tours
- \*\*Over 15,000 family&Friend visit
- Family life stage-specific care activities Parent Education session
- Company identity reflection programs: company goods, EV rental event, etc.
- Seasonal morale-boosting
- special care activities tailored for each job group: researchers, night shift care, etc.
- External Certification: "Best Family Friendly Management Certification" hosted by the Ministry of Gender Equality and Family

LG Energy Solution acquired the "Best Family Friendly Management Certification" in 2022, valid for next three years. The "Best Family Friendly Management Certification" is a Korean government-led initiative to create family-friendly social environment for the compatibility in work and family, in accordance with Article 15 of the Act on the Promotion of a Family Friendly Social Environment. The certification system recognizes companies and public institutions that have exemplary family-friendly programs, such as support for childbirth and childcare, flexible work hours, and family-friendly workplace culture. The certification process involves documentation screening, on-site screening, and employees' satisfaction surveys.



Saturday! Saturday! with Family!

LG Energy Solution pursues an organizational culture based on "diversity" that respects individual uniqueness without discrimination, "fairness" that provides equal opportunities and does not discriminate based on social status, and "embracement" based on mutual understanding, respect, and trust among the members. Following these policies of "diversity, equity, and inclusion (DEI)" we conduct internal education and strive to spread this, organizational culture throughout all global business sites.

Diversity, Equity and Inclusion Policy Visit Website

## **Organizational Culture that Respects Diversity**

#### Recruiting global talents based on diversity

LG Energy Solution respects diversity of individuals, as identified in the characteristics, preferences, and choices of gender, disabilities, nationality, and gender identity. We hire talents from various countries. As of 2024, the ratio of foreign employees in global business sites is approximately 70%, and considering additional investments and expansions in the North American region, this ratio is expected to increase further. We will continue to promote diversity at all levels in all global sites.

### Attracting and strengthening female talents and leadership

LG Energy Solution holds women's leadership meetings and introduce HR systems, such as support for leave and funding for infertility treatment and maternity protection systems for adoption to create an environment where women can work securely In addition, we analyze the status of male and female workers and gender wage conditions, as well as the causes of gender wage gaps among male and female workers every year.

## Expanding employment opportunities for people with disabilities

LG Energy Solution strives to increase the employment rate of people with disabilities and create a culture where everyone is respected and works together without discrimination. As of 2024, the number of employees with disabilities increased from 200 to 240 in Korea. In addition, we operate a subsidiary called "Areumnuri" that focuses on employing people with disabilities. Disabled workers perform various tasks at the headquarter, Ochang, and Daejeon business sites, such as store management, cafes, parking management, cleaning, steam car wash, and supplies management.

3-Year Employment of Persons with Disabilities Status Go to page

## **Culture that Values Equality and Fairness**

#### Providing fair opportunities for young talents

LG Energy Solution engages in various internships, content, and mentoring programs with the local universities near our major business sites. In addition, as part of our policy for a fair and inclusive opportunity toward balanced regional growth and youth job creation, we offer training to talents from non-metropolitan areas, which get reflected in our recruitment process.

#### Equal opportunity based on performance

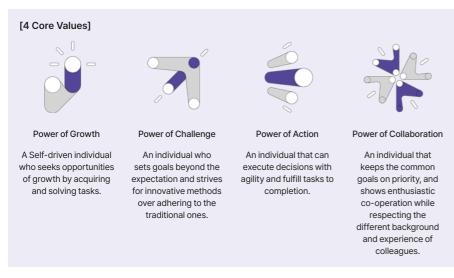
LG Energy Solution is responsible for fair and equal promotion, compensation, and training that does not discriminate against gender, age, race, religion, labor union participation, disability, pregnancy, marital status, and social status. Accordingly, we hire based on our discrimination-free principle and offer opportunities for promotion and compensation based on employee merits and capabilities, putting into practice a fair human resource management, training, and welfare system that our employees can trust.

## **Culture that Embraces Inclusivity**

LG Energy Solution builds an organizational culture based on mutual understanding and respect, fostering a stable environment for employees to grow as experts in their respective fields. Regardless of positions or job functions, we aim for a horizontal culture where opinions can be freely shared with mutual respect. All employees at LG Energy Solution use a unified way to call each other by "OONim." (\* Note: We removed the honorifics in names and titles to embed an equal and inclusive culture.) Guided by our philosophy that "employees are our most valuable customers," we listen to employees' voices through various channels such as EnTalk (a CEO hotline), organizational culture surveys, and the Junior Board (a representative body of employees) for our corporate culture programs.

## **Corporate Culture Activities**

LG Energy Solution has identified six key organizational culture priorities—such as flexible work, horizontal culture, and a culture of positivity—to realize "employee happiness," "a workplace where employees want to come and work for". These initiatives, collectively referred to as Ensol 1.0, have focused on fostering a culture that enhances employee motivation and engagement, thereby supporting the company's quantitative growth. In 2024, we established a new vision, Empower Every Possibility, along with 4 core values to achieve it. This marks a strategic shift toward Ensol 2.0, which aspires to become a top-tier company through qualitative growth and enhanced corporate value. By strengthening communication between top management and employees, and redefining the way we work, we seek to embed these new values across the organization and drive employeeled cultural transformation.



#### **Junior Board**

The LG Energy Solution Junior Board is composed of one representative from each center and business division, along with one member from each responsible department. With the mission of serving as Change Agents for improving organizational culture and ways of working, a total of 24 Junior Board representatives and 195 members were active throughout 2024. In particular, the 2024 activities focused on fostering a performance-oriented professional organizational culture and improving work practices aligned with the company's four core values. Grounded in the Voice of Employee (VoE), the Junior Board proposes constructive ideas for improvement, communicates directly with management on key internal issues, and drives change across various domains including organizational culture, HR systems, IT infrastructure, procurement, and investment.

## **CEO Lounge Talk**

In September 2024, LG Energy Solution launched "CEO Lounge Talk" as a new communication platform where the CEO can directly encourage and engage with employees in a relaxed setting. This initiative provides an open forum for discussing topics such as ways of working, business direction, and management philosophy. Through candid conversations, CEO Lounge Talk fosters psychological closeness between leadership and employees, enhancing employee motivation and engagement by directly conveying the CEO's interest and support for their work.

#### **EnTalk**

In November 2021, LG Energy Solution launched "EnTalk" a hotline channel enabling direct communication between domestic and overseas employees and the CEO. From January 2024 to March 2025, a total of 323 improvement ideas have been posted, demonstrating active engagement. In 2024, various new and improved policies were introduced to support work-life balance, including expanding reimbursement criteria for infertility-related non-covered medical expenses, widening the housing loan policy for Ochang Energy Plant, providing relocation and special leave support for transfers between Ochang Energy Plant and R&D Campus in Daejeon, and increasing parking space availability for employees at R&D Campus in Gwacheon.





CEO Lounge Talk

EnTalk

Unit: %

In order to facilitate praise and encouragement among employees, in October 2023, LG Energy Solution launched the "Thank you, ENSOL" platform, the "LGENergy" system previously used for this purpose within the company has been expanded and revamped. Through this platform, every employee receives 12 ENergy units annually, which they can use to send messages expressing gratitude to other employees. Employees can send messages not only to individuals, but also to organizations that have helped. ENergy units, once received, are converted and paid out at 10,000 KRW per each.

Not only in Korea but also across global subsidiaries-including those in China, Poland, the US, and Germany—we utilize the same communication platform. In 2024, employees across all subsidiaries have exchanged a total of 232,728 messages, out of which 198,447 included ENergy units. The growing volume of messages and use of ENergy reflects a widespread culture of appreciation taking root company-wide. This culture is expected to strengthen collaboration between teams and contribute to overall business performance.

#### Flexible Work Environment

To create the optimal environment for employee engagement, we have distributed a companywide remote work guide and secured 114 branch office locations nationwide in Korea, fostering a culture of flexible work environment.

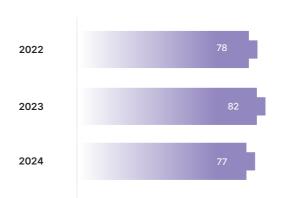


Remote work guide

## **Employee Satisfaction Survey and Organizational Development Program**

To improve organizational culture and enhance employee experience, LG Energy Solution conducts a annual satisfaction survey targeting all office employees. This survey assesses various factors that influence employee engagement, including job satisfaction, sense of purpose, happiness, and stress. Based on the results, strengths and areas for improvement within each organization are identified. The findings are shared in the form of individual reports with organizational leaders and Junior Board members, enabling leader-led, tailored improvement actions to strengthen execution. Furthermore, we operate organizational development programs to address issues hindering employee engagement and to continuously drive cultural improvements across the company.

[Positive response rate as a result of empolyee satisfaction survey (2022~2024)]



## **Employee Welfare Support**

HR Policy Visit Website

## Supporting Employees' Work-Family Balance

LG Energy Solution supports the stability of employees who are pregnant or approaching childbirth by offering maternity leave and childcare leave systems. Additionally, we ensure time for employees to be with their children through shortened working hours during childcare. These show the efforts we made to address the challenges faced by employees balancing work and childcare. Furthermore, we operate "ESG Ensol Kids" (headquarters) and "Kids&SOL daycare" (ochang Energy Plant) to support employees in successfully balancing their careers and family lives.

| Classification       | System                             | Main Contents  |
|----------------------|------------------------------------|--|
|                      | Infertility Leave                  | Leave granted to employees undergoing infertility treatment (6 days)   |
|                      | Infertility Leave of<br>Absence    | Leave of absence granted to employees diagnosed with infertility (6 months)  |
|                      | Maternity Leave                    | Leave granted to pregnant employees for stable childbirth (10 months)  |
| Period of<br>Service | Maternity Protection Leave         | Leave granted to pregnant employees for prenatal check-ups (varies by week)  |
|                      | Miscarriage Leave                  | Leave granted to employees who experience miscarriage or stillbirth during pregnancy (varies by week)  |
|                      | Pregnancy Work<br>Hour Reduction   | 2-hour working hours reduction for pregnant employees (within 12 weeks, after 32 weeks)  |
|                      | Pre and Postnatal<br>Leave         | Provision of maternity leave to employees giving birth: 90 days for general childbirth, 100 days for premature births, and 120 days for multiple births. |
| Childbirth           | Parental leave                     | Leave granted to employees whose spouse gives birth (20 days)  |
|                      | Maternity con-<br>gratulatory gift | A childbirth congratulatory allowance of KRW 1,000,000 is provided upon child-<br>birth.   |
|                      | Childcare Leave                    | Leave granted to employees with children under 8 years old or in elementary school grade 2 or below (2 years)  |
| Childcare            | Childcare Work<br>Hour Reduction   | Work hour reduction provided to employees with children under 12 years old or in elementary school grade 5 or below (1-5 hours reduction)                |
|                      | Breastfeeding<br>Time              | Paid breastfeeding time provided to female employees with children under 1 year old (twice a day, 30 minutes each)                                       |
| Othoro               | Family care leave                  | Leave granted to employees needing leave for family illness, accident, old age, or child care purposes (10 days)   |
| Others               | Family care leave of absence       | Leave of absence granted to employees needing leave for family illness, accident, old age, or child care purposes (90 days)                              |

3-Year Parental Leave Status Go to page

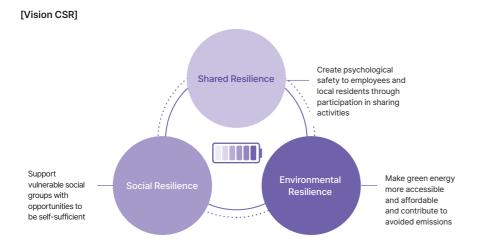
## **Employee Benefits and Services**

Additionally, LG Energy Solution operates a variety of welfare programs to support the healthy lives of our employees, including optional welfare benefits, housing and life safety support, and medical and health promotion assistance.

| Category                          | Items  |
|-----------------------------------|--|
| Flexible benefits                 | Health care, Self-development, Leisure & life, e-Shop  |
|                                   | Financial aid for housing expenses - Financial aid for home purchases and rental deposits - Employees at Manufacturing Plants : provision of company housing and dormitories                           |
|                                   | Housing support for business sites out of the Seoul - Financial aid for monthly rental expenses to new recruits in Ochang and Daejeon, Korea   |
| Financial aid for residential and | Congratulations and condolences allowance - Allowances and paid leaves for family occasions such as own and family marriages, 60th birthdays   |
| livelihood stability              | Small wedding - Allowance for domestic honeymoon expenses  |
|                                   | Tuition support - Tuition support for children in middle schools, high schools, and colleges   |
|                                   | Childbirth / School admission gifts - Congratulatory gifts for childbirth - Congratulatory gifts for children entering elementary schools, middle schools, high schools, and colleges                  |
|                                   | Medical expenses - Medical expenses covered for employees or families, spouse, children, and parents   |
| Medical and<br>healthcare         | Comprehensive health check-up  - Medical examinations for employees (once a year) over 35 years old or over 5 years of employment and the spouse (every two years)                                     |
|                                   | On-site health clinics/ medical centers  - Operation of health clinics and affiliated medical centers in domestic and overseas business sites  - Promotion of employee health and primary care support |
| Leisure Support                   | Flexible working - Flextime - Paid leaves in summer (5 days) - Paid leaves on corporate holidays (founding anniversary and labor union anniversary)  |
|                                   | Corporate Resort - Resorts for members and family use  |
|                                   | <ul> <li>In-house Clubs</li> <li>LGES provides full support to encourage members' leisure activities such as hiking, music appreciation, bowling clubs.</li> </ul>                                     |

LG Energy Solution considers resilience a key theme for our corporate social responsibility (CSR). Focusing on three main directions: Shared Resilience, Social Resilience, and Environmental Resilience, we aim to lead social change for the environment, society, and future generations.

Fulfilling Social Responsibility Visit Website



## **Current Status of Community Engagement Activities**

LG Energy Solution engage with local communities to understand their needs and impact within the regions where global facilities are located. We undertake multifaceted activities not only to support vulnerable groups but also to enhance local living conditions through initiatives like installing renewable energy facilities tailored to the region's specific characteristics.

3-Year Corporate Social Responsibility Go to page

## Cheongju Hope Green Power Plant

Through partnerships with local governments and NGOs, we completed the Cheongju hope green power plant, a 410kW solar power facility, at the Cheongju Northern Transfer Center in December 2020. If operated for 20 years, this facility is expected to reduce greenhouse gas emissions by 244 tons annually, totaling 4,900 tons, and generate an estimated revenue of approximately KRW 800-1,000 million. The revenue generated from this power plant is donated to the "Hope Green Energy Center" to support underprivileged youth in the Chungbuk region and cultivate young environmental leaders among them.

## Support activities for vulnerable groups in local communities

LG Energy Solution is engaged in various support activities for vulnerable populations in global communities. In Korea, we have undertaken initiatives to enhance fire safety environments for vulnerable groups such as basic livelihood recipients, people with disabilities, and elderly living alone in Cheongiu.

## **Education Support Activities**

LG Energy Solution has been consistently supporting the education and development of children and adolescents, actively contributing to educational initiatives. We strive to improve the teaching environment, upgrade infrastructure, and expand educational resources in schools within supported regions. Volunteer teams are organized to visit schools, deliver knowledge-sharing lectures, and donate books. Particular focus is placed on supporting students from low-income families, vulnerable girls, and neglected children. Since 2019, we have collaborated with the Jiangsu Women and Children's Welfare Foundation to provide scholarships and educational resources to students in need. To date, We have established "LG Energy Solution Chunlei(春蕾) Scholarship Classes" in four regions—Huaian (Jiangsu), Pu'er (Yunnan), Hainan Prefecture (Qinghai), and Suining (Sichuan)—supporting a total of 190 students. Through these efforts, we foster students' passion for global exploration and knowledge pursuit by enhancing local educational resources and nurturing talent. Additionally, we donated laptops and other resources to the Development and Activity Center for Children and Youth BOROMEO in Wrocław





Laptop Donation to the Development and Activity Center for Children and Youth BOROMEO in Wrocław

The Chunlei(春蕾) Scholarship Class in China

## **China University Student Battery Innovation Contest**

The China University Student Battery Innovation Contest has grown into one of the nation's premier professional competition platforms within universities. Over the past seven contests, a total of 3,298 student teams from 141 universities have participated, supported by 446 experts and professors, attracting the attention of more than 7 million people. In September 2024, the 7th LG Energy Solution China University Student Battery Innovation Contest was held with the attendance of key officials



China University Student Battery Innovation Contest

from the Nanjing city government and relevant departments. Top industry experts from the Society of Automotive Engineers of China (SAE-China), School of Law, Tsinghua University, China Automotive Technology and Research Center (CATARC), and Institute of Physics, Chinese Academy of Sciences (IOP, CAS) shared insights on cutting-edge technology trends. The event contributed to nurturing future talent in the battery industry by supporting students in strengthening their professional capabilities and broadening their perspectives.

## **Employee-Led Social Contribution Program**

LG Energy Solution provides opportunities for employees to directly participate in social contribution programs (volunteer activities), enabling them to connect with their community and find joy and fulfillment in return. Beginning in 2024, we have been shifting from companyled social contribution initiatives to a model focused on voluntary participation by employees. To support this shift, LG Energy Solution has set the "Percentage of voluntary employee participation in community service" as a mid- to long-term goal, helping employees experience the joy of giving.

\* 2024-2025: Period designated for promotion and guidance on voluntary employee participation in social contribution activities

From 2026: The rate of voluntary employee participation will be officially designated as a business target (2026: 10%, 2027: 20%, 2028: 30%)

#### [Percentage of Voluntary Employee Participation in Community Service]



## Employee volunteer group "Hamsori (Together, Ensol)"

"Hamsori(Together, Ensol)" meaning "Together, Ensol," is LG Energy Solution's volunteer group operated across all business sites for employees who wish to participate in community service. In 2024, a total of 59 volunteer activities were conducted with the participation of approximately 700 employees, focusing on supporting vulnerable groups through partnerships with local children's centers and social welfare facilities.



Hamsori (Together, Ensol)

#### **Ensol Touch**

LG Energy Solution's kiosk-based donation platform, Ensol Touch, is designed to introduce various stories of individuals in need and enable employees to easily and conveniently make donations. In 2024, 12 cases were featured, with 1,204 employees participating and approximately KRW 73 million donated to support vulnerable groups.



**Ensol Touch** 

## **Community-Based Social Contribution Activities**

At LG Energy Solution's local sites in Daejeon and Ochang, social contribution programs are carried out in collaboration with local communities. Activities include talent donation at the Daeieon Science Festival. environmental cleanup along major rivers in Ochang/ Cheongju, cultural events for persons with disabilities and elderly living alone, support for local farmers, and improvements to the living and learning environments of underprivileged families and night schools.



Improvements environments of underprivileged families

## **Volunteer Leave Program**

To encourage employees' interest and voluntary participation in social contribution activities, LG Energy Solution operates a "Volunteer Leave Program" under which paid leave is granted to employees who participate in voluntary community service outside of company-organized initiatives. This policy empowers employees to actively and voluntarily engage in volunteer work with their families, colleagues, or business units.

## **Information Security**

Information Security Visit Website

## **Establishment of Information Security System**

LG Energy Solution has established and implemented detailed operational rules tailored to each stakeholder involved in information security—including employees, partner companies, and departments responsible for or related to information security—based on its internal information security regulations. To ensure strict adherence to information protection, we enforce restricted access and viewing policies in accordance with the principles of need-to-know and minimum privilege.

## **Information Security Governance**

To systematically carry out various information security management activities, LG Energy Solution has designated a Chief Information Security Officer (CISO) and a Chief Privacy Officer (CPO) in accordance with the "Act on Promotion of information and communications network utilization and information protection" to manage our security management system and protect key information assets. Additionally, we have established and operated information security organizations at the headquarters and each business site. We have formed the Information security consultation group targeting security officers of all business sites in Korea and overseas subsidiaries, sharing and discussing security issues and concerns. We also hold Information Security Committee with the participation of executives from management and related departments to facilitate decision-making at the management level. Depending on the significance of the agenda, we share and report to the Chief Financial Officer (CFO) and relevant departments to enhance monitoring. Furthermore, to enhance the level of information security, we allocate an annual investment budget for information security in the business plan.

3-Year Investment Expenditure in Information Security Status Go to page

[Information security organization chart]



## **Information Security Management System**

LG Energy Solution treats our business information, trade secrets, intellectual property, and all information related to employees, customers, and suppliers as important information assets to be protected. We have established an information security management system based on international certifications such as ISO 27001, TISAX, and ISO 21434 to minimize security risks and ensure efficient security management.

[Information Security Certification (ISO 27001, TISAX, ISO 21434) Acquisition and Validity Period]

| Certificate of recognition | Country | Business site                          | Certification Validity        |  |
|----------------------------|---------|--|-------------------------------|--|
|                            | Korea   | R&D Campus Daejeon                     | Integrated                    |  |
| ISO 27001                  |         | R&D Campus Gwacheon                    | Certification<br>(2025-11-11) |  |
| 150 27001                  |         | Ochang Energy Plant 1                  | Integrated                    |  |
|                            |         | Ochang Energy Plant 2                  | Certification<br>(2025-12-04) |  |
|                            | Korea   | Headquarters                           | 2026-07-21                    |  |
| TISAX                      | Germany | LG Energy Solution Europe GmbH         | 2026-07-21                    |  |
|                            | Poland  | LG Energy Solution Wroclaw sp. z o. o. | 2028-05-08                    |  |
| ISO 21434                  | Korea   | R&D Campus Gwacheon                    | 2027-12-05                    |  |

<sup>\*</sup> ISO 27001 (Information Security Management System)
TISAX (Trusted Information Security Assessment Exchange, Automotive Information Security Assessment)
ISO 21434 (CSMS Certification, International Standards for Automotive Cyber Security)

## **Information Security Compliance**

## **Information Security Policy**

LG Energy Solution complies with global information security-related laws and regulations to securely handle and manage the personal information of employees, customers, and partners as well as national core technologies, and key personnel. In Korea, we implement protective measures that comply with the security requirements specified in the Personal Information Protection Act and Act on prevention of divulgence and protection of industrial technology. We continuously implement necessary measures following regulatory revisions. For overseas sites, we execute protective measures following the respective countries' and regions' laws, regulations, and policies, such as the European General Data Protection Regulation (GDPR) and Cybersecurity Law of the People's Republic of China.

## **Privacy Policy**

LG Energy Solution has established a "Privacy Policy" to protect the personal information and rights of the data subjects such as employees, customers, and visitors. This policy is posted on our website and internal systems, detailing various aspects such as the purposes of personal information processing, types of information collected, retention and use periods, provision to third parties, measures for ensuring the security of personal information, and rights of the data subjects.

#### Privacy Policy Visit Website

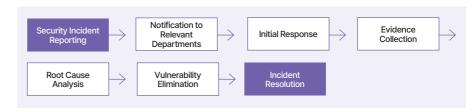


Privacy Policy

## **Preventive and Responsive Activities**

LG Energy Solution operates a continuous security monitoring system across office areas and production facilities. Particularly, new IT systems undergo security vulnerability assessments to eliminate all vulnerabilities deployment. As part of our business continuity plan, we perform regular (annual) security vulnerability assessments to respond in real-time to various internal and external cyber threats. Additionally, we conduct penetration testing and simulated training for our members to continuously enhance security levels and response capabilities. In terms of personal information protection, pre-security reviews that check for potential breaches of personal information and compliance issues are conducted. Also, we have designated a Chief Privacy Officer who oversees tasks related to personal information, including handling inquiries, complaints, and remedies for damages. Furthermore, we integrate intrusion prevention and detection solutions for 24/7 real-time security monitoring. In the event of abnormal behavior detection or security incidents, the Computer Emergency Response Team (CERT) promptly responds by coordinating with relevant departments, collecting evidence, conducting root cause analysis, and removing vulnerabilities.

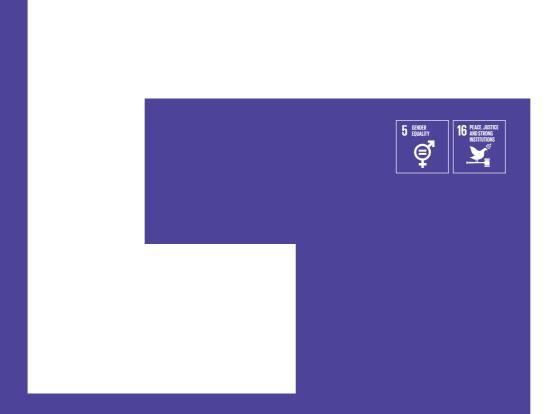
#### [Response Process]



## **Enhancing Information Security Awareness**

LG Energy Solution conducts annual security awareness training for all employees to enhance their security consciousness. In addition to this general training, specific education sessions are provided for new hires, employees nearing retirement, and visitors to raise awareness about information security. We also implement tailored training programs such as security education for handlers of national core technologies in the first half of the year and for personal information handlers in the second half. In addition, to prevent security incidents caused by malicious emails, We conduct simulated phishing email tests for employees. Security guidelines and real-world security incident cases are actively promoted through company-wide bulletin boards, building entrances, and elevator boards to raise awareness and encourage all employees to take an active interest in information security.

# Governance



LG Energy Solution is building a sustainable corporate governance structure centered on the board of directors to "reduce practices and increase communication". At the same time, we will identify and respond to various risks that may occur during corporate operations in advance through the compliance system and expand communication with shareholders to grow into a sustainable company.

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## Composition and Operation of the Board of Directors

With goals to fulfill transparent governance practices, LG Energy Solution established the "Corporate Governance Charter" to formulate our governance structure, composition, and activities at the Board of Directors (hereinafter the Board) and its committees. Our corporate governance follows the principles and procedures specified in the Charter and policies. Furthermore, relevant information and the Corporate Governance Charter are disclosed through our website and other channels. For stable and sound governance, more than 50% of the Board members are composed of independent directors (currently 4 out of 7 directors, accounting for 57%). Independent directors with diverse expertise and backgrounds participate as Board members to enhance expertise and efficiency. Independent directors exercise duty of monitoring and supervise on business matters.

As a result of the General meeting of shareholders on March 25, 2024, Kim, Dong Myung was newly appointed as a director, and Shinn, Mee Nam and Yeo, Mee sook were reappointed as independent directors, while Han, Seung Soo was separately appointed as an independent director who also serves as a member of the Audit Committee, and Shinn, Mee Nam, Yeo, Mee sook, and Park, Jin Kyu were also appointed as members of the Audit Committee. On the same day, as a result of the Board of Directors' resolution, the CEO (Kim, Dong Myung) and the Chairman of the Board (Kwon, Bong Seok, Non-standing director) were separately appointed.

LG Energy Solution ensures that shareholders who hold a certain percentage of the total issued shares, as stipulated under the Korean Commercial Act, may propose agenda items for the general meeting of shareholders—such as the appointment of directors—by submitting such proposals in writing or electronically at least six weeks prior to the meeting. Information regarding these rights is also made available through the company's official website. To date, none of the directors comprising the Board have been appointed through shareholder recommendations. While the company has not designated a lead independent director, it operates several board committees to facilitate specialized and objective deliberations on specific matters. These include the Audit Committee. Internal Trade Committee. ESG Committee, Nomination Committee for Independent Directors, and the Management Committee. Except for the Management Committee, all committees are chaired by independent directors to ensure independence. Directors of LG Energy Solution fulfill their faithful performance and monitoring duties by receiving and reviewing reports on key business matters through board and committee meetings. Financial risks are regularly reviewed by the Audit Committee, and critical financial issues are subject to Board approval. For non-financial risks—such as ESG initiatives and key compliance risks—management status and improvement plans are reported to and reviewed by both the ESG Committee and the Board of Directors.

Board of Directors Visit Website

Corporate Governance Charter Visit Website

#### [Board of directors]



| Name                   | Kwon, Bong Seok  | Gender | Male |
|------------------------|--|--------|------|
| Roles within the board | Chairman of the BOD / Non-standing Director                            |        |      |
| Term                   | March 2022 - March 2028  |        |      |
| Key experience         | Vice Chairperson, COO of LG<br>Former President, CEO of LG Electronics |        |      |



| Name                   | Kim, Dong Myung   | Gender | Male |
|------------------------|---|--------|------|
| Roles within the board | Director / Chairperson of the Management Committee  |        |      |
| Term                   | March 2024 – March 2027   |        |      |
| Key experience         | Executive President, CEO of LG Energy Solution Former Advanced Automotive Battery Division Leader of LG Energy Solution |        |      |



| Name                   | Lee, Chang Sil  | Gender | Male |
|------------------------|---|--------|------|
| Roles within the board | Director  |        |      |
| Term                   | March 2025 - March 2028   |        |      |
| Key experience         | Executive Vice President, CFO & CRO of LG Energy Solution Former Senior Vice President, Business Management Department of LG Chem |        |      |



| Name                   | Shinn, Mee Nam   | Gender | Female |
|------------------------|--|--------|--------|
| Roles within the board | Independent Director / Chairperson of the ESG Committee                                      |        |        |
| Term                   | June 2021 – March 2026   |        |        |
| Key experience         | Former CEO, inside director of K Auction Former President, Business Unit of Doosan Fuel Cell |        |        |



| Name                   | Yeo, Mee Sook   | Gender | Female |  |
|------------------------|---|--------|--------|--|
| Roles within the board | Independent Director / Chairperson of the Nomination Committee for Independent Directors and the Internal Trade Committee |        |        |  |
| Term                   | June 2021 - March 2027  |        |        |  |
| Key experience         | Professor, Hanyang University School of Law Former Presiding<br>Judge, Seoul High Court/Seoul Central District Court      |        |        |  |



| Name                   | Han, Seung Soo   | Gender                           | Male      |
|------------------------|--|----------------------------------|-----------|
| Roles within the board | Independent Director / Chairpe   | erson of the Audit               | Committee |
| Term                   | June 2021 - March 2027   |                                  |           |
| Key experience         | Vice Chairperson, Korean Asso<br>Professor, Korea University Bu-<br>Former a member of the Fi<br>Accounting Review Committee | siness School<br>nancial Supervi | ,         |



| Name                   | Park, Jin Kyu  | Gender | Male |  |
|------------------------|--|--------|------|--|
| Roles within the board | Independent Director   |        |      |  |
| Term                   | March 2023 - March 2026  |        |      |  |
| Key experience         | Specially appointed professor, University Research Institut Industry Collaboration Center, Korea University Former 1st Vice Minister, Ministry of Trade, Industry & Energy |        |      |  |

## **Operation of the Board of Directors**

According to the Article 27 of the Articles of Incorporation, the Board of LG Energy Solution must consist of at least 3 and up to 7 directors. Following the "Guidelines on Independent Directors" Independence," the Board is composed of 4 independent directors, out of a total of 7 directors (approximately 57%), ensuring that independent directors constitute a majority. Under the "Diversity Principle," we ensure that independent directors do not represent specific and common backgrounds or specific interests. They are composed of experts in fields closely related to company management, including finance, accounting, law, international trade, risk management and industry professionals. This composition ensures diverse backgrounds and expertise, enabling substantive deliberation on Board matters and effective monitoring and supervision of management's execution of duties. The board and the committee, except in cases where there are different provisions in the relevant laws or the Articles of Incorporation, make decisions by a majority of the directors or committee members present, and in the case of directors or committee members with special interests in the decision, their voting rights are restricted. Meanwhile, LG Energy Solution is a member of the International Standards on board diversity and responsibility insurance, renews its contract annually, and through this, receives compensation for board members who are subject to liability during management activities.

Guidelines on Independent Directors' Independence Visit Website

## Strengthening the board's expertise and diversity

On April 24, 2023, the ESG Committee approved Guidelines on the Expertise and Diversity of the Board of Directors, and is proposing diversity in the composition of the board, such as promoting the appointment of female directors and selecting two female directors for the board. In addition, to enhance the industry expertise of the board and committees, support is provided so that both internal and external experts can be appointed as Independent Directors, and when new directors or audit committee members are appointed, training is provided regarding the duties of the board and the Audit Committee. Especially for Independent Directors who are also audit committee members, regular training sessions are provided on internal accounting management systems through external auditors. In addition, workshops on management performance, management environment, and business strategy are held annually, and from June 9 to June 14, 2024, a board workshop was held in the Asia region, including visits to local manufacturing corporations, factories, and customer manufacturing facilities, as well as multi-faceted efforts to enhance industry expertise.

Guidelines on the Expertise and Diversity of the Board of Directors Visit Website

#### **Board Evaluation**

In addition to the evaluations of individual directors, LG Energy Solution also conducts board evaluations as part of the internal monitoring systems. These evaluations focus on whether the board has sufficient independence and expertise to exercise its supervisory authority over the execution of directors' duties, and whether the board is faithfully performing its duties in accordance with the Korean Commercial Act or the board's regulations. Each evaluation item is based on relevant laws and regulations, as well as internal documents and operational/ performance data.

#### [Main evaluation items and 2024 results]

| Main evaluation items      | Result   |
|----------------------------|--|
| Expertise and independence | <ul> <li>Independent directors consist of experts in finance/accounting, law, and industry fields, and secures an independent position from major shareholders and management</li> <li>The board consists of a total of 7 members, of which 4 are Independent directors, ensuring independence</li> </ul>                                  |
| The board tasks            | <ul> <li>The board carries out the main tasks in 7 areas such as Commerical Act, General<br/>meeting of shareholders, finance, strategy, and personnel according to the<br/>regulations</li> </ul>   |
| Operational integrity      | The board operates regularly/occasionally, checks the appropriateness of agenda items, and ensures that there are no omissions of necessary agenda items. All agenda items and related reference materials before the board meeting are delivered to the Independent Director so that prior review of agenda items is thoroughly conducted |

The results of the 2024 review of the board's operation and composition confirmed that the internal monitoring systems are being fully implemented, and the relevant content is disclosed through the Annual Report, including "the Audit Committee's evaluation opinion on the internal monitoring systems".

COMPANY OVERVIEW

#### Committees Visit Website

#### [Committee Composition]

| Committee  | Composition   | Regulation   |
|--|---|--|
| Audit Committee                                      | Han, Seung Soo (Chairman),<br>Shinn, Mee Nam,<br>Yeo, Mee Sook,<br>Park, Jin Kyu                    | Consists of three or more directors<br>(more than twothirds being independent directors)     At least one member shall be accounting / finance<br>expert (Audit Committee Regulations Article 4)   |
| ESG Committee  | Shinn, Mee Nam(Chairman),<br>Yeo, Mee Sook,<br>Han, Seung Soo,<br>Park, Jin Kyu,<br>Kim, Dong Myung | Consists of three or more directors<br>(more than two-thirds being independent directors)<br>(ESG Committee Regulations Article 4)   |
| Internal Trade<br>Committee                          | Yeo, Mee Sook (Chairman),<br>Han, Seung Soo,<br>Shinn, Mee Nam,<br>Lee, Chang Sil                   | Consists of three or more directors (more than<br>two-thirds being independent directors) (Internal<br>Trade Committee Regulations Article 4)  |
| Nomination Committee<br>for Independent<br>Directors | Yeo, Mee sook (Chairman),<br>Han, Seung Soo,<br>Kwon, Bong Seok                                     | Consists of three or more directors     One of the members is an inside director or other non-standing director; with the remaining two being independent directors (Nomination Committee for Independent Directors Regulations Article 4) |
| Management<br>Committee                              | Kim, Dong Myung (Chairman)<br>Lee, Chang Sil  | Consists of two inside directors - the CEO and CFO<br>(Management Committee Regulations Article 4)   |

•: Chairman

| Divi               | sion                     | Audit Com-<br>mittee | ESG<br>Committee | Internal Trade<br>Committee | Nomination<br>Committee for<br>Independent<br>Directors | Management<br>Committee |
|--------------------|--------------------------|----------------------|------------------|-----------------------------|---|-------------------------|
| Kim,<br>Dong Myung | Director                 |                      | 0                |                             |   | •                       |
| Lee, Chang Sil     | Director                 |                      |                  | 0                           |   | 0                       |
| Kwon,<br>Bong Seok | Non-standing<br>Director |                      |                  |                             | 0   |                         |
| Shinn, Mee<br>Nam  | Independent<br>Director  | 0                    | •                | 0                           |   |                         |
| Yeo, Mee Sook      | Independent<br>Director  | 0                    | 0                | •                           | •   |                         |
| Han, Seung<br>Soo  | Independent<br>Director  | •                    | 0                | 0                           | 0   |                         |
| Park, Jin Kyu      | Independent<br>Director  | 0                    | 0                |                             |   |                         |

<sup>\*</sup>As of June 2025

#### [Committee operation status in 2024]

| Committee   | Number of<br>Meet-ings | Number of Approvals and Reports                      | Approval Rate | Attendance<br>Rate |
|---|------------------------|--|---------------|--------------------|
| Audit Committee                                   | 6 meetings             | Approved 7 items, De-<br>liberated 11 reported items | 100%          | 100%               |
| ESG Committee                                     | 3 meetings             | Approved 2 items (3 detailed agenda items)           | 100%          | 100%               |
| Internal Trade Committee                          | 4 meetings             | Approved 7 items,                                    | 100%          | 100%               |
| Nomination Committee for<br>Independent Directors | 2 meetings             | Approved 2 items,                                    | 100%          | 100%               |
| Management Committee                              | 1 meeting              | Approved 1 items,                                    | 100%          | 100%               |

#### **Appointment of Independent Directors with Expertise** in Business-Related Fields

To secure the most suitable candidates for the Board, we run a pool of director candidate with strict standards, drawing from interviews and a preliminary verification process. In addition, to enhance the expertise of the Board, we provide independent directors with information related to business decision-making. While the Board regulations generally require the notice of board meetings to be given at least 12 hours in advance, in practice, we notify at least one day in advance and also hold briefings before meeting to support the best possible decision-making. Furthermore, to improve the level of understanding on LG Energy Solution, we report the status of major business activities to independent directors on a quarterly basis. Specifically, for Audit Committee members, we conduct periodic training on internal accounting management systems.

| Date            | Conducting<br>Entity              | Attendance<br>Audit Committee<br>Members                              | Reason for<br>Absence                         | Main Education Content   |
|-----------------|-----------------------------------|---|---|--|
| Jan 25,<br>2024 | Deloitte Anjin<br>LLC             | Han, Seung Soo,<br>Shinn, Mee Nam,<br>Yeo, Mee Sook                   | -   | Explanation of year-end<br>2023 financial statement<br>Notes and internal<br>accounting management<br>system audit   |
| Apr 23,<br>2024 | Deloitte Anjin<br>LLC             | Han, Seung Soo,<br>Shinn, Mee Nam,<br>Yeo, Mee Sook,<br>Park, Jin Kyu | -   | Explanation of Q1 2024<br>financial statements and<br>mandatory communication<br>with governance bodies;<br>Reporting requirements of<br>relevant auditing standards |
| Jul 23, 2024    | Deloitte Anjin<br>LLC             | Han, Seung Soo,<br>Shinn, Mee Nam,<br>Yeo, Mee Sook,<br>Park, Jin Kyu | -   | Explanation of Q2 2024<br>financial statements and<br>mandatory communication<br>with governance bodies;<br>Reporting requirements of<br>relevant auditing standards |
| Sep 9, 2024     | Company,<br>Deloitte Anjin<br>LLC | Park, Jin Kyu   | Training for new<br>Audit Committee<br>member | Roles and responsibilities<br>of the Audit Committee and<br>main tasks   |
| Oct 25,<br>2024 | Deloitte Anjin<br>LLC             | Han, Seung Soo,<br>Shinn, Mee Nam,<br>Yeo, Mee Sook,<br>Park, Jin Kyu | -   | Explanation of Q3 2024<br>financial statements and<br>mandatory communication<br>with governance bodies;<br>Reporting requirements of<br>relevant auditing standards |

#### **Evaluation of Directors**

The evaluation of directors is conducted comprehensively, considering both quantitative and qualitative criteria encompassing various activities to ensure fairness. The Board Secretariat and HR department evaluate independent directors based on the evaluation metrics considering attendance rates at Board meetings, thorough review and constructive feedback on Board agenda items, effectiveness of proposals made, appropriateness of professional advice on key management decisions. In particular, for Audit Committee members, contributions to internal controls regarding the company's key financial risks and internal monitoring systems are considered in evaluation. The evaluation is carried out regularly according to internal standards. In compliance with Article 542-8 of the Korean Commercial Act, the results are used by the Nomination Committee for Independent Directors to recommend candidates for new appointments or reappointments at the shareholders' meeting, thereby enhancing the fairness of the evaluation process. In addition, in the case of directors including the CEO, evaluations are conducted based on key issues such as the company's financial soundness and management leadership.

#### [Board Skills Matrix]

| C         | Category                 | Kim, Dong<br>Myung | Lee, Chang<br>Sil | Kwon,<br>Bong Seok | Shinn, Mee<br>Nam | Yeo, Mee<br>Sook | Han, Seung<br>Soo | Park, Jin<br>Kyu |
|-----------|--------------------------|--------------------|-------------------|--------------------|-------------------|------------------|-------------------|------------------|
|           | Leadership               | 0                  | 0                 | 0                  | 0                 | 0                | 0                 | 0                |
|           | CEO experience           | 0                  |                   | 0                  | 0                 |                  |                   |                  |
|           | Global                   | 0                  | 0                 | 0                  | 0                 |                  |                   | 0                |
| Com-      | Management accounting    |                    | 0                 | 0                  |                   |                  | 0                 |                  |
| petency   | Policy<br>Administration |                    |                   |                    |                   | 0                |                   | 0                |
|           | R&D                      | 0                  |                   |                    | 0                 |                  |                   |                  |
|           | Legal                    |                    |                   |                    |                   | 0                |                   |                  |
|           | Risk<br>management       | 0                  | 0                 | 0                  | 0                 | 0                | 0                 | 0                |
|           | Appointed Year           | 2024               | 2020              | 2022               | 2021              | 2021             | 2021              | 2023             |
|           | Independence             |                    |                   |                    | 0                 | 0                | 0                 | 0                |
| Diversity | Age                      | 55                 | 60                | 61                 | 63                | 59               | 55                | 59               |
|           | Nationality              | Korea              | Korea             | Korea              | Korea             | Korea            | Korea             | Korea            |
|           | Gender                   | Male               | Male              | Male               | Female            | Female           | Male              | Male             |

#### **Board Committees**

#### **Audit Committee**

To ensure the independence of the Audit Committee, all members are composed of independent directors. In accordance with the Audit Committee Charter, the committee performs accounting audits, operational audits, and oversight of directors' execution of duties. It also plays an active role in internal control through activities such as requesting business reports, reviewing the company's operations and financial condition, and receiving audit status reports from external auditors. In particular, the Audit Committee collaborates with external auditors to assess the appropriateness and improvement areas of internal monitoring systems, including the composition, expertise, independence, and activities of the Board of Directors and other internal control functions. The evaluation report on internal control systems, once approved, is disclosed together with the annual business report. The Audit Committee also reviews matters that may affect the independence of external auditors. External auditors must obtain prior approval from the Audit Committee before entering into and performing any non-audit services. Details such as audit fees, non-audit service fees, the nature of non-audit services, and fees excluded from non-audit services are disclosed in the business report. In accordance with the Audit Committee Charter, the committee holds the right to consent to the appointment and dismissal of the head of the internal audit department. During deliberations on executive personnel matters at the Board of Directors, all Audit Committee members exercise voting rights on appointments and dismissals. Additionally, to enhance the expertise of Audit Committee members, special training is provided in collaboration with external accounting firms.

To ensure fairness in the selection of independent director candidates, the Nomination Committee for Independent Directors composed of three members, of whom two are independent directors. The chair of the committee is selected from among the independent directors, and the third member is appointed as either a director (including the CEO) or a non-standing director. Currently, the position is held by a non-standing director. The committee is responsible for annually organizing, managing, and reviewing the pool of independent director candidates. It recommends individuals who possess the expertise and competencies required and who serve the interests of shareholders and other stakeholders. The evaluation of candidates is based on requirements stipulated in the Korean Commercial Act (Article 382(3), Article 542-8(2)), the LG Energy Solution Nomination Committee Regulations, and includes verification of whether the candidate can make a substantive contribution to the board through their practical experience and professional qualifications. This evaluation process involves interviews with relevant departments and rigorous document verification. In particular, pursuant to Article 542-8(2)(3) of the Korean Commercial Act, individuals who have been sentenced to imprisonment or a heavier punishment and for whom two years have not passed since the completion or exemption of such punishment are prohibited from serving as independent directors of listed companies. Accordingly, LG Energy Solution fundamentally excludes individuals with criminal records related to embezzlement, breach of trust, or other offenses that may impair corporate value or shareholder rights. Additionally, the committee utilizes a detailed checklist to assess whether candidates or their employers have any significant business relationships with LG Energy Solution or its affiliates. Only those with no material conflict of interest are recommended as independent director candidates. These checks continue throughout their tenure, with periodic confirmations of independence. Candidates who pass this rigorous screening process are nominated to the general meeting of shareholders following deliberation by the Board. LG Energy Solution seeks candidates who can make independent judgments from diverse perspectives and does not limit eligibility based on nationality, gender, religion, or race.

#### Internal Trade Committee

The Internal Trade Committee reviews inter-affiliate transactions that require Board approval under relevant laws, including transactions with major shareholders and related parties as defined by Korean Commercial Act, transactions subject to regulatory defraudation of private interests under the Fair Trade Act, and other internal trades that require Board approval. The Committee consists of four members, including three independent directors, usually chaired by an independent director.

## **Management Committee**

The Management Committee handles decisions related to the company's financing, such as issuing bonds within approved borrowing limits, establishing or closing branches, and appointing or dismissing general managers. The Committee facilitates swift decision-making on management matters, with the CEO serving as the Chairperson and the CFO as a member.

#### **ESG Committee**

The ESG Committee establishes fundamental policies and strategies in the areas of environment, safety, social responsibility, customer value, shareholder value, and corporate governance, and reviews long-term goals. Starting in 2023, the ESG Committee's regulations were amended to include the roles of oversight, and report on the management status and improvement plans of key compliance risks, annual compliance activity plans, and implementation reports. Through this amendment, directors are ensured to effectively fulfill their monitoring duties regarding the company's legal risks. Starting in 2025, the ESG Committee will review ESG materiality assessments. The ESG Committee is composed of five members, four of whom are independent directors, and the chair is appointed from among the independent directors unless otherwise required, thereby ensuring the operational independence of the committee.

## **Compensation Policy**

## **Board Compensation Policy**

The compensation of directors is determined within the total limit approved at the shareholders' meeting, in accordance with Article 388 of the Korean Commercial Act, and in accordance with internal regulations. The annual compensation of each inside and independent directors is disclosed in the annual report. The remuneration of registered directors consists of an annual salary with factors such as inflation rates, independent competitiveness, and financial performance, rolebased remuneration, and performance incentives based on business and individual performance. To determine performance compensation, both quantitative indicators such as sales and qualitative indicators such as core task evaluations and the implementation progress of long-term expectations are comprehensively evaluated. For performance evaluations, not only financial and quantitative indicators, but non-financial and non-quantitative indicators such as strategic efforts for discovering future growth engines, strengthening business competitiveness, and enhancing the business structure are considered. The annual salary of independent directors is determined by considering the responsibilities and risks of their duties, as well as the average salary level in the industry. The evaluation results of independent directors are used as reference materials for decisions on their reappointment. However, to maintain the independence of independent directors, compensation differentiation based on evaluation results is not applied.

## **Compliance Management**

Compliance Management Visit Website

## **Compliance Management System**

LG Energy Solution has established a company-wide compliance management system and emphasizes the importance of compliance activities through CEO compliance messages. To enhance compliance management, we are fostering compliance experts, enacting and revising policies and guidelines, operating compliance systems, and implementing continuous monitoring and inspection processes. These efforts are integrated into a comprehensive compliance management system. In 2021, we became the first in the battery industry to obtain ISO 37301 certification, a global standard for compliance management. We completed a follow-up audit through third-party verification in 2023 and renewed the certification in 2024.

#### [Acquisition and Validity of Compliance Management System (ISO 37301) Certification]

| Country | Business site                                     | Certification validity                |
|---------|---|---------------------------------------|
|         | Headquarters                                      |                                       |
|         | Ochang Energy Plant 1                             | Integrated certification (2027-10-07) |
| Varia   | Ochang Energy Plant 2                             |                                       |
| Korea   | R&D Campus in Daejeon                             |                                       |
|         | R&D Campus in Gwacheon                            | -                                     |
|         | R&D Campus in Magok                               | -                                     |
|         | LG Energy Solution (Nanjing) Co., Ltd.            | 2025-11-09                            |
| China   | LG Energy Solution Battery (Nanjing) Co., Ltd.    | 2026-08-20                            |
|         | LG Energy Solution Technology (Nanjing) Co., Ltd. | 2026-08-20                            |

All employees must adhere strictly to the Code of Conduct, which serves as the highest standard of conduct within the company, thereby fulfilling our compliance obligations. It covers areas such as "Honesty and Integrity with Customers," "Desirable Work Environment," "Fair Competition," "Responsibility to the Community," and "Enhancing Shareholder Value." In 2023, we undertook a comprehensive revision of the compliance guidelines to include the latest compliance issues, and in 2024, it was distributed company-wide to ensure all employees' compliance management awareness and understanding. In addition, Additionally, by appointing Compliance Officers as per the Commercial Act and establishing the compliance control standards and implementation rules, we operate a systematic compliance program. In particular, the Compliance Officer annually inspects whether the compliance control standards are being observed and reports the results to the board of directors. This information will be regularly disclosed in the Annual Business Report, starting at the end of 2024. The areas of review and evaluation include the criteria, the legal risk assessment and management system, compliance program and reporting system, independent work system of the Compliance Officer, and violation sanction system. These evaluations are conducted according to detailed items reflecting the indicators of the Ministry of Justice for assessing the effectiveness of the compliance management system.

#### [Report to the Board of Directors on the Status of Adherence to with Compliance Control Standards]

| Date          | Contents  |
|---------------|---|
| Manak         | Reviewed the operation status of the compliance control system for 2023 and reported to the board of directors.   |
| March<br>2024 | Results of adherence to the compliance management standards: Confirmed legal compliance.     Evaluation of the effectiveness of the compliance management system: Operating effectively and appropriately.  |
| March<br>2025 | Reviewed the operation status of the compliance control system for 2024 and reported to the board of directors.  ① Results of adherence to the compliance management standards: Confirmed legal compliance. ② Evaluation of the effectiveness of the compliance management system: Operating effectively and appropriately. |

To ensure the effectiveness of compliance management activities, the Compliance Office collaborates with 25 Compliance Managers across 11 functional departments, including Fair Trade, Environment, Safety and Health, and Information Security, to systematically manage and operate compliance. A total of 1,250 checklists have been prepared for risk assessment across 11 areas, which are utilized to inspect compliance management of global sites at least once a year. In addition, through annual company-wide compliance monitoring activities, we regularly identify any gaps or areas for policy improvement and encourages relevant departments to undertake voluntary improvements.

In particular, in 2024, compliance self-inspections were conducted for all business sites in Korea (но, ochang, Daejeon, Magok, Gwacheon) based on 2024 standards, and following 2023, the Compliance Office supported on-site compliance risk inspections and system establishment for the Safety and Health Team, which is a functional department, under the Serious Accidents Punishment Act. In addition, compliance risk was inspected in relation to the acquisition of other companies' management information, and the "Guideline for Use of Subcontracted Companies" was distributed.

In April 2023, the ESG Committee's regulations were revised to ensure that decisions and reports on key compliance matters, such as the establishment of basic compliance policies and management of core compliance risks, are made within the ESG Committee and reported to the Board. As a result, the findings from compliance inspections and the identified gaps and areas for improvement are regularly reported to the ESG Committee and the Board. Specifically, Compliance key risks (6 Key Risks: collusion, partner technology theft, management information leakage, violations of the Serious Accident Punishment Act, non-disclosure of important information, and sexual harassment) are reviewed and reported in details to the ESG Committee and the Board, ensuring that compliance risk inspections and preventive activities are pursued at the executive level. To prevent the recurrence of similar compliance issues, all possible measures, such as education programs, system improvements, and disciplinary actions, are implemented. Employees who intend to perform tasks that may pose legal risks can receive legal reviews and compliance quidelines through the legal support system and compliance consultation.

#### [Compliance governance]



#### [Operational process of CMS]



## **Internalizing Compliance Capabilities**

In order to strengthen employees' compliance awareness, compliance training is conducted for all global employees biannually. The training is operated as a company-wide mandatory training course in consultation with relevant departments such as HR, Fair Trade, Jeong-Do Management, and ESG. The program is updated every year to include all major compliance areas in addition to legally mandated training.

In 2024, pre-departure training for overseas assignees was conducted offline, organized by the Compliance Office. A total of 10 subjects (4 statutory and 6 internal) were covered, with compliance training sessions held monthly from June to November 2024. Compliance training is operated through the internal learning platform "Ensol Campus", which supports the participation of members and provides operational efficiency and learning accessibility for employees.

Through legal training, we conducted training on protection of national core technologies/ Protection of Information Security and Personal data (Security Strategy Team), improvement of awareness of people with disabilities in the workplace/prevention of sexual harassment in the workplace (Leader Development Team), and as internal training, we conducted training on Understanding ESG (Sustainability Cooperation Team), anti-corruption Compliance (Compliance Office), prevention of workplace bullying (Leaders Development Team), Jeong-Do Management violation cases (Business Ethics Office), Prevention of collusion due to the exchange of competitive information between joint ventures (JVs) (Fair Trade Team), and training on mindset for customer satisfaction and product quality assurance activities (Quality Audit Team).

#### [Compliance training for 2024]

| Catergories | Title   |
|-------------|---|
|             | Protection of National core technologies                                |
| Legal       | Protection of Information Security and Personal data                    |
| Legai       | Improvement of recognition of people with disabilities in the workplace |
|             | Prevention of sexual harassment in the workplace                        |
|             | Understanding ESG   |
|             | Anti-corruption compliance  |
|             | Prevention of workplace bullying  |
| Internal    | Jeong-Do Management violation case                                      |
|             | Prevention of collusion due to the exchange of competitive information  |
|             | between joint ventures (JVs)  |
|             | Mind-set for customer satisfaction and quality assurance activities     |

SOCIAL

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## **Compliance Violation Handling Process**

LG Energy Solution offers various channels to identify compliance-related concerns or violations, including the CEO's direct communication channel (EnTalk) and the internal reporting system (LG Ethics Hotline, Q Speek-Up). Reports related to compliance issues such as the leakage of company management information, infringement of other companies' intellectual property rights, misuse of undisclosed important information, unfair trade practices with partners, and legal violations by employees are handled in collaboration with relevant departments. The Compliance Office and Business Ethics Office collaborate to handle initial reports, investigation, review, and inspection activities. When compliance inspections and reports confirm the company's legal risks or employees' legal violations, a legal review of the associated risks and sentencing is conducted. Based on this review, appropriate disciplinary actions are determined and executed, which may include civil lawsuits or criminal charges if necessary. In 2024, the Compliance Office identified and addressed violations related to the misuse of undisclosed important information and the leakage of management information through abnormality detection activities by internal IT monitoring systems, such as emails and messengers. In accordance with the principle of protecting whistleblowers, we do not disclose or imply the identity of whistleblowers without their consent. Any disadvantage resulting from failure to comply with this principle is rectified, and appropriate remedial actions are taken. To further enhance the transparency and accountability of business operations and eradicate corruption that undermine customer value, LG Energy Solution has implemented a whistleblower reward system.





A case of violation or potential concern reported



Investigation Plan Developed

confirmation of investigation con-

tents

Development of investigation scenarios, determination of subjects and sched-ule,



Execution of Investigation

Preliminary investigation, onsite investigation, post-investigation



Investigation

Completed



Postmanagement

Follow-up actions, checking for any retaliatory actions against the whistleblower

## **Managing Corruption Risk**

LG Energy Solution does not tolerate any corruption or bribery. Our principles in this regard are unwavering, and we conduct enhanced corruption risk management based on our compliance management system to secure the trust of our customers and stakeholders in our integrity and honesty. To this end, we identify international laws and regulations related to anti-corruption that must be complied within the course of conducting business, and monitor new obligations due to amendments to laws and regulations and changes in regulatory authorities' policies. The identified obligations are reviewed and evaluated from a legal risk perspective, customized control measures are implemented, and improvement measures are continuously taken for any gap in the control measures to enhance their effectiveness. In addition, we have established and implemented Anti-bribery policies, operating regulations, guidelines, and checklists to establish and check policies to prevent corruption, and all employees are required to take an annual pledge to comply with anti-corruption laws and regulations and complete training to raise anti-corruption awareness. In addition, we manage corruption risks through business partners by collecting pledges from all suppliers and operating a supply chain due diligence process. Based on these activities, we obtained global standard ISO 37001 certification for anti-bribery management in 2024, and plans to undergo post-certification audits in 2025, aiming to expand certification to all

Anti-Bribery Policy Visit Website Anti-Bribery Guidelines Visit Website

## **Ensuring Business Resilience**

Ensuring Business Resilience Visit Website

## Risk management system

## Company-wide risk management governance

To effectively manage risks at a company-wide level, LG Energy Solution has appointed Chief Risk management Officer (CRO), the highest-ranking executive responsible for risk management. Additionally, for key risk areas - product quality and environmental and safety, the Board of Directors has appointed Chief Quality Officer (CQO) and Chief Production Officer (CPO), respectively, to manage related risks through technical expertise and independent leadership. The CRO leads the company-wide Risk Management Committee and oversees the monitoring, assessment and mitigation of potential risks and makes sure that risk management is integrated into all areas of business. In times of an actual company-wide crisis, the CRO chairs the company-wide Emergency Committee, which is the highest decision-making body for emergencies, and is responsible for convening and terminating the Company Emergency Committee assembly, approving crisis response measures, overseeing company-wide communication and external activities, and leading crisis management efforts.



## Responsibilities and Roles by Risk Management Department

(Operational Management Functions)

To manage risks more effectively, LG Energy Solution not only assigns the responsibility and accountability of risk management to the Board of Directors and executive management, but also requires each relevant business unit to take on specific roles and responsibilities as outlined below.

| Lines of Defense  | Department  | Main roles and responsibilities   |
|---|---|---|
| ()perational risk   |   | <ul> <li>Identify and manage risks in day-to-day operations</li> <li>Execute risk control measures in compliance with internal policies, procedures, and regulations</li> </ul>   |
| Risk management<br>and compliance<br>oversight                                    | Crisis<br>Management<br>Team,<br>Compliance<br>Office | Oversee policy/control standards development and risk management framework Support company-wide risk and compliance management, including through trainings Monitor implementation and roll out activities for continuous improvement |
| Independent review and evaluation  Corporate Audit Department, Compliance Office* |   | Conduct internal audits     Evaluate the appropriateness and effectiveness of risk management system (annually)   |

<sup>\*</sup> The Compliance Office independently reviews the adequacy and effectiveness of the compliance risk management system in relation to legal and regulatory compliance. To ensure independent assurance, the audits are performed in accordance with established objective standards and in conjunction with external certifications, where applicable.

## **Risk Response Procedures**

#### (Corporate Risk Management Committee / Emergency Committee)

LG Energy Solution activates the company-wide crisis response system according to the response manual in the event of a risk occurrence. If an incident or crisis is determined to be a "companywide crisis" based on pre-defined classifications by type and severity, an Emergency Committee is convened in accordance with the reporting and communication protocol. The committee is chaired by the CRO (or a designated C-level executive, depending on the situation). The Emergency Committee operates a comprehensive situation room to communicate with the field and support accident response and recovery. Once the crisis is resolved, the Committee monitors the implementation of measures to prevent recurrence and verifies the results. The dedicated organization under the CRO's authority lists changes in crises and their impacts, develops scenarios, including the decision-making process of the Emergency Committee, and conducts mock drills to enhance crisis response capabilities. Additionally, we improve crisis response manuals and systems and horizontally shares these measures to prevent similar crises from recurring.

COMPANY OVERVIEW

#### **Risk Identification and Management Process**

LG Energy Solution operates a company-wide risk review process to identify core risk areas and key risks with an aim to enhance sensitivity to potential risks and effectiveness of risk management practices. The first step is a risk pooling to identify risks relevant to the company. It takes into account various information from materiality assessments, cross-functional interviews, and in-depth risk analyses across various domains (e.g., investment, business planning, ESG, and external factors). Those risks deemed relevant are then quantitatively assessed based on their likelihood of occurrence and magnitude of impacts. This informs the determination of the company's core areas of risks and key risks, followed by development of mitigation plans and internal processes for each of key risks.

The process of risk review, risk mitigation planning, implementation monitoring and effectiveness evaluation of risk management practices is carried out on a regular basis and the results are reported to the company-wide Risk Management Committee semiannually.

The risk matrix used in risk review to assess likelihood of occurrence and magnitude of impact is developed considering the factors unique to the company such as business structure, site and value chain characteristics, and industry/market trends. This matrix is regularly updated through scenario and sensitivity analyses as necessary. Furthermore, key risk mitigation actions in each of core risk areas are reflected in the KPIs of responsible department leads, linking risk management performance with compensation, to promote active risk management among the leadership.

#### [Risk Review Process]



<sup>\*</sup> Deliberation and approval required by the CRO and the Risk Management Committee and sub-committees are established for each of core risk areas

#### **Key Risks**

As part of risk review process, LG Energy Solution conducted interviews with key departments to identify key risks and effective risk management strategy and also to support the enhancement of risk management framework in 2024. Considering the risk hierarchy of macro, business environment and business risk, we developed a Risk Map which constituted 15 risk areas and 69 risks, based on which we determined core risk areas and key risks (see the box below).

#### Product quality risk

LG Energy Solution recognizes fire incidents in electric vehicles and energy storage systems as significant risks. Such incidents pose risks to consumer safety and property and might spread negative perceptions on the future green energy industry among the public. To reduce the likelihood of such incidents and mitigate product quality and safety risk, we operate a rigorous product quality and safety management process and roll out various initiatives, ranging from close collaboration with major customers and safety management authorities in applicable jurisdictions, comprehensive and rigorous analyses of the causes of electric vehicle fires in collaboration with external research institutions, hazard diagnosis technology to assess potential hazards during use phase, to voluntary recalls.

#### Policy and regulatory risk

Given the global situation and the characteristics of the energy industry, the importance of risk management related to regulations and policies is increasingly emphasized. Policies related to the electric vehicle and battery industries can present opportunities, but they can also pose threats to our business operations or strategy formulation. Therefore, we define these factors as key risks and aim to enhance our response capabilities. To address these global policy and regulatory risks, we conduct compliance risk monitoring to identify regulatory risks, assess their impact, check response capabilities, and improve processes and capabilities. As part of this effort, we ensure compliance with various domestic environmental regulations, such as the Air Environment Conservation Act, Water Environment Conservation Act, Waste Management Act, and Chemical Substances Control Act.

#### **Environmental safety risk**

As LG Energy Solution continues to expand our business rapidly worldwide, we are making various efforts to ensure the safety of employees and the surrounding communities near our facilities. Considering the increased potential for environmental and safety risks due to the construction of numerous new facilities and the increased use of new equipment, we are implementing proactive risk identification and prevention measures. Furthermore, for facilities approaching 20 years of operation, we identify risks associated with aging and implement rigorous diagnostics and improvement measures. To achieve this, we continuously study and improve compliance with safety and environmental regulations in applicable jurisdictions.

## **Emerging Risks**

LG Energy Solution identifies and monitors emerging risk factors that may have a significant impact on the business from a long-term perspective. We are committed to minimizing business uncertainties by establishing risk mitigation measures and continuously reviewing their effectiveness.

| Extreme Weather Events |  |  |  |
|------------------------|--|--|--|
| Description            | Due to recent climate change, the frequency and intensity of extreme weather events—such as heavy rainfall, heatwaves, typhoons, and cold spells—has been increasing. These physical risks may cause direct damage to a company's critical assets, including production facilities and logistics infrastructure, and negatively affect the entire supply chain by disrupting electricity and raw material supplies, resulting in delays in transportation and delivery.  |  |  |
| Potential<br>impact    | Extreme weather events can lead to temporary shutdowns of manufacturing plants, production schedule delays, and product damage, potentially resulting in delayed customer deliveries and revenue loss. Additionally, power grid disruptions may cause instability in energy supply, hindering continuity in manufacturing processes. Delays in the procurement of raw materials and components can significantly impact overall supply chain efficiency. Over the long term, these factors may lead to decreased customer trust and increased operational costs.   |  |  |
| Risk<br>management     | [Business Impact Analysis and Response Strategies Development Through Scenario Analysis] LG Energy Solution has conducted scenario analyses on 10 selected material topics to assess their potential business impacts under various climate scenarios. This approach allows the company to establish clear directions to respond to the uncertainties posed by climate change and to strengthen its management system for both risk and opportunity factors.   |  |  |
|                        | [Establishment of Business Continuity Management System]  To ensure uninterrupted product and service quality and timely delivery to customers even in the face of various emergency situations—including extreme weather events—LG Energy Solution implements strategies and plans based on a Business Continuity Management System (BCMS). Additionally, to validate and enhance the sustainability, structure, and effectiveness of the system, we aquire and renew ISO 22301 (Business Continuity Management System) certification, and conducts assessments of all manufacturing sites based on internally developed standards aligned with this certification. |  |  |

| Strengthening of Trade Regulations in Major Countries related to Global Supply Chains |  |  |  |  |
|---|--|--|--|--|
| Description   | Globally, demands for environmental and human rights due diligence, information disclosure, and traceability across supply chains are increasing. In particular, regulations such as the EU Battery Regulation, the Corporate Sustainability Due Diligence Directive (CSDDD), and the U.S. Uyghur Forced Labor Prevention Act (UFLPA) are driving a fundamental shift in corporate supply chain management strategies.  LG Energy Solution operates a complex and international supply chain that spans from the extraction of mineral resources to assembly and delivery. These evolving regulations may have both direct and indirect impacts on overall value chain operations, including product exports and deliveries to customers |  |  |  |
| Potential<br>impact   | Major countries such as the EU and the U.S. are not only requiring companies to implement supply chain traceability and due diligence focused on environmental, human rights, and country of origin- of-materials aspects, but are also increasingly linking these requirements to trade sanctions. Non-compliance may result in a variety of direct and indirect risks, including fines, product seizures, recalls or disposals, suspension of operations, exclusion from public procurement, reputational damage, and loss of competitiveness. Additionally, strengthened management requirements across the value chain may lead to increased operational costs.  |  |  |  |
| Mitigating<br>actions   | [Enhancement of Supply Chain Due Diligence System] LG Energy Solution has established and implemented a due diligence strategy for critical raw material supply chains classified as high-risk, in accordance with the risk-based approach recommended by international supply chain due diligence standards such as the Organisation for Economic Co-operation and Development (OECD) and the UN Guiding Principles on Business and Human Rights (UNGP).  |  |  |  |
|   | [Forced Labor Risk Management] LG Energy Solution has formed a dedicated taskforce to proactively prevent and manage human rights risks in the supply chain, including issues related to forced labor. We conduct ongoing monitoring using supply chain mapping data, Al tools, and publicly available information.  |  |  |  |
|   | [Strengthening Supply Chain Traceability System] Through a supply chain traceability management system, LG Energy Solution ensures continuous risk oversight across all tiers of its suppliers and maintains a systematic record of supply chain due diligence activities.   |  |  |  |

#### **Mock Drills**

LG Energy Solution conducts company-wide crisis mock drills annually to strengthen corporate crisis management capabilities. In 2024, we simulated a major fire incident at an overseas site, whereby emergency response drills were executed in coordination with relevant sites, including the activation of the Emergency Committee and department-specific scenario management. Additionally, a drill was conducted to assess our response processes under a hypothetical geopolitical scenario that would have disrupted the supply chain. Based on participant feedback, we continuously enhance the completeness of its training by incorporating various crisis scenarios and plan to improve employees' crisis response proficiency and awareness through repeated exercises focused on key risk events.

#### **Establishment of Business Continuity Management System**

LG Energy Solution continuously enhances its capabilities to maintain business continuity during a crisis and validates the accountability of the business continuity management system by acquiring international and domestic standard certifications. In 2021, we obtained ISO 22301 certification for our domestic operations (the headquarters, Ochang Energy Plant 1). In 2023, LG Energy Solution obtained the Disaster Mitigation Excellence Certification by the Ministry of the Interior and Safety. In 2024, in addition to renewing ISO 22301 certification for its existing domestic sites, we also acquired certification for the Ochang Energy Plant 2, as it geared for mass production. These initiatives further demonstrated the company's excellence in disaster management and business continuity assurance. ISO 22301 is an international certification that assesses whether an organization has the ability to restore core functions in the shortest possible time to normalize business activities in the event of a business interruption due to various disasters, accidents, among others. We have applied the certification methodology to identify threats that could disrupt our business and ensure that our response strategies and procedures are well-defined and functioning smoothly. Moving forward, we will continue to strengthen our internal processes and capabilities related to business continuity and gradually expand the scope of certification to our overseas business sites.

## Improvement of Incident Reporting and Response Framework

Amid evolving internal and external business environments, crisis situations continue to emerge, with their impacts amplified through media and social networks. In preparation for unforeseen events, LG Energy Solution has enhanced its company-wide incident reporting and response framework to ensure swift, simultaneous, and transparent communication and escalation. Considering potential business interruption scenarios, we expanded the scope of business crises from 6 to 8 categories and redefined the reporting criteria and severity levels for each category. In addition, separate reporting and response protocols were established for critical incident levels, whereby reports on response outcomes and corrective actions are systematically delivered, upon issue resolution.

## **Promoting an Effective Corporate Risk Culture**

#### **Risk Management Training**

LG Energy Solution is actively engaged in enhancing employees' awareness and capabilities in risk management through a variety of initiatives. All employees responsible for crisis management are required to complete annual LG group-wide risk management training. In addition, information about potential risks, risk management practices is disseminated through a quarterly bulletin to all employees and officers, presenting diverse cases to strengthen overall risk awareness and support continuous improvement.

#### Risk Management Process Incorporated in Product Development Stages

LG Energy Solution conducts feasibility studies and product risk assessments during the development and project planning phases to preemptively identify and mitigate risks associated with products and business operations. At each development gate, relevant departments including project management, R&D, sales, quality, procurement, and equipment/process teams — evaluate potential risks in areas such as design validation, planning, investment, and cost, following the Advanced Product Quality Planning (APQP) guidelines. If any risks are deemed unresolved or mitigation measures are insufficient, progression to the next development stage is withheld through a "gating" procedure. This ensures that risks are addressed early in the development cycle, supporting more stable and reliable product development.

#### [Risk Management Process in the Product Development Stage]

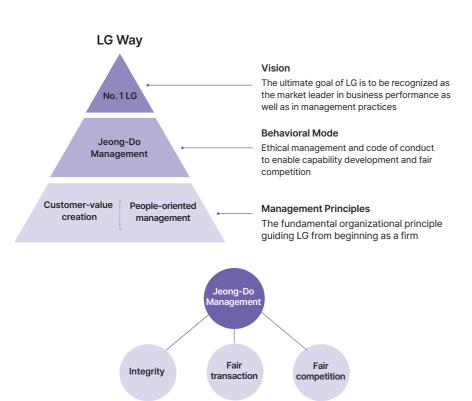
| Gate                          | Description   |  |  |
|-------------------------------|---|--|--|
| Business Review<br>(BR)       | A stage to review business feasibility, prior to the main development Gate, whereby risks are identified at each stage by comparing customer requirements and internal development capabilities.                        |  |  |
| Concept Verification<br>(CV)  | A stage where the feasibility of resources, product design concepts, and development schedule is reviewed to meet customer requirements and development goals are established.  |  |  |
| Design Verification<br>(DV)   | A stage where the product is designed and verified to meet the development/ quality goals established in the CV stage, and the design for mass production is finalized.   |  |  |
| Process Development<br>(PD)   | A stage to verify whether the development goals have been achieved based on the processability and certification results of products manufactured in the mass production process.                                       |  |  |
| Production Validation<br>(PV) | A stage where the final verification of process and quality re-producibility and mass production suitability is conducted for the completed development product, and the application for mass production is determined. |  |  |

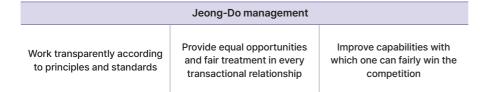
## Jeong-Do Management

LG Energy Solution pursues Jeong-Do Management following ethical norms. Jeong-Do Management represents LG's unique code of conduct based on ethical management and steady cultivation of skills and winning fairly. Jeong-Do Management means generating tangible results based on the ability to win in the competition with ethical management.

LG Jeong-Do Management Visit Website

LG Energy Solution Jeong-Do Management Visit Website

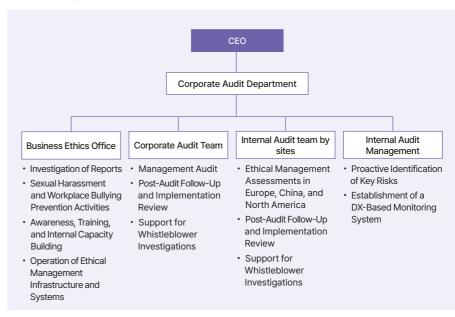




## Jeong-Do Management Governance

LG Energy Solution has established a Jeong-Do Management organization and internalized the Code of Ethics to support and enable fair and just performance.

#### [Ethical Management Governance Structure]



#### Code of Ethics

Respecting the free-market principle that pursues free and fair competition, LG sets the group's Code of Ethics as the standards for proper conduct and value judgment where all employees must adhere to, aiming for mutual trust, cooperation, and the pursuit of shared interests with all stakeholders. LG Code of Ethics consists of responsibilities and obligations toward customers fair competition, fair trade, basic ethics for employees, responsibilities toward employees, and responsibilities toward the nation and society.

#### [LG Code of Ethics]

#### Responsibilities and Obligations for Customers



- · Responsibilities and Duties to Customers
- · Creating Value
- · Providing Value

#### **Fair Competition**



- Pursuing Free Competition
- · Complying with Laws and Regulations

#### **Fair Transactions**



- Equal Opportunity
- · Fair Trade Process
- · Pursuing Mutual Growth

#### Basic Ethics of **Employees**



- · Basic Ethics
- Accomplishing Mission
- · Self-development
- · Fair Handling of Job
- · Avoiding Conflict of Interests with the Company

#### Corporate Responsibilities for **Employees**



- Respecting Humanity
- Fair Treatment
- · Promoting Creativity

#### Responsibilities to the Nation and Society



- · Rational Business Operation
- Protecting Shareholder Returns
- · Contributing to Social Development
- · Conservation of the Environment

## **Ethical Management Operations**

LG Energy Solution engage in business under the principles of ethical management, with an Ethics Office led directly by CEO office to uphold these principles. Annually, all employees participate in signing "Jeong-do Management Pledge of Practice" to reaffirm their commitment to ethical management practices, guided by the principles of integrity and fair competition.

## Pre-identification of Jeong-Do Management Risks

To proactively prevent ethical risks such as corruption and bribery, LG Energy Solution designates risk managers within teams responsible for tasks potentially exposed to Jeong-Do Management risks—such as fair trade compliance, government and legislative engagement, safety and environmental affairs, property taxation, National Tax Service interactions, and media relations. These designated managers are tasked with continuously monitoring relevant risk factors to ensure early detection and prevention.

#### Operation of the whistleblower system

LG Energy Solution operates the 'Jeong-Do Management Cyber Whistleblowing System' where employees can anonymously report on issues and irregularities within the company under the principle of whistleblower protection, which states that the company will not disclose any information that reveals or implies the identity of the whistleblower without the consent of the whistleblower, and will be held liable for restitution and similar responsibilities for any disadvantages arising from failure to comply.

#### Cyber Whistleblowing System Visit Website



Pledge of Practice for Jeong-Do management

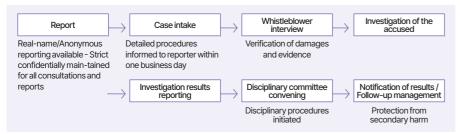


Cyber Whistleblowing System

Jeong-Do Management COMPANY OVERVIEW ENVIRONMENTAL SOCIAL GOVERNANCE FACTBOOK APPENDIX ≡ 141

## Jeong-Do Management Incident Investigation Process

LG Energy Solution has established a structured process to ensure swift, independent, and objective investigations in the event of Jeong-Do Management violations such as corruption or bribery across its business operations. Upon receipt of a report, an investigator or investigation committee—independent from the risk monitoring organization—is formed under the Jeong-Do Management and Ethics Office. The process begins with an interview with the whistleblower to verify the reported incident and collect supporting evidence. An investigation of the accused is subsequently conducted. If the violation is confirmed, we enforce a zero-tolerance policy, convening a disciplinary committee to impose strict disciplinary action. Investigation results are reported to the head of the accused's organization. After the process is complete, the whistleblower is informed of the outcome, and post-investigation follow-up is conducted to protect them from any secondary harm.



[2024 Jeong-Do Management violation cases]

| Categories                               | Cases | Categories | Cases    |    |
|--|-------|------------|----------|----|
| Corruption and Bribery                   | 2     |            | Reported | 14 |
| Discrimination and Harassment            | 6     | Employee   | Solved   | 14 |
| Customer data protection                 | 0     |            |          |    |
| Conflict of interest                     | 0     | Supplier   | Reported | 1  |
| Money Laundering and Inside Transactions | 0     |            | Solved   | 1  |
|  |       |            |          |    |

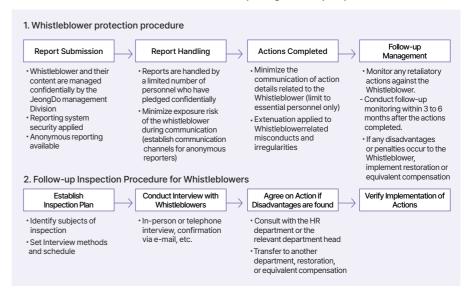
[2024 Employee and Supplier bribery grievance]

- 1) Tier-1 suppliers in direct transaction with LG Energy Solution
- Case reported anonymously, where the indentity or type of the whistleblower cannot be determined, are excluded.

#### **Whistleblower Protection Policy**

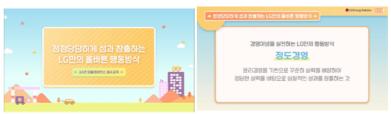
LG Energy Solution clarifies and complies with whistleblower protection standards related to employee ethics in accordance with the Labor Standards Act (Article 76-3, Paragraph 3), laws regarding gender equality in employment and work-life balance support (Article 14, Paragraph 3), and compliance under the Jeong-Do Management, Code of Ethics, and Internal Audit Regulations. Measures to protect whistleblowers include confidentiality of whistleblowers and related information, strict prohibition of disadvantageous dispositions and retaliatory acts, etc. Retaliation against whistleblowers and other violations of whistleblower protection, if they occur, are handled in accordance with Article 7 of the Whistleblower Protection Standards (Procedures for Protecting Whistleblowers and Post-inspection Procedures for Whistleblowers) in a lawful manner.

#### [Whistleblower Protection Procedures and Post-Reporting Follow-up Inspection Preocedures]



## **Jeong-Do Management Education**

To practice and internalize Jeong-Do Management, education is conducted regularly for all employees at all business sites along for our business partners in accordance with education and promotion system. In particular, we have strengthened online-based activities and education to spread the Jeong-Do Management culture and to encourage employees to practice Jeong-Do Management. We encourage employees' voluntary participation through the "Ensol Business Etiquette" campaign for all employees, including global business sites, and raise employees' interest through promotional activities utilizing the Jeong-Do Management portal. E-learning training on "Sexual Harassment in the Workplace" was conducted for all employees, including global business sites, and live training is conducted non-face-to-face for organization members who need intensive training.



Jeong-Do Management E-learning

## **Shareholder Policy**

LG Energy Solution is committed to enhancing shareholder value and rights through a sound shareholder policy. Based on the principle of shareholder equality, we treat all shareholders fairly and guarentee the exercise of their rights—including voting rights, minority shareholder rights, and the right to claim dividends—while complying with the specific practices outlined in its Corporate Governance Charter.

### Shareholder Status

## **Shares and Capital Structure**

According to LG Energy Solution's Articles of Incorporation, the total number of shares authorized for issuance is 800,000,000 shares (par value: KRW 500 per share). As of the end of 2024, the total number of issued shares stands at 234,000,000 common shares. We do not hold any treasury shares. Its largest shareholder is LG Chem Ltd., which holds an 81.8% ownership stake.



| Shareholder                         | Number of<br>Shares | Shareholding<br>Ratio (%) | Remarks               |
|-------------------------------------|---------------------|---------------------------|-----------------------|
| ① LG Chem Ltd.                      | 191,500,000         | 81.8                      | Affiliated<br>Company |
| ② National Pension Service          | 14,862,018          | 6.4                       |                       |
| 3 Employee<br>Ownership Association | 1,224,684           | 0.5                       |                       |
| Others     (Minority Shareholders)  | 26,413,298          | 11.3                      |                       |
| Total                               | 234,000,000         | 100.0                     |                       |

<sup>\*</sup> The above number of shares held and shareholding ratio are based on the shareholder's registry as of December 31, 2024 (excluding shareholders with less than one share), and actual shareholding status may

## **Enhancing Shareholder Value**

## Establishment of a system to protect shareholder rights

LG Energy Solution prioritizes transparency and fairness to ensure equal treatment of all shareholders and provide essential information for shareholder rights protection in corporate decision-making. The company has established the "Corporate Governance Charter," which specifies shareholder rights and practices responsible the sharholder-friendly management activities. Additionally, We have established the "Disclosure Management Regulations" to manage disclosure information and control disclosure-related works and procedure systems, thereby protecting shareholder rights through fair and accurate disclosure.

## **Shareholder Rights**

As owners of the company, shareholders of LG Energy Solution are entitled to receive timely and accurate information necessary to exercise their shareholder rights—such as attending and voting at the general meeting—in accordance with the Korean Commercial Act and LG Energy Solution's Articles of Incorporation. To ensure this, LG Energy Solution publicly announces key details of the general shareholders' meeting-including the date, location, and agenda-at least four weeks in advance, and submits the audit report no later than two weeks before the meeting. In addition, detailed explanations of each agenda item are posted on our website to enable shareholders to review the proposals thoroughly and make informed voting decisions.

To further enhance voting convenience and actively safeguard shareholder rights, LG Energy Solution introduced an electronic voting system starting from its 3rd Annual General Meeting. Information on the number of shares present and approval rates for each agenda item is disclosed transparently through public disclosures and our website.

Shareholders Meeting Visit Website

## The 5th annual general meeting of shareholders in 2025

Date: Thu, March 20, 2025 09:00 AM

Venue: B1 Connect Hall, LG Twin Towers, 128, Yeoui-daero, Yeongdeungpo-qu, Seoul

- Total number of shares in attendance: 218,714,946 / Attendance rate: 93.5%
- \* Attendance Rate excluding Related Persons: 64%

|          | Agendas for Resolution                                   | Result   | Approval Rate |
|----------|--|----------|---------------|
| Item 1   | Approval of Financial Statements for the 5th Fiscal Year | Approved | 99.4%         |
| Item 2-1 | Appointment of Non-Standing Director Kwon, Bong Seok     | Approved | 99.2%         |
| Item 2-2 | Appointment of Inside Director Lee, Chang Sil            | Approved | 99.8%         |
| Item 3   | Approval of Ceiling Amount of Remuneration for Directors | Approved | 99.9%         |

#### The 4th annual general meeting of shareholders in 2024

Date: Mon, March 25, 2024 11:00 AM

Venue: B1 Connect Hall, LG Twin Towers, 128, Yeoui-daero, Yeongdeungpo-qu, Seoul

- Total number of shares in attendance: 218,735,494 / Attendance rate: 93.5%
- \* Attendance Rate excluding Related Persons: 64.1%

|          | Agendas for Resolution  | Result   | Approval Rate |
|----------|---|----------|---------------|
| Item 1   | Approval of Financial Statements for the 4th Fiscal Year                          | Approved | 99.2%         |
| Item 2   | Approval of amendments to the Articles of Incorporation                           | Approved | 100.0%        |
| Item 3-1 | Appointment of Inside Director Kim, Dong Myung                                    | Approved | 99.8%         |
| Item 3-2 | Appointment of Independent Director Shinn, Mee Nam                                | Approved | 99.7%         |
| Item 3-3 | Appointment of Independent Director Yeo, Mee Sook                                 | Approved | 99.8%         |
| Item 4   | Appointment of Independent Director Han, Seung Soo for the Audit Committee Member | Approved | 96.9%         |
| Item 5-1 | Appointment of Audit Committee Member Shinn, Mee Nam                              | Approved | 97.8%         |
| Item 5-2 | Appointment of Audit Committee Member Yeo, Mee Sook                               | Approved | 98.1%         |
| Item 5-3 | Appointment of Audit Committee Member Park, Jin Kyu                               | Approved | 98.2%         |
| Itme 6   | Approval of Ceiling Amount of Remuneration for Directors                          | Approved | 99.9%         |

#### Fair treatment of shareholders

LG Energy Solution guarantees equitable voting rights for shareholders in accordance with Article 369 of the Commercial Act and Article 23 of the Articles of Incorporation. All shareholders, regardless of the number, are entitled to one vote for each share held and are treated equally, and have the right to receive sufficient and fair information from the company in a timely manner.

## Dividend and shareholder returns plan

LG Energy Solution is committed to leading the global battery market and achieving sustainable growth in the rapidly expanding industry and making large-scale investments to cater to the growing demand of customers is deemed inevitable for the time being. Given this, we plan to observe business performance, investment plans, market environment, availability of dividend sources under the Commercial Act and other relevant factors comprehensively towards implementing a shareholder return policy at an appropriate time in the future where we generate stable surplus cash flow based on profitable growth.

In addition, LG Energy Solution has amended its Articles of Incorporation to allow the record date for dividend payments to be set after the determination of the dividend amount. Should we implement a shareholder return policy such as dividends in the future, all decisions will be made in accordance with the Commercial Act and the Articles of Incorporation through resolutions by the Board and the General Meeting of Shareholders. These decisions will be communicated in a fair and transparent manner through public disclosures, website, investor relations presentations, shareholder letters, and other relevant channels.

#### Active communication with shareholders

#### IR communication

LG Energy Solution holds quarterly earnings presentations led by management via conference call to quickly and transparently communicate with shareholders on key issues. The earnings conference call is webcasted on our website in both Korean and English so that all shareholders in Korea and abroad can listen in real time. The materials are also disclosed on the website in Korean and English. In addition, we hold quarterly NDR (Non-Deal Roadshow) meetings and participate in conferences organized by securities firms to communicate with global investors. Furthermore, we sincerely respond to various communication channels to listen to the opinions of minority shareholders, such as the IR dedicated telephone line and the IR inquiry board on the website.

IR Activities Visit Website IR Materials Visit Website

## Quarterly earnings conference calls

LG Energy Solution held 4 earnings conference calls in 2024 to share business updates and financial results quarterly with global investors, analysts, and the media.

## NDR and Conference participation

LG Energy Solution participated in 26 NDRs and conferences in 2024 to communicate with shareholders, including global investors.

## **Transparent Disclosure System**

Through fair and prompt disclosure, LG Energy Solution provides timely information on major decisions that may affect investment decisions. We also provide in-depth IR materials in a timely manner to facilitate smooth shareholder communication and enhance business understanding. To improve information accessibility for foreign investors, we operate a website in English and submit disclosures in English separately for major disclosures. Our management information is available on our website (https://www.lgensol.com/en/index) and through electronic disclosure systems such as DART (https://englishdart.fss.or.kr) and KIND (https://engkind.krx.co.kr). We will continue to support investors' decision-making and strengthen fair communication through accurate and transparent disclosure.

## **ESG Information Management**

# **ESG Information Management and Disclosure Regulation**

To systematically manage ESG information and respond to upcoming ESG disclosure regulations, LG Energy Solution has established the "ESG Information Management and Disclosure Regulation," which was officially adopted in the first half of 2025 following approval by the ESG Committee. This regulation defines the responsibilities and authority of each department involved in the generation and management of ESG information. It also stipulates that ESG disclosures must undergo legal risk assessment and information generation process review, including for consolidated ESG data across subsidiaries, and be approved by the ESG Committee prior to public disclosure. Through this framework, LG Energy Solution aims not only to provide accurate and relevant ESG information to a wide range of stakeholders—including customers, shareholders, investors, and local communities—but also to proactively comply with the EU Corporate Sustainability Reporting Directive (CSRD), which is scheduled to take effect from 2028.

#### [ESG Disclosure Regulations Applicable to LG Energy Solution]

| Regulation | Classification   | Contents   |  |
|------------|------------------|--|--|
| KSSB       | Reporting Entity | Companies in adopting countries  |  |
|            | Contents         | Global Sustainability Disclosure Standards<br>(General & Climate-related)  |  |
|            | Applicable Scope | Company-wide (Consolidated)  |  |
| EU CSRD    | Reporting Entity | Companies headquartered or operating within the EU   |  |
|            | Contents         | A total of 12 environment, social, and governance (ESG)-<br>related regulations, including the EU Taxonomy and Sustainable<br>Finance Disclosure Regulation (SFDR) |  |
|            | Applicable Scope | Starting in 2028 (FY2027), one EU entity (LGESWA) will be subject to mandatory disclosure requirements   |  |

## **ESG IT Intelligence**

Non-financial indicators such as human rights and customer value are becoming increasingly important due to climate change and changing social values, and the need for a stricter, systematic managing of these quantitative indicators is being more emphasized. In June 2023, we launched the "LG ESG IT Intelligence" system, an ESG IT platform, together with other LG Group companies, to respond to increasing the ESG information disclosure regulations and operate an ESG IT infrastructure system that can efficiently manage ESG data required by various stakeholders LG ESG IT Intelligence aims to provide accurate ESG information to various stakeholders and derive future goals and insights for ESG management direction based on accumulated data. The system continues to evolve as a platform to install and advance ESG management. Future plans include gradually expanding the scope of ESG management targets, enhancing functionalities to meet the needs of subsidiaries in various industries, and ensuring the completeness of the ESG management platform through continuous improvement. Ultimately, beyond the data collection and management system, we plan on using the data to analyze and predict to secure preemptive managerial responses to meet the enforcing global ESG disclosure regulations and to establish a reliable databased risk management system. We will utilize the LG ESG IT Intelligence system to respond to relevant regulations and share transparent ESG information with internal and external stakeholders, including customers, in a timely manner.

COMPANY OVERVIEW ENVIRONMENTAL SOCIAL GOVERNANCE FACTBOOK APPENDIX  $\equiv$  145  $\equiv$ 

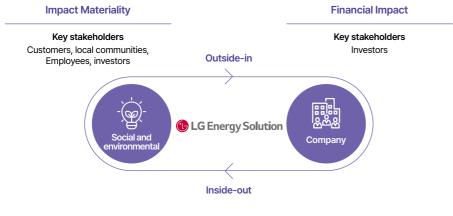
# Factbook

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### **Double Materiality Assessment**

LG Energy Solution conducts a materiality assessment each year to identify key issues of concern to stakeholders and those that have a significant impact on the business, and transparently discloses the results. Starting in 2024, the concept of double materiality has been introduced to enhance the reliability of ESG issue identification and related disclosures. The double materiality assessment considers both internal and external perspectives—evaluating the impact of ESG issues on the company's financial performance from an internal perspective, and assessing the company's environmental and social impacts from an external perspective. This approach enables LG Energy Solution to comprehensively address both financial materiality and sustainability.



### Social and environmental materiality

Inside-out perspective refers to the extent of positive or negative impacts that a company's business activities may have on society and the environment-both in the short and long term-across its entire value chain.

### **Financial Materiality**

Outside-in perspective refers to the extent of positive or negative impacts that external sustainability-related factors may have on a company's financial condition. It assesses the materiality of these issues by evaluating the degree to which they present significant financial or strategic risks or opportunities, both in the short and long term.

### **Double Materiality Assessment process**

LG Energy Solution developed its own process for materiality assessment by referring to the Double Materiality Implementation Guide 1 published by European Financial Reporting Advisory Group (EFRAG). Based on key indicators from the European Sustainability Reporting Standards (ESRS), we conducted face-to-face interviews with both internal and external stakeholders. Through these interviews, LG Energy Solution identified material indicators, key ESG topics in the secondary battery industry from the stakeholders' perspectives, and risk factors related to LG Energy Solution that have been publicly disclosed through media coverage. This comprehensive analysis resulted in the identification of three core ESG financial material issues and two environmental and social material issues.

### Stakeholder participation (Stakeholder interview)

To identify both the negative and positive impacts on LG Energy Solution, double materiality interviews were conducted with internal and external stakeholders based on key indicators from the ESRS. Interviewees were asked to select key ESG topics deemed material to LG Energy Solution, and in-depth interviews were then carried out focusing on four dimensions: Likelihood, Scale, Scope, and Feasibility of each issue. As a result of this process, a total of 12 material issues were identified.

### Overview of Stakeholder Interviews

- Interview Period: March to April 2025
- Methodology: In-person interviews
- Participants: A total of 20 teams comprising internal employees and external stakeholders, including investors, suppliers, customers, and academia

### **Identification of Impactful Topics**

Based on the results of stakeholder interviews, LG Energy Solution identified the most impactful ESG topics by analyzing the 12 ESG issues deemed significant in the interviews. alongside key sustainability issues in the management environment, corporate risk items under Enterprise Risk Management (FRM), and other external factors such as media exposure, controversies, ESG regulations, and ESG Materiality in Ratings.

### **Analytical Sources**

- Analysis of major global ESG-related media in 2024
- Controversy issues flagged by ESG rating agencies (e.g., MSCI)
- Risk items identified in ERM
- ESG regulations (e.g., EU Forced Labor Regulation, EU Battery Regulation, UFLPA)
- ESG-related inquiries from stakeholders

#### Step 3 Selection of Material Issues

Based on the short-listed results of materiality impacts on LG Energy Solution, and by taking into account their relative significance, we identified three core ESG material issues and two general material issues. These were subsequently reported to the management and the ESG Committee and received approval. For each of these identified material issues, we disclose the management approach, implementation performance, and mid- to long-term performance targets through its ESG Report to ensure transparency and accountability.

Double Materiality Assessment COMPANY OVERVIEW ENVIRONMENTAL SOCIAL GOVERNANCE FACTBOOK APPENDIX = 147

### [Double Materiality Assessment]

|      |                                    |                       |          | S        | ocial·Environ | mental Impac       | :t       |               |                    | Financial Impact     |                   |             |               |       |           |
|------|------------------------------------|-----------------------|----------|----------|---------------|--------------------|----------|---------------|--------------------|----------------------|-------------------|-------------|---------------|-------|-----------|
| Rank | Issue                              |                       |          | Scope    |               |                    | E        | valuation Res | ult                | Opportunity          | Evaluation Result |             | esult         | Final | Report    |
|      |                                    | Positive/<br>Negative | Customer | Own site | Value chain   | Local<br>Community | Severity | Likelihood    | Com-<br>prehensive | / Risk               | Scale             | Feasibility | Comprehensive |       | Page      |
| 1    | Climate Action                     | Positive              | 0        | 0        | 0             | 0                  | •••      | •••           | •••                | Risk,<br>Opportunity | •••               | •••         | •••           | •••   | 36 - 48   |
| 2    | Circular Economy                   | Positive              | 0        |          |               | 0                  | •••      | •••           | •••                | Risk                 | •••               | •••         | •••           | •••   | 49 - 55   |
| 3    | Product Stewardship                | Negative              |          | 0        | 0             | 0                  | •••      | •••           | •••                | Opportunity          | •••               | •••         | •••           | •••   | 91 - 96   |
| 4    | Sutainable Value Chain             | Positive              |          | 0        | 0             | 0                  | •••      | •••           | •••                | Risk                 | •••               | •••         | •••           | •••   | 79 - 84   |
| 5    | Environmental Mangetment           | Negative              |          | 0        |               | 0                  | ••       | ••            | ••                 | Risk                 | ••                | ••          | ••            | ••    | 60 - 66   |
| 6    | Talent Management and<br>Training  | Positive              |          | 0        | 0             | 0                  | •        | ••            | ••                 | Opportunity          | •                 | •           | •             | ••    | 110 - 116 |
| 7    | Corporate Social<br>Responsibility | Negative              | 0        | 0        | 0             | 0                  | •        | ••            | ••                 | Risk                 | •                 | •           | •             | ••    | 122 - 123 |
| 8    | Sustainable Workplace              | Positive              |          | 0        |               |                    | •        | •             | •                  | Opportunity          | •                 | •           | •             | •     | 117 - 121 |
| 9    | Jeong-Do Management                | Negative              |          | 0        |               |                    | ••       | •             | ••                 | Risk                 | •                 | •           | •             | •     | 139 - 141 |
| 10   | Empowering Our People              | Negative              |          |          |               | 0                  | •        | •             | •                  | Risk                 | •                 | •           | •             | •     | 103 - 109 |
| 11   | Information Security               | Negative              |          |          |               | 0                  | •        | •             | •                  | Risk                 | •                 | ••          | ••            | •     | 124 - 125 |
| 12   | Shared Growth                      | Negative              | 0        | 0        | 0             | 0                  | •        | •             | •                  | Risk                 | •                 | •           | •             | •     | 85 - 90   |

### The results of materiality assessment

| Rank | Category             | Issue                    | GRI Topic              | ESRS Topic |
|------|----------------------|--------------------------|------------------------|------------|
| 1    | Financial            | Climate Action           | 201, 302, 305          | E1         |
| 2    | Financial            | Circular Economy         | 301, 306               | E5         |
| 3    | Social-Environmental | Product Stewardship      | 416                    | S4         |
| 4    | Financial            | Sustainable Value Chain  | 308, 407, 408, 41, 414 | S2         |
| 5    | Social-Environmental | Environmental management | 303, 305               | E3         |

Double Materiality Assessment COMPANY OVERVIEW ENVIRONMENTAL SOCIAL GOVERNANCE FACTBOOK APPENDIX  $\equiv$  148

### **Management of Material Issues**

LG Energy Solution identified both risk and opportunity factors based on the interview during the double materiality assessment. We have developed and reflected the response strategies for each identified issue.

### [Top 3 Financial Impact]

| Issues                     | Risk and Opportunity Factors   | Business Impact | Response Strategy  | Target  | Page    |
|----------------------------|--|-----------------|--|---|---------|
| Climate<br>Action          | <ul> <li>Rising demand for renewable energy</li> <li>Weakened cost competitiveness due to rising energy prices</li> <li>Growing need to establish Scope 3 emissions management systems in response to regulations</li> <li>Increasing customer demand for low-carbon raw materials</li> <li>Expanding demand for EVs and renewable energy</li> </ul> | Revenue<br>Risk | Declaration of RE100 by 2030 and expansion of renewable energy adoption Introduction of PPAs to reduce energy price volatility Establishment of carbon footprint calculation systems RE100 transition and training for Tier-1 suppliers by 2030 Active response to global battery demand and securing a leading position in the market | <ul> <li>RE100 by 2030</li> <li>Carbon neutrality for own operations by 2040</li> <li>Carbon neutrality for the supply chain by 2050</li> <li>Expansion of production capacity to over 500 GWh</li> </ul> | 36 - 48 |
| Circular<br>Economy        | Proactive establishment of resource recycling processes to comply with the EU Battery Regulation Prevention of environmental pollution caused by raw material extraction and packaging waste, while enhancing business competitiveness through cost savings in raw material procurement and packaging recycling                                      | Cost            | <ul> <li>Establishment of a closed-loop system</li> <li>Establishment of a battery reuse process</li> <li>Utilization of recycled packaging materials and improvement of recycling rates</li> </ul>  | Increase the proportion of recycled metals used to<br>over 20% by 2030  | 49 - 55 |
| Sustainable<br>Value Chain | Reduce ESG risks and enhance customer trust through proactive<br>due diligence and supplier improvement  | Risk            | Conduct ESG audits and implement corrective action plans (CAP) Establish ESG supply chain policy, due diligence, and management processes  | <ul> <li>Achieve over 90% of suppliers classified as<br/>"low-risk" in ESG risk assessments by 2030</li> <li>Attain 100% RMI certification rate for cobalt smelters<br/>by 2026</li> </ul>                | 79 - 84 |

### [Top 2 Social·Environmental Impact]

| Issues                      | Value Chain                  | Impact Area           | Type of Impact | Impact on Stakeholders   | Output  | Impact Assessment<br>Method   | Outcome  | Page    |
|-----------------------------|------------------------------|-----------------------|----------------|--|---|---|--|---------|
| Product<br>Stewardship      | Product/<br>Service          | Consumer/<br>End user | Positive       | Ensure battery safety and quality to provide global-level quality competitiveness to customers, deliver a reliable experience to end users, and fully comply with safety standards set by regulatory authorities to meet market and societal expectations  | The number of ISO 9001<br>(Quality management<br>systme) certifications | Customer satisfaction survey  | Creation of social value: Increase in product and service satisfaction   | 91 - 96 |
| Environmental<br>management | Own-site,<br>Supply<br>chain | Environment           | Negative       | <ul> <li>Heightened compliance risks associated with environmental regulations in each country due to the import of chemicals used in battery production</li> <li>The mass production of batteries may lead to an increase in various pollutants, thereby raising the potential risks associated with exposure to these substances.</li> </ul> | Volume of Air pollutant emission and reduction rate.                    | Montioring the air pollutant emission and comparing the results with those of the local community and industry peers. | Enhacing environmental value:<br>Reducing the environmental burden<br>on local community (e.g., reduction the<br>treatment load in public wastewater<br>treamtment facility, improvement of<br>the condition of air) | 60 - 66 |

## **Membership Associations**

| Global Battery Alliance<br>(GBA)                                 | Korea Chamber of Commerce and Industry       | Korean Nurses Association                                    |
|--|--|--|
| Responsible Business Alliance<br>(RBA)                           | UN Global Compact                            | Korea Electrical Safety Managers Association                 |
| Renewable Electricity 100<br>(RE100)                             | Korea Listed Companies Association           | Korean Association of Occupational Health Nurses             |
| Electric Vehicle 100<br>(EV100)                                  | Korea Intellectual Property Association      | Korea Licensing Association                                  |
| Korea Battery Industry Associations<br>(KBIA)                    | Korea Electric Vehicle Association           | Korea Electric Two-Wheel Vehicle and Auto-mobile Association |
| Hanyang University Battery Center                                | Korea Electrical Manufacturers Association   | Alliance for Automotive Innovation (AAI)                     |
| Seoul National University Secondary<br>Battery Innovation Center | Korea Investor Relations Service             | The Rechargeable Battery Association (PRBA)                  |
| Korea Institute for Industrial Technology Protection             | Korea Radiation Promotion Association        | The American Chamber of Commerce in Korea (AMCHAM)           |
| Korea Fair Competition Federation                                | Chungbuk Environmental Engineers Association |  |
| Korea Industrial Technology Association                          | Chungbuk Process Safety Council              |  |

### **Forward-Looking Statement**

This report contains forward-looking statements related to LG Energy Solution's ESG goals, strategies, environmental management, and general business outlook.

Any statement that is not limited to facts pertaining solely to the present or past but is also relevant to the future may be considered a forward-looking statement. In this report, terms such as "may," "will," "could," "should," "forecasts," "expects," "intends," "plans," "aims to," "goals," "trying to," "anticipates," "projects," "outlook," "believes," "estimates," "predicts," "potential," "continue," and "preliminary" may be deemed forward-looking statements.

LG Energy Solution has carefully chosen such expressions to ensure they are not used indiscriminately, verifying reasonable grounds as well as the commitment of management and relevant departments. However, please note that these forward-looking statements are based on the current business situation, past or present information, and views, and therefore inherently involve uncertainties arising from various internal and external factors and specific circumstances.

Such factors may include, but are not limited to the following: statements related to the expected effects on our business of geopolitical events, global economic conditions, increased price and product competition from competitors, fluctuations in cost and availability of raw material, to ability to achieve material and sales price increases, the ability to recover margins, customer inventory levels, our ability to maintain favorable supplier relationships and arrangements, the timing of planned cost reductions and restructuring, the political and economic conditions of various countries, the ability to enter diverse domestic and international markets, exchange rates and fluctuations in such rate, fluctuation in tax rate, the impact of future legislation, the impact of environmental regulations, unexpected business disruptions, the effectiveness of our internal control over financial reporting, results of government investigations, and the unpredictability of existing or possible future litigation.

In addition, certain figures presented in the forward-looking statements in this report have been designed and calculated based on LG Energy Solution's internal standards (or generally accepted industry standards) using past or current information. These figures may change in the future due to unforeseen variables, external factors, or changes in calculation methods.

### (1) Forward-Looking Statements on ESG Goals and Implementation Plans Regarding **Environmental Management**

This report contains forward-looking statements related to LG Energy Solution's ESG goals. implementation plans for environmental management. Certain statements mentioned herein may constitute forward-looking statements subject to applicable laws and regulations, including Article 3(1) of the Act on Fair Labeling and Advertising, Article 16-10 of Development of and Support for Environmental Technology Act, EU Directive 2024/825, and the U.S. Green Guides. LG Energy Solution has sought to incorporate the recommendations provided by relevant laws, domestic and international regulations, and initiatives when using such expressions. The forward-looking statements on environmental management included in this report are based on information available as of the date of preparation and have been developed on the basis of scientific and objective evidence, as well as management's commitment. However, due to the various factors and circumstances mentioned above, there may be material differences between the originally intended goals, strategies, implementation plans, or progress and the actual results in relation to ESG-related businesses, market outlook, future price forecasts, guidelines, plans, and targets.

LG Energy Solution will continue its efforts to achieve the ESG goals presented in this report. In the event of significant changes, the company will review such matters through the ESG Committee and relevant departments, disclose them to stakeholders in a timely manner if necessary, and reflect the specific changes in the annual reports.

### (2) General Forward-Looking Statements Regarding Business Outlook and Management

This report contains forward-looking statements regarding LG Energy Solution's business and management, including market outlook, management plans, and financial forecasts.

While LG Energy Solution believes that the expectations reflected in these forward-looking statements are reasonable, it cannot guarantee that such expectations will necessarily prove to be correct. These statements are intended to help readers understand LG Energy Solution's approach, strategies, initiatives, and anticipated operating environment in key ESG areas; therefore, this information may not be suitable for other purposes.

Although LG Energy Solution believes that the forward-looking statements in this Report is based on timely and reasonable information, assumptions, and beliefs, such forward-looking statements - and the underlying information, assumptions, and beliefs - are subject to various factors, risks, and uncertainties, which could cause actual results to differ materially from management's expectations and plans as set forth in such forward-looking statements.

Accordingly, LG Energy Solution undertakes no obligation to revise or update the forwardlooking statement, whether as a result of new information, future events or otherwise.

### **ESG Data**

### **Economic Data**

|                | Categories                             | Unit    | 2022       | 2023       | 2024       |
|----------------|--|---------|------------|------------|------------|
|                | 1. Net sales                           |         | 25,598,609 | 33,745,470 | 25,619,585 |
|                | 2. Cost of sales                       |         | 21,308,077 | 28,802,437 | 22,213,605 |
|                | 3. Gross Profit                        |         | 4,290,532  | 4,943,033  | 3,405,980  |
|                | 4. Selling and marketing expenses      |         | 0          | 676,874    | 1,480,020  |
|                | 5. Selling and administrative expenses |         | 3,076,813  | 3,456,673  | 4,310,613  |
| Sum-<br>mary   | 6. Operating income                    | Million | 1,213,719  | 2,163,234  | 575,387    |
| of             | 7. Financial income                    |         | 385,537    | 984,984    | 1,048,343  |
| Income         | 8. Financial expenses                  | KRW     | 519,021    | 857,201    | 1,260,579  |
| State-<br>ment | 9. Equity method profit (loss)         |         | (36,641)   | (32,450)   | (49,118)   |
| mem            | 10. Others non-operating income        |         | 1,349,485  | 1,125,846  | 858,811    |
|                | 11. Others non-operating expenses      |         | 1,397,765  | 1,340,953  | 823,973    |
|                | 12. Profit (loss) before income tax    |         | 995,314    | 2,043,460  | 348,871    |
|                | 13. Income tax expense                 |         | 215,488    | 405,475    | 10,269     |
|                | 14. Profit (loss) for the year         |         | 779,826    | 1,637,985  | 338,602    |

|   | Categories  | Unit           | 2022  | 2023  | 2024  |
|---|---|----------------|-------|-------|-------|
| Contri-<br>butions<br>and<br>Other<br>Spend-<br>ing | Trade associations /     tax-exempt organizations | Million<br>KRW | 1,613 | 1,460 | 1,780 |
|   | Regional and national political campaigns         | Million<br>KRW | 0     | 0     | 0     |
|   | Lobbying and interest representation, etc.        | Million<br>KRW | 0     | 0     | 0     |
|   | 4. Other  | Million<br>KRW | 0     | 0     | 0     |

<sup>\*</sup>It is based on HQ expeditures. In accordance with Article 32 of the Political Funds Act and other relevant laws, the provision of political funds is prohibited in Korea

|   | Categories                                | Unit           | 2022 | 2023 | 2024 |
|---|---|----------------|------|------|------|
| Major<br>Insti-<br>tutions<br>for<br>Policy<br>Con- | Korea Battery Industry Association (KBIA) | Million<br>KRW | 230  | 475  | 449  |
|   | 2. Fair Cobalt Alliance (FCA)             | Million<br>KRW | 130  | 134  | 140  |
|   | 3. Korea Enterprises Federation           | Million<br>KRW | 173  | 189  | 183  |
| tributions  | Total                                     | Million<br>KRW | 533  | 798  | 772  |

<sup>\*</sup>Detailed major association fee expenditures was managed from 2024

|                 | Categories   | Unit           | 2022        | 2023        | 2024        |
|-----------------|--|----------------|-------------|-------------|-------------|
|                 | Current Assests  |                | 18,804,269  | 17,208,396  | 15,327,395  |
|                 | 1. Cash and Cash Equivalents                                       |                | 5,937,967   | 5,068,783   | 3,898,711   |
|                 | 2. Accounts Receivable   |                | 4,771,846   | 5,128,474   | 4,944,019   |
|                 | 3. Other Receivables   |                | 462,188     | 555,186     | 603,635     |
|                 | 4. Other Current Financial Assets                                  |                | 9,167       | 65,439      | 42          |
|                 | 5. Prepaid Corporate Income Tax                                    |                | 46,205      | 67,072      | 121,269     |
|                 | 6. Other Current Assets  |                | 581,267     | 927,106     | 1,207,364   |
|                 | 7. Inventory   |                | 6,995,629   | 5,396,336   | 4,552,355   |
|                 | Non-current Assets   |                | 19,495,176  | 28,228,748  | 44,979,396  |
|                 | 1. Long-term Accounts Receivable                                   |                | 120,698     | 129,995     | 392,584     |
|                 | 2. Other Long-term Receivables                                     |                | 119,058     | 122,282     | 134,450     |
|                 | 3. Other Non-current Financial Assets                              | Million<br>KRW | 408,551     | 357,038     | 1,132,368   |
|                 | <ol><li>Investments in Associates and<br/>Joint Ventures</li></ol> |                | 203,696     | 223,559     | 62,389      |
|                 | 5. Deferred Corporate<br>Income Tax Assets                         |                | 2,100,492   | 2,228,924   | 2,774,153   |
| Sum-<br>mary    | 6. Property, Plant, and Equipment                                  |                | 15,331,047  | 23,654,677  | 38,349,552  |
| of              | 7. Intangible Assets   |                | 642,090     | 875,993     | 1,284,576   |
| Con-            | 8. Investment Properties   |                | 213,042     | 212,489     | 225,934     |
| solidated       | 9. Other Non-current Assets  |                | 356,502     | 423,791     | 623,390     |
| State-<br>ments | Total Assets   |                | 38,299,445  | 45,437,144  | 60,306,791  |
| of              | Current Liabilities  |                | 11,444,923  | 10,937,185  | 12,054,922  |
| Financial       | Non-current Liabilities  |                | 6,260,760   | 10,126,450  | 17,285,326  |
| position        | Total Liabilities  |                | 17,705,683  | 21,063,635  | 29,340,248  |
|                 | Equity of the Parent Company (Owners of the Parent Company)        |                | 18,732,215  | 20,200,641  | 21,116,237  |
|                 | 1. Share Capital   |                | 117,000     | 117,000     | 117,000     |
|                 | 2. Additional Paid-in Capital                                      |                | 17,164,627  | 17,164,627  | 17,164,627  |
|                 | Accumulated Other     Comprehensive Income                         |                | 296,070     | 554,518     | 2,437,399   |
|                 | Retained Earnings     (Accumulated Deficit)                        |                | 1,154,518   | 2,364,496   | 1,397,211   |
|                 | Non-controlling Interests  |                | 1,861,547   | 4,172,868   | 9,850,306   |
|                 | Total Equity   |                | 20,593,762  | 24,373,509  | 30,966,543  |
|                 |  |                | 2022.01.01~ | 2023.01.01~ | 2024.01.01~ |
|                 |  |                | 2022.12.31  | 2023.12.31  | 2024.12.31  |
|                 | Revenue (Sales)  |                | 25,598,609  | 33,745,470  | 25,619,585  |
|                 | Net Profit (Loss) for the Period                                   |                | 779,826     | 1,637,985   | 388,602     |
|                 | Equity Attributable to Owners of the<br>Parent Company             |                | 767,236     | 1,237,180   | (1,018,741) |

### Environmental(E)

|                 | Classification                           | Unit                     | 2022   | 2023   | 2024   |
|-----------------|--|--------------------------|--------|--------|--------|
|                 | Energy Consumption                       | TJ                       | 37,823 | 40,839 | 45,723 |
|                 | Electiricity                             | TJ                       | 29,710 | 31,895 | 35,615 |
|                 | Renewable                                | TJ                       | 16,730 | 17,952 | 20,026 |
|                 | Non-renewable                            | TJ                       | 12,980 | 13,943 | 15,589 |
|                 | LNG                                      | TJ                       | 5,384  | 5,882  | 7,432  |
|                 | Steam, Heat                              | TJ                       | 2,717  | 3,047  | 2,892  |
|                 | Diesel, Kerosene, Gasoline               | TJ                       | 12     | 15     | 8      |
|                 | Others                                   | TJ                       | -      | -      | -      |
|                 | Korea 1)                                 | TJ                       | 7,319  | 7,510  | 8,872  |
|                 | Electricity                              | TJ                       | 5,952  | 6,223  | 6,988  |
|                 | LNG                                      | TJ                       | 1,074  | 931    | 1,439  |
|                 | Steam, Heat                              | TJ                       | 281    | 342    | 437    |
|                 | Diesel, Kerosene, Gasoline               | TJ                       | 12     | 15     | 8      |
|                 | Others                                   | TJ                       | 0      | 0      | 0      |
|                 | Global (Excluding Korea) 2)              | TJ                       | 30,504 | 33,328 | 36,851 |
|                 | Electricity                              | TJ                       | 23,758 | 25,672 | 28,627 |
|                 | LNG                                      | TJ                       | 4,310  | 4,951  | 5,769  |
|                 | Steam, Heat                              | TJ                       | 2,436  | 2,705  | 2,455  |
|                 | Diesel, Kerosene, Gasoline               | TJ                       | -      | -      | -      |
| Energy          | Others                                   | TJ                       | -      | -      | -      |
| manage<br>-ment | Korea                                    | TJ                       | 7,319  | 7,510  | 8,872  |
|                 | Renewable                                | TJ                       | 1,962  | 3,142  | 1,643  |
|                 | Non-renewable                            | TJ                       | 5,357  | 4,368  | 7,229  |
|                 | Global (Excluding Korea)                 | TJ                       | 30,504 | 33,328 | 36,851 |
|                 | Renewable                                | TJ                       | 14,768 | 14,810 | 18,383 |
|                 | Non-renewable                            | TJ                       | 15,736 | 18,519 | 18,468 |
|                 | Direct Energy                            | TJ                       | 7,832  | 8,602  | 9,671  |
|                 | Korea                                    | TJ                       | 1,086  | 946    | 1,447  |
|                 | Global (Excluding Korea)                 | TJ                       | 6,746  | 7,656  | 8,224  |
|                 | Indirect Energy                          | TJ                       | 32,427 | 34,942 | 38,507 |
|                 | Korea                                    | TJ                       | 6,233  | 6,564  | 7,425  |
|                 | Global (Excluding Korea)                 | TJ                       | 26,194 | 28,378 | 31,082 |
|                 | Renewable Energy Conversion (Company-wid | de) <sup>4)</sup>        |        |        |        |
|                 | Consumption                              | TJ                       | 16,730 | 17,952 | 20,026 |
|                 | Conversion Rate                          | %                        | 56%    | 56%    | 56%    |
|                 | Energy Conservation                      |                          |        |        |        |
|                 | Target                                   | TJ                       | 1,679  | 1,741  | 1,773  |
|                 | Performance                              | TJ                       | 1,744  | 2,309  | 2,505  |
|                 | Total Energy Intensity 3)                | TJ/<br>100Million<br>KRW | 0.148  | 0.121  | 0.178  |

|           | Classification   | Unit                                      | 2022      | 2023      | 2024      |
|-----------|--|---|-----------|-----------|-----------|
|           | Total Scope 1&2 Emissions<br>(Location-based)                                | tCO <sub>2</sub> eq                       | 2,436,890 | 2,418,355 | 2,486,777 |
|           | Total Scope 1&2 Emissions (Market-based)                                     | tCO2eq                                    | 1,501,618 | 1,493,362 | 1,467,506 |
|           | Korea  | tCO <sub>2</sub> eq                       | 358,473   | 376,454   | 408,140   |
|           | Global (Excluding Korea)   | tCO <sub>2</sub> eq                       | 1,143,145 | 1,116,908 | 1,059,364 |
|           | Scope 1  | tCO <sub>2</sub> eq                       | 306,029   | 287,493   | 355,030   |
|           | ETS Ratio (Poland, Korea)  | %   | 50%       | 55%       | 52%       |
|           | Korea  | tCO2eq                                    | 72,378    | 68,020    | 73,170    |
|           | Global (Excluding Korea)   | tCO2eq                                    | 233,650   | 219,474   | 281,860   |
|           | Scope 2  |   |           |           |           |
|           | Location-based   | tCO2eq                                    | 2,130,862 | 2,130,862 | 2,131,746 |
|           | Korea  | tCO <sub>2</sub> eq                       | 286,095   | 308,503   | 334,972   |
|           | Global (Excluding Korea)   | tCO <sub>2</sub> eq                       | 1,897,773 | 1,822,427 | 1,796,774 |
|           | Market-based   | tCO <sub>2</sub> eq                       | 1,195,589 | 1,205,869 | 1,112,476 |
|           | Korea  | tCO <sub>2</sub> eq                       | 286,095   | 308,435   | 334,972   |
|           | Global (Excluding Korea)   | tCO <sub>2</sub> eq                       | 909,494   | 897,434   | 777,504   |
| GHG       | Scope 3  | tCO2eq                                    | 164,193   | 6,471,645 | 7,992,070 |
| emissions | C1. Purchased goods and services   | tCO2eq                                    | -         | 5,762,099 | 5,883,859 |
|           | C2. Capital goods  | tCO2eq                                    | -         | -         | 1,146,337 |
|           | C3. Fuel- and energy-related activities (not included in scope 1 or scope 2) | tCO2eq                                    | 114,864   | 124,087   | 258,043   |
|           | C4. Upstream transporation and distribution                                  | tCO <sub>2</sub> eq                       | -         | 128,103   | 145,609   |
|           | C5. Waste generated in operations  | tCO2eq                                    | 37,658    | 37,817    | 20,204    |
|           | C6. Business travel  | tCO <sub>2</sub> eq                       | 11,671    | 12,450    | 14,228    |
|           | C7. Employee commuting   | tCO <sub>2</sub> eq                       | -         | 7,714     | 13,212    |
|           | C12. End-of-life treatment of solid vehicles                                 | tCO2eq                                    | -         | 399,375   | 510,578   |
|           | GHG Emissions Intensity (Scope 1 + 2)_<br>Location-based <sup>3)</sup>       | tCO <sub>2</sub> eq/<br>100Million<br>KRW | 9.520     | 7.166     | 9.707     |
|           | GHG Emissions Intensity(Scope 1 + 2)_<br>Market-based <sup>3)</sup>          | tCO <sub>2</sub> eq/<br>100Million<br>KRW | 5.866     | 4.425     | 5.728     |
|           | GHG reduction 4)   |   |           |           |           |
|           | Target   | tCO <sub>2</sub> eq                       | -         | 86,986    | 102,804   |
|           | Actual   | tCO <sub>2</sub> eq                       | -         | 81,943    | 140,124   |
|           |  |   |           |           |           |

### Environmental(E)

|                 | Classification                    | Unit | 2022       | 2023       | 2024       |
|-----------------|-----------------------------------|------|------------|------------|------------|
|                 | Korea                             | kg   | 42,495     | 38,779     | 32,968     |
|                 | Nitrogen oxides (NOx)             | kg   | 38,078     | 33,142     | 28,128     |
|                 | Sulfur oxides (SOx)               | kg   | 2,073      | 1,529      | 1,372      |
|                 | Hazardous air pollutants (HAP)    | kg   | 2          | 1          | 1          |
| Air             | Particulate matter (PM)           | kg   | 2,274      | 4,082      | 3,340      |
| Pollutant       | Volatile organic compounds (VOCs) | kg   | 67         | 25         | 127        |
| Manage-         | Global (Excluding Korea)          | kg   | 254,303    | 384,224    | 341,847    |
| ment            | Nitrogen oxides (NOx)             | kg   | 60,587     | 141,202    | 99,206     |
|                 | Sulfur oxides (SOx)               | kg   | 1,492      | 27,346     | 7,289      |
|                 | Hazardous air pollutants (HAP)    | kg   | 154        | 578        | 99         |
|                 | Particulate matter (PM)           | kg   | 9,213      | 10,960     | 11,000     |
|                 | Volatile organic compounds (VOCs) | kg   | 182,857    | 204,138    | 224,253    |
|                 | Water intake                      | ton  | 10,460,365 | 10,934,429 | 10,922,896 |
|                 | Korea                             | ton  | 1,673,759  | 1,729,098  | 1,880,668  |
|                 | Brackish water/Seawater           | ton  | 0          | 0          | 0          |
|                 | Fresh surface water               | ton  | 0          | 0          | 0          |
|                 | Groundwater (non-renewable)       | ton  | 0          | 0          | 0          |
|                 | Groundwater (renewable)           | ton  | 0          | 0          | 0          |
|                 | Produced water                    | ton  | 0          | 0          | 0          |
|                 | Third party sources (Tap-water)   | ton  | 1,673,759  | 1,729,098  | 1,880,668  |
|                 | Global (Excluding Korea)          | ton  | 8,786,606  | 9,205,332  | 9,042,228  |
|                 | Brackish water/Seawater           | ton  | 0          | 0          | 0          |
| Water           | Fresh surface water               | ton  | 0          | 0          | 0          |
| Manage-<br>ment | Groundwater (non-renewable)       | ton  | 0          | 0          | 0          |
|                 | Groundwater (renewable)           | ton  | 0          | 0          | 0          |
|                 | Produced water                    | ton  | 0          | 0          | 0          |
|                 | Third party sources (Tap-water)   | ton  | 8,786,606  | 9,205,332  | 9,042,228  |
|                 | Water Intake by Source            | ton  | 10,460,365 | 10,934,429 | 10,922,896 |
|                 | Brackish water/Seawater           | ton  | 0          | 0          | 0          |
|                 | Fresh surface water               | ton  | 0          | 0          | 0          |
|                 | Groundwater (non-renewable)       | ton  | 0          | 0          | 0          |
|                 | Groundwater (renewable)           | ton  | 0          | 0          | 0          |
|                 | Produced water                    | ton  | 0          | 0          | 0          |
|                 | Third party sources (Tap-water)   | ton  | 10,460,365 | 10,934,429 | 10,922,896 |

|                  | Classification                       | Unit | 2022      | 2023      | 2024      |
|------------------|--------------------------------------|------|-----------|-----------|-----------|
|                  | Water consumption                    | ton  | 9,055,951 | 7,710,750 | 8,297,000 |
|                  | Korea                                | ton  | 1,597,437 | 1,194,987 | 1,406,267 |
| Water<br>Manage- | Global (Excluding Korea)             | ton  | 7,458,514 | 6,515,764 | 6,890,733 |
| ment             | Water discharge                      | ton  | 0         | 0         | 0         |
|                  | Korea                                | ton  | 0         | 0         | 0         |
|                  | Global (Excluding Korea)             | ton  | 0         | 0         | 0         |
|                  | Sewage discharge                     | ton  | -         | 390,405   | 1,391,848 |
|                  | Korea                                | ton  | -         | 390,405   | 328,013   |
|                  | Global (Excluding Korea)             | ton  | -         | -         | 1,063,835 |
|                  | Wastewater discharge                 | ton  | 1,404,414 | 2,833,274 | 1,234,049 |
|                  | Korea                                | ton  | 76,322    | 143,706   | 146,389   |
|                  | Global (Excluding Korea)             | ton  | 1,328,092 | 2,689,568 | 1,087,660 |
|                  | Wastewater treatment volume          | ton  | 1,404,414 | 2,833,274 | 1,234,049 |
|                  | Water pollutant discharge (Korea)    | kg   | 1,818     | 3,875     | 4,313     |
|                  | COD                                  | kg   | 465       | 1,505     | 1,748     |
| Waste-           | TOC                                  | kg   | 373       | 604       | 703       |
| water<br>Manage- | SS                                   | kg   | 258       | 661       | 656       |
| ment             | T-N                                  | kg   | 410       | 691       | 686       |
|                  | T-P                                  | kg   | 44        | 115       | 120       |
|                  | BOD                                  | kg   | 267       | 300       | 401       |
|                  | Water pollutant discharge (Overseas) | kg   | 96,631    | 59,067    | 185,747   |
|                  | COD                                  | kg   | 58,648    | 22,783    | 116,086   |
|                  | TOC                                  | kg   | 0         | 0         | 0         |
|                  | SS                                   | kg   | 13,458    | 13,095    | 49,496    |
|                  | T-N                                  | kg   | 19,775    | 19,193    | 18,252    |
|                  | T-P                                  | kg   | 391       | 390       | 1,005     |
|                  | BOD                                  | kg   | 4,358     | 3,606     | 908       |

### Environmental(E)

\*Refer to page 160 for the footnotes corresponding to each data item.

|                 | Classification                                  | Unit              | 2022    | 2023    | 2024    |  |  |  |
|-----------------|---|-------------------|---------|---------|---------|--|--|--|
|                 | Waste discharge                                 | ton               | 153,654 | 244,289 | 114,327 |  |  |  |
|                 | Korea   | ton               | 21,578  | 22,884  | 18,499  |  |  |  |
|                 | Global (Excluding Korea)                        | ton               | 132,076 | 221,405 | 95,827  |  |  |  |
|                 | Recycled waste                                  | ton               | 127,146 | 220,696 | 104,591 |  |  |  |
|                 | Korea   | ton               | 18,510  | 19,348  | 15,596  |  |  |  |
|                 | Global (Excluding Korea)                        | ton               | 108,636 | 201,348 | 88,995  |  |  |  |
|                 | General waste                                   | ton               | 105,029 | 218,020 | 95,146  |  |  |  |
| Waste           | Landfill  | ton               | 290     | 281     | 93      |  |  |  |
| manage-         | Incineration                                    | ton               | 12,149  | 13,027  | 5,192   |  |  |  |
| ment            | Recycling                                       | ton               | 89,012  | 204,550 | 89,609  |  |  |  |
|                 | Others  | ton               | 3,578   | 162     | 252     |  |  |  |
|                 | Designated waste                                | ton               | 48,625  | 26,269  | 19,181  |  |  |  |
|                 | Landfill  | ton               | 0       | 0       | 0       |  |  |  |
|                 | Incineration                                    | ton               | 10,491  | 10,057  | 4,139   |  |  |  |
|                 | Recycling                                       | ton               | 38,134  | 16,145  | 14,982  |  |  |  |
|                 | Others  | ton               | 0       | 66      | 60      |  |  |  |
|                 | Waste Recycling rate                            | %                 | 83%     | 90%     | 91%     |  |  |  |
|                 | Investment Expenditure for Environmental safety | 100Million<br>KRW | 264     | 616     | 373     |  |  |  |
| Environ-        | Violation of environmental regulations 1)       | Case              | 1       | 2       | 1       |  |  |  |
| mental          | Environmental Management System(ISO14001) 2)    |                   |         |         |         |  |  |  |
| Manage-<br>ment | Certified sites                                 | Number            | 9       | 11      | 11      |  |  |  |
|                 | Total sites subject to certification            | Number            | 11      | 11      | 11      |  |  |  |
|                 | Certifed rate                                   | %                 | 82%     | 100%    | 100%    |  |  |  |

### Social(S)

|       | Classification               | Unit   | 2022   | 2023   | 2024  |
|-------|------------------------------|--------|--------|--------|-------|
|       | Labor union                  |        |        |        |       |
|       | Applicable employees (Korea) | Person | 4,335  | 4,206  | 4,269 |
|       | Union members (Korea)        | Person | 2,063  | 2,048  | 2,007 |
|       | Male                         | Person | 1,989  | 1,974  | 1,933 |
| Labor | Female                       | Person | 74     | 74     | 74    |
| Rela- | Membership rate (Korea)      | %      | 47.6%  | 48.7%  | 47.0% |
| tions | Applicable employees (China) | Person | 14,237 | 12,703 | 9,063 |
|       | Union members (China)        | Person | 14,206 | 12,676 | 9,033 |
|       | Male                         | Person | 9,955  | 8,817  | 6,394 |
|       | Female                       | Person | 4,251  | 3,859  | 2,639 |
|       | Membership rate (China)      | %      | 99.8%  | 99.8%  | 99.7% |

### Social(S)

|             | Classification   | Unit                      | 2022    | 2023    | 2024                                  |
|-------------|--|---------------------------|---------|---------|---------------------------------------|
|             | Education hours (permanent employees) 2)               | hour                      | 837,307 | 739,398 | 524,650                               |
|             | Male   | hour                      | 670,589 | 574,433 | 404,689                               |
|             | Female   | hour                      | 166,718 | 164,965 | 119,961                               |
|             | Education hours (Fixed-term employees) 3)              | hour                      | -       | 2,978   | 7,450                                 |
|             | Male   | hour                      | _       | 872     | 5,643                                 |
|             |  |                           | -       | -       | · · · · · · · · · · · · · · · · · · · |
|             | Female   | hour                      | -       | 2,106   | 1,807                                 |
|             | Education hours by age(permanent employees)            | hour                      | 837,307 | 739,398 | 524,650                               |
|             | 20s  | hour                      | 367,379 | 242,917 | 139,677                               |
|             | 30s  | hour                      | 350,912 | 353,714 | 237,335                               |
|             | 40s  | hour                      | 104,131 | 123,071 | 128,136                               |
|             | 50s  | hour                      | 10,382  | 19,544  | 19,297                                |
|             | 60s  | hour                      | 441     | 151     | 205                                   |
|             | Others (Ages) 4)                                       | hour                      | 4,062   | 0       | 0                                     |
|             | Education hours by titles (permanent employees)        | hour                      | 837,307 | 739,398 | 524,650                               |
|             | Associate  | hour                      | 385,505 | 228,470 | 115,276                               |
| Talent      | Specialist   | hour                      | 164,416 | 200,226 | 119,125                               |
| Manage-     | Professional   | hour                      | 282,539 | 291,404 | 282,199                               |
| ment        | Seniar Operator  | hour                      | 1,726   | 8,752   | 2,448                                 |
| and<br>Edu- | Lead Operator  | hour                      | 649     | 1,257   | 868                                   |
| cation 1)   | Research Fellow  | hour                      | 1,030   | 300     | 3,057                                 |
| Cation      | Expert Advisor   | hour                      | 1,174   | 2,179   | 1,677                                 |
|             | Others 5)  | hour                      | 268     | 6,810   | 0                                     |
|             | Compliance education hours (permanent employees)       | hour                      | 23,220  | 27,875  | 25,719                                |
|             | Male   | hour                      | 19,674  | 23,287  | 21,079                                |
|             | Female   | hour                      | 3,546   | 4,588   | 4,640                                 |
|             | Number of permanent employees subject to education     | Person                    | 8,284   | 9,320   | 12,519                                |
|             | Male   | Person                    | 6,745   | 7,741   | 10,280                                |
|             | Female   | Person                    | 1,539   | 1,579   | 2,239                                 |
|             | Number of fixed-term employees subject to education 3) | Person                    | -       | 28      | 270                                   |
|             | Male   | Person                    | -       | 19      | 206                                   |
|             | Female   | Person                    | -       | 9       | 64                                    |
|             | Edcuation and development costs                        | Million<br>KRW            | 19,274  | 30,266  | 27,204                                |
|             | Education hours per persons <sup>6)</sup>              | hour/<br>Person           | 80.08   | 64.89   | 45.25                                 |
|             | Education cost per persons 7)                          | Million<br>KRW/<br>Person | 1.84    | 2.65    | 2.31                                  |

Social(S)

|       | Classification  | Unit   | 2022   | 2023  | 2024  |
|-------|---|--------|--------|-------|-------|
|       | Number of newly hired employees<br>(Permanent + fixed-term) | Person | 12,329 | 4,142 | 2,410 |
|       | By country  | Person | 12,329 | 4,142 | 2,410 |
|       | Korea   | Person | 1,964  | 1,379 | 850   |
|       | China   | Person | 6,312  | 1,319 | 19    |
|       | US  | Person | 1,289  | 261   | 1,011 |
|       | Poland  | Person | 2,764  | 1,183 | 530   |
|       | Others  | Person | 0      | 0     | 1     |
|       | By gender   | Person | 12,329 | 4,142 | 2,411 |
|       | Male  | Person | 8,796  | 3,152 | 1,678 |
|       | Female  | Person | 3,533  | 990   | 733   |
|       | By age  | Person | 12,329 | 4,142 | 2,411 |
|       | Below 29 years old  | Person | 7,887  | 2,451 | 1,245 |
|       | Male  | Person | 5,630  | 1,786 | 846   |
|       | Female  | Person | 2,257  | 665   | 399   |
|       | 30 - 49 years old   | Person | 4,159  | 1,590 | 1,028 |
|       | Male  | Person | 2,959  | 1,283 | 757   |
|       | Female  | Person | 1,200  | 307   | 271   |
|       | 50 yeas old and above                                       | Person | 283    | 101   | 138   |
|       | Male  | Person | 207    | 83    | 75    |
|       | Female  | Person | 76     | 18    | 63    |
| Newly | Number of newly hired employees (Permanent)                 | Person | 11,191 | 2,530 | 1,558 |
| Hired | By country  | Person | 11,191 | 2,530 | 1,558 |
|       | Korea   | Person | 1,883  | 1,313 | 774   |
|       | China   | Person | 5,406  | 41    | 0     |
|       | US  | Person | 1,289  | 260   | 741   |
|       | Poland  | Person | 2,613  | 916   | 43    |
|       | Others  | Person | 0      | 0     | 0     |
|       | By gender   | Person | 11,191 | 2,530 | 1,558 |
|       | Male  | Person | 8,063  | 1,841 | 1,136 |
|       | Female  |        |        |       |       |
|       |   | Person | 3,128  | 689   | 422   |
|       | By age  | Person | 11,191 | 2,530 | 1,558 |
|       | Below 29 years old  | Person | 6,792  | 1,274 | 660   |
|       | Male  | Person | 4,920  | 855   | 442   |
|       | Female  | Person | 1,872  | 419   | 218   |
|       | 30 - 49 years old   | Person | 4,135  | 1,181 | 797   |
|       | Male  | Person | 2,954  | 926   | 624   |
|       | Female  | Person | 1,181  | 255   | 173   |
|       | 50 yeas old and above                                       | Person | 264    | 75    | 101   |
|       | Male  | Person | 189    | 60    | 70    |
|       |   |        |        |       |       |
|       | Female  | Person | 75     | 15    | 31    |

|       | Classification   | Unit   | 2022      | 2023      | 2024      |
|-------|--|--------|-----------|-----------|-----------|
|       | Number of newly hired employees (Fixed-term)             | Person | 1,138     | 1,612     | 853       |
|       | By country   | Person | 1,138     | 1,612     | 853       |
|       | Korea  | Person | 81        | 66        | 76        |
|       | China  | Person | 906       | 1,278     | 19        |
|       | US   | Person | 0         | 1         | 270       |
|       | Poland   | Person | 151       | 267       | 487       |
|       | Others   | Person | 0         | 0         | 1         |
|       | By gender  | Person | 1,138     | 1,612     | 853       |
|       | Male   | Person | 733       | 1,311     | 542       |
|       | Female   | Person | 405       | 301       | 311       |
| Newly | By age   | Person | 1,138     | 1,612     | 853       |
| Hired | Below 29 years old                                       | Person | 1,095     | 1,177     | 585       |
|       | Male   | Person | 710       | 931       | 404       |
|       | Female   | Person | 385       | 246       | 181       |
|       | 30 - 49 years old  | Person | 24        | 409       | 231       |
|       | Male   | Person | 5         | 357       | 133       |
|       | Female   | Person | 19        | 52        | 98        |
|       | 50 yeas old and above                                    | Person | 19        | 26        | 37        |
|       | Male   | Person | 18        | 23        | 5         |
|       | Female   | Person | 1         | 3         | 32        |
|       | Percentage of open positions filled by internal hires 1) | %      | 10.3%     | 13.4%     | 18.3%     |
|       | Average hiring cost 2)                                   | KRW    | 1,493,929 | 1,922,756 | 2,591,787 |

### Social(S)

|              | Classification                                 | Unit   | 2022   | 2023   | 2024   |
|--------------|--|--------|--------|--------|--------|
|              | Number of Employee<br>(Permanent + Fixed-term) | Person | 34,566 | 35,418 | 32,071 |
|              | Korea  | Person | 10,456 | 11,441 | 11,760 |
|              | Male   | Person | 8,606  | 9,338  | 9,478  |
|              | Female   | Person | 1,850  | 2,103  | 2,282  |
|              | Global (Excluding Korea)                       | Person | 24,110 | 23,977 | 20,311 |
|              | Male   | Person | 16,474 | 16,460 | 14,543 |
|              | Female   | Person | 7,636  | 7,517  | 5,768  |
|              | Ratio of permanent empolyees 1)                | %      | 96.5%  | 90.1%  | 89.1%  |
|              | Ratio of Fixed-term employees (%) 2)           | %      | 3.5%   | 9.9%   | 10.9%  |
|              | Number of permanent Employees                  | Person | 33,367 | 31,909 | 28,589 |
|              | Korea  | Person | 10,320 | 11,208 | 11,525 |
|              | Male   | Person | 8,530  | 9,153  | 9,303  |
|              | Female   | Person | 1,790  | 2,055  | 2,222  |
|              | Global (Excluding Korea)                       | Person | 23,047 | 20,701 | 17,064 |
|              | Male   | Person | 15,591 | 14,257 | 12,097 |
|              | Female   | Person | 7,456  | 6,444  | 4,967  |
|              | Number of fixed-term Employees                 | Person | 1,199  | 3,509  | 3,482  |
|              | Korea  | Person | 136    | 233    | 235    |
|              | Male   | Person | 76     | 185    | 175    |
|              | Female   | Person | 60     | 48     | 60     |
| Human<br>Re- | Global (Excluding Korea)                       | Person | 1,063  | 3,276  | 3,247  |
| source       | Male   | Person | 883    | 2,203  | 2,446  |
| Manage-      | Female   | Person | 180    | 1,073  | 801    |
| ment         | Number of permanent employee by age group      | Person | 33,367 | 31,909 | 28,589 |
|              | Korea  | Person | 10,320 | 11,208 | 11,525 |
|              | Below 29 years old                             | Person | 2,389  | 2,428  | 2,184  |
|              | Male   | Person | 1,557  | 1,488  | 1,248  |
|              | Female   | Person | 832    | 940    | 936    |
|              | 30 - 49 years old                              | Person | 7,407  | 8,241  | 8,742  |
|              | Male   | Person | 6,455  | 7,134  | 7,468  |
|              | Female   | Person | 952    | 1,107  | 1,274  |
|              | 50 years old and above                         | Person | 524    | 539    | 599    |
|              | Male   | Person | 518    | 531    | 587    |
|              | Female   | Person | 6      | 8      | 12     |
|              | Global (Excluding Korea)                       | Person | 23,047 | 20,701 | 17,064 |
|              | Below 29 years old                             | Person | 10,476 | 7,683  | 5,120  |
|              | Male   | Person | 7,561  | 5,819  | 3,894  |
|              | Female   | Person | 2,915  | 1,864  | 1,226  |
|              | 30 - 49 years old                              | Person | 11,453 | 11,622 | 10,801 |
|              | Male   | Person | 7,317  | 7,515  | 7,443  |
|              | Female   | Person | 4,136  | 4,107  | 3,358  |
|              | 50 years old and above                         | Person | 1,118  | 1,396  | 1,143  |
|              | Male   | Person | 713    | 923    | 760    |
|              | Female   | Person | 405    | 473    | 383    |
|              |  |        |        |        |        |

|                  | Classification  | Unit                                  | 2022         | 2023   | 2024   |  |  |  |  |  |
|------------------|---|---------------------------------------|--------------|--------|--------|--|--|--|--|--|
|                  | By country  | Person                                | 31,465       | 31,777 | 28,589 |  |  |  |  |  |
|                  | Korea   | Person                                | 10,320       | 11,208 | 11,525 |  |  |  |  |  |
|                  | China   | Person                                | 13,918       | 12,595 | 9,022  |  |  |  |  |  |
|                  | US  | Person                                | 1,503        | 4,549  | 3,126  |  |  |  |  |  |
|                  | Poland  | Person                                | 5,724        | 3,425  | 4,093  |  |  |  |  |  |
|                  | Others  | Person                                | 1,902        | 132    | 823    |  |  |  |  |  |
|                  | Permanent employees related to sales/<br>research and development | Person                                | 9,782        | 17,868 | 18,019 |  |  |  |  |  |
|                  | Sales-related departments<br>Employees with titled position       | Person                                | 412          | 1,299  | 1,299  |  |  |  |  |  |
|                  | Male  | Person                                | 363          | 1,092  | 1,092  |  |  |  |  |  |
|                  | Female  | Person                                | 49           | 207    | 207    |  |  |  |  |  |
|                  | Sales-related departments - Non-employees with titled position    | Person                                | 5,490        | 12,502 | 12,502 |  |  |  |  |  |
|                  | Male  | Person                                | 4,687        | 8,958  | 8,958  |  |  |  |  |  |
|                  | Female  | Person                                | 803          | 3,544  | 3,544  |  |  |  |  |  |
|                  | Research and development departments <sup>3)</sup>                | Person                                | 3,880        | 4,067  | 4,218  |  |  |  |  |  |
|                  | Male  | Person                                | 3,001        | 3,047  | 3,157  |  |  |  |  |  |
|                  | Female  | Person                                | 879          | 1,020  | 1,061  |  |  |  |  |  |
| Human<br>Re-     | Voluntary turnover rate 4)  | %                                     | 7.8%         | 5.2%   | 5.3%   |  |  |  |  |  |
| source           | Korea   | %                                     | 3.6%         | 1.5%   | 2.1%   |  |  |  |  |  |
| Vlanage-<br>ment | Global (Excluding Korea)  | %                                     | 9.7%         | 7.3%   | 7.4%   |  |  |  |  |  |
| mem              | By gender in Korea  |                                       |              |        |        |  |  |  |  |  |
|                  | Male  | %                                     | 3.4%         | 1.4%   | 2.1%   |  |  |  |  |  |
|                  | Female  | %                                     | 4.5%         | 2.0%   | 2.2%   |  |  |  |  |  |
| ļ                |   | By gender in Global (Excluding Korea) |              |        |        |  |  |  |  |  |
|                  | Male  | %                                     | 10.4%        | 7.7%   | 7.3%   |  |  |  |  |  |
|                  | Female  | %                                     | 8.2%         | 6.2%   | 7.5%   |  |  |  |  |  |
|                  | By age in Korea   |                                       |              |        |        |  |  |  |  |  |
|                  | Below 29 years old  | %                                     | 7.0%         | 2.2%   | 4.5%   |  |  |  |  |  |
|                  | 30 - 49 years old   | %                                     | 2.6%         | 1.4%   | 1.6%   |  |  |  |  |  |
|                  | 50 years old and above  | %                                     | 1.3%         | 1.3%   | 0.7%   |  |  |  |  |  |
|                  | By age in Global (Excluding Korea)                                | 04                                    | 10.00        | 44.00/ | 10.70  |  |  |  |  |  |
| -                | Below 29 years old  | %                                     | 13.3%        | 11.2%  | 12.7%  |  |  |  |  |  |
| -                | 30 - 49 years old   | %                                     | 8.2%<br>8.8% | 4.6%   | 4.9%   |  |  |  |  |  |
|                  | 50 years old and above  Number of leavers                         | %                                     | 8.8%         | 7.2%   | 7.3%   |  |  |  |  |  |
|                  | (Voluntary + Involuntary) 5)                                      | Person                                | 2,594        | 5,187  | 5,995  |  |  |  |  |  |
|                  | Korea   | Person                                | 369          | 215    | 311    |  |  |  |  |  |
|                  | Global (Excluding Korea)  | Person                                | 2,225        | 4,972  | 5,684  |  |  |  |  |  |
| ].               | By continent  | Person                                | 2,594        | 5,187  | 5,995  |  |  |  |  |  |
|                  | Asia  | Person                                | 1,385        | 2,764  | 4,000  |  |  |  |  |  |
|                  | America   | Person                                | 300          | 1,139  | 1,013  |  |  |  |  |  |
|                  | Europe  | Person                                | 907          | 1,283  | 982    |  |  |  |  |  |
|                  | Oceania   | Person                                | 2            | 1      | 0      |  |  |  |  |  |

Social(S)

|               | Cla                               | ssification  | Unit   | 2022  | 2023  | 2024  |
|---------------|-----------------------------------|--|--------|-------|-------|-------|
|               | Number of vol                     | untary leavers 6)                                  | Person | 2,594 | 1,673 | 1,504 |
|               | Korea                             |  | Person | 369   | 172   | 245   |
|               | Global (Ex                        | cluding Korea)                                     | Person | 2,225 | 1,501 | 1,259 |
|               | By continent                      |  | Person | 2,594 | 1,673 | 1,504 |
|               | Asia                              |  | Person | 1,385 | 855   | 583   |
|               | Ameri                             | ca   | Person | 300   | 287   | 349   |
|               | Europ                             | е  | Person | 907   | 531   | 572   |
|               | Ocear                             | nia  | Person | 2     | 0     | 0     |
|               | By gender                         | in Korea   |        |       | '     |       |
|               | Male                              |  | Person | 288   | 131   | 196   |
|               | Femal                             | е  | Person | 81    | 41    | 49    |
|               | By gender                         | in Global (Excluding Korea                         | )      |       |       |       |
|               | Male                              |  | Person | 1,616 | 1,101 | 884   |
|               | Femal                             | e  | Person | 609   | 400   | 375   |
|               | By age in I                       | Korea  |        |       |       |       |
|               | Below                             | 29 years old                                       | Person | 167   | 53    | 98    |
|               | 30 - 49 years old                 |  | Person | 195   | 112   | 143   |
|               | 50 yea                            | ars old and above                                  | Person | 7     | 7     | 4     |
|               | By age in 0                       | Global (Excluding Korea)                           |        |       |       |       |
| Human         | Below 29 years old                |  | Person | 1,395 | 863   | 648   |
| Re-<br>source | 30 - 49 years old                 |  | Person | 934   | 538   | 527   |
| Manage-       | 50 years old and above            |  | Person | 98    | 100   | 84    |
| ment          | Employees with titled position 7) |  | Person | 1,905 | 5,029 | 5,283 |
|               | Korea                             |  | Person | 726   | 1,149 | 1,159 |
|               | Male                              | Male   |        | 675   | 1,070 | 1,087 |
|               | Femal                             | е  | Person | 51    | 79    | 72    |
|               | Global (Ex                        | cluding Korea)                                     | Person | 1,179 | 3,880 | 4,124 |
|               | Male                              |  | Person | 897   | 3,012 | 3,198 |
|               | Femal                             | e  | Person | 282   | 868   | 926   |
|               | Breakdown by                      | Position and Title                                 |        | 2,594 | 1,673 | 1,504 |
|               | Korea                             |  |        | 369   | 172   | 245   |
|               |                                   | Empolyees (Professional and above)                 | Person | 4,141 | 4,864 | 5,162 |
|               | Office                            | Empolyees (Specialsit, Assoicate)                  | Person | 4,159 | 4,426 | 4,431 |
|               |                                   | Executives   | Person | 80    | 98    | 108   |
|               | 5                                 | Supervisors<br>(Lead Operator, Senior<br>Operator) | Person | 660   | 790   | 904   |
|               | Production                        | Employees<br>(Advanced Operator,<br>Operator)      | Person | 1,406 | 1,263 | 1,155 |
|               | Employee sati                     | sfaction information                               | %      | 78    | 82    | 77    |

|     | Classification   | Unit   | 2022  | 2023  | 2024  |
|-----|--|--------|-------|-------|-------|
|     | Employee   |        |       |       |       |
|     | Company-wide   |        |       |       |       |
|     | Male   | %      | 72.6% | 72.8% | 74.9% |
|     | Female   | %      | 27.4% | 27.2% | 25.1% |
|     | Korea  |        |       |       |       |
|     | Male   | %      | 82.3% | 81.6% | 80.6% |
|     | Female   | %      | 17.7% | 18.4% | 19.4% |
|     | Global (Excluding Korea)                                   |        |       |       |       |
|     | Male   | %      | 68.3% | 68.6% | 71.6% |
|     | Female   | %      | 31.7% | 31.4% | 28.4% |
|     | Employees with titled position by gender                   |        |       |       |       |
|     | Company-wide   |        |       |       |       |
|     | Male   | %      | 82.5% | 81.2% | 81.1% |
|     | Female   | %      | 17.5% | 18.8% | 18.9% |
|     | Korea  |        |       |       |       |
|     | Male   | %      | 93.0% | 93.1% | 93.8% |
|     | Female   | %      | 7.0%  | 6.9%  | 6.2%  |
|     | Global (Excluding Korea)                                   |        |       |       |       |
|     | Male   | %      | 76.1% | 77.6% | 77.5% |
|     | Female   | %      | 23.9% | 22.4% | 22.5% |
|     | Share of female in total workforce by country              | -      |       |       |       |
| DEI | Korea  | %      | 17.3% | 18.3% | 19.3% |
|     | China  | %      | 31.4% | 30.3% | 28.7% |
|     | US   | %      | 30.7% | 28.7% | 26.2% |
|     | Europe   | %      | 36.3% | 37.8% | 37.0% |
|     | Others   | %      | 20.9% | 25.3% | 9.0%  |
|     | Share of female by title and position                      |        |       |       |       |
|     | Executive management                                       | %      | -     | -     | 3.1%  |
|     | Junior management position                                 | %      | -     | -     | 18.9% |
|     | Revenue-generating positions                               | %      | 11.9% | 22.8% | 22.8% |
|     | Stem-related positions                                     | %      | 22.7% | 25.1% | 25.1% |
|     | Parental Leave   |        |       |       |       |
|     | Number of employees on parental leave                      | Person | 491   | 563   | 930   |
|     | Male   | Person | 284   | 266   | 537   |
|     | Female   | Person | 207   | 297   | 393   |
|     | Number of employees return to work<br>after parental leave | Person | 487   | 434   | 666   |
|     | Male   | Person | 282   | 287   | 444   |
|     | Female   | Person | 205   | 147   | 222   |

### Social(S)

|                               | Classification  | Unit                  | 2022   | 2023   | 2024   |  |  |  |  |
|-------------------------------|---|-----------------------|--------|--------|--------|--|--|--|--|
|                               | Employees with disabilities 1)                                    |                       |        |        |        |  |  |  |  |
|                               | Employees   | Person                | 397    | 253    | 313    |  |  |  |  |
|                               | Korea   | Person                | 185    | 200    | 240    |  |  |  |  |
|                               | Global (Excluding Korea)  | Person                | 212    | 53     | 73     |  |  |  |  |
|                               | Rate 2)   | %                     | 1.2%   | 0.8%   | 1.1%   |  |  |  |  |
| DEI                           | Korea   | %                     | 1.8%   | 1.8%   | 2.1%   |  |  |  |  |
|                               | Global (Excluding Korea)  | %                     | 0.9%   | 0.3%   | 0.4%   |  |  |  |  |
|                               | Employee of national merit beneficiaries                          | Person                | 80     | 75     | 76     |  |  |  |  |
|                               | Employees with titled position in global (excluding               | ng Korea)             |        |        |        |  |  |  |  |
|                               | Rate  | %                     | 19.3%  | 16.2%  | 20.0%  |  |  |  |  |
|                               | Total   | Person                | 4,214  | 3,880  | 3,795  |  |  |  |  |
|                               | Tier-1 suppliers subject to regular assessment                    | Number                | 143    | 145    | 115    |  |  |  |  |
|                               | New suppliers included in assessment                              | Number                | 10     | 14     | 8      |  |  |  |  |
|                               | Tier-1 suppliers completing SAQ                                   | %                     | 71.9%  | 74.4%  | 53.5%  |  |  |  |  |
| Sus-                          | Tier-1 Core suppliers completing SAQ                              | %                     | 96.6%  | 98.0%  | 93.9%  |  |  |  |  |
| tainable                      | Tier-1 On-site ESG assessment                                     |                       |        |        |        |  |  |  |  |
| Value<br>Chain                | Completion rate of on-site assessment for high-risk suppliers     | %                     | 66.7%  | 44.4%  | 54.1%  |  |  |  |  |
|                               | Completion rate of on-site assessment for key suppliers           | %                     | 6.8%   | 13.5%  | 17.4%  |  |  |  |  |
|                               | Completion rate of on-site assessment for high-risk key suppliers | %                     | 100.0% | 100.0% | 100.0% |  |  |  |  |
| Corporate                     | Program   | Number                | 85     | 172    | 175    |  |  |  |  |
| Social<br>Responsi-<br>bility | Expenditures  | Million<br>KRW        | 1,496  | 8,708  | 9,998  |  |  |  |  |
|                               | Education   |                       |        |        |        |  |  |  |  |
|                               | Case  | Count                 | 20     | 10     | 12     |  |  |  |  |
| Information<br>Security       | Person  | Person                | 10,393 | 11,883 | 10,280 |  |  |  |  |
|                               | Investment expenditure  | 100<br>Million<br>KRW | 39     | 59     | 99     |  |  |  |  |
|                               | Information security violations                                   | Case                  | 0      | 0      | 0      |  |  |  |  |

| Certified sites  |      | Classification   | Unit        | 2022   | 2023    | 2024   |  |  |  |  |
|--|------|--|-------------|--------|---------|--------|--|--|--|--|
| Total sites subject to certification   |      | Safety and Health Management System(ISO 45001) <sup>1)</sup> |             |        |         |        |  |  |  |  |
| Certified rate   |      | Certified sites  | Number      | 9      | 11      | 11     |  |  |  |  |
| Safety audit   |      | Total sites subject to certification                         | Number      | 11     | 11      | 11     |  |  |  |  |
| CRO-led Safety and Environment-related Meetings   Number   6   |      | Certified rate   | %           | 82%    | 100%    | 100%   |  |  |  |  |
| Improvement Tasks (Korea)   Case   2,892   2,762   2,405     Improvement Tasks (Overseas)   Case   42,074   20,964   15,935     Coccupational illnesses (Employees)     Deceased   Person   0   0   0     Illness   Occupational illness frequency rate(OIFR)   (per 1 million hours))?   0   0   0     Occupational illnesses Non-employee workers  |      | Safety audit   |             |        |         |        |  |  |  |  |
| Improvement Tasks (Overseas)   |      | CRO-led Safety and Environment-related Meetings              | Number      | 6      | 4       | 10     |  |  |  |  |
| Deceased   Person   0   0   0   0   0   0   0   0   0  |      | Improvement Tasks (Korea)                                    | Case        | 2,892  | 2,762   | 2,405  |  |  |  |  |
| Deceased   Person   0   0   0   0   0   0   0   0   0  |      | Improvement Tasks (Overseas)                                 | Case        | 42,074 | 20,964  | 15,935 |  |  |  |  |
| Illiness   |      | Occupational illnesses (Employees)                           |             |        |         |        |  |  |  |  |
| Occupational illness frequency rate(OIFR) (per 1 million hours)) <sup>2)</sup>   Occupational illnesses Non-employee workers   |      | Deceased   | Person      | 0      | 0       | 0      |  |  |  |  |
| Cocupational illnesses Non-employee workers  |      | Illness  | Person      | 0      | 0       | 0      |  |  |  |  |
| Deceased   Person   Deceased   Person   Deceased   Person   Deceased   Person   Deceased   Deceased   Person   Deceased   Deceased |      |  |             | 0      | 0       | 0      |  |  |  |  |
| Illness  |      | Occupational illnesses Non-employee workers                  |             |        |         |        |  |  |  |  |
| Occupational illness frequency rate(OIFR) (per 1 million hours) <sup>21</sup>   0   0   0   0   Occupational injury(Employees)   |      | Deceased   | Person      | 0      | 0       | 0      |  |  |  |  |
| Cocupational injury(Employees)   Lost Time Incident(LTI)   Case   26   21   17     LTIFR(per 1 million hours) 3)   0.31   0.25   0.22     Accident   Case   26   21   17     Injured   Person   26   21   17     Deceased   Person   0   0   0   0     Occupational injury(Employees in Korea)     Lost Time Incident(LTI)   Case   5   9   6     LTIFR(per 1 million hours) 3)   0.20   0.33   0.21     Accident   Case   5   9   6     Injured   Person   5   9   6     Injured   Person   5   9   6     Deceased   Person   0   0   0     Occupational injury(Employees in Global (Excluding Korea))     Lost Time Incident(LTI)   Case   21   12   11     LTIFR(per 1 million hours) 3)   0.36   0.21   0.23     Accident   Case   21   12   11     Deceased   Person   0   0   0     Occupational injury (Non-Employees on-site workers)     Lost Time Incident(LTI)   Case   13   8   9     Accident   Case   13   8   9     Injured   Person   13   8   9   |      | Illness  | Person      | OP 6   | erson 0 | 0      |  |  |  |  |
| Lost Time Incident(LTI)   Case   26   21   17  |      | Occupational illness frequency rate(OIFR) (per 1 millio      | on hours)2) | 0      | 0       | 0      |  |  |  |  |
| LTIFR(per 1 million hours) 30   0.31   0.25   0.22   |      | Occupational injury(Employees)                               |             |        |         |        |  |  |  |  |
| Case    | 0.5. | Lost Time Incident(LTI)                                      | Case        | 26     | 21      | 17     |  |  |  |  |
| Nanagement   Nanagement   National Person   Na |      | LTIFR(per 1 million hours) 3)                                |             | 0.31   | 0.25    | 0.22   |  |  |  |  |
| Injured   Person   26  |      | Accident   | Case        | 26     | 21      | 17     |  |  |  |  |
| Occupational injury (Employees in Korea)           Lost Time Incident(LTI)         Case         5         9         6           LTIFR(per 1 million hours) <sup>3)</sup> 0.20         0.33         0.21           Accident         Case         5         9         6           Injured         Person         5         9         6           Deceased         Person         0         0         0           Occupational injury (Employees in Global (Excluding Korea))           Lost Time Incident(LTI)         Case         21         12         11           LTIFR(per 1 million hours) <sup>3)</sup> 0.36         0.21         0.23           Accident         Case         21         12         11           Injured         Person         21         12         11           Deceased         Person         0         0         0           Occupational injury (Non-Employees on-site workers)         Value of the color of t   |      | Injured  | Person      | 26     | 21      | 17     |  |  |  |  |
| Lost Time Incident(LTI)   Case   5   9   6   |      | Deceased   | Person      | 0      | 0       | 0      |  |  |  |  |
| LTIFR(per 1 million hours) 3)         0.20         0.33         0.21           Accident         Case         5         9         6           Injured         Person         5         9         6           Deceased         Person         0         0         0           Occupational injury(Employees in Global (Excluding Korea))           Lost Time Incident(LTI)         Case         21         12         11           LTIFR(per 1 million hours) 3)         0.36         0.21         0.23           Accident         Case         21         12         11           Injured         Person         21         12         11           Deceased         Person         0         0         0           Occupational injury (Non-Employees on-site workers)           Lost Time Incident(LTI)         Case         13         8         9           Accident         Case         13         8         9           Injured         Person         13         8         9  |      | Occupational injury(Employees in Korea)                      |             |        |         |        |  |  |  |  |
| Accident   Case   5   9   6  |      | Lost Time Incident(LTI)                                      | Case        | 5      | 9       | 6      |  |  |  |  |
| Injured  |      | LTIFR(per 1 million hours) 3)                                |             | 0.20   | 0.33    | 0.21   |  |  |  |  |
| Deceased   Person   0   0   0   0  |      | Accident   | Case        | 5      | 9       | 6      |  |  |  |  |
| Occupational injury(Employees in Global (Excluding Korea))           Lost Time Incident(LTI)         Case         21         12         11           LTIFR(per 1 million hours) <sup>3)</sup> 0.36         0.21         0.23           Accident         Case         21         12         11           Injured         Person         21         12         11           Deceased         Person         0         0         0           Occupational injury (Non-Employees on-site workers)           Lost Time Incident(LTI)         Case         13         8         9           Accident         Case         13         8         9           Injured         Person         13         8         9   |      | Injured  | Person      | 5      | 9       | 6      |  |  |  |  |
| Lost Time Incident(LTI)         Case         21         12         11           LTIFR(per 1 million hours) 3)         0.36         0.21         0.23           Accident         Case         21         12         11           Injured         Person         21         12         11           Deceased         Person         0         0         0           Occupational injury (Non-Employees on-site workers)           Lost Time Incident(LTI)         Case         13         8         9           Accident         Case         13         8         9           Injured         Person         13         8         9   |      | Deceased   | Person      | 0      | 0       | 0      |  |  |  |  |
| LTIFR(per 1 million hours) 3)       0.36       0.21       0.23         Accident       Case       21       12       11         Injured       Person       21       12       11         Deceased       Person       0       0       0         Occupational injury (Non-Employees on-site workers)         Lost Time Incident(LTI)       Case       13       8       9         Accident       Case       13       8       9         Injured       Person       13       8       9   |      | Occupational injury (Employees in Global (Excluding Kor      | rea))       |        |         |        |  |  |  |  |
| Accident         Case         21         12         11           Injured         Person         21         12         11           Deceased         Person         0         0         0           Occupational injury (Non-Employees on-site workers)           Lost Time Incident(LTI)         Case         13         8         9           Accident         Case         13         8         9           Injured         Person         13         8         9  |      | Lost Time Incident(LTI)                                      | Case        | 21     | 12      | 11     |  |  |  |  |
| Injured  |      | LTIFR(per 1 million hours) 3)                                |             | 0.36   | 0.21    | 0.23   |  |  |  |  |
| Deceased   Person   0   0   0  |      | Accident   | Case        | 21     | 12      | 11     |  |  |  |  |
| Occupational injury (Non-Employees on-site workers)           Lost Time Incident(LTI)         Case         13         8         9           Accident         Case         13         8         9           Injured         Person         13         8         9   |      | Injured  | Person      | 21     | 12      | 11     |  |  |  |  |
| Lost Time Incident(LTI)         Case         13         8         9           Accident         Case         13         8         9           Injured         Person         13         8         9   |      | Deceased   | Person      | 0      | 0       | 0      |  |  |  |  |
| Accident         Case         13         8         9           Injured         Person         13         8         9   |      | Occupational injury (Non-Employees on-site workers)          |             |        |         |        |  |  |  |  |
| Injured Person 13 8 9  |      | Lost Time Incident(LTI)                                      | Case        | 13     | 8       | 9      |  |  |  |  |
| ,  |      | Accident   | Case        | 13     | 8       | 9      |  |  |  |  |
| Deceased Person 0 0 0  |      | Injured  | Person      | 13     | 8       | 9      |  |  |  |  |
|  |      | Deceased   | Person      | 0      | 0       | 0      |  |  |  |  |

### Governance(G)

|           | Classification                    | Unit   | 2022 | 2023 | 2024 |  |  |  |
|-----------|-----------------------------------|--------|------|------|------|--|--|--|
|           | Board Meeting                     |        |      |      |      |  |  |  |
|           | Board Meetings Held               | Number | 10   | 9    | 8    |  |  |  |
|           | Average rate of Attendance        | %      | 100% | 97%  | 96%  |  |  |  |
|           | Agenda                            | Number | 30   | 24   | 30   |  |  |  |
|           | Objected or Modified Agenda       | Number | 0    | 0    | 0    |  |  |  |
|           | Average Tenure of Board Member    | Month  | 17   | 26   | 35   |  |  |  |
|           | Board Composition                 |        |      |      |      |  |  |  |
|           | Board Member                      | Person | 6    | 7    | 7    |  |  |  |
|           | Director                          | Person | 2    | 2    | 2    |  |  |  |
|           | Independent Director              | Person | 3    | 4    | 4    |  |  |  |
| Board     | Ratio of Independent Directors    | %      | 50%  | 57%  | 57%  |  |  |  |
| of        | Female Directors                  | Person | 2    | 2    | 2    |  |  |  |
| Directors | Non-standing Directors            | Person | 1    | 1    | 1    |  |  |  |
|           | Directors with Industry Expertise | Person | 3    | 3    | 3    |  |  |  |
|           | Board Expertise 1)                |        | 67   | 57   | 57   |  |  |  |
|           | Audit Committee                   |        |      |      |      |  |  |  |
|           | Member                            | Person | 3    | 3    | 4    |  |  |  |
|           | Meeting                           | Count  | 5    | 5    | 6    |  |  |  |
|           | Agenda Reported                   | Number | 13   | 12   | 11   |  |  |  |
|           | Agenda Approved                   | Number | 5    | 4    | 7    |  |  |  |
|           | ESG Committee                     |        |      |      |      |  |  |  |
|           | Member                            | Person | 5    | 5    | 5    |  |  |  |
|           | Meeting                           | Count  | 2    | 2    | 2    |  |  |  |
|           | Agenda Reported                   | Number | 2    | 3    | 4    |  |  |  |
|           | Agenda Approved                   | Number | 0    | 1    | 3    |  |  |  |

|          | Classification   | Unit              | 2022  | 2023   | 2024   |
|----------|--|-------------------|-------|--------|--------|
|          | Corruption risk  |                   |       |        |        |
|          | Number of legal sanctions due to the code of ethics-related breach | Case              | 0     | 0      | 0      |
|          | Number of Breach   | Case              | 4     | 8      | 8      |
|          | Number of Employees disciplined due to the breachs                 | Case              | 3     | 12     | 9      |
|          | Number of terminated suppliers due to the braches                  | Case              | 0     | 13     | 4      |
|          | Contracts not Renewed due to Violation                             | Case              | 0     | 0      | 0      |
|          | Ratio of business sites assessed for corruption risk               | %                 | 14%   | 43%    | 50%    |
|          | Number of sites with high corruption risk                          | Number            | 0     | 0      | 0      |
| Jeona-Do | Anti-corruption Education for Employees                            |                   |       |        |        |
| Manage-  | Korea  | %                 | 100%  | 98%    | 98%    |
| ment     | US   | %                 | 83%   | 36%    | 60%    |
|          | Poland   | %                 | 41%   | 15%    | 71%    |
|          | Germaney   | %                 | 0%    | 0%     | 0%     |
|          | Australia  | %                 | 0%    | 0%     | 0%     |
|          | China  | %                 | 29%   | 36%    | 87%    |
|          | Discrimination and Harassment 1)                                   |                   |       |        |        |
|          | Reported   | Case              | 16    | 7      | 3      |
|          | Sexual harassment 1)   |                   |       |        |        |
|          | Reported   | Case              | 3     | 8      | 5      |
|          | Legal Violations   |                   |       |        |        |
|          | Cases 2)   | Case              | 1     | 2      | 1      |
|          | Penalty Amount   | 100Million<br>KRW | 4.0   | 8.7    | 0.2    |
|          | Employees who received education                                   | Person            | 6,664 | 18,722 | 11,585 |
|          | Education hours  | Hours             | 1,503 | 3,760  | 2,822  |
| Fair     | Unfair trade practices   |                   |       |        |        |
| Trade    | Number of cases under legal proceeding                             | Case              | 0     | 0      | 0      |
|          | Number of closed legal proceedings                                 | Case              | 0     | 0      | 0      |
|          | Loss amount  | KRW               | 0     | 0      | 0      |

### The Footnotes

| Energy & GHG<br>Management            | 1) In the case of Korea, data was changed to align with greenhouse gas reports. The total figures submitted in GHG reports may differ due to differences in the calculation method (rounding down to the nearest whole number at the facility level). 2) Overseas, JV (LGESHM, LGESST, LGESGM2) and Sales (LGESIL, LGESJP) have been included from 2024. 3) Intensity: Data has been changed according to the classification into market-based and location-based.  - Energy consumption (TJ) ÷ Sales based on consolidated standards (100 Million won)  - GHG emissions (tCO2eq) ÷ Consolidated sales (100 Million won) 4) In the case of GHG emissions reduction, we have been managing data since 2023.   |
|---------------------------------------|--|
| Environmental<br>Management           | 1) In the case of environmental law violations, we did not include cases amounting to 10 million won or less, as they were consistent with the annual report.  2) This ISO certification acquisition rate is calculated based on business sites directly operated by LG Energy Solution and for which it is responsible for environmental safety management.  For currently operating joint ventures (JV), primary responsibility for environmental safety operations lies with the partner company in accordance with the JV operating agreement and other agreements. LG Energy Solution provides secondary technical and managerial support, and therefore, this is not included in the scope of our disclosure.  |
| Talent<br>Management<br>and Education | <ol> <li>Online + Offline education</li> <li>Total reduction in training hours due to the introduction of a new LMS to promote and support self-directed competency development among employees</li> <li>Starting from 2023, counting the total training hours and number of participants for ir-Non-fixed-term workers will begin.</li> <li>Others(ages): No information of Ages</li> <li>Others(positions): intern and so on</li> <li>Education hours per persons: The calculation method has been changed to "education hours for domestic employees (permanent + non-fixed employee) divided by the number of employees in Korea," resulting in a change in the figure.</li> <li>Education cost per persons: Education cost for domestic employees (permanent + non-fixed employee) ÷ Number of employees in Korea</li> </ol>  |
| Newly Hired                           | 1) Proportion of internal hires: Internal ÷ (external + internal) 2) Average cost per hire: (Costs by recruitment channel + recruitment expenses) ÷ Number of external hires   |
| Human Resource<br>Management          | 1) Ratio of permanent: Number of permanent employees / Number of Total Employees 2) Ratio of fixed-term: Number of fixed-term employees / Number of Total Employees 3) We have corrected the relevant performance due to data errors. 4) Voluntary turnover: Resignation by an employee based on their own free will, excluding involuntary turnover (such as dismissal, temporary layoff, retirement due to reaching the mandatory retirement age, death, or dismissal due to restructuring or merger, etc., which are beyond the employee's control). 5) Counting the number of involuntary retirees starting in 2023 6) Domestic refers to permanent employees, while overseas refers to permanent employees and contract employees (excluding interns and trainees). 7) Position holder: An organizational leader who has responsibility and authority for business and functional organizations (such as personnel, evaluation, and attendance), excluding executives.  ** Disclosed in the business report or under the employment status disclosure system. |

| DEI                           | <ol> <li>Data is collected only from those who "self-Identification" whether or not they have a disability.</li> <li>Numbers change due to logic change from "Total number of Employment with Disabilities / The number of Employee" to "Total number of Emoloyment / The number of permanen"</li> </ol>   |
|-------------------------------|--|
| Safety & Health<br>Management | 1) This ISO certification acquisition rate is calculated based on business sites directly operated by LG Energy Solution and for which it is responsible for environmental safety management. For currently operating joint ventures (JV), primary responsibility for environmental safety operations lies with the partner company in accordance with the JV operating agreement and other agreements. LG Energy Solution provides secondary technical and managerial support, and therefore, this is not included in the scope of our disclosure.  2) OIFR (Occupational illness frequency rate): (Number of illnesses cases ÷ total working hours) × 1,000,000  3) LTFIR (Lost Time Injury Frequency Rate): (Number of Lost Time Incident(LTI) ÷ Total working hours) × 1,000,000 |
| Board of<br>Directors         | 1) Board Expertise = (Number of Directors with Industry Expertise $\div$ Total Number of Board Members) $\times$ 100   |
| Jeong-Do<br>Management        | 1) Correction of results due to data entry errors in 2023 2) In accordance with the section "Matters Related to Sanctions, etc." in annual report, we only disclose legal violation amounts of 10 million KRW or more.  On February 21, 2024, LG Energy Solution Michigan, Inc. was imposed a fine of approximately 1.8 million KRW by MOSHA due to insufficient safety training for electrical work. As a corrective measure, we conducted NFPA 70e electrical worker training and PPE usage training provided by a third-party training organization.  |

# Appendix

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| TCFD Index                         | 168 |
| TNFD Index                         | 168 |
| SASB Index                         | 169 |
| 10 Principles of the UNGC          | 169 |
| UN SDGs                            | 170 |
| GHG Assurance Statement            | 171 |
| Independent Assurance<br>Statement | 173 |
| Glossary of Terms                  | 175 |

### **GRI Index**

| GRI 1: Foundation 2024            |   |
|-----------------------------------|---|
| Statement of use                  | LG Energy Solution has disclosed its sustainability management activities for the period from January 1, 2024, to December 31, 2024, in accordance with GRI Standards |
| GRI 1 used                        | GRI 1: Foundation 2021  |
| Applicable GRI Sector Standard(s) | No GICS and industry sectords applicable to LG Energy Solution as of the July 2025 reporting date have been published   |

| GRI standard      | Code | Description   | Page                                    | Remark   |
|-------------------|------|---|---|--|
| The organization  | 2-1  | Organizational details  | 8, 19                                   |  |
| and its reporting | 2-2  | Entities included in the organization's sustainability reporting            | 3                                       |  |
| practices         | 2-3  | Reporting period, frequency and contact point                               | 3                                       |  |
|                   | 2-4  | Restatements of information   | 160                                     | Disclosed the contents to the report   |
|                   | 2-5  | External assurance  | 173 - 174                               |  |
| Activities and    | 2-6  | Activities, value chain and other business relationships                    | 11 - 17                                 |  |
| Workers           | 2-7  | Employees   | 156                                     |  |
|                   | 2-8  | Workers who are not employees   | 156                                     |  |
| Governance        | 2-9  | Governance structure and composition  | 127 - 131                               |  |
|                   | 2-10 | Nomination and selection of the highest governance body                     | 127                                     |  |
|                   | 2-11 | Nomination and selection of the highest governance body                     | 127 - 131                               |  |
|                   | 2-12 | Role of the highest governance body in overseeing the management of impacts | 27                                      |  |
|                   | 2-13 | Delegation of responsibility for managing impacts                           | 27                                      |  |
|                   | 2-14 | Role of the highest governance body in sustainability reporting             | 27                                      |  |
|                   | 2-15 | Conflicts of interest   | 128                                     |  |
|                   | 2-16 | Communication of critical   | 27                                      |  |
|                   | 2-17 | Collective knowledge of the highest governance body                         | 28, 128                                 |  |
|                   | 2-18 | Evaluation of the performance of the highest governance body                | 130 - 131                               |  |
|                   | 2-19 | Remuneration policies   | 131                                     |  |
|                   | 2-20 | Process to determine remuneration   | 131                                     |  |
|                   | 2-21 | Annual total compensation ratio   | Refer to the Annual Report p.303, p.305 | 3) Status of employees and others in 1. Information on Executives and Employees and 2. Executive compensation etc. |
|                   | 2-22 | Statement on sustainable development strategy                               | 7                                       |  |
|                   | 2-23 | Policy commitments  | 139 - 141                               |  |
|                   | 2-24 | Embedding policy commitments  | 139 - 141                               |  |
|                   | 2-25 | Processes to remediate negative impacts                                     | 135 - 136                               |  |
|                   | 2-26 | Mechanisms for seeking advice and raising concerns                          | 108                                     |  |
|                   | 2-27 | Compliance with laws and regulations  | Refer to the Annual Report p.318        | Matters relating to sanctions, etc   |
|                   | 2-28 | Membership associations   | 149                                     |  |
|                   |      | Stakeholder engagement  | 31 - 32                                 |  |
|                   | 2-30 | Collective bargaining agreements  | 109, 154                                |  |

| GRI standard        | Code | Description                          | Page | Remark |
|---------------------|------|--------------------------------------|------|--------|
| GRI 3:              | 3-1  | Process to determine material topics | 146  |        |
| Material Topic 2021 | 3-2  | List of material topics              | 147  |        |

### Key Issue 1. Climate Action

| GRI 3:                              |       |  |         |   |
|-------------------------------------|-------|--|---------|---|
| Material Topic 2021                 | 3-3   | Management of material topics  | 37 - 41 |   |
| GRI 201 : Economic 2<br>Performance | 201-2 | Financial implications and other risks and opportunities due to climate change | 37 - 41 |   |
| GRI 302:                            | 302-1 | Energy consumption within the organization                                     | 152     |   |
| Energy 3                            | 302-2 | Energy consumption outside of the organization                                 | 152     |   |
| - 3                                 | 302-3 | Energy Intensity   | 152     |   |
| -3                                  | 302-4 | Reductions in energy requirements of products and services                     | 152     |   |
| GRI 305:                            | 305-1 | Direct (Scope 1) GHG emissions   | 152     |   |
| Emissions 3                         | 305-2 | Energy indirect (Scope 2) GHG emissions  | 152     |   |
|                                     | 305-3 | Other indirect (Scope 3) GHG emissions   | 152     |   |
| - 3                                 | 305-4 | Other indirect (Scope 3) GHG emissions   | 152     |   |
| :                                   | 305-5 | Reduction of GHG emissions   | 152     |   |
| _                                   |       | Emissions of ozone-depleting substannces (ODS)                                 | -       | We haven't procure and use the Oxidation Depletion Susbstances. |

### Key Issue 2. Circular Economy

| GRI standard                   | Code  | Description  | Page                        | Remark  |  |  |
|--------------------------------|-------|--|-----------------------------|---|--|--|
| GRI 3 :<br>Material Topic 2021 | 3-3   | Management of material topics                          | 148                         |   |  |  |
| GRI 301:                       | 301-1 | Materials used by weight or volume                     |                             |   |  |  |
| Materials                      | 301-2 | Recycled input materials used                          | Confidentiality constraints | Detail data related to raw materials and packaging is not disclosed |  |  |
|                                | 301-3 | Reclaimed products and their packaging materials       |                             | externally in accrodance with management decision                   |  |  |
| GRI 306 :                      | 306-1 | Waste generation and significant waste-related impacts | 49                          |   |  |  |
| Waste                          | 306-2 | Management of significant waste-related impacts        | 54 - 55                     |   |  |  |
|                                | 306-3 | Waste generated  | 154                         |   |  |  |
| -                              |       | Waste diverted from disposal                           | 154                         |   |  |  |
|                                | 306-5 | Waste directed to disposal                             | 154                         |   |  |  |

**=** 163

### Key Issue 3. Product Stewardship

| GRI standard                            | Code  | Description  | Page    | Remark |
|---|-------|--|---------|--------|
| GRI 3 : Material Topic 2021             | 3-3   | Management of material topics  | 148     |        |
| GRI 416 :<br>Customer Health and Safety | 416-1 | Assessment of the health and safety impacts of product and service categories  | 91 - 92 |        |
| ESRS S4. Consumers and End Users        | S4-1  | Policies related to consumers and end-users  | 91 - 92 |        |
|   | S4-2  | Processes for engaging with consumers and end-users about impacts  | 92      |        |
|   | \$4-3 | Processes for engaging with consumers and end-users about impacts  | 92      |        |
|   |       | Taking action on material impacts on consumers and end-users, and approaches to mitigating material risks and pursuing material opportunities related to consumers and end-users, and effectiveness of those actions | 93 - 95 |        |
|   | S4-5  | Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities   | 92      |        |

### Key Issue 4. Sustainable Value Chain

| GRI standard  | Code  | Description  | Page    | Remark   |
|---|-------|--|---------|--|
| GRI 3 : Material Topic 2021                                   | 3-3   | Management of material topics  | 148     |  |
| GRI 308:  | 308-1 | New suppliers that were screened using environmental criteria  | 158     |  |
| Supplier Environmental Assessment                             | 308-2 | Negative environmental impacts in the supply chain and actions taken   | 81 - 83 |  |
| GRI 407 :<br>Freedom of Association and Collective Bargaining | 407-1 | Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk | 84      |  |
| GRI 408 : Child Labor   | 408-1 | Operations and suppliers at significant risk for incidents of child labor                                      | -       |  |
| GRI 409 :<br>Forced or Compulsory Labor                       | 409-1 | Operations and suppliers at significant risk for incidents of forced or compulsory labor                       | -       | No significant impacts or issues related to freedom of association, child labor, or forced labor were identified |
| GRI 411:<br>Rights of Indigenous Peoples                      | 411-1 | Incidents of violations involving rights of indigenous peoples   | -       | during the reporting period.   |
| GRI 414:  | 414-1 | New Suppliers that were screened using social criteria   | 158     |  |
| Local Communities   | 414-2 | Negative social impacts in the supply chain and actions taken  | 81 - 83 |  |

### Key Issue 5. Safeguarding Natural System

| GRI standard                | Code  | Description   | Page    | Remark |
|-----------------------------|-------|---|---------|--------|
| GRI 3 : Material Topic 2021 | 3-3   | Management of material topics   | 148     |        |
| GRI 303:                    | 303-1 | Interactions with water as a shared resource                                    | 60 - 63 |        |
| Water consumption           | 303-2 | Management of water discharge-related impacts                                   | 62      |        |
|                             | 303-3 | Water withdrawal  | 153     |        |
|                             | 303-4 | Water discharge   | 153     |        |
|                             | 303-5 | Water consumption   | 153     |        |
| GRI 305 : Emissions         | 305-7 | Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions | 153     |        |

### General topic

| GRI standard                                | Code   | Description   | Page      | Remark   |
|---|--------|---|-----------|--|
| GRI 201: Economic Performance               | 201-1  | Direct economic value generated and distributed (EVG&D)   | 8 - 9     |  |
|   | 205-1  | Operations assessed for risks related to corruption   | 159       |  |
| GRI 205 : Anti-corruption                   | 205-2  | Communication and training about anti-corruption policies and procedures  | 133, 141  |  |
|   | 205-3  | Confirmed incidents of corruption and actions taken   | 159       |  |
| GRI 206 :<br>Anti-competitive Behavior      | 206-1  | Legal actions for anti-competitive behavior, anti-trust, and monopoly practices   | -         | No such a case of violations, legal cases, or incidents related to anti-competitve practices or monopolstic behavior during the reporting period |
|   | 304-1  | Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas | 69 - 73   |  |
| GRI 304 : Biodiversity                      | 304-2  | Significant impacts of activities, products and services on biodiversity  | 69 - 73   |  |
| GRI 304 - Biodiversity                      | 304-3  | Habitats protected or restored  | 75        |  |
|   | 304-4  | IUCN Red List species and national conservation list species with habitats in areas affected by operations                                | 75        |  |
|   | 401-1  | New employee hires and employee turnover  | 155 - 157 |  |
| GRI 401: Employment                         | 401-2  | Benefits provided to full-time employees that are not provided to temporary or part-time employees  | 121       |  |
|   | 401-3  | Parental leave  | 121, 157  |  |
|   | 403-1  | Occupational health and safety management system  | 97        |  |
|   | 403-2  | Hazard identification, risk assessment, and incident investigation  | 99        |  |
|   | 403-3  | Occupational health services  | 101 - 102 |  |
|   | 403-4  | Worker participation, consultation, and communication on occupational health and safety   | 100       |  |
| ODI 400 :                                   | 403-5  | Worker training on occupational health and safety   | 100       |  |
| GRI 403 :<br>Ocuupational Health and Safety | 403-6  | Promotion of worker health  | 101 - 102 |  |
| ocaapational realth and carety              | 403-7  | Prevention and mitigation of occupational health and safety impacts directly linked by business relationships                             | 102       |  |
|   | 403-8  | Workers covered by an occupational health and safety management system  | 97        |  |
|   | 400.40 | Work-related injuries   | 158       |  |
|   | 403-10 | Work-related ill health   | 158       |  |
|   | 404-1  | Average hours of training per year per employee   | 154       |  |
| GRI 404:                                    | 404-2  | Programs for upgrading employee skills and transition assistance programs   | 112 - 115 |  |
| Training and Education                      | 404-3  | Percentage of employees receiving regular performance and career development reviews  | 116       |  |
| GRI 405 :                                   | 405-1  | Diversity of governance bodies and employees  | 159       |  |
| Diversity and Equal Opportunity             | 405-2  | Ratio of basic salary and remuneration of women to men  | -         | There is no gender-based wage disparity  |
| GRI 406 : Non-discrimination                | 406-1  | Incidents of discrimination and corrective actions taken  | 159       |  |
| GRI 415 : Public Policy                     | 415-1  | Political contributions   | -         | No such case of the political donations and lobbies accroding to Political Funds Act   |
| GRI 416 :<br>Customer Health and Safety     | 416-2  | Incidents of non-compliance concerning the health and safety impacts of products and services   | -         | No such a case of violation related to the health and safety of products and services during the reporting period                                |
| GRI 418 : Customer Privacy                  | 418-1  | Substantiated complaints concerning breaches of customer privacy and losses of customer data  | -         | No incidents of personal or customer information leakage or loss during the reporting period   |

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### **ESRS** (European Sustainability Reporting Standards) **Index**

ESRS is a management tool for the implementation of the Corporate Sustainability Reporting Directive (CSRD), a directive that the EU will implement from March 2023 to make sustainability reporting mandatory, and specifies the scope and standards of information that companies are required to disclose in relation to sustainability. The European Financial Reporting Advisory Group (EFRAG) published the ESRS in Official Journal of the EU in December 2023, including two common standards, 11 thematic standards, 84 disclosure requirements and 1,144 quantitative and qualitative data. LG Energy Solution is in the direct sphere of influence as it has a production site (Poland) in the EU, so we are trying to prepare in advance by familiarizing ourselves with the contents of ESRS and having a system in place to manage information.

### **ESRS 2. General Disclosures**

| No.   | Title   | Page                                 |
|-------|---|--------------------------------------|
| BP-1  | General basis for preparation of the sustainability statements  | 3                                    |
| BP-2  | Disclosures in relation to specific circumstances   | Disclosed the contents to the report |
| GOV-1 | The role of the administrative, management and supervisory bodies   | 127 - 129                            |
| GOV-2 | Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies | 27                                   |
| GOV-3 | Integration of sustainability-related performance in incentive schemes  | 26                                   |
| GOV-4 | Statement on due diligence  | 84                                   |
| GOV-5 | Risk management and internal controls over sustainability reporting   | 144                                  |
| SBM-1 | Strategy, business model, and value chain   | 11 - 17                              |
| SBM-2 | Interests and views of stakeholders   | 31 - 32                              |
| SBM-3 | Material impacts, risks and opportunities and their interaction with strategy and business model(s)                                 | 147                                  |
| IRO-1 | Description of the processes to identify and assess material impacts, risks and opportunities                                       | 146                                  |
| IRO-2 | Disclosure Requirements in ESRS covered by the undertaking's sustainability statements  | 166 - 167                            |

<sup>\*</sup> BP(Basis for Preparation) / GOV(Governance) / SBM(Strategy and Business Model) / IRO(Impact, Risk and Opportunity)

### **ESRS E1. Climate Change**

| No.  | Title   | Page    |
|------|---|---------|
| E1-1 | Transition plan for climate change mitigation   | 42 - 44 |
| E1-2 | Policies related to climate change mitigation and adaptation  | 37 - 41 |
| E1-3 | Actions and resources in relation to climate change policies  | 42 - 44 |
| E1-4 | Targets related to climate change mitigation and adaptation   | 42      |
| E1-5 | Energy consumption and mix  | 152     |
| E1-6 | Gross Scopes 1, 2, 3 and Total GHG emissions  | 152     |
| E1-7 | GHG removals and GHG mitigation projects financed through carbon credits  | 152     |
| E1-8 | Internal carbon pricing   | -       |
| E1-9 | Anticipated financial effects from material physical and transition risks and potential climate-related opportunities | 37 - 41 |

### ESRS E2. Pollution

| No.  | Title   | Page |
|------|---|------|
| E2-1 | Policies related to pollution   | 56   |
| E2-2 | Actions and resources related to pollution  | 57   |
| E2-3 | Targets related to pollution  | 56   |
| E2-4 | Pollution of air, water and soil  | 153  |
| E2-5 | Substances of concern and substances of very high concern                             | 65   |
| E2-6 | Anticipated financial effects from pollution-related impacts, risks and opportunities | -    |

### **ESRS E3. Water and Marine Resources**

| No.  | Title  | Page    |
|------|--|---------|
| E3-1 | Anticipated financial effects from pollution-related impacts, risks and opportunities                  | 60 - 63 |
| E3-2 | Actions and resources related to water and marine resources  | 62      |
| E3-3 | Actions and resources related to water and marine resources  | 61, 63  |
| E3-4 | Water consumption  | 153     |
| E3-5 | Anticipated financial effects from water and marine resources-related impacts, risks and opportunities | -       |

### ESRS E4. Biodiversity and Ecosystems

| No.  | Title   | Page    |
|------|---|---------|
| E4-1 | Strategy and business model consideration or transition plan of biodiversity and ecosystems | 67      |
| E4-2 | Policies related to biodiversity and ecosystems   | 67      |
| E4-3 | Actions and resources related to biodiversity and ecosystems                                | 67      |
| E4-4 | Policies related to biodiversity and ecosystems   | 76 - 77 |
| E4-5 | Impact metrics related to biodiversity and ecosystems change                                | 75      |
| E4-6 | Potentialfinancial effects frombiodiversity andecosystem-relatedrisks and opportunities     | 73 - 74 |

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| No.  | Title   | Page       |
|------|---|------------|
| E5-1 | Policies related to resource use and circular economy   | 49 - 55    |
| E5-2 | Actions and resources related to resource use and circular economy  | 50 - 54    |
| E5-3 | Targets related to resource use and circular economy  | 51, 53, 55 |
| E5-4 | Resource inflows  | -          |
| E5-5 | Resource outflows   | 154        |
| E5-6 | Potential financial effects from resource use and circular economy-related impacts, risks and opportunities | 148        |

### ESRS S1. Own Workforce

| No.   | Title  | Page                                    |
|-------|--|---|
| S1-1  | Policies related to own workforce  | 104                                     |
| S1-2  | Processes for engaging with own workers and workers' representatives about impacts   | 109                                     |
| S1-3  | Processes to remediate negative impacts and channels for own workers to raise concerns   | 108                                     |
| S1-4  | Taking action on material impacts on own workforce, and approaches to mitigating material risks and pursuing material opportunities related to own workforce, and effectiveness of those actions | 105                                     |
| S1-5  | Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities   | 107                                     |
| S1-6  | Characteristics of the undertaking's employees   | 156                                     |
| S1-7  | Characteristics of non-employee workers in the undertaking's own workforce   | 156                                     |
| S1-8  | Percentage of total employees covered by collective bargaining agreements For employees not covered by collective bargaining agreements, a description of reasons and countermeasures            | 109, 154                                |
|       | No. of strikes, no. of work loss days due to strikes, measures and discussions to resolve strikes, etc.  | No such case                            |
| S1-9  | Average hourly wage difference between genders, ratio of women's hourly wage against men's hourly wage   | There is no gender-based wage disparity |
|       | Persons subject to family care leave (maternity leave, parental leave, etc.), no. of persons who went on a leave, retention rate after returning to work after leave                             | 157                                     |
| S1-10 | Adequate wages   | 116                                     |
| S1-11 | Social protection  | 121                                     |
| S1-12 | Persons with disabilities  | 158                                     |
| 04.40 | Percentage of employees that participated in regular performance and career development reviews  | 116                                     |
| S1-13 | Average number of training hours and expenses per person   | 154                                     |
| 24.44 | Percentage of own workers who are covered by the undertaking's health and safety management system based on legal requirements and/or recognized standards or guidelines                         | 97 - 98                                 |
| S1-14 | Number and rate of work-related injuries and ill health, the number of days lost to work-related injuries, accidents, and ill health   | 158                                     |
| S1-15 | Work-life balance indicators   | 121, 157                                |
| S1-16 | Ratio of the annual total compensation ratio of the highest paid individual to the median annual total compensation for all employees  | -                                       |
| S1-17 | Number of work-related incidents and severe human rights impacts and incidents within its own workforce and any relatedmaterialfinesor sanctions forthe reportingperiod                          | 107                                     |
| 31-1/ | Number of complaints and severe human rights impacts and incidents within its own workforce and any related countermeasures and plans to prevent reoccurrence                                    | 107                                     |

### ESRS S2. Wokers in the Value Chain

| No.  | Title  | Page    |
|------|--|---------|
| S2-1 | Policies related to value chain workers  | 79      |
| S2-2 | Processes for engaging with value chain workers about impacts  | 81 - 83 |
| S2-3 | Processes to remediate negative impacts and channels for value chain workers to raise concerns   | 83      |
| S2-4 | Taking action on material impacts on value chain workers, and approaches to mitigating material risks and pursuing material opportunities related to value chain workers, and effectiveness of those actions | 81 - 83 |
| S2-5 | Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities   | 148     |

### **ESRS S3. Affected Communities**

| No.  | Title  | Page         |
|------|--|--------------|
| S3-1 | Policies related to affected communities   | 122          |
| S3-2 | Processes for engaging with affected communities about impacts   | 31 - 32, 122 |
| S3-3 | Processes to remediate negative impacts and channels for affected communities to raise concerns  | 108          |
| S3-4 | Taking action on material impacts on affected communities, and approaches to mitigating material risks and pursuing material opportunities related to affected communities, and effectiveness of those actions | 108          |
| S3-5 | Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities   | 123          |

### ESRS S4. Consumers and End Users

| No.  | Title  | Page |  |  |  |
|------|--|------|--|--|--|
| S4-1 | Policies related to consumers and end-users  |      |  |  |  |
| S4-2 | Processes for engaging with consumers and end-users about impacts  |      |  |  |  |
| S4-3 | Processes to remediate negative impacts and channels for consumers and end-users to raise concerns   |      |  |  |  |
| S4-4 | Taking action on material impacts on consumers and end-users, and approaches to mitigating material risks and pursuing material opportunities related to consumers and end-users, and effectiveness of those actions |      |  |  |  |
| S4-5 | Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities   | 92   |  |  |  |

### **ESRS G1. Business Conduct**

| No.  | Title   | Page    |
|------|---|---------|
| G1-1 | Top decision-making body's declaration of ethical management and roles and responsibilities in relation to management and supervision                                       | 139     |
|      | Requirements in the Ethics Charter and Code of Conduct  | 140     |
|      | Operating the compliance program, conducting activities to make payment improvements, such as the win-win payment system  | 86 - 90 |
| G1-2 | Diagnosing and conducting a due diligence on supplier ESG risks, reflecting diagnosis and due diligenceresults in supplier selection criteria                               | 81 - 83 |
|      | Activities to prevent corruption or bribery, and a system to investigate and report outcomes to the administrative, management and supervisory bodies                       | 141     |
| G1-3 | to prevent unfair trading, and a system to investigate and report outcomes to the administrative, management and supervisory bodies   | 141     |
| G1-4 | Number of confirmed incidents of corruption or bribery, details of public legal cases, the number of confirmed incidents in which own workers were dismissed or disciplined | 159     |
|      | Number of confirmed incidents of unfair trading, details of public legal cases, the number of confirmed incidents in which own workers were dismissed or disciplined        | 159     |
| G1-5 | Political influence and lobbying activities   | 151     |
| G1-6 | Payment practices   | 88      |

### **TCFD** Index

The Task Force on Climate-related Financial Disclosures (TCFD) is a consultative body established by the Financial Stability Board of the Council of Finance Ministers, which includes the countries of the G20. The TCFD's disclosure recommendations are set forth in terms of content and manner to ensure that stakeholders, including customers and investors, can easily access and understand information that may contribute to climate change. Accordingly, LG Energy Solution publicly declared its support for TCFD for the first time in the domestic battery industry in February 2023 in order to respond to customers' and investors' demands for ESG management activities by thoroughly managing climate change factors and transparently disclosing them. We will join the international community's efforts to prevent the increase in global average temperature by transparently disclosing climate-related information on ① governance, ② strategy, ③ risk management, ④ metrics and targets, which are the basic frameworks for climate change financial disclosure recommended by the TCFD.

| No.                 | Title   | Page         |
|---------------------|---|--------------|
|                     | Describe the board's oversight of climate-related risks and opportunities   | 36           |
| Governanace         | Describe the management's role in assessing and managing climaterelated risks and opportunities.  | 36           |
|                     | Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.   | 37 - 41      |
| Strategy            | Describe the impact of climate related risks and opportunities on the organization's businesses, strategy, and financial planning.  | 37 - 41      |
|                     | Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.                 | 37 - 41      |
|                     | Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a $2^{\circ}\text{C}$ or lower scenario. | 37           |
| Risk<br>Management  | Describe the organization's processes for managing climate-related risks.   | 37           |
| Wanagement          | Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.                     | 136 -<br>138 |
|                     | Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.                     | 152          |
| Metrics and targets | Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks   | 152          |
|                     | Describe the targets used by the organization to manage climaterelated risks and opportunities and performance against targets  | 42 - 44      |

### **TNFD Index**

| No.                 | Title  | Page    |
|---------------------|--|---------|
|                     | Describe the board's oversight of nature-related dependencies, impacts, risks and opportunities.   | 67      |
| Governance          | Describe management's role in assessing and managing nature-related dependencies, impacts, risks and opportunities.  | 67      |
| Covernance          | Describe the organisation's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities. | 67      |
|                     | Describe the nature-related dependencies, impacts, risks and opportunities the organisation has identified over the short, medium and long term.   | 69 - 73 |
| Stratogy            | Describe the effect nature-related dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.   | 69 - 73 |
| Strategy            | Describe the resilience of the organisation's strategy to nature-related risks and opportunities, taking into consideration different scenarios.   | 69 - 73 |
|                     | Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.  | 69 - 73 |
|                     | Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its direct operations.  | 76      |
| Risk                | Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).   | 76      |
| management          | Describe the organisation's processes for monitoring nature-related dependencies, impacts, risks and opportunities.  | 76      |
|                     | Describe how processes for identifying, assessing, prioritising and monitoring nature-related risks are integrated into and inform the organisation's overall risk management processes.   | 76      |
|                     | Disclose the metrics used by the organisation to assess and manage material nature-<br>related risks and opportunities in line with its strategy and risk management process.  | 76 - 77 |
| Metrics and targets | Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature.   | 76 - 77 |
|                     | Describe the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.   | 76 - 77 |

### **SASB Index**

"SASB Standards" refers to the industry-specific sustainability accounting standards developed by the Sustainability Accounting Standards Board (SASB) in U.S., established in 2011. The SASB Standards categorize financially material sustainability information into 11 sectors and 77 industries according to the "Sustainable Industry Classification System (SICS)" considering the unique characteristics of each industry. LG Energy Solution actively supports the adoption of SASB Standards and discloses sustainability information for the Renewable Resources & Alternative Energy sector, specifically in the Fuel Cells & Industrial Batteries industry, which is expected to have a high financial impact.

Table 1. Sustainability Disclosure Topics & Metrics

| Topic                 | Code         | Category          | Metric   | Page & Answer  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------|--------------|-------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|                       |              |                   | (1) Total energy consumed  | 152  |  |  |  |  |  |  |  |  |  |  |  |  |
| Energy<br>Management  | RR-FC-130a.1 | Quan-<br>titative | (2) Percentage grid electricity  | 152  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wanagement            |              | utative           | (3) Percentage renewable   | 152  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | RR-FC-410a.1 |                   | Average storage capacity of batteries, by product application and technology type  | Based on<br>cylindrical<br>21700(for electric<br>operation) :<br>270Wh/kg                        |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | RR-FC-10a.2  | Quan-<br>titative | Average energy efficiency of fuel cells as (1) electrical efficiency and(2) thermal efficiency, by product application and technology type | N/A  |  |  |  |  |  |  |  |  |  |  |  |  |
| Product<br>Efficiency | RR-FC410a.3  |                   |  |  |  |  |  |  |  |  |  |  |  |  |  | Average battery efficiency as coulombic efficiency, by product application and technology type |
|                       | RR-FC410a.4  |                   | Average operating lifetime of fuel cells, by product application and technology type   | N/A  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       | RR-FC410a.5  |                   | Average operating lifetime of batteries, by product application and technology type  | Based on<br>cylindrical<br>21700(for electric<br>operation): With<br>80% lifespan,<br>1,000 uses |  |  |  |  |  |  |  |  |  |  |  |  |

Table 2. Activity Metrics

| Topic    | Code        | Category | Metric                                    | Page & Answer   |
|----------|-------------|----------|---|---|
|          | RR-FC-000.A |          | Number of units sold                      | We made the decision to keep                          |
| Activity | RR-FC-000.B | Q GGT    | Total storage capacity of batteries sold  | this information                                      |
| Metrics  | RR-FC-000.C | titative | Total storage capacity of fuel cells sold | private based on<br>the necessities of<br>our company |

### 10 Principles of the UNGC

LG Energy Solution joined the UN Global Compact(UNGC) in April 2022, pledging to adhere to the ten principles of the UNGC in the areas of human rights, labour, environment, and anticorruption in all business activities. In addition, we support the achievement of the United Nations Sustainable Development Goals(UN SDGs) in the three areas of social inclusion, economic growth, and sustainable environment. We plan to disclose the related activities and achievements.

| UNGC<br>Topic   | Detailed activities  | Page    |
|-----------------|--|---------|
| Human Rights    | (1) Businesses should support and respect the protection of internationally proclaimed human rights; and                     | 104     |
|                 | (2) make sure that they are not complicit in human rights abuses.  | 104     |
|                 | (3) Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; | 109     |
| Labour          | (4) the elimination of all forms of forced and compulsory labour;  | 104     |
|                 | (5) the effective abolition of child labour; and   | 104     |
|                 | (6) the elimination of discrimination in respect of employment and occupation.   | 104     |
|                 | (7) Businesses should support a precautionary approach to environmental challenges;  | 56 - 58 |
| Environment     | (8) undertake initiatives to promote greater environmental responsibility; and   | 56 - 58 |
|                 | (9) encourage the development and diffusion of environmentally friendly technologies.  | 56 - 58 |
| Anti-corruption | (10) Businesses should work against corruption in all its forms, including extortion and bribery                             | 140     |

### **UN SDGs**

To fulfill social responsibility as a global citizen, LG Energy Solution works hard to contribute to achieving UN SDGs. We are conducting various sustainability management activities regarding 14 sustainability development goals that have high relevance by considering the direct and indirect impact on LG Energy Solution's entire value chain.

|   | UN SDGs                                 | Detailed activities   | Page            |
|---|---|---|-----------------|
| 1 ™un<br>Ñ¥ŤŤ÷Ť                           | No Poverty                              | Activities designed to support local communities  | 122             |
| 3 GOOD HEALTH AND WELL-BEING              | Good Health and Well-being              | Youth health & education projects and environment protection activities   | 122             |
| 4 quality                                 | Quality Education                       | Training skilled professionals through tailored academic program support  | 122             |
| 5 GARDER TOPOLITY                         | Gender Equality                         | Organizational culture and female talent management based on gender equality  | 118             |
| 6 CLIAN MATTER AND SANITATION             | Clean Water and Sanitation              | On-site wastewater treatment considering the reduction water consumption and discharge area for sustainable water consumption |                 |
| 7 AFFRENCH AND CLEAR DESIGN               | Affordable and Clean Energy             | Hope Green Power Plant<br>Conversion of renewable energy to reduce the GHG<br>emissions                                       | 42 - 44,<br>122 |
| 8 DECENT WORK AND ECHNOMIC GROWTH         | Decent Work and<br>Economic Growth      | Operating "Areum Nuri" to create jobs for persons with disabilities   | 85 - 90,<br>118 |
| 9 NOSSIN, INMINISTRA<br>AND INFACTIVE THE | Industry, Innovation and Infrastructure | Conducting research to develop new technologies / products for future growth such as next-generation batteries                | 21 - 23         |
| 10 HERCED DEGRACITES                      | Reduced Inequalities                    | Organizational culture based on diversity, equity, and inclusion (DEI)  | 118             |

|  | UN SDGs                                   | Detailed activities   | Page      |
|--|---|---|-----------|
| 12 HSPONGELE CONSIDERATION AND PRODUCTION  | Responsible Consumption and Production    | Creating a battery circular ecosystem through the reuse and recycling of end-of-life batteries Promoting zero landfill to minimize environmental impact | 49 - 55   |
| 13 ciner   | Climate Action                            | Carbon negative strategy<br>Building a decision-making system for climate<br>change Building a global energy management<br>system                       | 36 - 48   |
| 15 the column of | Life on Land                              | Establishment of biodiversity protection policies   | 67 - 77   |
| 16 PLACE RESIDE AND STRONG INSTITUTIONS  | Peace, Justice and Strong<br>Institutions | Conducting a compliance education for employees Obtaining the ISO 37301 (Compliance management system) certification                                    | 132 - 134 |
| 17 HATTNEEDINGS  | Partnerships for the Goals                | Engaging in initiatives such as UNGC, GBA, RBA / RMI / RLI, FCA, and RE100 / EV100  | 31 - 32   |

### **GHG Assurance Statement**

### GHG Assurance Statement (Scope 1, 2) in Korea

### **GHG Assurence Statement**

MPC-24-084

LG Energy Solution, LTD.

#### 1) Verification Scope

Korean Standards Association has conducted verification for GHG emissions based on GHG report provided by LG Energy Solution, LTD. which includes Scope1 and Scope2 emissions.

### 2) Verification Standards and Guidelines

To conduct verification activities, verification team applied verification standards and guidelines. The standards and guidelines are as follows.

- Guidance for reporting and verification of GHG emissions trading scheme
   (No. 2024-155 provided by Ministry of Environment, Republic of Korea)
- Verification Guidelines for the Operation of the Greenhouse Gas Emission Trading
   System (No. 2024-169 provided by Ministry of Environment, Republic of Korea)
- 2006 IPCC Guidelines, KS I ISO 14064-1: 2018 and KS I ISO 14064-3: 2019

### 3) Level of Assurance

LG Energy Solution, LTD's GHG emissions satisfies the under Reasonable Assurance (less than 5.0% of total emissions).

#### 4) Verification Conclusion

As a result of verification activities, verification team has found no significant errors, omissions, and misstatements. Therefore, Korean Standards Association confirms that following emissions data are adequately quantified.

### • 2024 GHG Emissions(Scope1, Scope2)

(Unit: tCO2eq)

| Year | Scope 1    | Scope 2     | Total   |
|------|------------|-------------|---------|
| 2024 | 73,170,290 | 334,972,173 | 408,140 |

 $\ensuremath{\mathbb{X}}$  Note: Decimal place is not considered when calculating the emission of each workplace.

June 9, 2025



### GHG Assurance Statement (Scope 1, 2) in Overseas



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### Verification Opinion (MPC-24-084)

LG Energy Solution Co., Ltd.

#### 1) Verification Scope

- Direct GHG emissions (Scope 1) and indirect emissions (Scope 2) of overseas business sites in 2024

#### 2) Data Verified

- Annual direct (Scope 1) and indirect (Scope 2) GHG emissions in 2024

(Unit: tCO2eq)

|           |                           |         | Scope 2        |              | Total (Scope 1 + Scope 2 |              |
|-----------|---------------------------|---------|----------------|--------------|--------------------------|--------------|
| Country   | Country Site Abbreviation |         | Location based | Market based | Location based           | Market based |
| China     | LGESNJ                    | 43,144  | 535,292        | 94,320       | 578,437                  | 137,464      |
| China     | LGESNA                    | 6,970   | 100,292        | 27,031       | 107,262                  | 34,001       |
| China     | LGESNB                    | 17,907  | 256,200        | 90,894       | 274,107                  | 108,800      |
| Poland    | LGESWA                    | 110,670 | 515,153        | 235,381      | 625,823                  | 346,051      |
| America   | LGESMI                    | 18,329  | 51,743         | 51,743       | 70,072                   | 70,072       |
| America   | Utium Cells 1             | 35,563  | 129,501        | 69,543       | 165,064                  | 105,105      |
| America   | Utium Cells 2             | 22,640  | 69,042         | 69,042       | 91,682                   | 91,682       |
| Canada    | Nextstar Energy           | 6,416   | 305            | 305          | 6,721                    | 6,721        |
| Indonesia | PT. HLI Green power       | 20,061  | 138,263        | 138,263      | 158,324                  | 158,324      |
| Taiwan    | LGESTW                    | -       | 435            | 435          | 435                      | 435          |
| Australia | LGESAU                    | -       | 21             | 21           | 21                       | 21           |
| Germany   | LGESEG                    | -       | 55             | 55           | 55                       | 55           |
| America   | LGESVT                    | 161     | 465            | 465          | 626                      | 626          |
| Japan     | LGESJP                    | -       | 2              | 2            | 2                        | 2            |
| India     | LGESIL                    | -       | 4              | 4            | 4                        | 4            |
|           | Total                     | 281,860 | 1,796,774      | 777,504      | 2,078,634                | 1,059,364    |

### 3) GHG Criteria & Protocols used for Verification

The verification was carried out at the request of the LG ENERGY SOLUTION using:

- \*ISO 14064-1:2018 & ISO 14064-3:2019
- · Guideline for Reporting and Certification of Emissions in the Greenhouse Gas Emissions Trading Scheme
- · BSI GHGEV Manual

#### 4) Verification Opinion

BSI Group Korea's verification opinions on the result of carrying out verification in accordance with the GHG criteria and protocols mentioned above are as follows.

- Verification of Scope 1 & 2 greenhouse gas emissions for domestic business sites of LG ENERGY SOLUTION
  was performed with a limited assurance level, and the quality of the data conforms to important international
  principles for greenhouse gas verification.
- No material misstatement during the verification process for emissions was found, and no evidence could be found that the activity data and relevant evidence were not properly managed.
- Therefore, the BSI Group Korea Verification Team provides a verification opinion that is "appropriate".





For and on behalf of BSI: Issue: 11/06/2025

Managing Director Korea, SeongHwan Lim

GHG Assurance Statement COMPANY OVERVIEW ENVIRONMENTAL SOCIAL GOVERNANCE FACTBOOK APPENDIX ≡ 172

### GHG Assurance Statement (Scope 3) in Company-wide



### Verification Opinion (MPC-24-084)

LG Energy Solution Co., Ltd.

### 1) Verification Scope

Other indirect emissions (Scope 3) of LG Energy Solution Co., Ltd.'s domestic business sites and overseas corporations in 2024

2) Verification level: Limited Level of Assurance

### 3) Data Verified

Annual greenhouse gas other indirect emissions (Scope 3) for 2024 are as follows:

(Unit: tCO2eq)

|           | Scope 3 category   |           |  |  |  |  |
|-----------|--|-----------|--|--|--|--|
| Category1 | Purchased goods and service                                  | 5,883,859 |  |  |  |  |
| Category2 | Capital goods  | 1,146,337 |  |  |  |  |
| Category3 | Fuel and energy related activities not included in scope 1&2 | 258,043   |  |  |  |  |
| Category4 | Upstream transportation and distribution                     | 145,609   |  |  |  |  |
| Category5 | Waste generated in operations                                | 20,204    |  |  |  |  |
| Category6 | Business travel  | 14,228    |  |  |  |  |
| Category7 | Employee Commuting   | 13,212    |  |  |  |  |
| Category8 | Disposal of sold products                                    | 510,578   |  |  |  |  |
|           | Total Emissions  |           |  |  |  |  |

<sup>\*\*</sup> Details including limitations and assumptions for calculating emissions by Scope3 category are described in the verification report.

### 3) Verification Criteria and Protocol

The verification was performed at the request of LG Energy Solution using the following verification standards

- WRI/WBCSD GHG Protocol Corporate Value Chain (Scope 3) Standard
- · 2006 IPCC Guidelines
- · ISO 14064-1:2018 & ISO 14064-3:2019
- · BSI GHGEV Manual

### 4) Verification Opinion

As a result of the verification in accordance with the standards listed above, it is the opinion of BSI that:

- In conducting this verification, no visits to the verification target business site or verification of the authenticity
- of the data provided by LG Energy Solution were carried out.
- This verification may be affected by limited factors such as the limitation of provided data, non-execution of on- site verification, and sampling. Due to the limitation of this verification, there is an unavoidable risk that important errors may not be found and exist.
- The data quality was considered corresponding to the international key principles for GHG emissions verification.
- No material misstatements in the GHG emission calculations were detected, related records were maintained appropriately.





For and on behalf of BSI: Issue: 13/06/2025

- For

Managing Director Korea, SeongHwan Lim

### **Independent Assurance Statement**

### INDEPENDENT ASSURANCE OPINION STATEMENT



To: The Stakeholders LG ENERGY SOLUTION, LTD.

### Overview

BSI (British Standards Institution) Group Korea (hereinafter referred to as the "Assurer") was requested to verify the LG ENERGY SOLUTION ESG Report 2024 (hereinafter referred to as the "Report"). The Assurer is independent of the LG ENERGY SOLUTION and has no major operational financial interest other than the assurance. This assurance opinion statement is intended to provide information related to the assurance of the LG ENERGY SOLUTION report relating to the environment, social and governance (ESG) to the relevant stakeholders and may not be used for any purpose other than the purpose of publication. This assurance opinion statement was prepared based on the information presented by the LG ENERGY SOLUTION and the assurance was carried out under the assumption that presented the information and data were complete and accurate. LG ENERGY SOLUTION is responsible for managing the relevant information contained within the scope of assurance, operating the relevant internal control procedures, and for all information and claims contained in the report. Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to LG ENERGY SOLUTION only.

The Assurer is responsible for providing LG ENERGY SOLUTION management with an independent assurance opinion containing professional opinions derived by applying the assurance methodology to the scope specified, and to provide the information to all stakeholders of LG ENERGY SOLUTION. The Assurer shall not bear any other responsibility, including legal responsibility, to any third party other than LG ENERGY SOLUTION in providing the assurance opinion and shall not be liable to any other purpose, purpose or stakeholders related thereto for which the assurance opinion may be used.

### Scope

The scope of engagement agreed upon with LG ENERGY SOLUTION includes the following:

- Reporting contents during the period from January 1st to December 31st 2024 included in the report, some data included the first half of 2025.
- Major assertion included in the Report, such as sustainability management policies and strategies, goals, projects, and performance, and the Report contents related to material issues determined as a result of materiality assessment.
- Appropriateness and consistency of processes and systems for data collection, analysis and review.
- In Accordance with the four principles of AA1000 AccountAbility in the report, based on the type of Sustainability Assurance based on AA1000AS v3 and if applicable, the reliability of the sustainability performance information contained in the report.

The following contents were not included in the scope of assurance.

- Financial information in Appendix.
- Index items related to other international standards and initiatives other than the GRI.
- Other related additional information such as the website, business annual report

#### Assurance Level and Type

The assurance levels and types are as follows;

 Moderate level based on AA1000 AS and Type 2 (confirmation to the four principles as described in the AA1000 Accountability Principle 2018 and quality and reliability of specific performance information published in the report.)

### Description and sources of disclosures covered

Based on the scope and methodology of assurance applied, the assurer reviewed the following Disclosures based on the sampling of information and data provided by LG ENERGY SOLUTION.

#### Universal Standards

2-1 to 2-5 (The organization and its reporting practices), 2-6 to 2-8 (Activities and workers), 2-9 to 2-21 (Governance), 2-22 to 2-28 (Strategy, policies and practices), 2-29 to 2-30 (Stakeholder engagement), 3-1 to 3-3 (Material Topics Disclosures)

### [Topic Standards]

201-1~2, 205-1~3, 206-1, 301-1~3, 302-1~4, 303-1~5, 304-1~4, 305-1~7, 306-1~5, 308-1~2, 401-1~3, 403-1~10, 404-1~3, 405-1~2, 406-1, 407-1, 408-1, 409-1, 411-1, 414-1~2, 415-1, 416-1~2, 418-1

### Methodology

As a part of its independent assurance, the Assurer has used the methodology developed for relevant evidence collection in order to comply with the verification criteria and to reduce errors in reporting. The Assurer has performed the following activities:

- A top-level review of issues raised by external parties that could be relevant to organizations policies to provide a check on the appropriateness of statements made in the report.
- Discussion with managers and staffs on organization's approach to stakeholder engagement.
- Review of the supporting evidence related to the material issues through interviews with senior managers in the responsible departments.
- Review of the system for sustainability management strategy process and implementation
- Review of materiality issue analysis process and prioritization by reviewing materiality issue analysis process and verifying the results
- Verification of data generation, collection and reporting for each performance index and document review of relevant systems, policies, and procedures where available
- An assessment of the company's reporting and management processes concerning this reporting against the principles of Inclusivity, Materiality, Responsiveness and Impact as described in the AA1000 AccountAbility Principles Standard (2018).
- Visit of the LG ENERGY SOLUTION HQ to confirm the data collection processes, record management practices.

### Limitations and approach used to mitigate limitations

The Assurer performed limited verification for a limited period based on the data provided by the reporting organization. It implies that no significant errors were found during the verification process, and that there are limitations related to the inevitable risks that may exist. The Assurer does not provide assurance for possible future impacts that cannot be predicted or verified during the verification process and any additional aspects related thereto.

### Competency and Independence

BSI (British Standards Institution) is a leading global standards and assessment body founded in 1901. BSI is an independent professional institution that specializes in quality, health, safety, social and environmental management with almost 120 years history in providing independent assurance services globally. No member of the assurance team has a business relationship with LG ENERGY SOLUTION. The Assurer has conducted this verification independently, and there has been no conflict of interest. All assurers who participated in the assurance have qualifications as an AA1000AS assurer, have a lot of assurance experience, and have in-depth understanding of the BSI Group's assurance standard methodology.

### **Opinion Statement**

The assurer was carried out by a team of sustainability report assurors in accordance with the AA1000 Assurance Standard v3. Assurer planned and performed this part of our work to obtain the necessary information and explanations assurer considered to provide sufficient evidence that LG ENERGY SOLUTION's description of their approach to AA1000 Assurance Standard and their self-declaration of compliance with the GRI standards were fairly stated.

On the basis of our methodology and the activities described above, it is our opinion that the information and data included in the Report are accurate and reliable and the Assurer cannot point out any substantial aspects of material with mistake or misstatement. We believe that the economic, social and environmental performance indicators are accurate and are supported by robust internal control processes.

#### Conclusions

The Report is prepared in accordance with the GRI Standards. (Reporting in accordance with the GRI standards). The detailed reviews against the AA1000 AccountAbility Principles of Inclusivity, Materiality, Responsiveness and Impact and the GRI Standards are set out below.

### Inclusivity: Stakeholder Engagement and Opinion

LG ENERGY SOLUTION defined shareholders/investors, customers, employees, business partners, local communities/NGOs, academia/experts, industry associations, government and global initiatives as Key Stakeholder Groups. In order to collect opinions by each stakeholder group in the context of sustainability, operated the stakeholder engagement process. LG ENERGY SOLUTION was conducting a review of the stakeholder engagement process at the Steering Committee in order to reflect on the major issues derived through the stakeholder engagement process in sustainability strategy and goals. LG ENERGY SOLUTION disclosed the results related to the process in the Report.

### Materiality: Identification and reporting of material sustainability topics

LG ENERGY SOLUTION implemented its own materiality assessment process in consideration of the major business and operational characteristics to derive important reporting issues related to sustainability. In the materiality assessment, LG ENERGY SOLUTION conducted the analysis of global sustainability disclosure and evaluation standards, and conducted the IRO (Impact, Risk, Opportunity) analysis to derive the impact and financial materiality. LG ENERGY SOLUTION derived 5 material issues through the process, and disclosed GRI topic standards disclosures related to material issues in the Report.

### Responsiveness: Responding to material sustainability topics and related impacts

LG ENERGY SOLUTION operated a management process for material issues in the context of sustainability derived from the materiality assessment. LG ENERGY SOLUTION established mid- to long-term sustainability plans and goals in according to the management methodology established to effectively reflect the expectations of key stakeholders, LG ENERGY SOLUTION disclosed the process including policy, indicator, activity and response performance on key issues in the Report.

### Impact: Impact of an organization's activities and material sustainability topics on the organization and stakeholders

LG ENERGY SOLUTION identified the scope and extent of the impacts to the organization and key stakeholders in the context of the sustainability of the material issues reported. LG ENERGY SOLUTION established sustainability strategies and objectives based on the analysis results of major impacts, including risks and opportunities for material issues at the governance level, disclosed mid- to long-term plans and strategic system in the Report.

### Findings and conclusions concerning the reliability and quality of specified performance information

Among the GRI Topic Standards, the following disclourse related Economic, Social and Environmental were carried out in a assurance Type 2 based on the information and data provided by the reporting organization. In order to verify the reliability and accuracy of the data and information, internal control procedures related to data processing, processing, and management were verified through interviews with the responsible department, and accuracy was verified through sampling. Errors and intentional distortions in sustainability performance information included in the report were not found through assurance processes. The reporting organization manages the sustainability performance information through reliable internal control procedures and can track the process of deriving the source of the performance. Errors and unclear expressions found during the assurance process were corrected during the assurance process and prior to the publication of the report, and the assurer confirmed the final published report with the errors and expressions corrected.

- GRI Topic standards: 201-2, 205-1~3, 301-1~3, 302-1~4, 303-1~5, 304-1~4, 305-1~7, 306-1~5, 308-1~2, 401-1~3, 403-1~10, 404-1~3, 405-1~2, 406-1, 407-1, 408-1, 409-1, 411-1, 414-1~2, 416-1

### Recommendations and Opportunity for improvement

The assurer will provide the following comments to the extent that they do not affect the result of assurance; Considering the industry and business characteristics of LG ENERGY SOLUTION,

- -It may be helpful to advance the sustainability management system by specifying key impacts of the sustainability context, such as circular economy, product safety, carbon neutrality, and the management system of those impacts.
- -lt may be helpful to advance the sustainability management system by establishing a sustainability performance indicator management system, including companies subject to consolidation criteria, and specifying internal control procedures for those sustainability indicators.
- -It may be helpful to advance sustainability management systems by expanding and transparent disclosure of roles and responsibilities and other sustainability information related to key ESG governance fuction.

### **GRI-reporting**

LG ENERGY SOLUTION provided us with their self declaration of compliance within GRI Standards. Based on our review, we confirm that social responsibility and sustainable development indicators with reference to the GRI Index. The Assurer confirmed that the Report was prepared in accordance with the GRI Standards and the disclosures related to the Universal Standards and Topic Standards Indicators based on the data provided by LG ENERGY SOLUTION. The sector standard was not applied.

Issue Date: 23/06/2025

For and on behalf of BSI(British Standards Institution):

BSI representative

Junawoo Lee. Lead Assurer, LCSAP

Seonghwan Lim. Managing Director of BSI Korea

BSI Group Korea Limited: 29, Insa-dong 5-qil, Jongno-qu, Seoul, South Korea Hold Statement Number: SRA 826437



## **Glossary of Terms**

| Acronyms | Full-name                              | Acronyms | Full-name                                     | Acronyms | Full-name  |
|----------|--|----------|---|----------|--|
| AAM      | Anode active materials                 | CRMA     | Critical Raw Materials Act                    | GBA      | Global Battery Alliance                                    |
| AED      | Automated External Defibrillators      | CRO      | Chief Risk Officer                            | GBF      | Kunming-Montreal Global Biodiversity Framework             |
| APQP     | Advanced Product Quality Planning      | CSDDD    | Corporate Sustainable Due Diligence Directive | GDPR     | General Data Protection Regulation                         |
| APS      | Announced Pledged Scenario             | CSR      | Corporate Social Responsibility               | GHG      | Greenhouse gas   |
| AVEL     | Add Value to Energy Label              | CSRD     | Coporate Sustainability Reporting Directive   | GRI      | Global Reporting Initiative                                |
| BaaS     | Battery as a Service                   | СТО      | Chief Technology Officer                      | GWP      | Global Warming Potential                                   |
| BAU      | Business As Usual                      | D/L      | Distribution Line                             | GX       | Green Transformation                                       |
| BCMS     | Business Continuity Management System  | DAF      | Dissolved Air Floatation                      | HAPS     | High Altitude Pseudo Satellite                             |
| BEV      | Battery Electric Vehicle               | DEH      | Dehumidifier                                  | HSM      | Hazardous Substance Management system                      |
| BIC      | Battery Innovation Contest             | DEI      | Diversity, Equity, Inclusion                  | IATF     | International Automotive Task Force                        |
| BMS      | Battery Management System              | DR       | Demand Response                               | IBAT     | Intergrated Biodiversity Assessment Tool                   |
| BOD      | Biochemical Oxygen Demand              | EaaS     | Energy as a Service                           | IBT      | Institute of Battery Technology                            |
| вот      | Battery of Things                      | EFRAG    | European Financial Reporting Advisory Group   | IEA      | International Energy Agency                                |
| BRF      | Biodiversity Risk Filter               | EH&S     | Environmental, Health and Safety              | ILO      | International Labour Organization                          |
| BRT      | Business Round Table                   | EMAS     | ESS Management and Analysis System            | IPCC     | Intergovernmental Panel on Climate Change                  |
| BSC      | Battery Section Controller             | ENCORE   | Exploring Natural Capital Opportunities,      | IRA      | the US Inflation Reduction Act                             |
| BSM      | Battery System Monitoring              | ENCORE   | Risks and Exposure                            | IRMA     | Initiative for Responsible Mining Assurance                |
| BSS      | Battery Swapping Station               | EOL      | End-of-Life                                   | ISSB     | International Sustainability Standards Board               |
| втс      | Battery Tech Conference                | EPD      | Environmental Product Declarations            | JV       | Joint Venture  |
| CAM      | Cathode active materials               | ESG      | Environmental, Social, Governance             | KBA      | Key Biodiversity Areas                                     |
| Capex    | Captial Expenditures                   | ESRS     | European Sustainability Reporting Standards   | KCGS     | Korea Institute of Corporate Governance and Sustainability |
| CCUS     | Carbon Capture Utilization and Storage | ESS      | Energy Storage System                         | K-ETS    | Korea emissions trading system                             |
| CDP      | Carbon Disclosure Project              | EU FLR   | EU Forced Labor Regulation                    | KPI      | Key Performance Indicators                                 |
| CEPP     | Customized Education Polymer Program   | EU-ETS   | European Union emissions trading system       | L&S      | Lamination & Stacking                                      |
| CERT     | Computer Emergency Response Team       | EUM      | Energy & Utility Management system            | LBA      | LG Battery Acadmey   |
| CIC      | Company-in-Company                     | EV100    | Electric Vehicle 100                          | LCA      | Life Cycle Assessment                                      |
| CISO     | Chief Information Security Officer     | FCA      | Fair Cobalt Alliance                          | LEV      | Light Electric Vehicle                                     |
| CMRT     | Conflict Minerals Reporting Template   | FMDS     | FM Global's safety management standards       | LFP      | lithium iron phosphate                                     |
| СОР      | Conference of the Parties              | FPIC     | Free, Prior, and Informed Consent             | LMT      | Light Means of Transport                                   |
| СРО      | Chief Production Officer               | FSB      | Financial Stability Board                     | LTIFR    | Lost Time Injury Frequency Rate                            |
| CQO      | Chief Quality Officer                  | FTA      | Free Trade Agreement                          | MOU      | Memorandum of Understanding                                |

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| Acronyms | Full-name                                       | Acronyms | Full-name   |  |
|----------|---|----------|---|--|
| MRO      | Maintenance Repair and Operation procurement    | REC      | Renewable Energy Certificates                       |  |
| MSA      | Mean Species Abundance                          | RLI      | Responsible Labor Initiative                        |  |
| MSCI     | Morgan Stanley Capital International            | RMA      | Return Material Authorization                       |  |
| MSDS     | Material Safety Data Sheet                      | RMI      | Responsible Minerals Initiative                     |  |
| NCM      | Nickel-Cobalt-Manganese                         | RO       | Reverse osmosis                                     |  |
| NDC      | Nationally Determined Contributions             | RoHS     | Restriction of Hazardous Substances Directive       |  |
| NDR      | Non-Deal Roadshow                               | S&P      | Standard and Poors                                  |  |
| NFPA     | National Fire Protection Association            | SAQ      | Self-Assessment Questionnaire                       |  |
| NGD      | No Gross Deforestation                          | SASB     | Sustainability Accounting Standards Board           |  |
| NND      | No Net Deforestation                            | SBTN     | Science Based Target Network                        |  |
| NNL      | No Net Loss                                     | SCIP     | Security Cooperation Information Portal             |  |
| NPI      | Net Positive Impact                             | SMEs     | small and medium-sized enterprises                  |  |
| NSF      | National Sanitation Foundation                  | SNBH     | Supplier New Biz. Hold                              |  |
| NZE      | Net-zero emissions                              | SOH      | State of health                                     |  |
| 0505     | Organisation for Economic                       | SQ       | Supplier Quality                                    |  |
| OECD     | Co-operation and Development                    | SQM      | Supplier Quality Management                         |  |
| OEM      | Original Equipment Manufacturer                 | SRS      | Safety Reinforced Separator                         |  |
| Орех     | Operational Expenditures                        | SS       | suspended solids                                    |  |
| PDCA     | Plan, Do, Check, Act                            | SSP      | Shared Socioeconomic Pathways                       |  |
| PHEV     | Plug-in Hybrid Electric Vehicle                 | SSQ      | Sub-supplier Qualification                          |  |
| PPA      | Power purchase agreements                       | STAR     | Speicies Threat Abatement and Restoration           |  |
| PPE      | Personal Protective Equipment                   | STEPS    | Stated Policies Scenario                            |  |
| PSDS     | Product Safety Data Sheet                       | TCFD     | Task Force on Climate-related Financial Disclosures |  |
| QMS      | Quality Management System                       | TNFD     | Task Force on Nature-related Financial Disclosures  |  |
|          | Recognized And Generally                        | TOC      | Total Organic Carbon                                |  |
| RAGAGEP  | Accepted Good Engineering Practices             | TSCA     | Toxic Substances Control Act                        |  |
| RBA      | Responsible Business Alliance                   | UAM      | Urban Air Mobility                                  |  |
| RCP      | Representative Concentration Pathways           | UFLPA    | Uyghur Forced Labor Prevention Act                  |  |
| RE100    | Renewable Electricity 100%                      | UL       | Underwriters Laboratories                           |  |
|          | The Regulation on the registration, evaluation, | UN SDGs  | United Nations Sustainable Development Goals        |  |
| REACH    | authorisation and restriction of chemicals      | UNGC     | United Nations Global Compact                       |  |
|          |   |          |   |  |

| Acronyms | Full-name                    |
|----------|------------------------------|
| UPS      | Uninterruptible Power Supply |
| VAP      | Validated Assessment Program |
| WDS      | Waste Disposal System        |
| WEF      | World Economic Forum         |
| WRI      | World Resource Institute     |

**LG** Energy Solution

