

# GREEN ENERGY FOR FUTURE

2022 L&F ESG Report



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## About this Report

We released this report with the aim to share our strategies for ESG management as well as financial and non-financial data with our stakeholders. The report provides a comprehensive overview of our strategic direction for sustainable management and our progress in this area since 2021, when we published our first ESG report to share our strategies and achievements. To help readers understand the key issues facing L&F, this report includes the results of a double materiality assessment conducted with the participation of multiple stakeholders. In the coming years, we will continue to transparently disclose our ESG strategies and achievements to facilitate more active communication with our diverse stakeholders.

### Reporting Period and Boundaries

This report covers our sustainability activities and performance from January 1, 2022, to December 31, 2022. To provide timely information, we have also included key operations from the first half of 2023. For some data that requires an understanding of changes and trends, we have provided three years of data from 2020 to 2022. The scope of this report includes our Daegu Plant, Waegwan Plant, Guji Plant 1, and Guji Plant 2.

### Reporting Principles and Framework

This report is aligned with the Global Reporting Initiative(GRI) Standards 2021 and also follows the Sustainability Accounting Standards Board(SASB) and the United Nations Sustainable Development Goals(UN SDGs). In terms of financial performance, it adheres to the Korean version of the International Financial Reporting Standards(K-IFRS).

### Data Assurance

The data in this report has been verified by Han Consulting Group, an independent verifier, to ensure its reliability. The verification was conducted based on the AA1000AS v3 standard. The results can be found on pages 107 to 108.

### Inquiries


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\*Some of the reporting scope, such as the Headquarters and Innovation Center, that were included in the first report published in 2021, have been excluded from the second report published in 2022. As a result, some of the data presented in the 2021 report have been updated in the 2022 report.



 **Reader's Guide**  
Our ESG report is published in an interactive PDF format that includes links to related pages.

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## ESG Management

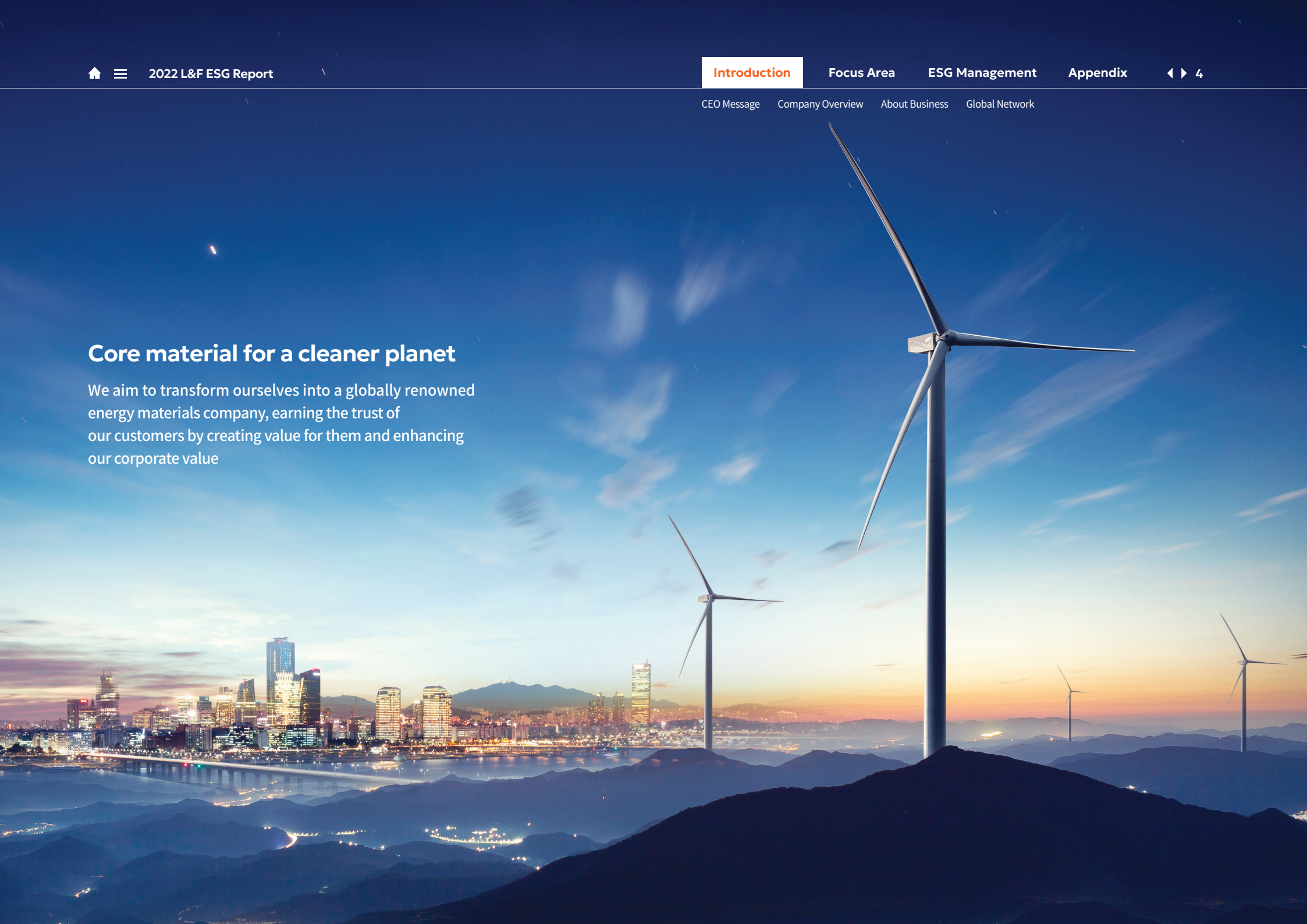
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## Core material for a cleaner planet

We aim to transform ourselves into a globally renowned energy materials company, earning the trust of our customers by creating value for them and enhancing our corporate value



# Introduction

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# CEO Message

## Dear valued stakeholders,

I would like to express my sincere gratitude to all of our stakeholders for your unwavering support and encouragement in our growth and development.

2022 marked a significant step forward in our journey to become a reliable, top-notch electronic materials company. In 2022, the changing international political landscape disrupted global supply chains, leading to the need for reorganizing value chains in each industry. Our outstanding technological prowess, process competitiveness, and increased production capacity through expansion allowed us to navigate these challenging circumstances and achieve KRW 3.9 trillion in sales, a 302% increase from the previous year. This remarkable achievement would not have been possible without your generous support and encouragement.

In the face of an uncertain global business environment, humanity must rise to the challenge of achieving sustainable growth for the survival of all. The rapidly changing times have made ESG management a top priority, rather than an option, for companies.

L&F has consistently attained outstanding financial results, breaking records year after year, while recognizing that the company’s ability to implement sustainable management practices determines the long-term prosperity and survival of both the company and society as a whole. L&F is committed to becoming a leading player in the clean energy materials sector, contributing to a cleaner Earth through the following actions.

**First, we will introduce a sustainable management system and embed ESG elements into all aspects of our management.**

Last year, L&F made 2022 an inaugural year for ESG management by publishing its first ESG report and presenting its ESG vision, ‘We INNOVATE materials for green energy.’ Based on this vision, we have made sustainable growth one of our main goals. To achieve this goal, we established an organization responsible for ESG affairs in 2023, which has strengthened our ESG strategies and systems, and helped us systematize our ESG management. Furthermore, in the second half of 2023, an ESG Committee will be established under the Board of

Directors to provide direction for our ESG policies. We will incorporate ESG elements into every corner of our business operations to enhance our sustainability.

**Second, we will enhance the sustainability of our operations and the entire supply chain.**

With the objective to strengthen our value chain, we have been working closely with clients and partner companies. Our collaboration will expand to include a wide range of areas, such as achieving net-zero emissions, meeting RE100 targets, establishing a circular resource system, improving supply chain sustainability, managing human rights issues, ensuring a safe workplace for all employees, building a transparent governance structure, and addressing environmental, social, and governance concerns. In concert with various stakeholders, we will achieve sustainable growth and establish a responsible supply chain.

**Third, we will disclose our data on sustainable management to stakeholders in a transparent manner.**

As we progress towards fully implementing sustainable management, we will share both our financial and non-financial data openly. In 2022, we disclosed our goals and progress in the areas of environment, society, and governance through the publication of our ESG report. The implementation of the plans outlined in the 2022 ESG report and all processes of internalizing ESG management will be disclosed by releasing an ESG report at an appropriate time.

We promise that L&F will never stop striving towards a sustainable future. In the coming years, we look forward to your continued interest and support on this journey.

Thank you very much.

CEO *SuAn Choi*

# Company Overview

Started as a manufacturer of BLUs for LCDs in July 2000, L&F embarked on the cathode business for secondary batteries in August 2005. And we became the world's first company to mass-produce high-nickel NCM cathode materials, which has put us on track to become a global top-tier player in the field of rechargeable battery cathode material business.

## Company Profile

<b>Company name</b>	L&F
<b>CEO</b>	SuAn Choi
<b>Date of establishment</b>	July 27, 2000
<b>HQ location</b>	11, Igokdong-ro, Dalseo-gu, Daegu, Republic of Korea
<b>Market capitalization</b>	KRW 6.25 trillion (as of December 31, 2022)
<b>No. of employees</b>	1,488
<b>Key businesses</b>	Manufacturing and selling cathode active materials for secondary batteries
<b>Intellectual property rights</b>	[10 registered in 2022] [15 registered in 2021] [7 registered in 2020]

[www.landf.co.kr](http://www.landf.co.kr)



# Company Overview

## Business Sites

Domestic HQ, 6 Plants(1 under construction), R&D Center

Overseas 1 plant

Waegwan Plant

JH Chemical

Guji Plant 1

Guji Plant 2

Guji Plant 3

Headquarters

R&D Center

Daegu Plant

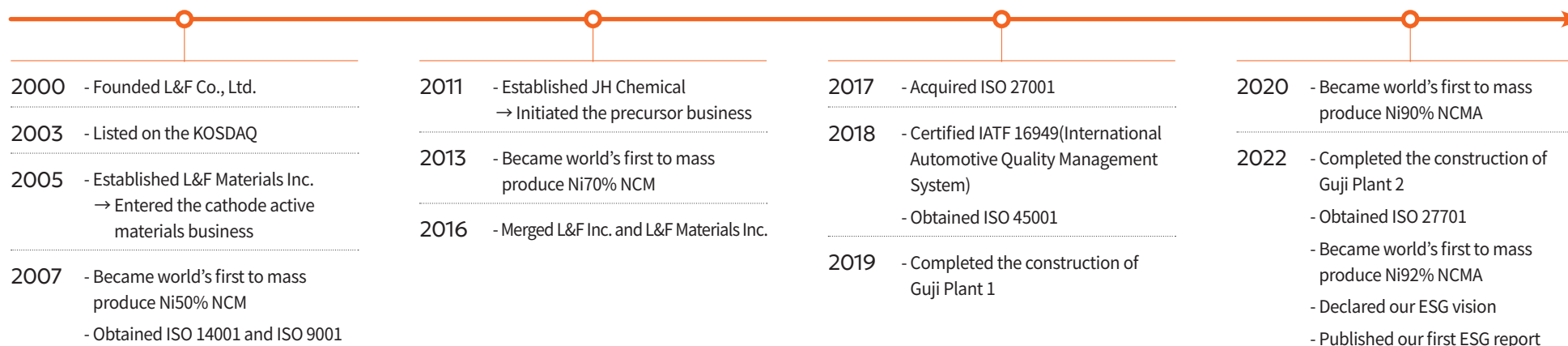
Wuxi Light & Future Advanced Materials Co., Ltd



# Company Overview



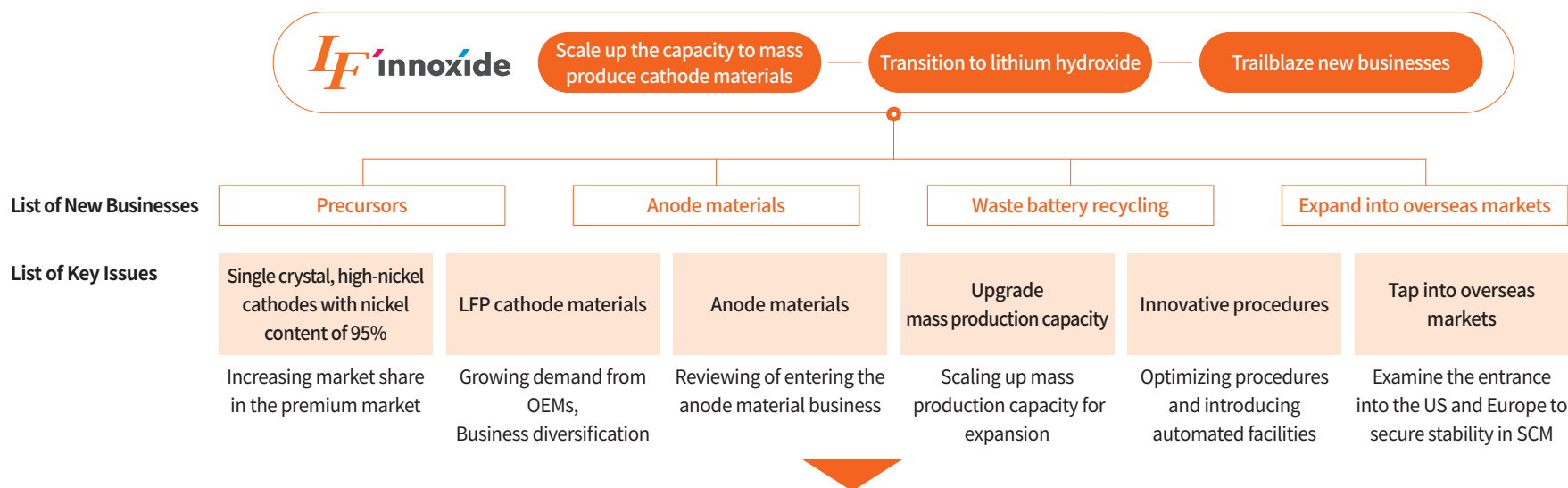
## History



# About Business

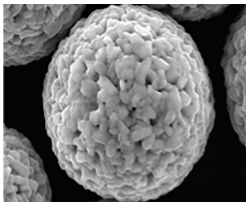
Our key business is the development and production of cathodes, a core material for secondary batteries. Our advanced technological enables us to have the upper hand in the Ni-rich cathode market. We are also focused on the ‘waste battery recycling’ business, with the aim of developing eco-friendly technology that take advantage of the resource circulation system and exploring new growth engines. To this end, we are collaborating with multiple corporations.

## Map for Closed Loop



**1**

### Cathode Material Production



Cathode materials, also known as cathode active materials, are the materials that make up the positive electrode of batteries. These materials play a crucial role in determining the capacity and performance of rechargeable batteries, making them essential for charging secondary batteries. L&F is a leading company in the production of high-nickel cathode materials, which are primarily used in high-performance electric vehicles(EVs). In particular, L&F excels in manufacturing high-nickel NCMA cathodes, which offer enhanced maximum output and stability and also longer battery life due to the addition of aluminum to NCM(Nickel-Cobalt-Manganese).

**2**

### Waste Battery Recycling



Secondary batteries reach the end of their life through repeated charging and discharging. Extracting and recycling valuable metals such as lithium, nickel, and cobalt from waste batteries can provide a stable source of raw materials while also improving eco-friendliness. L&F is working with various corporations to propel the waste battery recycling business forward. Through this business, we aim to expand our presence as an eco-friendly company and to spur our growth by pioneering new markets.

\*It refers to cathode materials in which nickel accounts for more than 90% of the materials used in the positive electrode.



## About Business

We are living in the era of Battery of Things(BoT), where various objects rely on batteries as their power source. Secondary batteries, which can store and use electricity, have become the main energy solution in this age of battery-powered devices. Against this backdrop, L&F is a leading company in the rechargeable battery industry, which is expected to be a future growth sector. L&F produces cathode materials, a crucial component that accounts for 40% of the battery production costs. In 2022, we overcame the significant challenges posed by the changing market conditions and delivered an outstanding performance, with our sales growing by 302% year-on-year. Moreover, we laid the foundation for continued growth by enhancing our production capacity with the establishment of our second and third Guji Plants and by innovating a new state-of-the-art cathode material for the future generation.

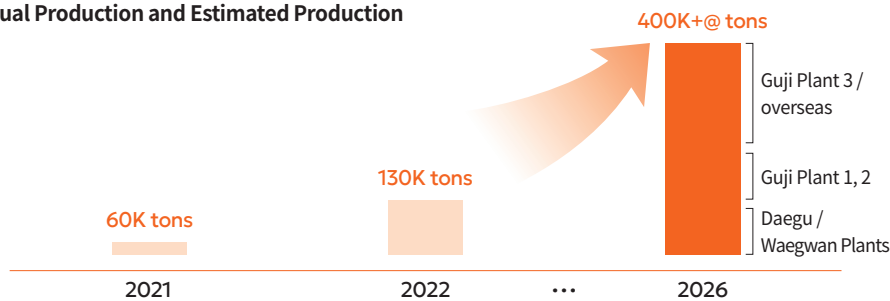
### Increasing Material Production Capacity

L&F has achieved a world-first breakthrough in mass-producing high-nickel NCMA cathode materials, which enable high-output and high-capacity batteries by raising the nickel content to 90%, compared to conventional cathode materials. To meet the growing demand for high-nickel NCMA cathode materials, which are mainly used for high-performance EVs, we are constantly increasing our production capacity by initiating the construction of our Guji Plant 3 following the completion of Guji Plant 2.



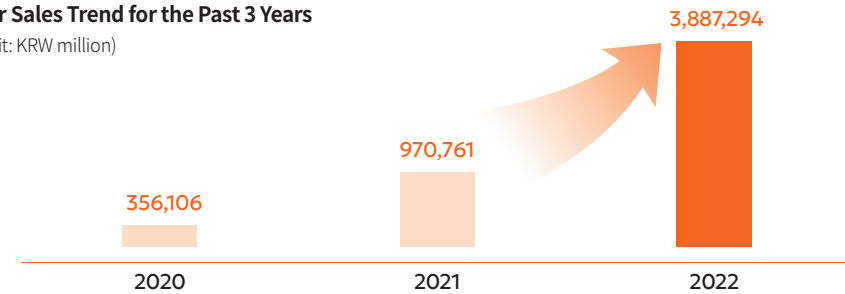
Rendered image of Guji Plant 3

### Annual Production and Estimated Production



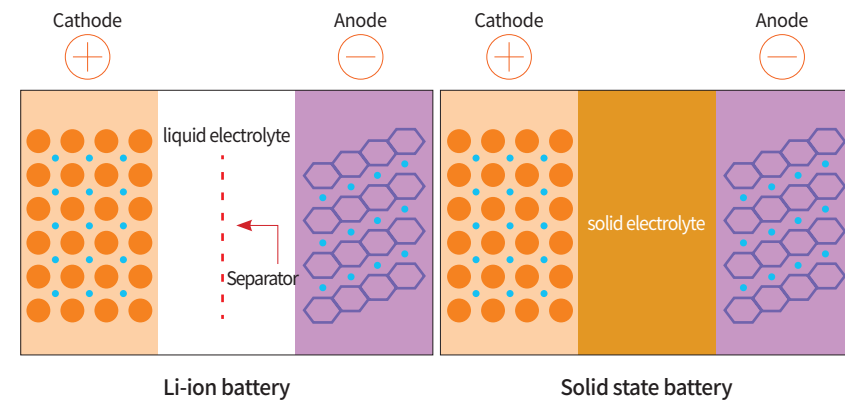
### Our Sales Trend for the Past 3 Years

(Unit: KRW million)



### Development of Next-generation Cathode Materials

The all-solid-state battery is a type of battery that uses solid electrolyte instead of liquid electrolyte solution in the lithium-ion battery. This offers the benefits of high power and high stability, but also poses several challenges for mass production and commercialization, due to slow lithium-ion transport, side reactions at the interfaces and lower conductivity. We are constantly engaged in research and development activities to overcome these challenges and to commercialize all-solid-state battery materials.

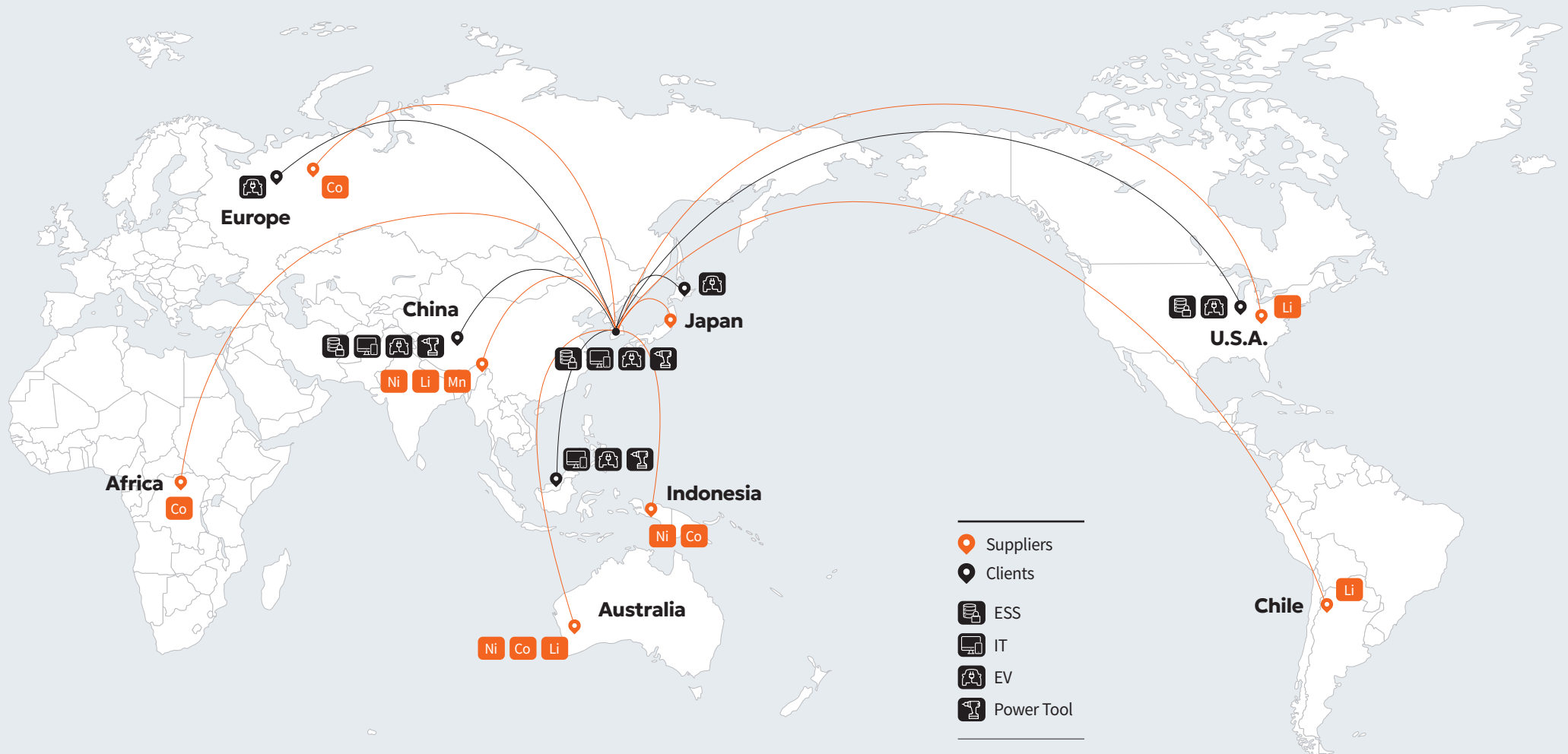


10 intellectual property rights registered

\*As of 2022

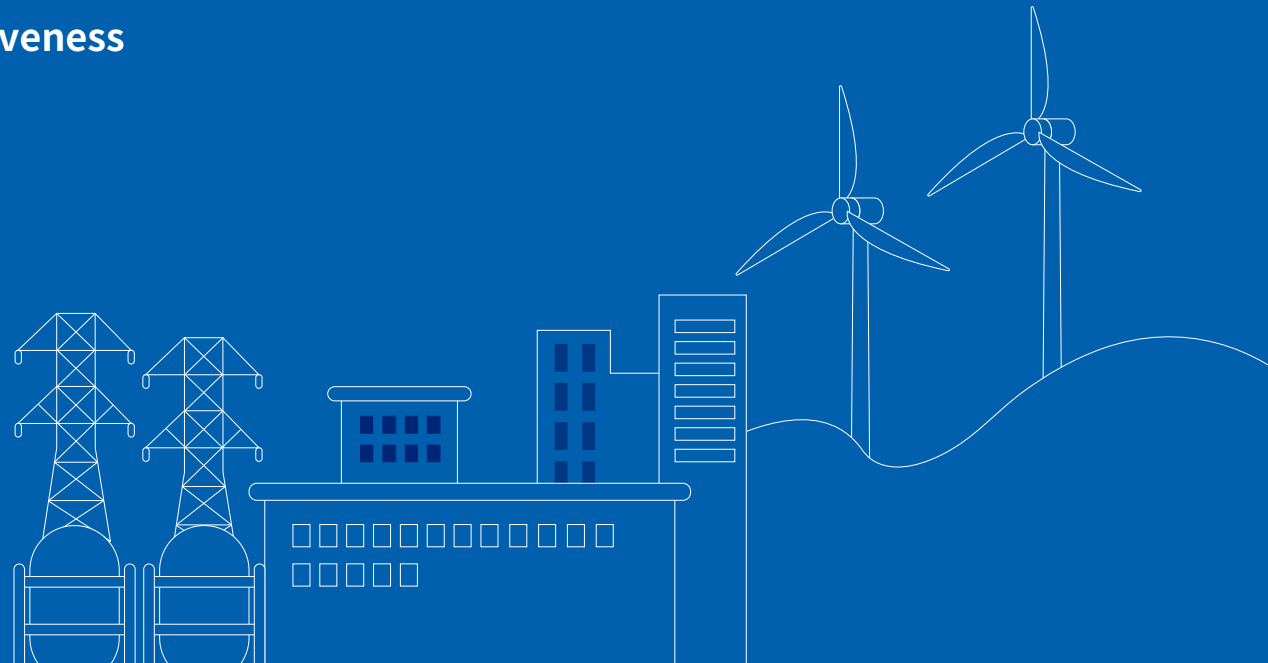
# Global Network

L&F is expanding its direct and indirect supply networks not only in Korea but also in various regions across the globe, such as North America, Europe, China, Japan and Southeast Asia. Leveraging the networks with diverse clients and partner companies, L&F is making a leap forward as a global company.



# Focus Area

- 14 ESG Strategy
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# ESG Strategy

L&F has adopted ‘We INNOVATE materials for green energy’ as its ESG vision to become a global company that fosters a sustainable future based on its accomplishments in the eco-friendly energy materials industry. This vision reflects our commitment to creating green energy and achieving a sustainable future through innovation in the materials industry. Based on the keyword ‘INNOVATE’, we established eight strategic directions and identified 11 key tasks to pursue them.



Strategic Directions	I	N	N	O	V	A	T	E
	Improving resource efficiency	Net zero transition	New ideas towards zero pollution	Outstanding product quality	Value of mutual growth	Accountability for employees	Transparent governance	Enhance compliance
Key Tasks	Improve the efficiency of resource use and elevate value	Make all-out efforts to combat climate change	Reinforce the management of pollutants and hazardous substances	Sharpen quality-based product competitiveness	Establish the ESG management system for supply chain Seek for the mutual growth with local communities	Respect employees and develop their capabilities Spread a culture of safety and security	Build a decision-making structure that takes ESG into account Embed ethical management into every corner	Step up compliance

# Double Materiality Assessment

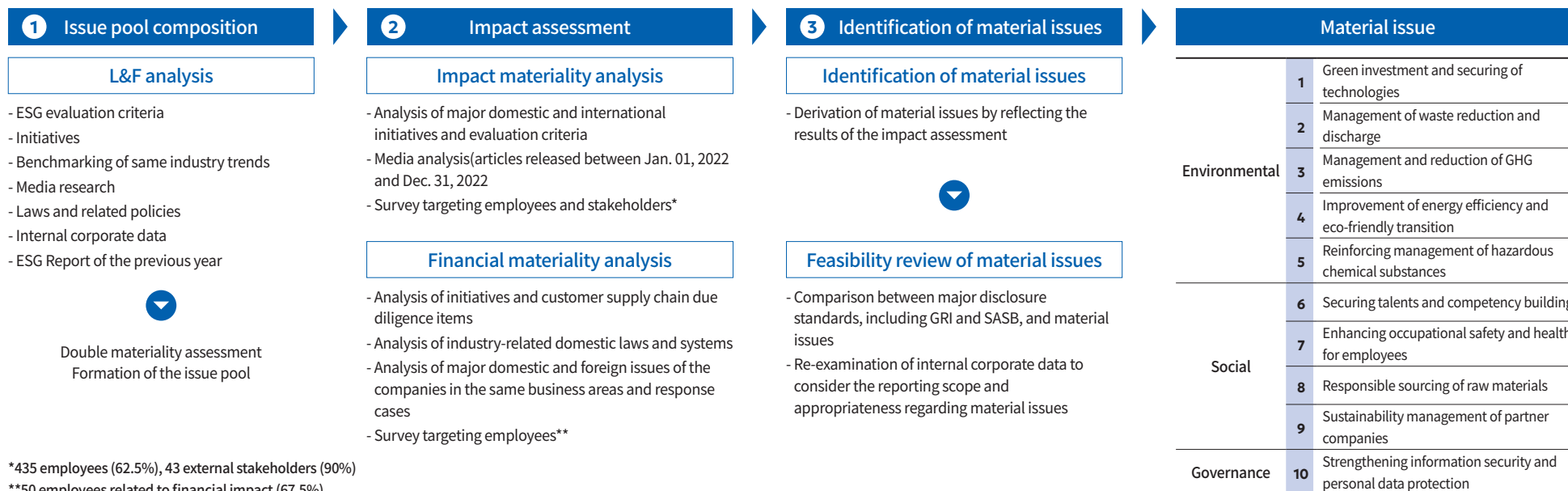
We conducted a double materiality assessment to identify and select the issues that require our focused management in the future and to determine the reporting content of our 2022 ESG Report. This analysis enabled us to select material issues by considering both environmental and social implications as well as corporate financial perspectives.

We applied the GRI's reporting content determination process to conduct the double materiality assessment on L&F. We evaluated the environmental and social impact and the corporate (financial) impact through various processes, such as analyzing global disclosure standards and indicators, reviewing laws, systems, regulations, and related policies, examining domestic and international trends in the same industry, analyzing media reports in the base year, and conducting surveys of employees and stakeholders.

Through the double materiality assessment, we identified 10 material issues that are relevant to our business and stakeholders. We disclosed our activities and performance related to these salient issues in detail in our ESG Report.



## Double Materiality Assessment Process



\*435 employees (62.5%), 43 external stakeholders (90%)

\*\*50 employees related to financial impact (67.5%)

# Double Materiality Assessment

We introduce the material issues of L&F that we selected through the double materiality assessment as below. For each material issue, we measured the impact of our business activities and sustainability management activities on the environment and society as well as the impact on our corporate finance. We also disclose our response to each issue and the changes in material issues compared to the previous year.

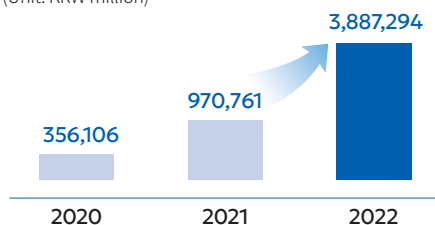
Category	No.	Material issue	Definition	Impact materiality	Financial materiality	Our response	Changes from the previous year	Page
Environmental	1	<b>Green investment and securing of technologies</b>	Development of green products and services, process technology, etc.	●●●○	●●●●○	- Expanded R&D organization and facilities, allocating more budget - Developed new products and processes focusing on green aspects	- Developing new battery material technology - Improving the waste recycling process	32-34
	2	<b>Management of waste reduction and discharge</b>	Control of waste reduction and discharge, Establishment of recycling and resource circulation system	●●●●○	●●●●●	- Operated waste reduction management system - Implemented raw material recycling through process improvement - Promoted waste battery recycling business	- Same as the material issues of the previous year	31-32, 52
	3	<b>Management and reduction of GHG emissions</b>	GHG emission measurement, reduction strategy and implementation of it	●●●●○	●●●●○	- Measured GHG emissions at all business sites - Established a mid- to long-term strategy for carbon neutrality	- Declaring carbon neutrality and establishing related strategies	28-30, 48
	4	<b>Improvement of energy efficiency and eco-friendly transition</b>	Energy efficiency improvement, Conversion to renewable energy	●●●●○	●●●○	- Conducted energy saving campaigns - Established new and renewable energy conversion strategy	- Changing the basic direction of energy conversion to new and renewable energy, going beyond mere energy reduction	28-30, 48
	5	<b>Reinforcing management of hazardous chemical substances</b>	Establishment of chemical substance management system, accident prevention and response	●●●○	●●●●○	- Revised chemical substance management regulations - Set hazardous chemical management guidelines and providing related training	- Same as the material issues of the previous year	21-24, 49-50
Social	6	<b>Securing talents and competency building</b>	Talent recruitment and management, Competency development, Organizational culture	●●●●	●●●●○	- Recruited outstanding talents, particularly local talents - Enhanced employee training and welfare benefits	- Reflecting the significance of talent securing and competency building due to rapid growth	64-66
	7	<b>Enhancing occupational safety and health for employees</b>	Occupational safety and health policy and protocol operation	●●●●○	●●●●	- Implemented ISO certification process related to occupational safety and health - Operated the organization for responding to the Serious Accident Punishment Act	- Same as the material issues of the previous year	21-24, 69-70
	8	<b>Responsible sourcing of raw materials</b>	Response to conflict mineral issues, Responsible raw material procurement system	●●●○	●●●●●	- Joined the Responsible Cobalt Initiative(RCI) - Conducted evaluations of key partner companies in mineral procurement	- Emphasizing the active response to the strong demand for supply chain management from customers and initiatives	25-26, 38-40, 60
	9	<b>Sustainability management of partner companies</b>	Customer supply chain management, Supplier ESG issue management	●●●○	●●●○	- Used sustainability evaluation indicators on partner companies - Conducted evaluations of key partner companies		38-40, 59-60
Governance	10	<b>Strengthening information security and personal data protection</b>	Protection of industrial information and stakeholder data	●●●●○	●●●●	- Organized information security and accident response systems - Obtained the related certification(ISO 27001)	- Same as the material issues of the previous year	41-43, 87-88

# ESG Highlights

## Economic

### Maintenance of Robust Sales Growth

(Unit: KRW million)



By 2022, our sales reached KRW 3.8 trillion, marking a remarkable about 300% growth compared to the previous year.

### Capability Enhancement for Mass Production



The successful completion of Guji Plant 2 in August 2022 has significantly enhanced our capacity for mass production.

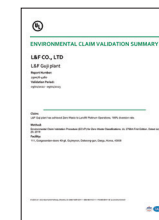
## Environmental

### Outstanding Company in Resource Circulation



In September 2022, we were chosen as a premier resource circulation company and were honored with the Prime Minister Award for our achievements.

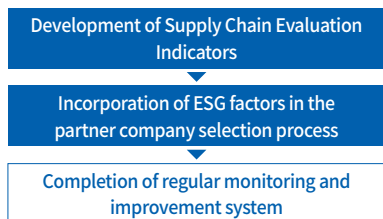
### ZWTL Validation



In September 2022, we obtained the platinum Zero Waste To Landfill(ZWTL) validation

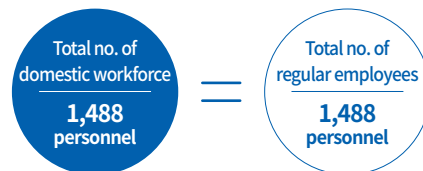
## Social

### Establishment of Supply Chain Evaluation System



Commencing with the formulation of supply chain evaluation indicators, we are currently in the process of establishing a comprehensive supply chain evaluation system.

### Full Regular Employment



With a 100% regular employee composition, we guarantee secure working conditions for the entire workforce.

## Governance

### ESG Organizational Structure



We have set up an organization responsible for ESG affairs within the Strategy Planning Division to oversee the ESG management system and its integration into our business operations. These units are staffed with skilled professionals equipped with both capabilities and experience.

# Focus 1

## Build a Sustainable Management System

In 2022, L&F published its first '2021 ESG Report,' outlining its mission, vision, and ESG strategic framework. Concurrently, we initiated endeavors to establish a systematic approach for sustainable management, including step by step plans and the setup of relevant working groups, all aimed at enhancing our sustainable management. Currently, we are in the process of building ESG governance to build trust among stakeholders. In pursuit of this, we are refining our occupational safety, health, and environmental management system, continuously obtaining and renewing relevant certifications. Notably, we are integrating ESG into our business operations while enhancing communication with stakeholders, designing processes to uphold human rights, and managing impacts.



Relevant material issue

- 5** Reinforcing management of hazardous chemical substances
- 7** Enhancing occupational safety and health for employees
- 8** Responsible sourcing of raw materials
- 9** Sustainability management of partner companies



# Plan 1. Building Trustworthy ESG Governance



In 2022, L&F marked the inception of its ESG management system. ESG management has evolved into an undeniable trend that significantly influences not only the company’s long-term sustainability but also its immediate financial performance. Effective ESG management serves as a cornerstone for sustained, long-term value creation, going beyond risk mitigation. Against this backdrop, a growing number of investors have set rigorous benchmarks for ESG management evaluation. To embed ESG management into our mid- to long-term strategies, we have initiated the establishment of robust ESG governance. Building upon ESG strategy that was introduced last year, we are organizing working groups and forging a framework for collaboration while restructuring the Board of Directors(BOD). We are presently in the process of developing and executing plans, progressing towards the final phase of complete ESG management integration.



## STEP 1

Recognize the need and draw up a plan

### Develop plans for governance composition based on ESG strategies

Establish company-wide ESG strategies, and formulate action plans, and form a dedicated organization for building governance

- Composition and activities of ESG Task Force Team → promote the organization into a permanent position later
- Develop company-wide ESG strategies, complete with a roadmap and action plans for each stage
- Disclose non-financial data through the publication of ESG reports

Establish company-wide ESG strategies and disclose related data

## STEP 2

Build an ESG governance structure

### Revamp the Board of Directors’ organizational structure and build a framework for collaboration

Organize an ESG Committee and other governance structures  
Organization responsible ESG affairs – platform for collaboration with other departments

- Create an ESG Committee and other committees under the Board of Directors
- Define R&R of the dedicated organization for ESG management and forge a collaborative platform among departments
- Regularly formulate and implement improvement plans to gear up for external ESG assessments

Build an ESG governance structure and form working groups under the supervision of the Board of Directors

## STEP 3

Embed ESG management into our management

### Incorporate ESG management into every aspect of our management

Integrate ESG elements into our business strategies and operations  
Employees’ profound understanding on ESG management and awareness of its significance

- Take ESG elements into account when making key decisions at the board
- Incorporate ESG elements into our operational processes at the management level, such as when signing purchase contracts with suppliers or conducting personnel assessments
- Incorporate ESG elements into KPIs for the company and departments

Incorporate ESG elements into management process

# Plan 1. Building Trustworthy ESG Governance

## Establishing ESG Committee

Expanding from our previous ESG Task Force Team, we have organized an ESG Management Team, aimed at advancing a transparent and reliable ESG governance structure. Building on this foundation, our plan includes establishing an ESG Committee in the latter half of 2023. Additionally, we are in the process of creating an Independent Director Recommendation Committee, which will facilitate a transparent process for recommending and appointing independent directors equipped with expertise and impartiality. As we integrate the three new committees into the BOD, we will develop specific operational guidelines for each, defining their roles and authorities. These guidelines will ensure expertise, independence, and the effective decision-making process within each committee, which will ultimately contribute to fostering a transparent and trustworthy ESG governance structure.

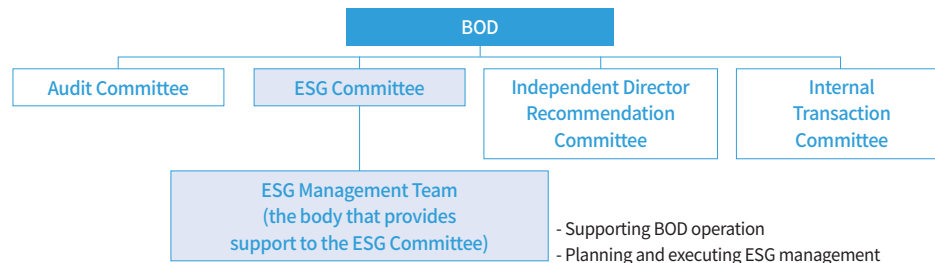
## Organizations Responsible for ESG Management



The ESG TF, previously responsible for formulating ESG strategies and overseeing environment, social, and governance aspects, has evolved into the ESG Management Team with greater authority and broader responsibilities. As of January 2023, the ESG Management Team, a specialized and dedicated unit, officially assumed its responsibilities.

The ESG Management Team is entrusted with supervising all decision-making processes pertaining to ESG. This team manages a diverse array of responsibilities, spanning from the comprehensive management of ESG data throughout the organization, disclosing non-financial information, assessing the sustainability of partner companies, formulating strategies for climate action, evaluating the status of ethical and compliance management, and orchestrating responses to external evaluations. Through all of our combined efforts, our team's ultimate goal is to elevate our sustainability to new heights.

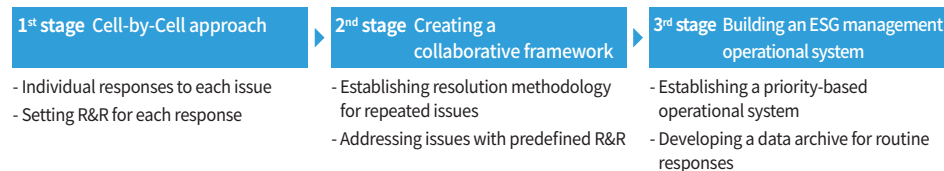
## Board Restructuring Plan in 2023



## Inter-departmental Collaborative Framework



## Stage of Establishing ESG Management Operational System



The foundation of ESG management is rooted in the coordination and collaboration among relevant departments. Currently, as we are in the process of establishing the ESG management framework, making cooperative responses to find solutions to problems. Through the standardization of collaborative approaches for recurring issues, considering their significance, we are committed to gradually crafting a tailored ESG management operational system that meets our specific needs.

## Plan 2. Refining Safety, Health, and Environmental Management System



5 Reinforcing management of hazardous chemical substances 7 Enhancing occupational safety and health for employees

The ISO 14001 certification outlines the criteria for a robust environmental management system, ensuring that businesses effectively manage their environmental responsibilities and continually elevate their environmental performance. Fundamental to this certification is the validation of whether a company has successfully established an internal framework for managing environmental policies, which includes setting and achieving environmental objectives, measuring outcomes, and strategizing improvements. L&F, committed to these ideals, secured its Environmental Safety Management System ISO 14001 certification in 2007 and has diligently maintained its certification status. Beginning in 2018, L&F also achieved the Occupational Health and Safety Management System ISO 45001 certification. This certification prescribes the prerequisites for preemptively identifying and mitigating various potential risks within an operational environment, aiming to systematically manage an organization’s health and safety concerns. L&F has been tenaciously refining its environmental safety and occupational health and safety management systems, capitalizing on insights gained during the ISO 14001 and ISO 45001 certification processes. Moving forward, L&F is poised to fortify its integration with the overarching sustainable management infrastructure of the organization.



### STEP 1

Recognize the need and formulate plans

#### Establish a system required to obtain certifications

Check requirements for obtaining certifications, and build related systems and necessary procedures

- Ensure management’s commitment to obtaining certifications and integrate them into our business objectives
- Establish the necessary processes for certification acquisition
- Draw up guidelines on process-specific measurement, inspection, and improvement

Develop necessary processes and draw up guidelines

### STEP 2

Perform regular monitoring and implement improvements

#### Improve relevant processes to ensure efficient system operation

Keep track of certification requirements - supplement the system operation process

- Establish a cyclical system that includes the identification of issues for the efficient operation and enhancement of the system, as well as monitoring and improvement
- Put the process into operation that includes restructuring and documentation

Enhance the process for occupational safety and health to renew relevant certifications

### STEP 3

Integrate sustainable management systems

#### Make the most of the framework for acquiring certifications

Transition to a sustainable management system built on the framework for certification acquisition

- Establish sustainable management systems over the area of environment and safety based on the systems and frameworks established for obtaining certifications
- Incorporate performance measurement methodologies and improvement processes

Grasp the parallels between certification requirements and ESG assessment indicators

## Plan 2. Refining Safety, Health, and Environmental Management System

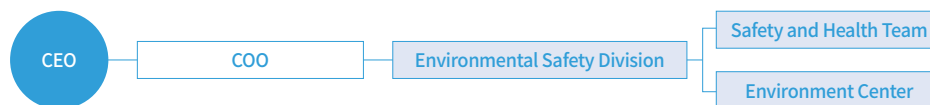
### Safety, Health, Environment Management System

We have established three key policies for safety and environmental management: ‘Zero Accidents’, which focuses on preventing serious accidents and other workplace disasters; ‘System Establishment’, which encourages employees to voluntarily comply with laws and regulations; and ‘Green Management’, which aims to minimize environmental pollution and enhance resource recycling. In line with these policies, we have implemented a management system for safety, health, and the environment, adhering to ISO 14001 and ISO 45001 standards. Furthermore, we are making comprehensive efforts to reduce the risk of accidents, including regular monitoring of contaminants, occupational safety and health assessments, stakeholder communication, and training.



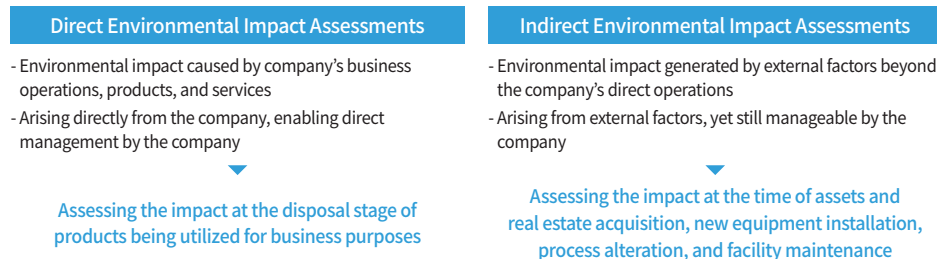
### Organization Restructuring

We have established an Environmental Safety Division, which consists of the Environment Center and the Safety and Health Team, under the supervision of the CEO and COO. For each plant, we have set up dedicated departments responsible for environmental and health and safety matters, ensuring the site-specific safety, health, and environmental management system. Each department is comprehensively managed according to the ISO 14001 and ISO 45001 standards. We are committed to creating a secure working environment that meets both domestic and international standards with a primary goal of fostering eco-friendly workplaces while minimizing environmental impact.



### Environmental Impact Assessment

L&F conducts the monitoring on waste and pollutants to mitigate its environmental footprint within the production processes. Each plant operates in strict adherence to regulations, obtaining prior approvals from relevant governmental bodies. This includes acquiring licenses for handling hazardous chemicals, setting up wastewater discharge facilities, and reporting waste-related issues. Moreover, we conduct environmental impact assessments to ensure appropriate management of waste generated during production. These assessments are conducted regularly every three years. Throughout the product development phase, we consistently create environmental evaluation standard tables. We carry out both direct and indirect environmental impact assessments, enabling us to take measures that minimize environmental impact in waste treatment.

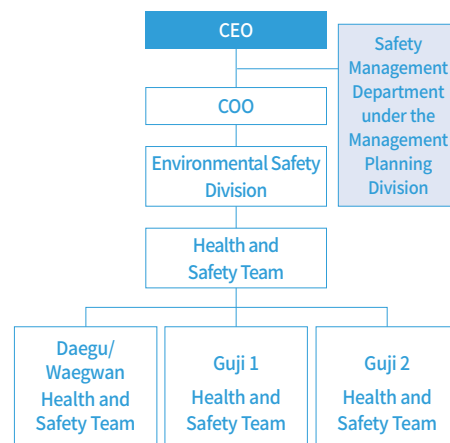


## Plan 2. Refining Safety, Health, and Environmental Management System

### New Organization Dealing with the Serious Accident Punishment Act

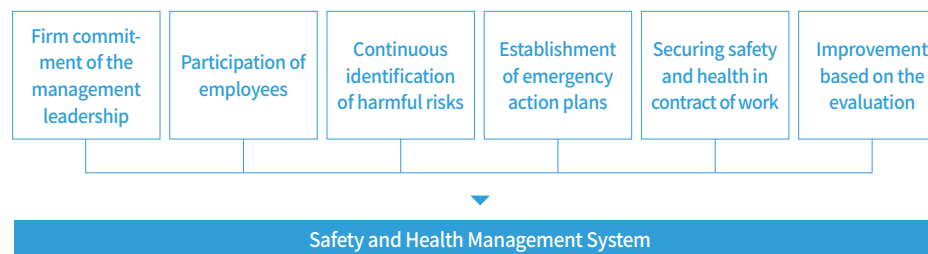
In response to the enactment of the Serious Accident Punishment Act and the broadening scope of ESG management, we have established a new organizational entity, the Safety Management Department, operating under the Management Planning Division. Alongside this, we've maintained Health and Safety Teams within the Environmental Safety Division. The Safety Management Department assumes a pivotal role in formulating safety and health initiatives. These encompass risk assessment, occupational safety and health training, oversight of subcontracted and external workers' safety, and the conduct of routine and special inspections.

Organizational Structure of Health and Safety Sector



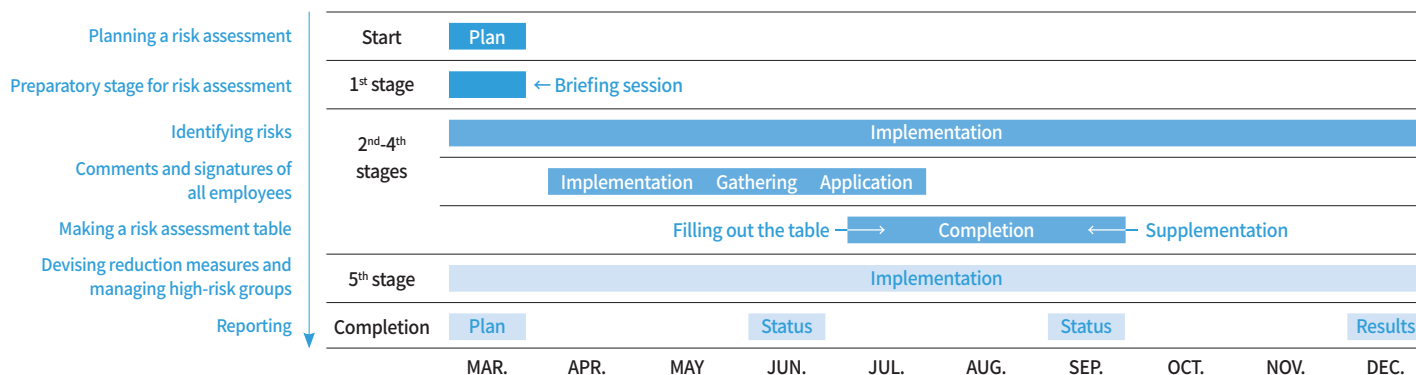
### Safety and Health Management System

With a focus on the continual identification and mitigation of hazardous risk factors, we have implemented a safety and health management system. Our proactive measures go beyond the requirements stipulated by the Industrial Safety and Health Act and related regulations, ensuring the safety and well-being of our employees. We are fully committed to adhering to the seven key elements integral to the operation of our safety and health management system.



### Risk Assessment System

Every year, we conduct risk assessments to proactively identify and address potential hazards within the working environment of our employees. Across all departments, workers, management supervisors, and Safety Officers from the Health and Safety Team carry out these assessments. The Chief Safety Officer(CSO) oversees the risk assessment process. Upon identifying hazards during the risk assessment, we initiate necessary corrective measures. The year-end risk assessment results and improvement outcomes are incorporated into the implementation of the safety, health, and environmental management system in the upcoming year.



### Risk Assessment Results and Improvement Outcomes in 2022

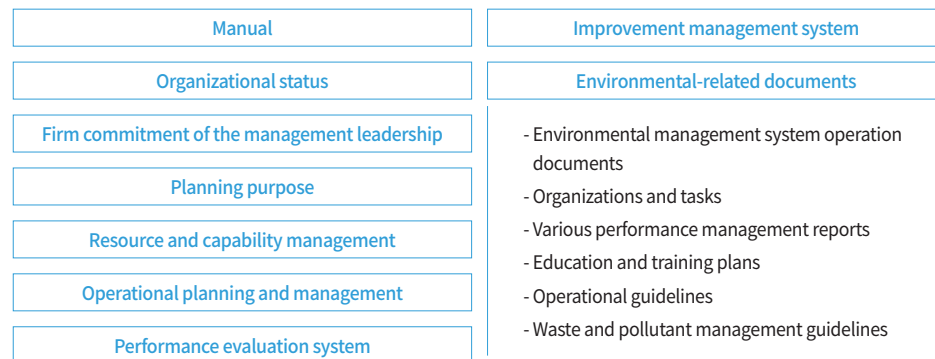
Category	Identified risks	Addressed risks	Resolution rate
Daegu Plant	40	40	100%
Waegwan Plant	36	36	100%
Guji Plant 1	47	47	100%
Guji Plant 2	33	33	100%
R&D Center	19	19	100%
Headquarters	7	7	100%
<b>Total</b>	<b>182</b>	<b>182</b>	<b>100%</b>

## Plan 2. Refining Safety, Health, and Environmental Management System

### Environmental Management System

Since 2007, we have obtained ISO 14001 certification, and by the first half of 2023, we successfully renewed certifications for all our business sites. We have undergone a verification process that confirms our resolute management commitment, including manual creation, performance assessments and improvements, and documentation processes. This consistent certification renewals underscores our unwavering dedication to upholding these standards.

#### ISO 14001 Verification Process



Verification



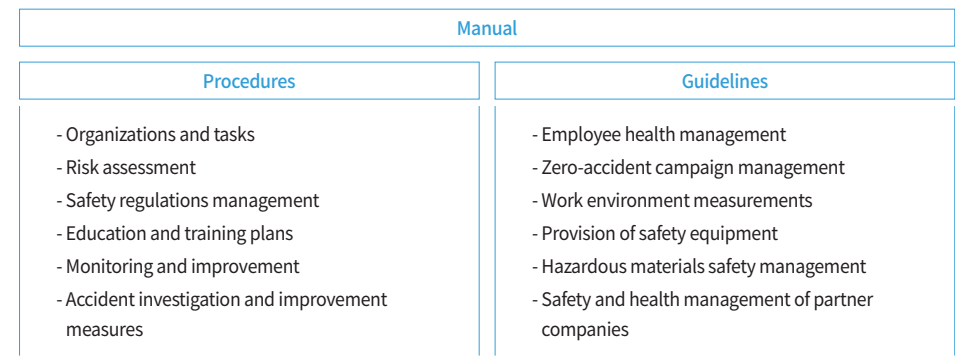
Obtaining ISO 14001 certification



### Occupational Health and Safety Management System

ISO 45001 certification is an international standard that involves anticipating and preventing various risks within a workplace, enabling systematic management of the health and safety of employees. Since 2018, we have successfully obtained and renewed ISO 45001 certification by verifying our occupational health and safety management systems.

#### ISO 45001 Verification Process



Verification



Obtaining ISO 45001 certification



# Plan 3. Upholding Human Rights of Stakeholders



8 Responsible sourcing of raw materials 9 Sustainability management of partner companies

Respecting stakeholders is crucial for managing a company’s reputation effectively. It should be the first step in establishing a process for identifying and mitigating potential risks related to stakeholders. Importantly, our key clients’ demand for human rights impact assessments, aligned with their supply chain management policies, has amplified its importance. In 2018, we unveiled our comprehensive global human rights and labor policy. This policy assures humane treatment, bans forced and child labor, combats discrimination, ensures adherence to working hours, guarantees fair wages and benefits, and upholds employees’ freedom of association. We transparently shared this policy with both our customers and partners. Building on this foundation, we are set to establish policies that uphold stakeholder rights. The key points underscored in our global human rights and labor policy have been ingrained into our internal procedures. Ultimately, our commitment extends to conducting regular human rights impact assessments and embedding the principles of respecting human rights within our management framework.



## STEP 1

**Acknowledge the importance of managing human rights and make a public declaration**

**Declare the beginning of human rights management and share our relevant policies with external stakeholders**

Declare our endorsement for international human rights initiatives and communicate our human rights management policies to both external and internal stakeholders

- Define the boundaries of our human rights management policies, including employees, the supply chain, and stakeholders
- Put in place channels for engaging with stakeholders for communication
- Formulate long-term objectives for human rights management and make them public

Disclose our global human rights and labor policy

## STEP 2

**Identify internal risk factors and respond to them**

**Identify human rights-related risk elements and establish a system to deal with them**

Establish protocols for the issues highlighted in the human rights management policy

- Integrate the key aspects of our human rights management policy into our business management system
- Offer educational programs to enhance awareness and understanding of human rights management
- Implement a mechanism for addressing employee grievances

Educate employees on human rights management and operate a grievance handling system

## STEP 3

**Embed human rights management into our management system**

**Conduct regular human rights impact assessments**

Develop and operate a human rights impact assessment system aligned with our human rights management policy

- Extend the reach of our human rights management policy to include the supply chain and stakeholders
- Identify potential human rights-related risks and their impacts
- Prioritize risks that require improvement, and design and implement a monitoring system

Operate a human rights impact assessment system

## Plan 3. Upholding Human Rights of Stakeholders

### Human Rights Policy

L&F has declared its support for the UN Universal Declaration of Human Rights and the UN Guiding Principles on Business and Human Rights. Additionally, we endorse and adhere to relevant international standards, including the UN Global Compact’s Principles for Business and Human Rights and Conventions by the International Labour Organization.

### Key Endorsement Regulations on Human Rights



UN Universal Declaration of Human Rights



UN Guiding Principles on Business and Human Rights



Conventions by the International Labour Organization

### Seven Key Elements of Global Human Rights and Labor Policy

In accordance with our commitment to respecting human rights of stakeholders, we have unveiled our global human rights and labor policy. Furthermore, we comply with labor laws in all countries and regions where we operate. We aim to share our human rights and labor policy with stakeholders who are under the direct influence of our business activities, including employees, customers, and partners, by the declaration of the following seven key elements.

- 1 Humane treatment**
  - We respect all employees, eliminating inhumane treatment such as abusive language, psychological or physical coercion.
  - We create a safe and healthy working environment for our employees.

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- 2 Prohibition of forced labor**
  - We prohibit all forms of involuntary labor, including forced labor and restriction of psychological and physical freedom of employees.
  - We do not request the original copy of identification, passport, and work permits upon hiring.

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- 3 Prohibition of child labor**
  - We abide by local labor laws on minimum age of employment.
  - We prohibit the child labor below the age of 16.
  - We prohibit employees under the age of 18 from being involved in night shifts and overtime work.

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- 4 Non-discrimination**
  - We provide equal opportunities for hiring, promoting, remunerating, and training.
  - We strictly prohibit all forms of discrimination on the grounds of gender, age, race, religion, disability, marital status, pregnancy, labor union activities, and social status.
  - All workers write a contract that clearly states working conditions in their native language

- 5 Adherence to working hours**
  - We comply with local laws on working hours regarding regular/overtime hours and holidays.
  - We shall not force employees to work overtime.
  - Employees are to be paid based on labor laws when working overtime.

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- 6 Fair wages and benefits**
  - All employees are to be paid above minimum wage prescribed by local laws.
  - We provide welfare benefits in addition to wages to enable employees to lead a humane life.

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- 7 Freedom of association**
  - We respect the employee’s freedom of association and collective bargaining in accordance with local labor laws.
  - Employees can communicate with management regarding their working conditions without any fear of discrimination or retaliation.
  - We guarantee confidentiality and protection of whistleblowers.



# Focus 2

## Empower Green Management

Climate change poses a pressing threat, accelerating environmental degradation and giving rise to a string of natural disasters and hazards. In this context, businesses are called upon to minimize their environmental impact and mitigate carbon emissions. Moreover, they must build a circular resource system to tackle the challenge of resource scarcity, extending beyond mere waste reduction. Setting aside these endeavors, businesses also need to pursue continuous development. Built upon the commitment to its declaration of achieving carbon neutrality by 2050, L&F has crafted a comprehensive carbon neutrality roadmap, strategies for transition to renewable energy, and implementation plans. Additionally, we are establishing a circular resource system that goes beyond conventional waste reduction, encompassing the recovery of materials from wastewater for the reuse in production processes, thus creating added value. Our steadfast investments in eco-friendly technology development enable the realization of these initiatives, demonstrating our dedication to sustainable development.



UN SDGs



Relevant material issue

- 1** Green investment and securing of technologies
- 2** Management of waste reduction and discharge
- 3** Management and reduction of GHG emissions
- 4** Improvement of energy efficiency and eco-friendly transition

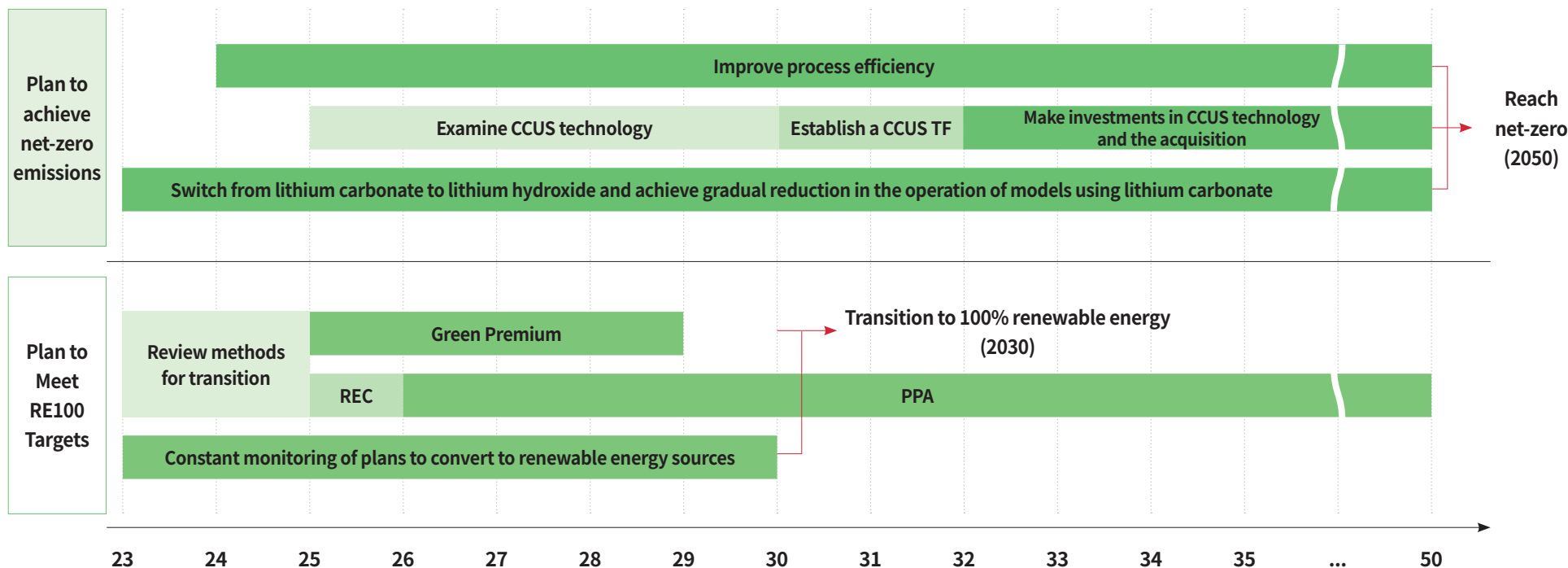
# Plan 1. Achieving Carbon Neutrality



3 Management and reduction of GHG emissions 4 Improvement of energy efficiency and eco-friendly transition

L&F has set targets for direct emissions(Scope 1) and indirect emissions(Scope 2) areas, aiming to achieve carbon neutrality by 2050 and RE100 target by 2030. We have developed a plan to reach net-zero by 2050, focusing on three main pillars: ① securing CCUS technology for carbon capture, utilization, and storage, ② improving process efficiency, and ③ replacing carbon-emitting materials. We are reviewing implementation plans to achieve the 2050 net-zero goal. As the 100% of indirect carbon emissions are generated from electricity production processes, we are striving to attain the RE100 target by 2030. To this end, we are conducting a comprehensive assessment of various renewable energy transition methods, including the introduction of Green Premium, REC, or PPA, considering their economic feasibility and efficiency.

## Net-Zero Plan



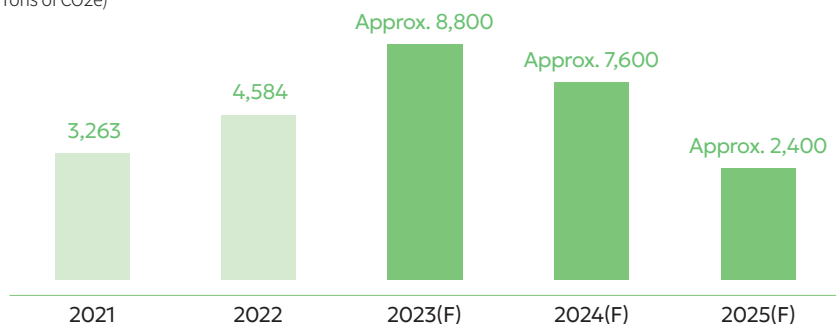
# Plan 1. Achieving Carbon Neutrality

## Direct Carbon Emissions

At L&F, most direct emissions are released from the consumption of lithium carbonate. Starting from 2023, we plan to gradually decrease the production volume of lithium carbonate model, thereby naturally reducing direct carbon emissions. It is anticipated that the direct carbon emissions for 2023 will be recorded at approximately 8,800 tons. However, we expect a continuous decrease in emissions from that point onwards, leading to an even lower carbon emissions figure in 2025 compared to the 2021 levels.

### Direct Emissions(Scope 1)

(Unit: Tons of CO<sub>2</sub>e)



### Reduction Plans for Direct Emissions(Scope 1)

We will lessen direct emissions in accordance with the step-by-step plans, focusing on three main pillars of securing CCUS technology, improving process efficiency, and replacing carbon-emitting materials.

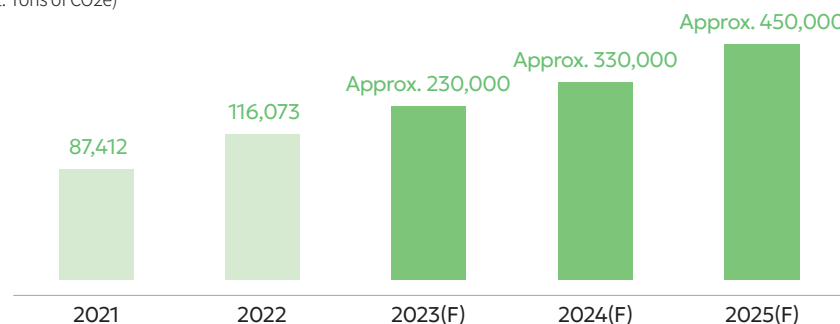
Securing CCUS technology	Improving process efficiency	Replacing carbon-emitting materials
Reviewing technology development	Establishing a responsible TF	Making efforts to replace Li <sub>2</sub> CO <sub>3</sub> with LiOH
Establishing a responsible TF		Decreasing the production volume of Li <sub>2</sub> CO <sub>3</sub> model
Investments in securing technology	Improving process efficiency	

## Indirect Carbon Emissions

With the rapid increase in production volume, we anticipate a corresponding rise in indirect carbon emissions. The power generation process is accountable for all(100%) of these emissions. Recognizing the transition to renewable energy as the most effective approach to mitigate indirect emissions, we have drawn up relevant implementation plans.

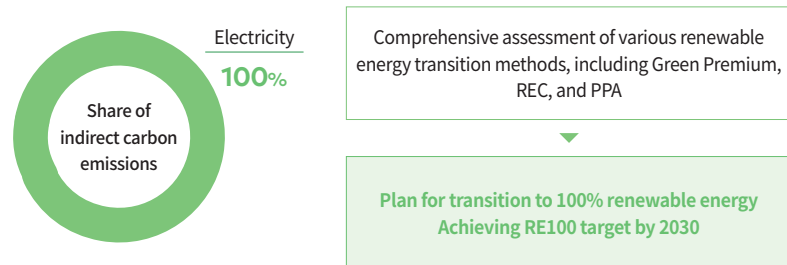
### Indirect Emissions(Scope 2)

(Unit: Tons of CO<sub>2</sub>e)



### Reduction Plans for Indirect Emissions(Scope 2)

L&F has set a target of meeting RE100 through the transition to 100% renewable energy sources. In pursuit of this goal, we have evaluated various strategies to ensure the most efficient conversion to renewable energy.



# Plan 1. Achieving Carbon Neutrality

## The details of Reduction Plans

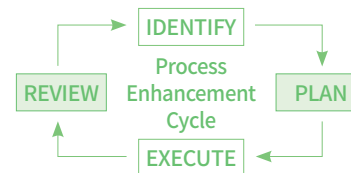
### Securing CCUS Technology



Carbon Capture Utilization and Storage(CCUS) is a technology that prevents the release of carbon dioxide into the atmosphere. With the declaration of the 2050 net-zero goal by various countries, including South Korea, the CCUS technology has come to the fore.

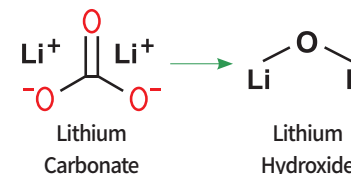
Starting from 2025, we will initiate a review for securing CCUS technology. In 2030, we plan to establish a responsible task force to carry out comprehensive preparatory work, followed by substantial investments in securing the related technology. Particularly, we will proceed with CCUS technology acquisition efforts in alignment with 2050 carbon neutrality roadmap presented by the government, considering participation in government-supported initiatives during this process.

### Improving Process Efficiency



By enhancing production and operational efficiency, and upgrading facilities, we aim to reduce both the time and carbon emissions.

### Replacing Carbon-emitting Materials



At L&F, the majority of our direct emissions come from the use of lithium carbonate. As a result, we have switched from lithium carbonate, which produces a large amount of emissions, to lithium hydroxide in order to gradually mitigate our carbon footprint.

### Economic Feasibility and Efficiency Assessment of Various Renewable Energy Transition Methods

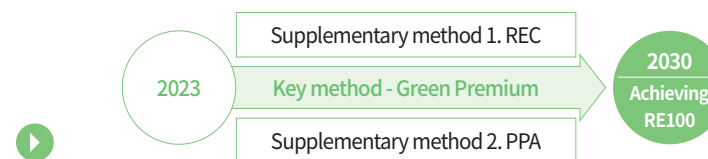
#### Price by Transition Method

(Unit: KRW)



Given the limitations within the domestic power generation industry, Green Premium, REC, and PPA are gaining significance as viable transition methods towards renewable energy. Accordingly, we are conducting economic feasibility and efficiency assessments of various renewable energy transition methods to identify the most efficient way to achieve our goal of 100% transition.

### Establishing Mid- to Long-Term Plan



We are in the process of establishing mid- to long-term plan for renewable energy transition. Currently, we are conducting multidimensional assessments of various renewable energy transition methods considering their economic feasibility and efficiency.

Direct Emissions

Indirect Emissions

## Plan 2. Minimizing Waste through the Establishment of a Circular Resource System



### 2 Management of waste reduction and discharge

In response to the challenges of resource scarcity, we are implementing a three-stage approach: ① waste reduction, ② establishment of a circular resource system, and ③ operation of circular economy businesses. L&F obtained the highest level of Zero Waste To Landfill (ZWTL) validation, known as the platinum grade, for the first time among rechargeable battery cathode materials providers. Beyond this achievement, we have made various process improvements to secure waste recycling technologies. This has led to significant outcomes, such as ① lithium extraction through complete reuse of wastewater, ② 89% reuse of hazardous waste (waste powder), and ③ recovering materials for artificial mineral fiber from recycling of waste sagger. Expanding upon the accomplishments of our circular resource system, we are propelling the development of new business ventures. As we strive to create a driving force for sustainable growth, we are venturing into the sector of recycling discarded batteries, which are gaining recognition as both a novel source of raw materials and a promising business opportunity.



### STEP 1

#### Mitigate waste generation

##### Formulate and implement a plan that encompasses the measurement, analysis, and reduction of waste

Measure the total amount of waste generated from procedures and other operations, and formulate reduction plans

- Develop techniques to quantify the total amount of waste produced by type
- Devise the most effective strategies for reducing waste by type
- Generate plans for waste reduction, tailored to each process

Acquire Zero Waste To Landfill validation

### STEP 2

#### Secure waste recycling technology

##### Acquire a variety of technologies for waste recycling

Analyze waste types and total waste generation to develop a plan to secure relevant technologies to reuse them in the process

- Separate recyclable waste existing waste
- Evaluate the economic viability of recycled raw materials compared to existing ones
- Understand the efficiency status of processes that reuse recycled raw materials

Enhance the process and introduce raw material recycling technology

### STEP 3

#### Run a resource circulation business

##### Develop a business model for resource circulation

Improve process efficiency and profitability, and explore new markets and attract customers through recycling initiatives

- Secure technologies related to the extraction of cathode materials and recycling processes, which include discharge, crushing and grinding, and high-temperature molten reduction.
- Concluding partnerships to secure additional recycled sources of raw materials

Operate a cathode material recycling business

## Plan 2. Minimizing Waste through the Establishment of a Circular Resource System

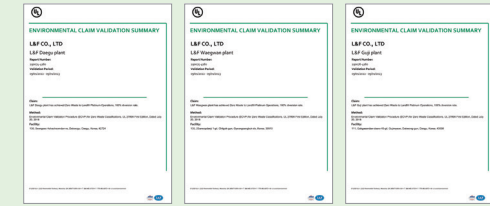
### STEP 1

#### Making Tangible Progress in the Waste Management Sector

L&F has been making efforts to minimize the impact on the environment by reducing waste emissions and implementing recycling improvement activities. As a result, all three of our business sites in Guji Plant 1, Daegu Plant, and Waegwan Plant obtained the highest level of Zero Waste To Landfill(ZWTL), the platinum grade validation by UL Solutions, the global leader in the applied safety science sector.

#### Zero Waste To Landfill(ZWTL)

ZWTL stands for Zero Waste To Landfill, which is a certification system evaluating a company's resource recycling efforts. Companies are categorized into Silver(90-94%), Gold(95-99%), and Platinum(100%) grades based on the proportion of recycled waste that would have otherwise been sent to landfills. We are proud to announce that we are the first company in the rechargeable battery cathode materials production industry to achieve the platinum validation.

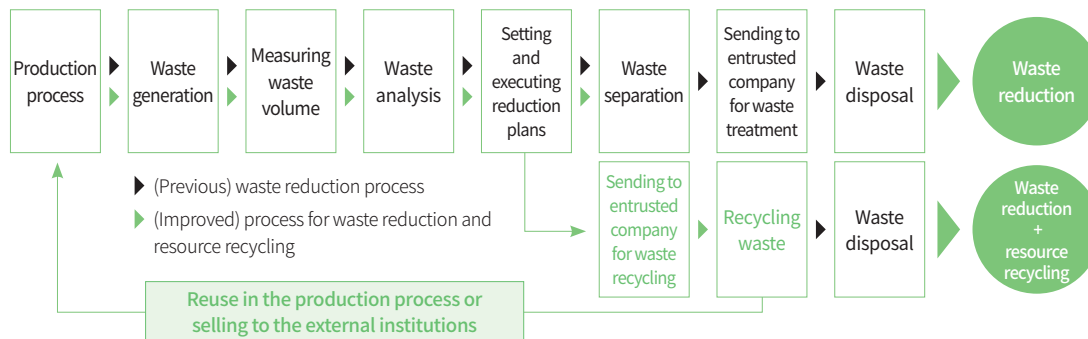


ZWTL Validation for Guji Plant 1, Daegu Plant and Waegwan Plant



### STEP 2

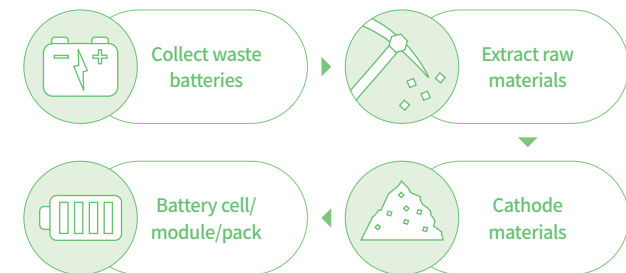
#### Process Enhancement for Resource Recycling



L&F has developed a recycling process that involves extracting materials from various waste generated during production and reintroducing them into the manufacturing process. This initiative not only curtails waste disposal but also establishes a circular resource system, enabling the internal supply of some key materials. In the washing processes designed to enhance purity by removing impurities from cathode materials, effluent is generated containing lithium. We recover this lithium from the wastewater, reusing it within the process or selling it externally to generate additional revenue.

### STEP 3

#### Embarking on the Used Battery Recycling Business



Leveraging achievements of our circular resource system, we are driving new business ventures. We are making inroads into the sector of recycling discarded batteries, with close cooperation with various partners. We explore a wide range of collaborative initiatives such as material supply and establishing joint ventures.

# Plan 3. Securing a Future Growth Engine through Eco-Friendly Technology Advancement



## 1 Green investment and securing of technologies

Technology research and development are integral parts of a company’s operations and fundamental elements for sustainable growth. Given the promising growth potential of the rechargeable battery materials industry, technological advancement is pivotal. With growing concerns about various environmental impacts during the production of cells for eco-friendly secondary batteries, the tasks of ‘minimizing environmental impact’ have gained additional prominence on top of ‘excellent product development’. We are acknowledged for our exceptional technical expertise in the field of rechargeable battery cathode materials, having successfully achieved the world’s first mass production of high-nickel cathode materials. In our pursuit of developing superior yet environmentally friendly products, we operate research centers. Through consistent efforts in eco-friendly research and development, we strive to simultaneously accomplish the goals of ‘reducing environmental impact’ and ‘securing growth momentum.’



### STEP 1

Analyze the environmental impact of the existing process

**Develop and implement a strategy to assess, evaluate, and reduce our environmental footprint**

Assess the environmental impact of the current process for cathode materials and other procedures, and devise a plan for reduction

- Perform Life Cycle Assessments(LCAs)
- Create a plan to quantify waste by process, GHG emissions, and other environmental impacts
- Formulate a plan to mitigate the environmental impact of each process

Conduct LCAs and environmental impact assessments → enhance the current process

### STEP 2

Replace raw materials and develop recycling technologies

**Substitute lithium-based materials and recycle existing resources**

Formulate technologies and processes for substituting and recycling raw materials to significantly diminish our environmental footprint

- Develop technologies capable of replacing lithium-based raw materials(lithium carbonate → lithium hydroxide)
- Develop technologies to recycle raw materials

Develop new processes to replace and recycle raw materials

### STEP 3

Build a Closed-Loop Value Chain

**Conduct R&D activities to establish a virtuous cycle for circulation**

Forge a system for battery resource circulation(Closed-Loop) and develop necessary technologies for its commercialization

- Construct a circular system that facilitates the recycling of raw materials from the existing process of raw materials, precursor cathode material, battery, and end user
- Develop eco-friendly technologies that can be applied throughout the entire circulation cycle

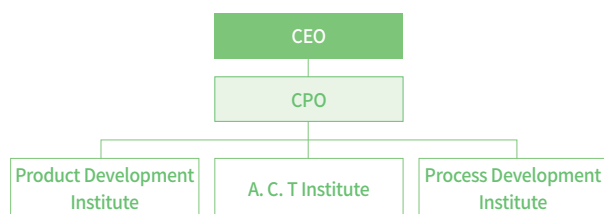
Devise and execute a plan for research and development on the sustainable cycle, stage by stage

## Plan 3. Securing a Future Growth Engine through Eco-Friendly Technology Advancement

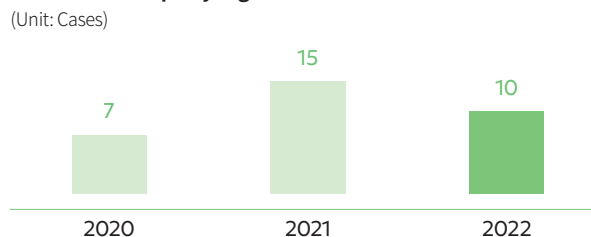
### R&D Organizations

L&F has established three specialized research institutes focused on the development of eco-friendly technologies, overseen by the CPO. These organizations are the Product Development Institute, Advanced and Core Technology Institute, and Process Development Institute. Our research and development efforts span a wide range of areas, including the development of highly efficient cathode materials, next-generation cathode technologies, and methods for eco-friendly production and resource circular systems. We consistently allocate increased annual R&D expenditures to provide comprehensive support for our R&D personnel.

#### R&D Organizational Structure



#### Intellectual Property Rights Owned



#### Investments in R&D

(Unit: KRW million)

Category	2020	2021	2022
Total R&D investments	11,960	12,168	33,592
Governmental subsidies	1,678	1,764	1,257
R&D investments / Sales	3%	1%	1%

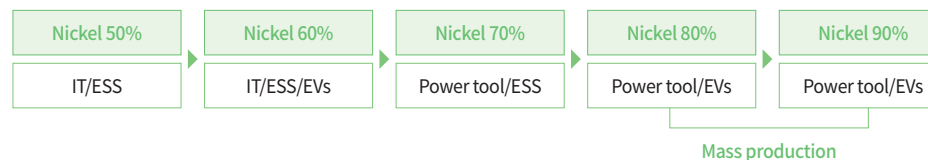
### Promoting Green Technology Development Projects

Apart from our ongoing efforts in new product development, we are also dedicated to advancing recycling technologies. With the integration of initiatives like establishing a circular resource system and recycling discarded batteries within our key research and development projects, we have witnessed a consistent rise in the prominence of these relevant research areas.

Goal	Technology	Status
New product development	- Development of high-safety single-crystal materials	In progress
	- Development of cobalt-reduced NCM	In progress
	- Development of cobalt-free materials	In progress
	- Development of xEV cathode materials based on High BET	Completed
	- Development of high-performance cathode electrode manufacturing technology of 6mAh/cm <sup>2</sup> or higher for all-solid-state batteries	In progress
	- Development of high-energy-density lithium-ion battery technology for EVs that is capable of realizing high-rate charging	In progress
Recycling technology development	- Development of high-purity technology and recovery of lithium compound from the process water generated from lithium rechargeable battery manufacturing process	Completed
	- Development of simplified precursor manufacturing process technology without the metal extraction process from black powder	In progress

### World's First Commercialization of High-nickel Cathode Materials

The performance output and mileage of batteries are determined by the nickel content in the cathode material, which defines its energy density. In March 2020, L&F achieved a groundbreaking success by becoming the world's first to successfully mass-produce high-nickel NCM cathode materials with a nickel content of 90%. Building on this achievement, we now supply high-nickel NCM cathode materials to key clients.



### Development of Single Crystal Cathode Material

The single crystal cathode material offers superior battery performance and exceptional safety with its high particle strength, surpassing the performance of conventional products. We are committed to continuously developing high-performance products that combine excellent performance and efficient resource utilization through ongoing innovation in advanced materials.



# Focus 3

## Sharpen Value Chain Competitiveness

To achieve growth, companies must collaborate with diverse partners across upstream and downstream industries, constructing a robust value chain. Only when the competitiveness of the entire value chain is fortified, companies can drive mutual growth with concerted effort. In light of technological advancements that can cause market fluctuations, supply chain restructuring due to external factors, and an increased focus on sustainability due to climate change, companies must work proactively and collaboratively with their partners to respond to rapid changes. L&F has recognized its customers and suppliers as integral growth partners. We are elevating product quality through adherence to the L&F quality improvement process, tailored to meet customer demands. Furthermore, we are bolstering sustainability management systems for our partners, fostering enduring collaboration frameworks that ensure stability in raw material supply and other supports. We are dedicated to upholding the secure management of pivotal technological confidentiality through our information security systems across the process.



UN SDGs



Relevant material issue

- 8** Responsible sourcing of raw materials
- 9** Sustainability management of partner companies
- 10** Strengthening information security and personal data protection

# Plan 1. Product Development and Quality Improvement to Meet Customer Demands



Companies are expected to cater to diverse customer demands with the highest quality. L&F operates a systematic quality improvement process, aiming to ensure prompt response to market demand changes and continuous quality enhancement. We also consistently monitor the operational status of this process, undergo external validation procedures, and as a result, have obtained IATF 16949 and RoHS certifications. Our quality improvement strategies are formulated from a customer-centric perspective. We continuously collect feedback on our products from customers which are incorporated in products development and quality improvement.



## STEP 1

Obtain customer feedback and implement a system to incorporate their insights

**Systematize the process for obtaining customer feedback(VOC), examining the process, and incorporating their suggestions**

Stay current with trends in the upstream industry and customer demands, and closely monitor the process to ensure exceptional quality

- Conduct LPAs(Layered Process Audits) with the goal of enhancing follow-up checks on the handling of customer complaints and requests, resulting in improved quality assessments by customers
- Manage foreign matter through the Clean Process System (CPS)

Adopt and operate quality upgrade processes such as LPAs and CPS

## STEP 2

Sharpen suppliers' quality competitiveness

**Making regular discussions with suppliers to ensure quality control**

Reinforce the quality management system for the supply chain to respond together with suppliers to customers' requests in an agile manner

- Holding regular meetings with suppliers to improve raw material quality
- Maintain standardization and rigor in quality requirements for key suppliers(L&F Quality Requirement)

Carry out audits for foreign matter and assist key suppliers in improving their quality

## STEP 3

Upgrade our quality management system

**Advance equipment and the operating system**

Improve the procedures for inspection and enhancement to systematically manage our quality control system

- Establish our Quality Audit System(QAS)
- Introduce automated inspection equipment and systems
- Conduct intensive quality assessments by plant and undertake monthly improvement activities

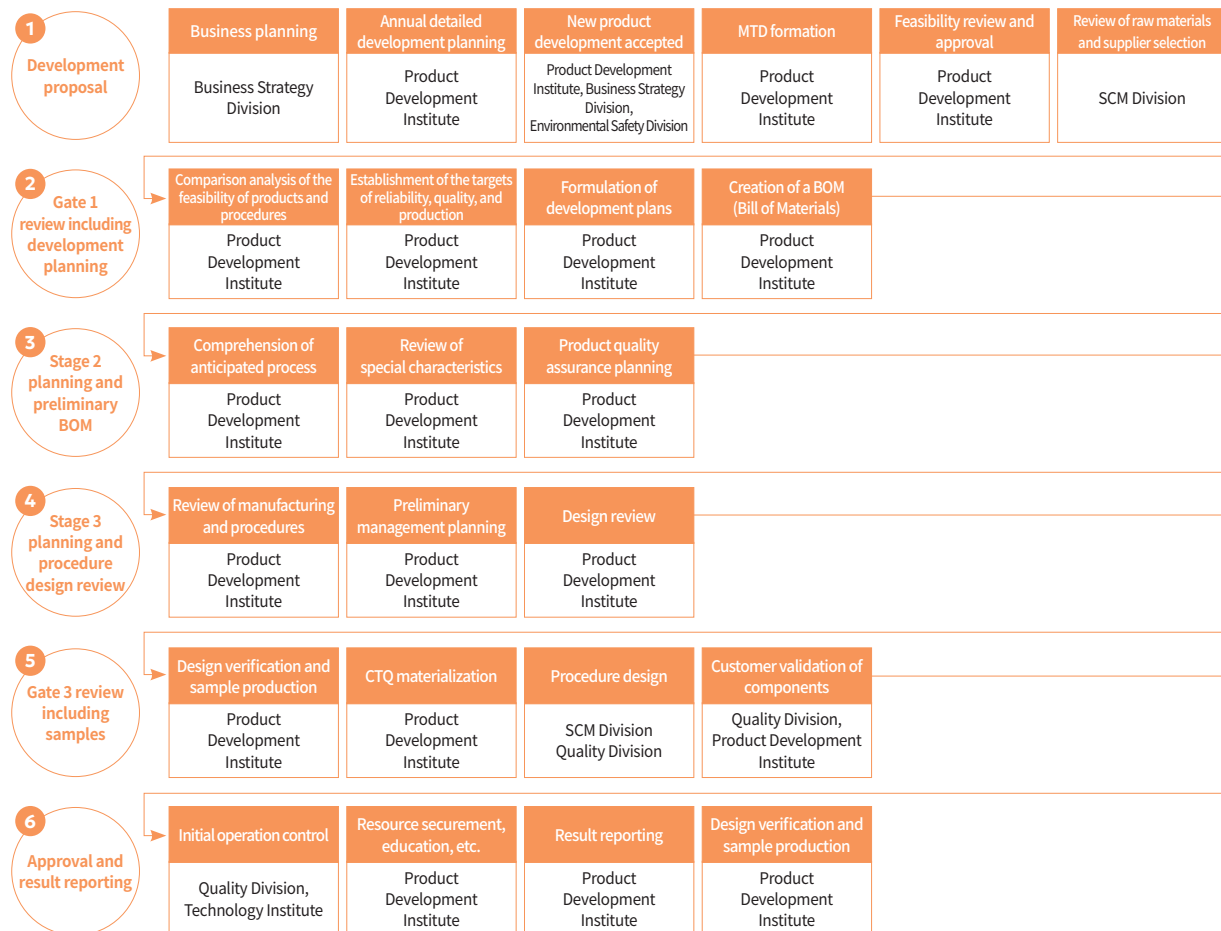
Upgrade our quality management system

# Plan 1. Product Development and Quality Improvement to Meet Customer Demands

## Strategies for Quality Management

L&F operates a systematic product design and development process tailored to customers' specific needs. We strictly adhere to the processes outlined in the product design and development procedures, ensuring product reliability. In addition to our regular customer communication processes, we make an effort to facilitate communication with our customers to increase their trust in both our products and our company.

### Product Development and Quality Improvement Process



### Third-party Product Quality Test



We have undergone third-party verification processes to ensure customer safety and earn their trust, which is directly linked to customer satisfaction. In this context, L&F obtained RoHS certificates from SGS in 2022 and renews these certificates annually for each product. RoHS certification involves measuring the hazardous substance content in products, ensuring the company's compliance with EU recommendations. We validate our process for enhancing product reliability through inspections by external specialized organizations.

### Automotive Quality Management System



L&F operates a global quality management system for the automotive industry across all stages of product design, production, delivering, and customer satisfaction to effectively respond to industry and market changes as well as customer demands. During the process of obtaining the IATF 16949 certification, we have implemented quality management processes throughout the entire production cycle, ensuring our ability to produce products of reliable and consistent quality.

## Plan 2. Bolstering Sustainability Management Systems for Partners Companies



8 Responsible sourcing of raw materials 9 Sustainability management of partner companies

The competitiveness of the value chain is underpinned by a robust supply chain. In the past, key considerations for stable supply chain management encompassed competitive pricing, notably high quality, and production capacity. However, in the evolving business landscape, a sustainable and responsible supply chain management has emerged as an additional requirement. To ensure an unwavering supply of cathode materials to our clients, L&F has formulated plans to fortify our partners' sustainability management systems. This endeavor has been pointed out as one of our focal points in our ESG strategy unveiled in 2022. In line with this strategy, we have developed our own ESG evaluation metrics for partner companies in 2022. Capitalizing on these metrics, we are in the process of instituting a comprehensive sustainability assessment system for our partner companies. Going forward, we plan to conduct ongoing monitoring, followed by improvement activities. Our overarching goal is to bolster the sustainability management capabilities of our partner companies, ultimately reinforcing the competitiveness of the value chain.



### STEP 1

Lay the foundation for suppliers' sustainable management

#### Establish a system for assessing suppliers' sustainability

Devise suppliers' sustainability assessment indicators and conduct assessments for key suppliers

- Formulate metrics for assessing the sustainability of suppliers
- Establish an evaluation system such as self-checks by suppliers and the verification of evidence
- Draw up and distribute guidelines on supply chain management

Encourage key suppliers to perform self-assessments on their sustainability and propose enhancements

### STEP 2

Ensure regular supply chain management

#### Manage the supply chain and conduct constant monitoring

Establish a supply chain management system that allows us to oversee supplier monitoring and track their progress

- Perform regular ESG evaluations in compliance with the Supplier Code of Conduct
- Establish a system to track improvements based on the outcomes of previous evaluations
- Create guidelines customized to suggested enhancements

Establish a monitoring system for supply chain management

### STEP 3

Assist suppliers in building their capacity for sustainable management

#### Establish a system to strengthen suppliers' sustainability

Operate various programs aimed at supporting suppliers in enhancing their capabilities to elevate their sustainability

- Draw up plans for supplier education on sustainable management taking advantage of our experience of distributing guidelines
- Develop step-by-step plans for capacity building tailored to the status of suppliers' sustainable management

Formulate step-by-step plans to enhance the sustainability of suppliers

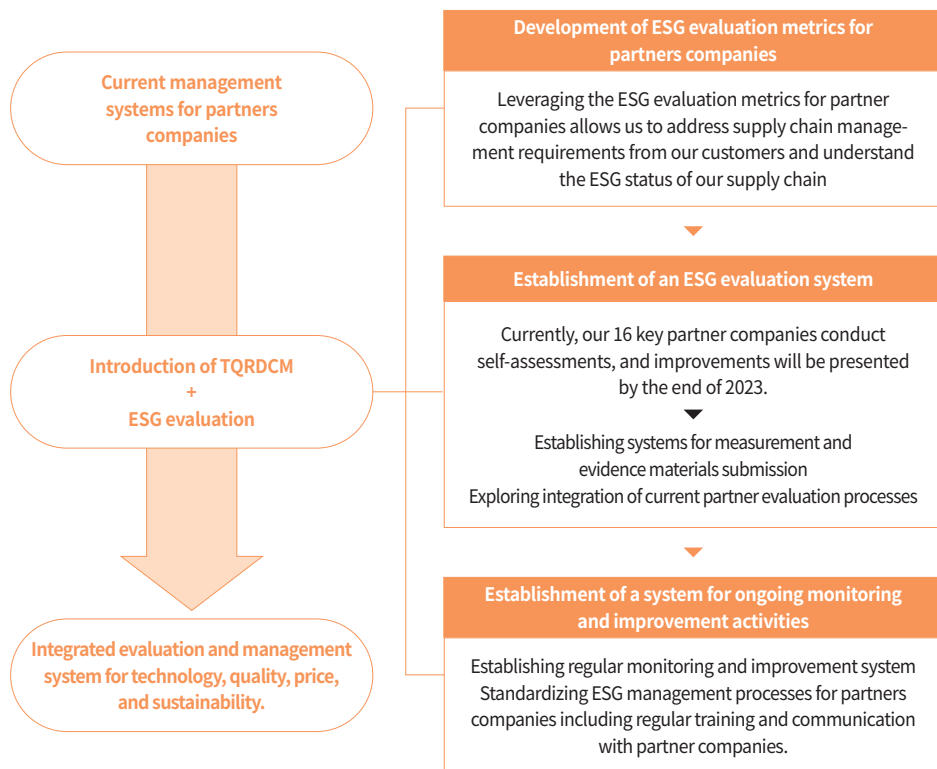
## Plan 2. Bolstering Sustainability Management Systems for Partners Companies

### Enhancing Management Systems for Partners Companies

We have refined the management system for our partner companies, with an aim of transparent management over all aspects of sustainable management, including environment, safety and health, responsible sourcing, ethics, and compliance, across the entire value chain.

Furthermore, we have designed ESG evaluation metrics tailored to our organization, which serve as standards for evaluating performance of partner companies. Starting from 2023, we are working on the creation of KPIs for the ESG evaluation process of partners, which will act as evaluation criteria for both L&F employees and corporate performance assessments in the future.

### Improvements in Management Systems for Partners Companies



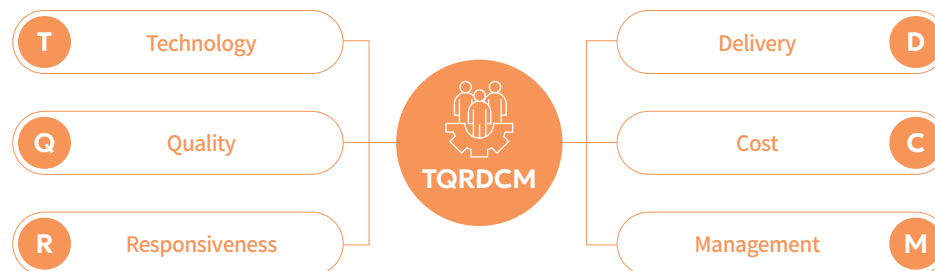
### Development of ESG Evaluation Metrics for Partners Companies

In response to the growing demand for ESG supply chain management, the previous CSR self-checklist was advanced into the ESG evaluation metrics for partner companies. These metrics encompass three areas - Environment, Social, and Governance - comprising a total of 96 indicators. Currently, our 16 key partner companies perform self-assessments. We will provide evaluation results upon customer requests, contributing to the development of a competitive supply chain.

Category	Subcategory	No. of items
Environment	Carbon emissions	4
	Water resources	10
	Green technology	3
	Chemical substances	7
	Waste	6
	Air pollution	7
	Raw material sourcing (environmental)	5
Society	Labor and human rights	14
	Safety and health	12
	Raw material sourcing(social)	8
	Data security	9
Governance	Ethical management	11
<b>Total</b>		<b>96</b>

### Utilizing TQRDCM for Comprehensive Evaluation of Partners Companies

With a view to capacity building of our partners companies and robust value chain, we have implemented the TQRDCM Tool, which comprehensively assesses technology, quality, responsiveness, delivery, cost, and management aspects to grant partner qualifications. Capitalizing on the TQRDCM Tool, we systematically evaluate and manage our partner's technological expertise, production capacity, unit costs.



## Plan 2. Bolstering Sustainability Management Systems for Partners Companies

### Supplier Code of Conduct

Prior to engaging in transactions with L&F, partner companies are required to sign our Supplier Code of Conduct. This code, established in 2018, encompasses vital aspects including human rights, the prohibition of forced and child labor, minimum wage guarantees, equitable compensation systems, non-discrimination, diversity promotion, freedom of association, ethical management policies, and responsible sourcing. Each revision, occurring biennially, integrates key supply chain management concerns, mandating partner companies to take pledge on the updated Supplier Code of Conduct. In May 2023, we secured the signatures of 20 key partner companies on the revised Supplier Code of Conduct. These companies, by affirming their dedication to the code's principles, contribute to fortifying our value chain through fulfillment of environmental and social responsibilities, along with compliance with the RBA Code of Conduct.

### Encouraging Participation in Initiatives and ESG Evaluations

We encourage our key partner companies to engage in initiatives such as RE100 and ESG evaluations to bolster the competitiveness of our value chain. We maintain a continual monitoring of partner company participation, underscoring the significance of involvement to those who have yet to participate. Moving forward, we intend to integrate their commitment into our partner company evaluations.

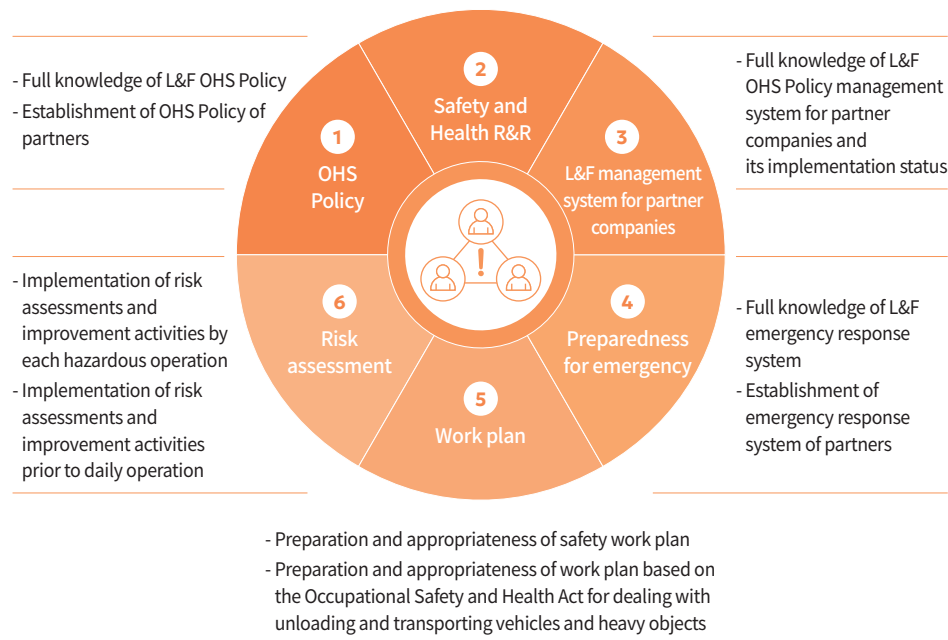
Category	Sectors	No. of companies
RE100 agreement	Precursor	3
	OEM	1
	Lithium	-
	Additives	1
ESG evaluations	Precursor	6
	OEM	1
	Lithium	6
	Additives	6

### Safety and Health Management of Partners

We offer support to our partner companies to ensure a secure working environment. We evaluate their occupational safety and health competencies before task commencement, and if any shortcomings are identified, we refrain from issuing work permits. Additionally, we conduct regular safety and health consultations with partner companies to discuss areas requiring further assistance, thus aiding in the enhancement of their safety and health capabilities.

#### Checklist for Safety and Health Management of Partners

- Appointment of safety and health management officer (with overall control)
- Appointment of safety and health supervisor and manager
- Establishment of employee safety and health R&R





## Plan 3. Strengthening Information Security for Technological Confidentiality

10 Strengthening information security and personal data protection

Companies must treat stakeholder-related information, including business data, trade secrets, intellectual property, and personal details of employees, customers, and partner companies, as vital assets and establish robust data security strategies. In particular, the potential risks of critical technology leakage pose significant threats across the entire value chain. Therefore, L&F prioritizes the safeguarding of information assets for both internal and external stakeholders, especially partners directly involved in the value chain, making information security a paramount concern. Given L&F's possession of national core battery material technologies, we operate a data security management system covering the production, research, and management of core technologies in adherence to the Act on Prevention of Divulgence and Protection of Industrial Technology. Additionally, we have acquired international certifications such as ISO 27001 (Information Security Management System) and ISO/IEC 27701, continually elevating our security management standards.



### STEP 1

#### Establishment of information security system

##### Building an information security system and setting R&R

Establishment of priority and security system based on significance and risk level of data

- Identify data protection targets and importance
- Design a security system and prepare concrete plans
- Designate information security personnel and set roles and permissions

Establishing an information security system and designating personnel in charge

### STEP 2

#### Regular management of information security

##### Monitoring security management and inspecting the incident response system

Improvement of information security system operation process through external certification acquisition process

- Check the operation status of regular security audits and monitoring processes
- Inspect response systems and conduct mock training to cope with possible accidents
- Acquire external certifications for inspection items

Obtaining certifications for security system and operations

### STEP 3

#### Linkage with a sustainable management system

##### Linkage and interaction with the sustainable management system

Linkage and integration of information security management system as part of sustainable management system

- Select information security as one of the factors for identifying non-financial risks
- Analyze and respond to information security-related evaluation indicators of ESG rating agencies
- Develop performance measurement measures reflecting ESG indicators in the data security field

Measuring information security performance and establishing an external disclosure plan

## Plan 3. Strengthening Information Security for Technological Confidentiality


### Operation of Information Security Management System

L&F has formalized its information security system through the implementation of Guidelines for Information Security System Operation Management and Development. Additionally, we have put in place regulations for information protection management, ensuring the systematic safeguarding of L&F's valuable information assets. Our commitment to security extends beyond internal operations, as we enforce stringent information control processes for external individuals entering our premises. This protective approach helps prevent the leakage of critical industrial secrets and ensure technological confidentiality.

### Our Information Security System

	
Information Security Chairman	- Execution and approval of corporate security plans
Information Security Officer	- Review and deliberation of company-wide security plans and activities - Deliberation of information protection activity plans and budgets - Deliberation on matters related to setting a mid- to long-term information protection plan
Information Security Manager	- Overseeing security operations, taking charge of security planning and execution management - Development, establishment and suggesting data protection policies - Data protection management and security audits
Information Security Personnel	- Carrying out practical information protection activities - Performing management, human, physical, technology, monitoring, and systematic security tasks



	<p>Partner companies</p> <ul style="list-style-type: none"> <li>- Establishment of Information sharing and data processing security system</li> <li>- Access control and authority management</li> <li>- Access security pledge and completion of security training</li> <li>- Event monitoring and response</li> <li>- Risk management</li> </ul>
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### Customer Information Protection System

L&F is committed to complying with customer data security laws and information protection regulations in order to proactively prevent potential information leaks. We implement various measures, including training for incoming and outgoing personnel, media control, document encryption, and web controls, to meticulously manage valuable customer information. Furthermore, we provide stakeholders with information regarding our data security practices through transparent disclosures.

### Data Security Information Disclosure

(As of 2022, reported in June 2023)

Category	Subcategory	Content
Investment in information protection	Spending on IT(A)	KRW 4,905 million
	Spending on information protection(B)	KRW 1,056 million
	(B) / (A)	22%
Information protection personnel	IT personnel	41 persons
	Personnel dedicated to information protection	10 persons
	Note	-
Information protection certifications		ISO/IEC 27001:2013

### Information protection activities

- Achieved the certification of personal information protection management system in accordance with the international standard(ISO/IEC 27701:2019)
- Selected as a beneficiary of the security capacity enhancement support project by the Korea Industrial Technology Protection Association
- Estimated the scope and number of personnel involved in handling national core technologies
- Delivered security training for employees, including personal information protection training
- Joined the Korean Association for Industrial Technology Security and actively participated in its activities
- Established and operated the Information Protection Council
- Performed internal security audits regularly
- Conducted DDoS simulation training to prepare for potential infringement incidents
- Organized employee security events, such as security slogan contests
- Inspected security status periodically(monthly)
- Engaged in cyber crisis response mock training twice a year, hosted by KISA
- Implemented business continuity training, such as disaster recovery training
- Provided company-wide training on personal information and data protection
- Disseminated security notices on Security Day(14th of every month) continuously
- Enacted and revised information protection management regulations and other related documents on a regular basis

# Plan 3. Strengthening Information Security for Technological Confidentiality

## Security Incident Response & Recovery System

### Security Incident Response Process

We have established a security incident response process to promptly and effectively address incidents, minimizing associated damages. This process has been made public, and all employees are actively participating in the related training and procedures. By doing so, we are instilling a culture of information security into our daily routines.

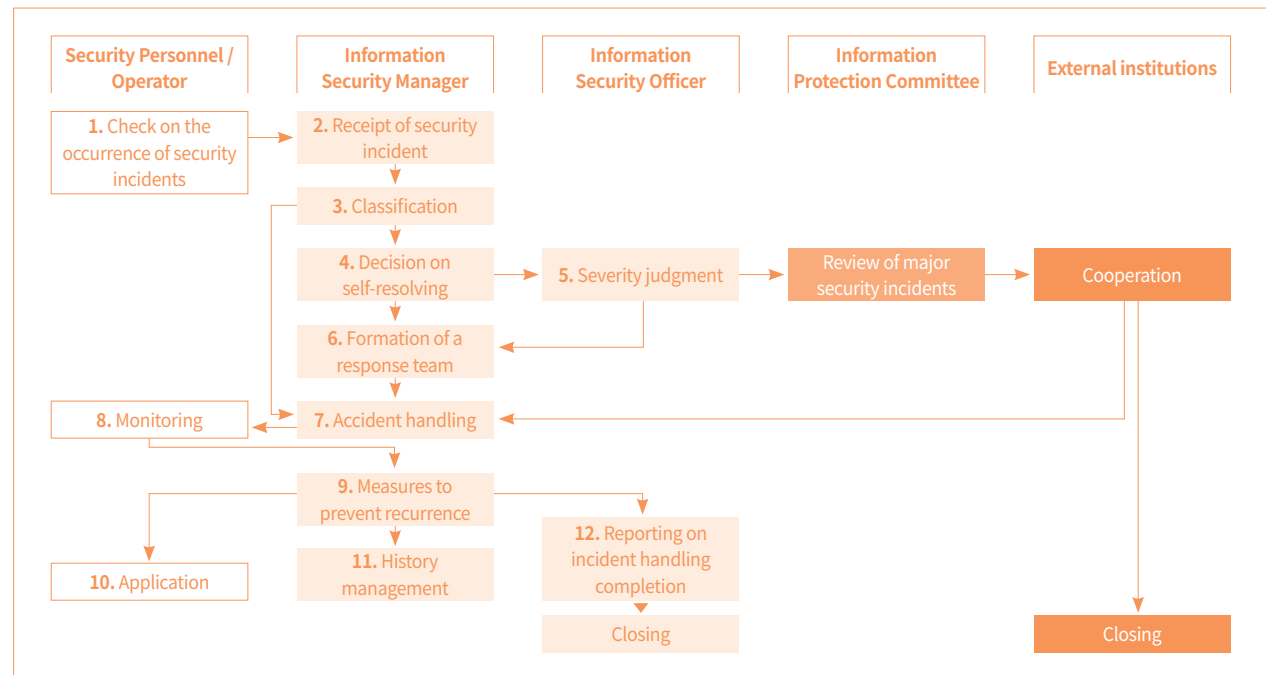
### Responsibilities and Authorities of Security Incident

The security incident response process stipulates the responsibilities and authorities of the Information Security Officer, the Information Security Manager, and the Security Personnel, respectively, in the event of a security incident. The Information Protection Committee decides on the incident-handling direction on severe security accidents and requests cooperation from related external institutions while revising and deliberating on information protection policies.

### Follow-up Measures on Security Incidents

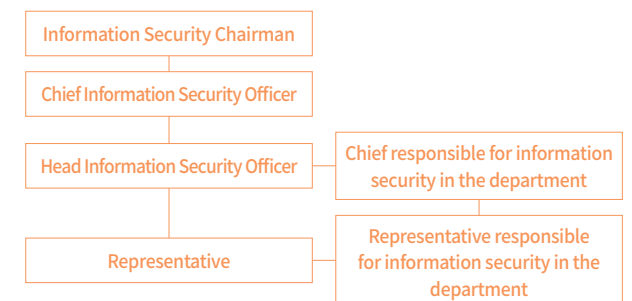
Following a security incident, we conduct a thorough review of the relevant processes to prevent any recurrence of the same issue. In our efforts to avoid recurrence, the Information Security Officer provides training, reviews the incident response system, and maintains a record of past incidents. Furthermore, we enhance the educational materials regarding security incident response to bolster our preparedness.

### Security Incident Response System and Procedures



### Information Security Organization Chart

To address security incidents effectively, we have established an information protection organization, designating specific roles and responsibilities according to each unit within the organization. The Information Security Chairman oversees the company's overall security management system, while individual assignees are endowed with the necessary roles and responsibilities for security incident response and monitoring.



## Core material for a cleaner planet

We aim to transform ourselves into a globally renowned energy materials company, earning the trust of our customers by creating value for them and enhancing our corporate value











# ESG Management

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# Stakeholder Communication

L&F recognizes that effective ESG management is rooted in engaging with stakeholders. As a result, we have defined six key stakeholder groups (customers, shareholders/investors, employees, partner companies, local communities, the government/institutions and expert groups) closely related to corporate operations. We gather opinions through various channels tailored to each group and disclose engagement and response activities to our stakeholders. We identify high-priority issues for each stakeholder group, and these are integrated into the strategic direction of our sustainable business development efforts.

Stakeholder	Priority issues	Communication channels
 <b>Customers</b>	Strengthening communication with customers, product safety and quality control, information protection, prompt provision of information, understanding customer needs	<ul style="list-style-type: none"> <li>- Customer satisfaction survey(annual)</li> <li>- Responding to customer grievances through the Customer Satisfaction Team(ongoing)</li> <li>- Participation in exhibitions(annual)</li> <li>- Information leakage prevention activities(ongoing)</li> </ul>
 <b>Shareholders &amp; Investors</b>	Protection of shareholders' rights and interests, equal treatment, active provision of information	<ul style="list-style-type: none"> <li>- BOD meetings(quarterly, occasional if needed)</li> <li>- General shareholders' meeting(annual)</li> <li>- Business report and disclosure(annual)</li> <li>- IR briefing</li> </ul>
 <b>Employees</b>	Work-life balance, fair treatment, safe working environment, cooperative labor-management relations, human resources, promotion of employee benefits	<ul style="list-style-type: none"> <li>- Labor-Management Council(4 times a year)</li> <li>- Ethics Hotline(ongoing)</li> <li>- Environment Day(monthly)</li> <li>- Hanmaum Conference(4 times a year)</li> </ul>
 <b>Partner companies</b>	Shared growth communication, support for win-win cooperation with partner companies, safety of partner companies, fair trade, healthy supply chain	<ul style="list-style-type: none"> <li>- Partner company meeting(monthly)</li> <li>- ESG evaluation of partner companies(annual)</li> <li>- Safety training for partner companies(weekly)</li> <li>- Refinery check through CSR activities and RIM site(ongoing)</li> </ul>
 <b>Local community</b>	Social contribution activities, creating jobs for the underprivileged, corporate social responsibility, employee volunteer activities	<ul style="list-style-type: none"> <li>- Community volunteering(ongoing)</li> <li>- Social contribution activities(ongoing)</li> <li>- Job fair at local high school / colleges(5-6 times a year)</li> <li>- Local community job fair(2-3 times a year)</li> </ul>
 <b>Government / institutions and expert groups</b>	response to current and new regulations, sustainable R&D, expansion of industry-academia collaboration	<ul style="list-style-type: none"> <li>- New business identification(ongoing)</li> <li>- Green technology development(ongoing)</li> <li>- New product development(ongoing)</li> <li>- Industry-academia cooperation</li> </ul>





## Approach 1 Environment

Climate change has led to the intensification of environmental regulations on corporate management activities. The emphasis on sustainable development has brought significant changes in the mid- to long-term business environment, and companies are expected to adopt eco-friendly management practices.

Eco-friendly management activities are not only a measure of a company's competitiveness, but also an investment for future generations.

L&F is committed to various eco-friendly management initiatives to ensure the well-being of our children who will inherit the Earth.



# Climate Action

Acknowledging climate change-related risks, we identify the management of GHGs as a pivotal measure to address climate change. Our climate actions are categorized into two main strategies: direct emissions management and indirect emissions management. We are committed to decreasing direct emissions through three primary pillars: securing CCUS technology, enhancing process efficiency, and gradually phasing out lithium carbonate models. Concerning indirect emissions, which largely stem from electricity consumption, we have established a transition plan towards renewable energy sources while concurrently curbing energy consumption.

## GHGs Management

We have established a GHG inventory to track emissions by emission source, analyzing the proportion and fluctuations within each facility. In 2022, the majority of GHG emissions were associated with electricity consumption (Scope 2, indirect emissions), constituting around 96% of the total emissions.


### GHG Emissions

Category	Unit	2020	2021	2022
Direct emissions (Scope 1)	Tons of CO2e	2,181	3,263	4,584
Indirect emissions (Scope 2)	Tons of CO2e	30,538	87,412	116,073
Total emissions (Scope 1+ Scope 2)	Tons of CO2e	32,719	90,674	120,657
Intensity emissions	Tons of CO2e / KRW million	0.092	0.094	0.031

## Response to Global Environmental Initiatives

**RE100 (Renewable Energy 100)**


- A global campaign aiming for 100% transition of the electricity required for corporate activities to renewable sources.
- L&F joined RE100 and executed specific plans → Implementing strategies to achieve RE100 by 2030.



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**CDP (Carbon Disclosure Project)**

- A total 91 countries worldwide joined in the initiative
- A global climate change project that discloses GHGs, climate-related risks and opportunities, and carbon management strategies.
- L&F has been engaging in CDP evaluations since 2023.



## Transition to Renewable Energy and Energy-Saving Initiatives

We are currently implementing the renewable energy transition policy designed to reduce carbon emissions from the electricity production process, where a significant portion of indirect emissions are generated. Additionally, we are pursuing internal energy-saving initiatives, such as optimizing heating and cooling system operations. Furthermore, we are encouraging our partner companies to participate in the RE100 initiative, aiming to drive the transition to renewable energy throughout our supply chain.

### Operation of Cooling and Heating Equipment

Category	Number of energy-saving units	Number of idle units per day
CRM Division	2units → 2units	0
SCM Division	5units → 3units	2
Finance Center	5units → 3units	2
HR Division, Information Security Team	3units → 2units	1
Management Planning Division	1units → 1units	0

### Partner Companies Joining in RE100

Items	Partners	Date of agreement	Renewable Energy Transition Plan
Precursor	A	Nov. 11, 2022	Green Premium purchase
	B	Oct. 31, 2022	REC purchase
OEM	C	Oct. 31, 2022	Sourcing 100% electricity from hydroelectric power
Lithium	D	In progress	2030 Green Grid Transition plan established
Additives	E	Completed	PPA Purchase

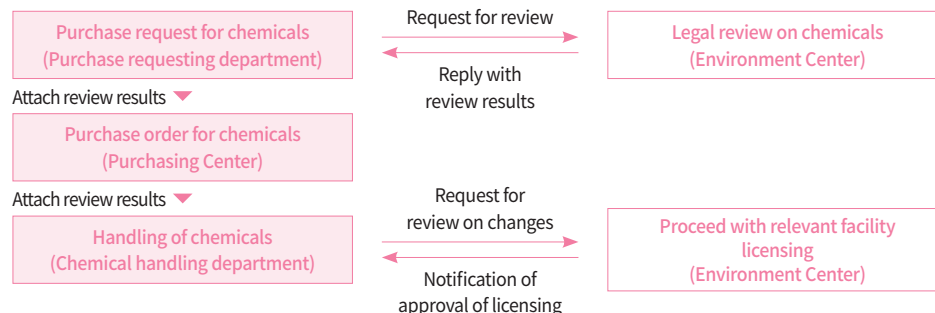
# Hazardous Chemicals Management

We have established a well-defined management system for hazardous chemicals, ensuring that there are no violations of chemical substance regulations. This involves creating Inter-departmental Collaborative Frameworks that span from the purchase to the use and disposal stages of chemical substances. Moreover, we assess the toxicity of chemicals used in our processes and develop management guidelines, thus formalizing our hazardous chemicals management system. By doing so, we have prepared various response procedures to mitigate environmental impacts associated with chemical substances.

## Chemical Substance Management Department



## Chemical Sourcing Process



## Response to Hazardous Substance Regulation

In response to domestic chemical substance regulations and the EU’s chemical substance management regulations such as REACH(Registration, Evaluation, Authorization, and Restriction of Chemicals), we are meticulously monitoring data related to hazardous substances. To this end, we refrain from using high-risk substances in the development stage, conduct regular SVHC and RoHS inspections to monitor the presence of hazardous substances, review MSDS at both our domestic business sites and partner company, and establish and uphold internal standards that surpass customer requirements. Additionally, pollutant reduction devices, such as dust collectors, are installed across all L&F production facilities to safeguard the local environment and ensure the well-being of workers.

## RoHS Management Guideline

L&F has established and adheres to the RoHS management guidelines, aiming to replace hazardous chemicals with safer materials and develop products that are in compliance with environmental regulations. RoHS refers to the EU guidelines on restricting the use of hazardous chemicals in electrical and electronic equipment, and we assign responsibilities and authorities to each organization in accordance with the RoHS management guideline for effective management of hazardous chemicals.

### RoHS Management Guideline – Responsibility and Authority

R&D Center	Refraining from the use of hazardous chemicals from the product development stage
Quality Division	Management of RoHS report history for raw materials, products and packaging materials, submitting RoHS report upon customer request
Environmental Safety Division	Reviewing compliance with RoHS-related laws and managing revisions of the guidelines

### RoHS Analysis Items and Period

Category	Lead	Mercury	Cadmium	Hexavalent chromium	Flame-retardant	Halogen	Phthalate	SVHC
L&F	Product							Annual
	Precursor							Annual
	Lithium							
Partner companies	Additives							-
	Packaging material							Biennially
	Sagger							

\*Flame-retardant: PBS, PBDEs / Halogen: Bromine, chlorine / SVHC: Proceed analysis on all items upon customer request

\*For items other than the above, proceed upon customer request

# Hazardous Chemicals Management

## Hazardous Chemicals Management Regulations and Procedures

In 2022, we revised the chemical management regulations and established new hazardous chemicals management guidelines. To ensure the safe handling of hazardous chemicals, we developed hazardous chemicals management regulations encompassing aspects like hazardous chemical handling facilities, courier transportation, and subcontractor reporting. Consequently, we conducted regular inspections and self-assessments, while also compiling a register for hazardous chemicals management.

## Training on Hazardous Chemicals

L&F provides education and training on hazardous chemicals so that our employees can acquire knowledge about the hazardous chemicals. We also designate a hazardous chemical manager, and carry out safety training for managers and staff who handle hazardous chemicals as well as workers of the handling business sites, and report the results to the National Institute of Chemical Safety. In 2022, we carried out a series of training sessions for managers and staff who handle chemicals with an aim that they can correctly and skillfully handle such chemicals.

### Safety Training on Hazardous Chemicals

Category	Period	Education type
Professional training for hazardous chemical managers / technical personnel	Once / 2 years(16 hours)	External training
Training for hazardous chemical substance handlers (direct handlers)	Once / 2 years(16 hours)	External training / online training
Professional training for workers related to hazardous chemical substance	Once / 1 year(2 hours)	Online training

## Hazardous Chemical Emergency Response

We have formalized emergency actions and incident reporting procedures related to hazardous chemical substances. We establish accident scenarios and emergency response plans, conducting annual emergency response training sessions specific to each facility. According to the plans, we execute immediate control measures in the event of a spill incident. Following the completion of control operations, we compile an incident report containing the incident's cause and measures to prevent recurrence, which is then submitted to the CEO within 24 hours of the incident to enable proactive action.

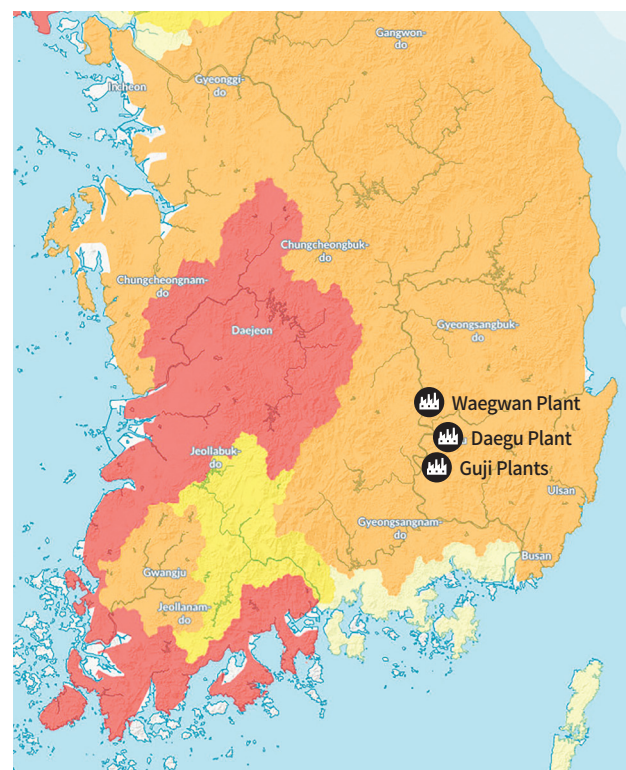
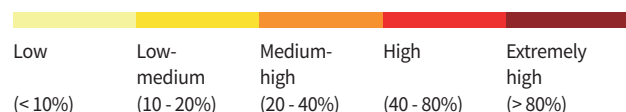
### Emergency Response and Incident Reporting Procedures for Hazardous Chemical Emergencies



# Water Resources Management

The management of water resources has gained prominence as a means of minimizing the risks associated with water scarcity and environmental impacts stemming from wastewater. In this context, L&F is actively engaged in proactive measures concerning water supply and wastewater management. Specifically, we are repurposing wastewater through specialized recycling and treatment companies that are chosen according to water resource management guidelines and standards. This approach aids in curtailing the influx of wastewater into public wastewater treatment facilities, thereby contributing to a decrease in public environmental treatment expenses.

## Water Consumption Management



(Map source : Water Risk Atlas from WRI Aqueduct)

L&F recognizes the water stress areas identified by the World Resources Institute(WRI). The water stress index indicates the ratio of water demand to available water resources on an annual basis. A higher value implies a higher risk of water scarcity. L&F's business sites(Daegu Plant, Waegwan Plant, and Guji Plant 1 and 2) have a water stress index of Medium-High(20-40%). Although the water shortage situation in the vicinity of our business sites is not severe, L&F is taking proactive measures to manage water resources. Firstly, we have assessed the water consumption at all business sites to determine the level of water usage. Based on the assessment results, we have implemented various initiatives to reduce water consumption for production processes and other purposes, and we have achieved continuous reduction of water intensity consumption since 2020.

## Water Usage

(Unit: m<sup>3</sup>)

Category	2020	2021	2022
Daegu Plant	32,262	24,516	19,705
Waegwan Plant	7,756	6,121	6,480
Guji Plant 1	20,587	39,078	86,747
Guji Plant 2	-	7,748	57,770
Total usage	60,605	77,463	170,702
Intensity (m <sup>3</sup> / KRW million)	0.170	0.080	0.044

## Waste Water Management

L&F carefully monitors both the total and daily volumes of wastewater discharged. In addition to this, we regularly conduct thorough analyses of pollutants present in the wastewater, which encompasses 61 distinct substances beyond biological oxygen demand. To ensure effective treatment, we entrust the complete wastewater treatment process to specialized companies. This approach ensures the operation of a reliable and stable wastewater treatment system.

## Waste Water Generation

(Unit: Tons)

Category	2020	2021	2022
Daegu Plant (Analysis Headquarters)	449	492	500
Waegwan Plant (Analysis Headquarters)	142	243	155
Guji Plant 1			
Analysis Headquarters	670	4,181	889
Washing process	-	-	10,935
Guji Plant 2			
Analysis Headquarters	-	-	981
Washing process	-	-	5,107

\*All wastewater from Analysis Division is outsourced for treatment, and all wastewater from washing process is disposed of.

# Water Resources Management

## Wastewater Circular System

During the washing processes aimed at purifying cathode material by eliminating impurities, wastewater is produced which contains elevated levels of lithium. Given that this water pollutant could detrimentally affect water quality, we engage in collaboration with specialized waste recycling companies that possess advanced high-temperature evaporation and concentration technologies. The lithium extracted from the wastewater is then repurposed as a raw material for battery production. Moreover, through the complete reuse of wastewater, we mitigate the strain on the Nakdong River drainage system.

### Wastewater Processing Diagram



### Accomplishments in Wastewater Processing and Lithium Recovery

1	Reused wastewater	43,800 tons per year
2	Internal Treatment Cost Savings	KRW 500 million per year
3	Public Treatment Cost Savings	KRW 60 million per year
4	Sales of Lithium from wastewater processing	KRW 1.2 billion per year

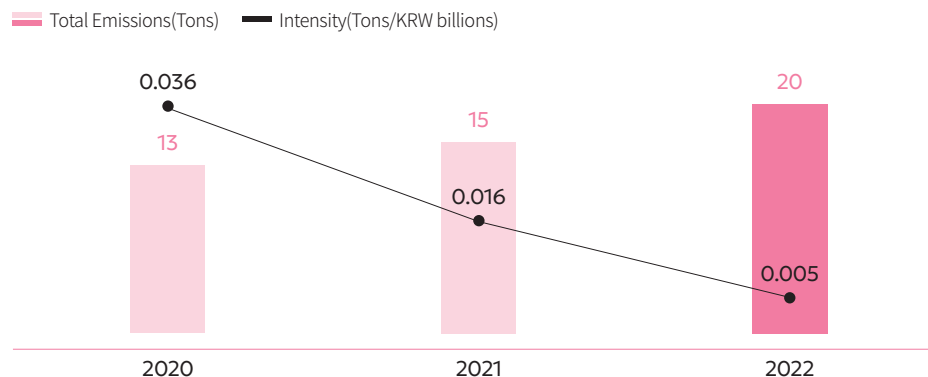
# Air Pollutant Management

We monitor the emission concentrations of all air pollutants generated within our facilities to identify and disclose information regarding NOx, SOx, and particulate matter. In 2022, new pollutants were detected during the self-monitoring process, leading to fines being imposed due to non-compliance with reporting changes in air emission facilities. We promptly took corrective action and are currently reviewing related procedures to prevent recurrence while enhancing our internal implementation protocols.

### Air Pollutant Monitoring Results

Category	Unit	2020	2021	2022	
Particulate matter	Daegu Plant	Tons	8.06	5.80	7.92
	Waegwan Plant	Tons	0.65	0.15	0.04
	Guji Plant 1	Tons	4.19	7.47	6.85
	Guji Plant 2	Tons	-	0.14	1.67
NOx	Daegu Plant	Tons	-	0.48	0.53
	Waegwan Plant	Tons	-	-	-
	Guji Plant 1	Tons	-	1.44	2.96
	Guji Plant 2	Tons	-	-	0.08
SOx	Daegu Plant	Tons	-	-	0.01
Total Emissions	Tons	12.90	15.48	20.06	
Intensity	Tons/KRW billions	0.036	0.016	0.005	

### Total Air Pollutant Emissions





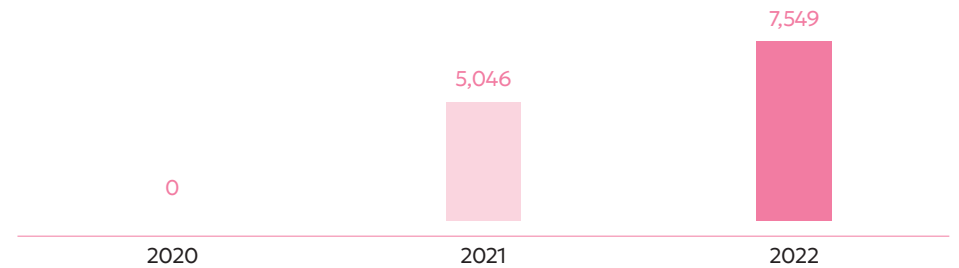
# Environmental Performance

## Environmental Investment

L&F develops and executes an annual environmental investment plan, consistently increasing the investment amount over the last three years. Our goal is to advance environmental management and fortify sustainability within our business operations, transcending the mere mitigation of regulatory compliance risks. Furthermore, we are actively investing in various training programs aimed at enhancing the capabilities of individuals in charge of environmental tasks, while obtaining environmental management system certification.

## The amount of Environmental Investment

(Unit: KRW million)



## Environmental Awards

Recognized for various resource circulation efforts, such as reducing and recycling waste saggars and reusing waste powder, we were selected as a leading resource circulation company at the Resource Circulation Day event, hosted by the Ministry of Environment last September, and received the Prime Minister Award. In addition, we have contributed to establishing a sustainable environment through discharge facility management, chemical substance safety management, and prevention of chemical accidents. As a result, we have awarded including the Administrator Award from the Daegu Regional Environmental Agency, the Governor’s Award from Gyeongsangbuk-do Province, and the Mayor’s Award from Dalseo-gu(district) Office.

### Environmental Award Achievements



Awards ceremony from the Administrator of Daegu Regional Environmental Agency



Awards ceremony from the Governor of Gyeongsangbuk-do Province

### Awards



Premier Resource Circulation Company Prime Minister Award



Administrator Award from the Daegu Regional Environmental Agency

# Sustainability by L&F

## Employee

**Yeonghoon Kang, Team Leader**

Guji Plant 2 Environment Team / Environmental Safety Division



**Q** What responsibilities does the Environment Team in L&F's Environmental Safety Division undertake?

**A** Within the Environmental Safety Division, the Environment Team has three main areas of focus. Firstly, we manage permits and ensure compliance with various regulations pertaining to air and water quality, as well as hazardous chemicals. Secondly, we enhance criteria related to the generation of pollutants and waste to minimize pollution. Lastly, we proactively establish and operate pollution reduction facilities by maintaining ongoing communication with stakeholders to prevent environmental issues in advance.

**Q** Isn't the task of managing environmental impacts challenging? Why is this task necessary despite its challenges?

**A** Honestly, it is challenging. However, we are currently undergoing a gradual transformation within the company, driven by the unveiling of ESG strategies. We are shifting from a passive approach focused on the compliance with regulations to a more proactive approach in line with our ESG strategies, such as the establishment of a resource circulation system and pursuing medium to long-term objectives. Looking ahead, this will determine the company's survival and growth.

**Q** The significance of environmental impact management is increasing, especially for manufacturing companies. How does L&F perceive environmental impact management?

**A** As a global leader in the rechargeable battery material manufacturing industry, environmental impact management holds a central position in our enterprise. There are two primary reasons why companies engage in environmental impact management. Firstly, it is to ensure regulatory compliance. Environmental regulations have become more stringent, accompanied by severe penalties for violations. Neglecting environmental impact management can directly impact a company's financial performance. However, compliance represents only a passive and limited rationale for environmental impact management. The ultimate goal is to enhance the company's sustainability. Non-financial information disclosure has evolved into an inevitable social trend. Particularly since the comprehensive disclosure of our ESG strategies in 2022, I have observed a noticeable shift in our employees' perspectives towards environmental tasks.

# Sustainability with L&F

## Stakeholder



**Gildo Song**

ISO 14001 Certification Auditor / Korea Management Registrar

**Q Carbon neutrality and environmental management are significant topics which L&F must be aligning with, isn't it?**

**A** Carbon neutrality is no longer optional for companies. In March 2023, the government revealed detailed plans for achieving a 40% reduction in GHGs by 2030, compared to 2018 levels. The transition to a low-carbon economy is rapidly gaining momentum. In this context, L&F is expected to take a leading role as a key player in the eco-friendly future sector of rechargeable battery manufacturing, both nationally and globally.

**Q L&F is in the process of formulating medium to long-term strategies and developing action plans to achieve carbon neutrality and transition to renewable energy. What factors should companies consider when aiming for carbon neutrality?**

**A** There are three main aspects that require attention. Firstly, it is essential to establish a climate change response strategy. L&F needs to assess whether climate change presents financial opportunities or risks within their financial plans. Depending on the assessment, appropriate response scenarios should be prepared, aligning with L&F's medium to long-term strategies. Secondly, the promotion of environmental management activities is crucial. Environmental initiatives such as waste reduction, resource circularity, and energy conservation should not only be the focus of the environmental department but also integrated into the overall company management. Lastly, the transition to renewable energy is pivotal. With a limited time frame remaining until the 2030 RE100 target, L&F should allocate adequate budgets and concurrently pursue green premium purchasing while progressing toward the 2050 carbon neutrality strategy.

**Q I would like to request advice regarding environmental management for L&F.**

**A** Above all, I would suggest embracing a sense of urgency and responding swiftly, while staying within the framework of strategies and plans. Time is more limited than one might assume. Furthermore, during this process, I urge you to maintain constant communication with stakeholders and ensure that the results of these communications are factored into management decisions. Effective stakeholder management is at the core of sustainable management.



## Approach 2 Partners

The growth of a company is not determined by its own efforts alone. It relies on the robustness of the entire value chain that comprises customers, companies, and partners.

The current business environment demands a high level of management of the overall value chain to secure a company's growth. Hence, a company needs to create a strong cooperation system with its partners.

L&F has engaged in various activities to improve its value chain competitiveness. We are convinced that we can only grow when we strengthen our value chain.

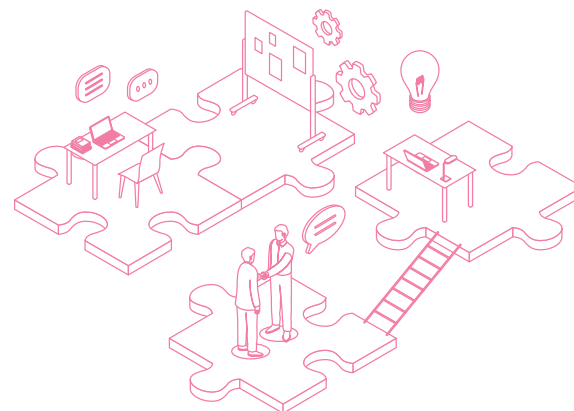


# Generating New Growth Momentum

## Broadening Customer Base

Companies need to diversify their customer base and consistently create new revenue streams. In this regard, L&F engages in market and technology analysis to identify relevant technologies or products for potential new customers. We also promote our products by offering free-trial samples to gather feedback from potential customers. This process allows us to attract new customers and establish a solid foundation for growth.

As part of these efforts, we conduct Information Research Briefing sessions 24 times a year to grasp industry trends and explore new markets to secure new customers. During these briefing sessions, we share information about emerging markets and potential customers, and we prepare strategic collaboration proposals essential for joint ventures, consortium, and supply contracts.

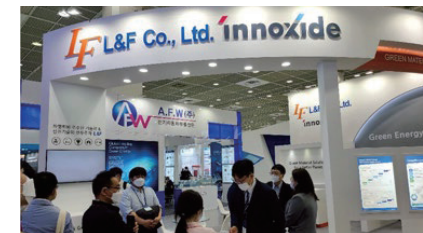


## Participation in Exhibitions and Fairs

With the aim of improving its brand reputation, and communicating with customers, L&F has taken part in mobility-related exhibitions and fairs. In detail, we attended InterBattery since 2021 where we showcased our technology prowess regarding cathode materials tailored to each customer's cell, and identified new business opportunities. And we plan to participate in the InterBattery 2023.

On October 27, 2022, we attended the DIFA(Daegu International Future Auto & Mobility Expo) in order to lead the growth of the future mobility industry in Daegu as one of companies representing Daegu. On top of that, we held a job fair as part of the effort to create jobs in the region.

Attended the InterBattery 2022



Participated in the DIFA(Daegu International Future Auto & Mobility Expo) 2022



# Customer Satisfaction

## Acquiring Quality Management System Certification

L&F has established a robust quality management system to efficiently address customer requirements and has obtained the relevant certification. IATF 16949 pertains to the Automotive Quality Management System, encompassing all areas of quality including planning, assurance, management, and enhancement. Through the process of obtaining and renewing the IATF 16949 certification, we have implemented rigorous quality management procedures, ensuring the delivery of high-quality products with a continuous focus on improvement.



## Customer Satisfaction Survey

In accordance with the strict standard stipulated in the IATF 16949 9.1.2, we have conducted customer satisfaction evaluations on a regular basis. Based on customer survey data, we quantitatively evaluate our performance, explore what we need to improve, and complement those areas. In 2022, we scored 81.8 points in customer satisfaction, 15.4 points lower than the level of 2021. According to the analysis of the results, the main reason for the decrease in customer satisfaction scores was the occurrence of three recalls. Other areas did not show any significant changes. We sincerely regret the decline in customer satisfaction and are taking measures to enhance the production process and quality improvement process to prevent future recalls.

### 2022 Customer Satisfaction Survey Results

Category	Average Score	Frequency	Department in Charge
Quality performance	16.8	Annual	Quality Division
Customer line discontinuation	20.0		Quality Division
Field return or recall*	5.0		CRM Division
Shipment within the due date	20.0		CRM Division
Claim	20.0		Quality Division
<b>Total</b>	<b>81.8 / 100</b>		

\*A total of 3 recalls occurred, resulting in 15 points decrease from the previous year

## Ongoing Customer Claim Management System

We have established a Customer Satisfaction Team responsible for consistently addressing grievances and complaints. The details of complaints are meticulously reviewed, and we promptly address them by collaborating closely with the relevant departments. Thanks to a robust collaborative system and continuous communication with our customers, we have successfully achieved zero customer claims for three consecutive years.

### Customer Claims

Zero customer claims in three consecutive years

2020	2021	2022
0	0	0

## Satisfaction Survey by Customer

We conduct area-specific customer satisfaction surveys to formulate comprehensive quality improvement plans based on the survey results. In the first half of 2022, we conducted surveys among our three major customers, and the results indicated a final customer satisfaction score of 3.7 points. Throughout this process, we identify the reasons and areas for the decline and take corrective measures to achieve better outcomes.

### Results of Customer Satisfaction by Customer in 2022

(Unit: Point, on a scale of 5 points)

Customers	Communication	Task Management	Product Quality	Schedule Management	Quality Reliability	Total
A	4.0	4.1	3.9	3.7	3.8	3.9
B	4.1	3.9	3.6	3.5	3.8	3.8
C	3.4	3.2	3.3	3.2	3.1	3.2



# Creating Mutually Beneficial Partnerships

## Supporting System for Mutual Growth

We are actively engaged in a range of initiatives aimed at fostering mutual growth with our partners. In 2019, we provided partners with technical support on two occasions, contributing to the enhancement of their R&D capabilities. Consequently, the outcomes derived from these efforts were shared, resulting in increased sales and growth for our partners.

Despite the challenges posed by the COVID-19 pandemic in 2020 and 2021, we continued to promote a win-win relationship with our partner companies by offering cooperative support expenses. This approach enabled the maintenance of a mutually beneficial relationship from a financial perspective. Beyond technical and financial assistance, we are committed to exploring avenues for stimulating the growth and competitiveness of our partner companies throughout our supply chain.

### Financial Support for Mutual Growth

We are taking proactive steps to foster mutual growth through an increase in win-win cooperation expenses. Additionally, we have adjusted payment conditions for partners facing financial challenges due to COVID-19, aiming to assist them in maintaining stable financial conditions.

### Boosting Competitiveness of Partner Companies through Technological Support

Until 2019, we actively provided technological support related to precursors to assist in the technology development of our partner companies. While our technical support was put on hold due to COVID-19 and our focus on mass production capability development from 2020 to 2022, we consistently explore ways to assist partner companies that have the potential to enhance the competitiveness of our value chain.

## Support for Mutual Growth

Category	Unit	2020	2021	2022
Technological support	cases	0	0	0
Win-win cooperation expenses*	KRW million	34,247	36,831	388

\*Mainly financial support undertaken owing to Pandemic between 2020 and 2021

## Fair Trade Principle

We are committed to respecting our partner companies, as outlined in our Code of Ethics. We reinforce our commitment to fair-trade principles by signing a fair-trade agreement. This agreement solidifies our strong determination to avoid any unfair practices that leverage our position, and we take disciplinary actions against those who violate this agreement.

## Communication with Partners

Effective communication and swift issue resolution are fundamental for ensuring a stable supply chain. In this context, L&F is at the forefront of establishing regular communication channels with our partner companies. For our key partners, we conduct monthly meetings and disseminate essential information through meeting minutes. Furthermore, through continuous and active communication with our partners, we consistently exchange insights to enhance the competitiveness of our value chain.

### Safety Training for Partner Companies

We have conducted safety training to promote a safe working environment for our partners. In 2022, we focused on enhancing the safety and health of partner companies by conducting weekly safety training sessions for the construction partners at Guji Plant 2. We maintained continuous communication to ensure a secure working environment. Supervisors from partner companies attended the training and were required to submit safety work permits. Additionally, we promptly addressed areas with potential hazards or unfavorable conditions by implementing workplace changes.

## Safety training for partners



## Section on 'Partnerships' among Code of Ethics

### iii. Commitment to Competitors and Partners

1. Fair competition with competitors
2. Fair-trade with partners

- L&F endeavors to establish mutually beneficial relationships by nurturing mutual trust and cooperation with partners through fair trade.
- L&F avoids using its dominant position to force any kind of unfair actions or exert influence.

# Responsible Sourcing

## Conflict Mineral Management

In 2016, we became a member of the RCI (Responsible Cobalt Initiative) and formulated a 'Responsible Sourcing Policy' outlining the criteria for cobalt and conflict minerals in high-risk regions. We have also called upon new cobalt producers to commit to this policy.

### Extracts from Responsible Sourcing Policy

Regarding the procurement of raw materials, including cobalt, from high-risk and conflict areas,

- L&F expects its suppliers to circumvent all minerals from conflict affected smelters.
- Minerals related to the mining, transport, trade, handling, processing, or export which supports stateless and non-state groups, directly or indirectly are regarded as conflict-affected.
- L&F expects its suppliers to disclose the origin of materials, when it is required, which are connected to potential human rights violations such as child labor, compulsory or forced labor and any forms of modern slavery and human trafficking - especially in case of mining and extraction.
- The suppliers are requested to carry out and meet their due diligence obligations along the supply chain. This includes the implementation of measures which ensure that the minerals used by suppliers - particularly tin, tantalum, tungsten, gold, and cobalt - do not contribute to the direct or indirect support of armed conflicts or are in connection with the violations of human rights.
- Suppliers need to establish policies and due diligence practices to reasonably assure that products and components supplied to L&F are not sourced from conflict minerals.

Furthermore, we are conducting third-party verification of cobalt smelters by using the Extended Minerals Reporting Template (EMRT) and supply chain mapping tools. We integrate our conflict minerals response process with our partner company's sustainability management system to ensure responsible mineral sourcing.

## Supervising Conflict Minerals Management of Suppliers

As the management of conflict minerals within the supply chain has gained prominence, we are in the process of refining our conflict minerals management procedures. With the transformation of the previous CSR checklist into ESG evaluation criteria, it has become more challenging for suppliers with conflict minerals issues to be integrated into our value chain.

In response to this, we conduct thorough evaluations of new raw material suppliers before their registration. This evaluation covers aspects such as their basic financial structure, production capacity, quality control, environmental impact assessment, and measures against child labor. In particular, we carefully review the policies and management systems related to conflict minerals, including cobalt. Our major partner companies are obligated to conduct a self-inspection concerning conflict minerals in accordance with established procedures. This inspection is followed by the submission of a detailed report. We meticulously scrutinize these results to determine whether any involvement in child or forced labor, excessively extended working hours, inadequate treatment of workers, violation of human rights, and the presence of proper reporting and disciplinary mechanisms. We have set up a communication channel on our website to facilitate direct reporting in the event of any issues.

### Responsible Sourcing Policy

#### L&F Responsible Sourcing Policy Procurement of Cobalt and Raw Materials from Conflict-Affected and High-Risk Areas

L & F is committed to the responsible sourcing of materials used in the products and it is the core basic values of L&F that to respect and guarantee the rights to human dignity, freedom and happiness throughout the whole supply chain.

We know our work is never done, but by strengthening due diligence at every level of our supply chain and partnering with like-minded companies and organizations, we will continue to aggressively pursue the protection of human rights and the environment along our supply chain.

#### Our requirements

L & F buys parts and components including Cobalt and other minerals and L&F follow the OECD Due Diligence Guidance for Responsible Supply Chains from Conflict-Affected and High-Risk Areas to investigate our supply chain and engage with suppliers.

So, we encourage all the suppliers to understand our policy and meet the requirements of our policy as the following:

- L & F expects its suppliers to avoid all minerals from conflict affected smelters.
- Minerals related to the mining, transport, trade, handling, processing or export which supports armed, non-state groups, directly or indirectly are regarded as conflict-affected.
- L & F expects its suppliers to disclose the origin of materials, when it is required, which are connected to potential human rights violations such as child labor, compulsory or forced labor and any kind of modern slavery and human trafficking - especially in case of mining raw material and extraction.
- The suppliers are requested to carry out and meet their due diligence obligations along the supply chain. This includes the implementation of measures which ensure that the minerals used by suppliers - particularly tin, tantalum, tungsten, gold and cobalt - do not contribute to the direct or indirect support of armed conflicts or are in connection with violations of human rights.
- Suppliers need to have policies and due diligence practices in place to reasonably assure that products and components supplied to L & F are not sourced from conflict minerals.

L & F appreciates the need for broad collaboration to reach our objectives.

L & F joined the Responsible Cobalt Initiative (RCI) in 2016 and applied global human rights policies to partners dealing with L&F across the world in order to promote sourcing of minerals through continuous monitoring human rights. The risk factors were checked and requested to be improved and the company is actively cooperating with customers, suppliers, and other stakeholders.

In order to present what we expect in hopes of downstream and upstream companies joining our social responsibilities and efforts, L & F has established a code of conduct for our partners through the mutual efforts with suppliers. We look forward to fulfilling our internationally recognized social responsibilities, achieving sustainable and sound performance, and growing together.

# Sustainability by L&F

## Employee

**Jaeyoon Jeong, Part Leader**  
Purchasing Team / SCM Division



## Employee

**JiWon Kim, Manager**  
ESG Management Team /  
Strategy Planning Division



**Q** Recently, supply chain management has become a significant topic in the realm of sustainable management within the manufacturing sector. How is the structure and roles in supply chain management at L&F?

**A** The organizational framework of supply chain management involves the collaboration between the Purchasing Team within the SCM Division and the ESG Management Team within the Strategy Planning Division. Initially, the ESG Management Team conducts sustainability assessments for each partner company and provides improvement recommendations based on the analysis of assessment results. The Purchasing Team engages in direct communication with partner companies using relevant data to offer support for enhancing sustainability. Given the current size of the Purchasing Team, we have recognized the need to dedicate personnel specifically for partner company sustainability management. As a result, we are planning a long-term approach to allocate dedicated personnel within the Purchasing Team. Considering that L&F is a global company with a substantial portion of overseas sourcing, agile responses to this issue are crucial, underscoring the importance of appropriate staffing. This reflects our strong commitment to supply chain management.

**Q** Could you provide a brief explanation of L&F's sustainable supply chain management system?

**A** In conjunction with the release of our ESG strategies, we established our own ESG evaluation criteria for partner companies in 2022. Currently, we are overseeing the ESG performance of our 16 key partner companies based on these criteria, and we intend to share the assessment outcomes with them by year-end. Looking ahead, we aim to maintain continuous monitoring and provide assistance for improvement initiatives. Our ultimate objective is to mitigate sustainability risks within our supply chain.

**Q** Do you have any message you would like to convey to L&F's partner companies?

**A** We offer sustainability enhancement guidelines to our partner companies in order to enhance the competitiveness of the value chain. These guidelines are developed in alignment with the criteria set by our customers. We encourage active participation from our partner companies to strengthen our value chain. We aim to jointly establish a sustainable supply chain with our partners.

# Sustainability with L&F

## Stakeholder



**Saebom Jeon, Specialist**  
Procurement/SRM Division / LG Energy Solution

**Q What is the significance of ESG factors in the selection of suppliers by LG Energy Solution?**

**A** LG Energy Solution considers ESG factors, such as renewable energy utilization and responsible supply chain management, when selecting new partner companies. We enhance supply chain ESG management through an annual commitment to the Supplier Code of Conduct and regular assessments. Especially since 2019, we have increased the weighting of the S-Rating within the ESG component, alongside QCD(Quality, Cost, Delivery), making it a pivotal aspect of our regular assessment criteria. Furthermore, we are exploring the possibility of incorporating key ESG priorities—such as the transition to renewable energy, human rights risk management, and major mineral recycling—as essential prerequisites for supplier selection.

**Q Could you summarize the requirements of LG Energy Solution’s customers?**

**A** The primary requirements of LG Energy Solution’s customers include the reduction of carbon emissions throughout the company and the entire supply chain, specifically targeting carbon emissions associated with batteries. The RE100 initiative holds significant importance as a strategy to achieve these carbon reduction goals, focusing on the transition to renewable energy sources for electricity used in both internal processes and the supply chain. LG Energy Solution is actively working towards attaining RE100 by 2025 for critical components such as battery production sites and key material suppliers like cathode material providers. Looking ahead, the ultimate goal is to have all material-related suppliers achieve RE100 by 2030. Additionally, customers emphasize the need for human rights risk assessments within the supply chain and an increased utilization of recycled raw materials. Meeting these various supply chain ESG management demands necessitates collaborative efforts from LG Energy Solution and its partner companies. We expect our partners to participate in initiatives such as RE100, effective LCA data analysis, and the establishment of supply chain auditing systems, all of which contribute to enhancing supply chain ESG capabilities. Our commitment includes active collaboration and communication with partner companies to enhance supply chain ESG practices.

**Q How does LG Energy Solution perceive L&F’s strengths in terms of sustainable management?**

**A** L&F, as a significant partner of LG Energy Solution, displays a strong understanding of our ESG policies and directions, actively engaging in collaborative endeavors. LG Energy Solution is in the process of disseminating ESG guidelines tailored for partner companies, encompassing crucial industry regulations and customer requisites within the dynamic battery sector. We hold strong confidence that L&F will fully comprehend and embrace these guidelines. We hope for the continued close collaboration with L&F, which demonstrates a profound understanding of our ESG trajectory.





## Approach 3 Employees

Attaining sustainable growth for companies lie in their human resources. Employee competencies determine the survival and growth of the company. Nevertheless, mere possession of skills by employees falls short.

A secure and pleasant working environment that fosters the full utilization of employees' abilities, encourages engagement, acknowledges accomplishments, and offers a range of employee benefits to enhance satisfaction is imperative.

L&F is committed to providing multifaceted support to its employees who drive sustainable growth, ensuring they receive the utmost care and treatment.

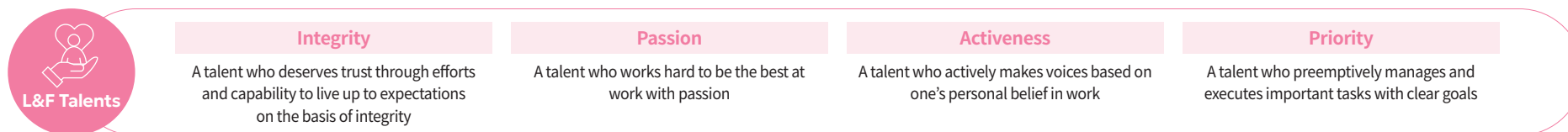


# Human Resources and Performance Management System

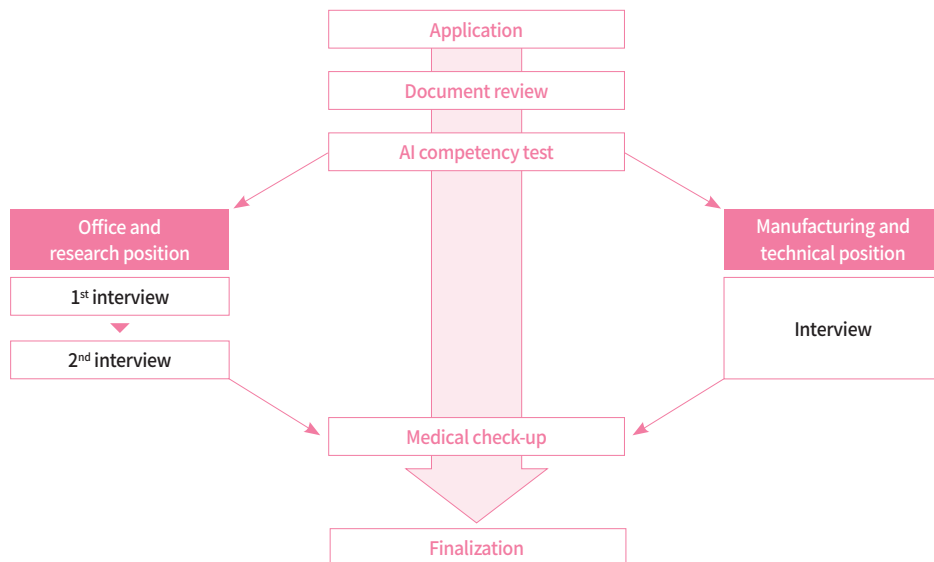
## Securing Outstanding Talents

Our recent rapid growth has led to dramatically surged demand for exceptional talents, amplifying the significance of securing top-tier individuals. In response, L&F has established a systematic talent recruitment and development framework aligned with our talent philosophy, with a strong emphasis on sourcing local talent. Our talent philosophy is grounded in the fundamental principles of Integrity, Passion, Activeness, and Priority, which serve as qualifications in our talent recruitment process. We make our recruitment information available to the public through a dedicated recruiting channel on our official website. Furthermore, we proactively engage in initiatives like recruitment tours and job mentoring within local universities, enabling us to attract and retain exceptional talent from our surrounding business communities.

### Ideal Talents for L&F



### Recruitment Procedures



### Position Chart

Office position		Research position	Manufacturing / Technical position
Staff	Engineer		
CRM, Environmental Safety, Quality, Finance, Strategic Planning, Information Security, Manufacturing Management, Production Technology, EPC, SCM, HR	Manufacturing, Equipment, Equipment design, Technical, Quality Assurance, CS	Technical Development, Technical Planning	EPC, Manufacturing, Quality Assurance, Materials Management, Research position

### Recruitment Status

(Unit: Persons)

Category		2020	2021	2022
Number of new hires		167	703	714
Recruitment	Gender			
	Male	159	666	678
	Female	8	37	36

# Human Resources and Performance Management System

## Embracing Diversity

L&F has experienced rapid growth and has recruited many employees in a short span of time. Consequently, the size of its workforce has more than doubled since 2020. With the present pace of growth anticipated to continue, it is projected that by 2025, the employee count at L&F could reach approximately 2,500 to 3,000. Throughout the recruitment process, our primary focus has been on job suitability, while excluding any factors that could lead to discrimination, such as gender, race, and educational background. However, in alignment with our commitment to investing in local communities and effective stakeholder management, we have implemented a recruitment policy that places a priority on identifying exceptional local talent. Furthermore, we strictly prohibit any form of discrimination based on gender, age, race, or educational background. In cases where discriminatory actions are identified, our internal protocol ensures that appropriate disciplinary measures are taken, based on the severity of the incident. Additionally, our HR management regulations explicitly underline the importance of embracing diversity in various aspects of our operations, including recruitment, promotions, and job assignments.

### Domestic Employee Status

Category	2020	2021	2022
Number of employees	656	1,038	1,488
Gender	Male	957	1,379
	Female	81	109

### Overseas Employee Status

Category	2020	2021	2022
Number of employees	2	2	2
Gender	Male	2	2
	Female	0	0

### Detailed Employee Status

Category	Unit	2020	2021	2022
Number of employees	Persons	656	1,038	1,488
Gender	Male (ratio)	599 (91%)	957 (92%)	1,379 (93%)
	Female (ratio)	57 (9%)	81 (8%)	109 (7%)
Employment type	Full-time (ratio)	656 (100%)	1,038 (100%)	1,488 (100%)
	Contract or dispatched (ratio)	0 (0%)	0 (0%)	0 (0%)
Age	Under 30 (ratio)	278 (42%)	541 (52%)	734 (49%)
	30 - 49 (ratio)	346 (53%)	463 (45%)	710 (48%)
	50 and above (ratio)	32 (5%)	34 (3%)	44 (3%)

### Diversity in Domestic Employee Status

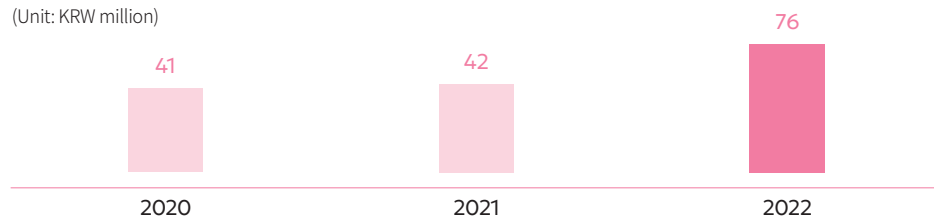
Category	Unit	2020	2021	2022
Number of employees	Persons	656	1,038	1,488
Disabled (ratio)	Persons (%)	13 (2%)	20 (2%)	27 (2%)
Managerial position	Persons	2	2	5
Non-managerial position	Persons	11	18	22
High school graduates (ratio)	Persons (%)	125 (19%)	208 (20%)	323 (22%)
Managerial position	Persons	20	24	38
Non-managerial position	Persons	105	184	285

## Human Resources and Performance Management System

We have established a comprehensive system to ensure that employees receive equitable compensation through fair performance evaluations and a well-structured reward system. We formulate Key Performance Indicators(KPIs) by quantifying individual goals alongside organizational objectives based on the mutual agreement between employees and the company. Additionally, we integrate ESG factors into KPIs to embed ESG management within our practices. Employees align their performance targets and competency development goals with organizational aims through collaborative discussions. Throughout the year, we assess team and individual performance, contributions, and accomplishments. Evaluation outcomes are shared with team members and leaders as needed to ensure transparency and impartiality. Moreover, throughout these processes, any potential sources of discrimination, such as gender, race, age, and educational background, are rigorously excluded, except for the predetermined performance targets. This approach guarantees fair compensation based on a rational performance evaluation framework.

### Salary Per Capita\*

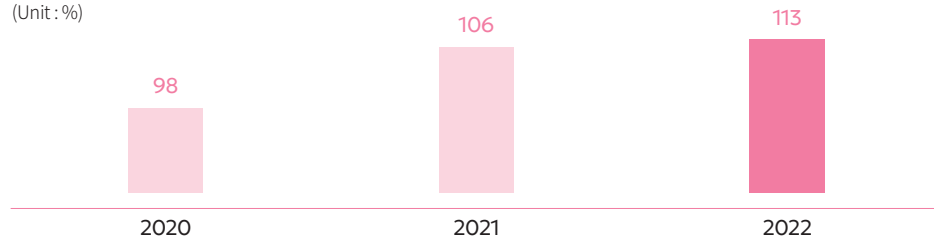
(Unit: KRW million)



\*Based on average annual salary per capita

### Gender Equal Pay\*\*

(Unit: %)



\*\*Ratio of women's wages to men's (female employee salary / male employee salary\*100)

## Employee Capacity Building

Annually, we design and execute training programs, aiming for rapid organizational adaptation and continuous skill development among employees. These programs encompass mandatory education, introductory programs for new hires to facilitate their organizational integration, courses to enhance strategic planning abilities, training on core values of the company for manufacturing technology personnel, leadership enhancement sessions for managerial staff, and compliance training. Notably, we have specifically developed an ESG management training program to ingrain ESG practices into our management. While the scheduled statutory education and new hire orientation took place as planned, the majority of other training sessions were regrettably impeded by the COVID-19 pandemic during the latter half of 2022. However, we intend to integrate these postponed training sessions into our 2023 curriculum.

### Annual Education Provided in 2022

Category	Target	Period	Remarks
Legally mandatory education	All employees	September to December	Online training
Introductory training for new employees	New hires and those who have not completed training	August to September	-

### Employee Training Status

Category	Unit	2020	2021	2022
Total training participants	Persons	656	1,038	1,488
Training hours per capita	Hours	21	15	18
Training cost per capita	KRW	19,615	9,508	11,365

# Employee Benefits

## Work & Life Balance



### Flexible Work System

To ensure work-life balance for our employees, we have implemented various work systems which allow for efficient working schedule such as selective working hours and work-from-home arrangements.



### Refresh leave system

We provide Founding Anniversary Leave and annual leave(3 days) setting aside from the annual leave entitlement. Additionally, we support a long-term leave system known as the Refresh Leave to encourage extended breaks and support employees in spending quality time with their families.



### External recreation facility

We provide support for employees to use recreation facility located at major tourist destinations nationwide, either free of charge or at a discounted rate.



### Tickets for local team matches

We offer support for tickets for home game tickets (Sweet Box) for local sports teams(Samsung Lions).

## Stable Life



### Gifts for anniversaries / family event support

We provide gifts on Labor Day and national holidays. Additionally, we offer support for family events including leave, congratulatory or condolence money, floral arrangements, and condolence items.



### Contributing 50% of IRP

We support our employees' post-retirement security and aim to ensure a stable life by contributing 50% of the payment amount.



### Benefits for long-serving employees

After 5 years of service, we provide rewards, additional vacation days, and other benefits in every 5years.



### Supporting education expenses

We support education expenses for employees' children entering university.

## Health Promotion



### Comprehensive and regular checkup

For the health of our employees, we offer annual health checkups. Particularly, employees aged 35 and above are provided with regular comprehensive medical check-ups for their health management.



### In-house gym

We established an in-house gym to promote exercise along with convenient facilities such as massage chairs and lounges.



### Medical service discount benefits

We offer up to 20% discount benefits in medical services through partnerships with excellent local hospitals.

## Company Life



### In-house club activity support

We operate hobby clubs and provide monthly activity allowances for club activities, aiming to facilitate quick adaptation and enhance teamwork among employees.



### Commuting Buses

We operate commuter buses free of charge around the business site.



### Free in-house cafeteria

We operate an in-house cafeteria to offer complimentary lunch, dinner, and late-night meals.

# Improved Work Environment for Employees

## Hanmaum Conference

L&F established the Hanmaum Conference regulations in 2002 to create a communicative and win-win labor-management relationship. Aiming to pursue the common interests of labor and management, we have established a balanced representation of eight members each from the company and the employees. We also have a well-defined procedure to ensure that the views of employees are fully reflected.

### Hanmaum Conference Meetings

Category	Unit	2020	2021	2022
Number of Hanmaum Conference meetings	Number	5	5	4

### Major Agenda Items

Date of meeting	Agenda items
4Q 2021	<ul style="list-style-type: none"> <li>- Availability of stock option loan support</li> <li>- Carryover of supervisor activity expenses</li> <li>- Expansion of company diary provision</li> <li>- Request for electric vehicle chargers at in-house parking lot</li> <li>- Installation of massage chairs and change in allowance payment method</li> </ul>
1Q 2022	<ul style="list-style-type: none"> <li>- Deposit bank loan support</li> <li>- Revision of family affair leave application in regulations</li> <li>- Appointment of grievance-handling members</li> </ul>
2Q 2022	<ul style="list-style-type: none"> <li>- Post of the comprehensive guidelines for corporate welfare system</li> <li>- Environmental improvement in changing rooms</li> <li>- Request for the participation in environmental campaign activities</li> </ul>
3Q 2022	<ul style="list-style-type: none"> <li>- Increasing unit price for holiday gifts</li> <li>- Adding 1 more suite box for employees at Samsung Lions Park</li> </ul>
4Q 2022	<ul style="list-style-type: none"> <li>- Support for IRP contributions</li> <li>- Expansion of eligibility for comprehensive health checkup coverage</li> <li>- Expansion of eligibility and limit for educational expenses support</li> </ul>
1Q 2023	<ul style="list-style-type: none"> <li>- Discussing step-by-step working environment improvement for office positions</li> </ul>

## Female-friendly Working Environment

We are committed to creating a female-friendly working environment where female employees can work without concerns. We provide pre- and post-maternity leave and have a comprehensive parental leave system in place as well as support the cost of in-house daycare centers to ensure that working mothers can take care of their children without worries. We have also established a dedicated lounge for female employees, providing a space where they can relieve stress during work hours.

## Employee Grievance Handling Process

We have established a grievance handling system to ensure a more favorable working environment for our employees. This system enables employees to report any grievances, allowing us to promptly address their concerns. Through the system, employees can submit their complaint using a designated form to the HR team followed by consultation with the HR team leader at a time convenient for the employee. If the matter necessitates input from the management team, a second consultation is arranged with senior management. For situations requiring external expertise, we facilitate consultations with relevant experts. We strictly safeguard the employees under protection system as per the management regulations. The outcomes of these consultations are subsequently reported for approval by the CEO.

### Employee Grievance Handling

Category	Unit	2020	2021	2022
Number of grievances reported	Cases	13	17	9
Number of grievances addressed	Cases	13	17	9
Grievance resolution rate	%	100	100	100

## Preventive Measures for Workplace Bullying

As we take a rigorous approach to addressing workplace harassment, we have implemented regulations to prevent and manage workplace harassment that involve the misuse of power, status, or relationships and result in physical or psychological harm. We conduct regular employee training and individual interviews to eliminate workplace bullying, sexual discrimination, and harassment, while cultivating a healthy organizational culture. Furthermore, we regularly survey employees to understand possible workplace bullying and respond with strict disciplinary measures when issues arise.



# Creating Safe Working Environment

## Risk Mitigation

We conduct regular risk assessments with an aim of minimizing the frequency and potential of accidents. We conduct regular inspections on a daily, weekly, and monthly basis to identify and address the safety and health risk factors for our workers. The inspections involve the participation of safety and health management managers, management supervisors, safety managers, health managers, workers, and others. We also establish and implement improvement measures by reviewing the hazardous risk factors identified through regular inspections from a 4M(Machines, Manpower, Methods, and Material) perspective.

### 2022 Annual Risk Factor Inspection

Category	Daegu Plant	Waegwan Plant	Guji 1 Plant	Guji 2 Plant
No. of risks identified	147	99	193	53
No. of risks improved	147	99	193	53
Rate of improvement	100%	100%	100%	100%

### Process for Establishing an Improvement Plan



## Special Inspections in Preparation for Emergencies

In addition to regular inspections, we also perform special inspections to prevent natural disasters or mitigate various concerns about possible casualties resulting from social exposure. During special inspections, a team of supervisors and workers from each department, including those who are legally appointed, is assembled to address the risk factors related to special issues.



## Safety and Health Training

In addition to mandatory education, all employees have participated in a comprehensive array of safety and health training programs, including those for new hires, regular safety and health sessions, specialized safety and health training, as well as MSDS(Material Safety Data Sheet) training. These training sessions establish guidelines that all employees adhere to, simultaneously enhancing their awareness of safety and health practices. Furthermore, to enhance the skills of supervisors, we conduct group training that is customized to the company's working environment. All employees are committed to a safety pledge, instilling a culture of health and safety in everyday operations.

### Safety and Health Training schedule in 2022

Program	Month
1st Class Fire Safety Manager(first term)	Jul
1st Class Fire Safety Manager(second term)	Nov
2nd Class Fire Safety Manager	Feb
New Safety Manager	May
New Health Manager(first term)	Apr
New Health Manager(second term)	Jun

Program	Month
Safety Supervisor(first term)	Mar
Safety Supervisor(second term)	Apr
Assistant Fire Safety Manager	Sep
Elevator Management(first term)	Jun
Elevator Management(second term)	Jun
Elevator Management(first term for Safety Supervisor)	Jun
Elevator Management(second term for Safety Supervisor)	Aug

Program	Month
Safety Manager Maintenance(first term)	May
Safety Manager Maintenance(second term)	Jun
Laboratory Safety	Oct
Electrical Safety Manager	Nov
Forklift and Aerial Work Platform Safety	Oct
Prevention of Suffocation Accidents	Nov

# Creating Safe Working Environment

## Emergency Drills

We conduct regular emergency drills with an aim of predicting possible accidents in each plant and take appropriate responses. We conduct training based on established scenarios that simulate accidents resulting from various hazardous risk factors, such as electric shock, collision, fall, conduction, getting jammed, fire, explosion, and poisoning. Supervisors and workers in each department are making themselves familiar with the scenarios and conduct repeated training to ensure that they can respond promptly and effectively in the event of an actual accident, minimize the loss of life and property, and restore normal operations as soon as possible.



## Occupational Accident

For the purpose of industrial accidents prevention, L&F has conducted various safety and health training programs, emergency response training, and the enhancement of safety and health-related protocols. Additionally, we have recorded industrial accidents to consistently assess the outcomes. As a result, over the past three years, the accident rate has steadily decreased, reaching 1.08% in 2022.

## Occupational Accident Rate

Category	Unit	2020	2021	2022
No. of victims	Persons	8	12	16
No. of employees	Persons	656	1,038	1,488
Accident rate	%	1.37	1.16	1.08

**Steadily decrease in accident rate over the past three years**

# Sustainability by L&F

## Employee



**Byunghoon Kang, Manager**  
HR Team / HR Division

**Q With the recent rapid expansion, we have seen a significant influx of new colleagues. Could you please elaborate on the organizational culture of L&F that you would like to communicate to them?**

**A** Every month, our CEO addresses our employees through the internal bulletin board. Upon summarizing the content, three consistent keywords emerge. The first is Integrity, the second is mutual respect and consideration, and the third is resilience rooted in insight into our vision and a positive mindset. I firmly believe that those who actively embody these three keywords will become ideal talents that fit into L&F's organizational culture.

**Q Could you please elaborate on the three consistent keywords?**

**A** Speaking about Integrity, L&F never makes decisions that could lead to negative impacts on the environment, society, or ethics. Even before establishing our ESG strategies, we have demonstrated a deep commitment to ethical management and corporate social responsibility. The next point is mutual respect and consideration. As L&F experiences rapid growth, the number of new employees joining us has increased significantly. When individuals from diverse backgrounds come together, practicing respect and consideration in communication becomes essential. Lastly, regarding resilience, the rechargeable battery industry is marked by high competition and uncertainties. In this context, where we must achieve both rapid short-term growth and long-term sustainability, resilience becomes a crucial means to tackle these challenges.

**Q What kind of 'good company' would L&F become if it achieves the desired organizational culture?**

**A** While a larger company can be made by a few exceptional employees, a genuinely good company is an outcome that demands the combined efforts of all members. In my perspective, a 'good company' is where we grow together with our employees, collaboratively shaping a dynamic future, and discovering fulfillment and happiness along the way. Through the collaboration of new members who join us and our existing employees, we can forge a truly good company.

# Sustainability with L&F

## Employee

**Hanbin Kim, Manager**  
Employee representative / Hanmaum Conference



**Q** Could you please provide a brief explanation of the Hanmaum Conference, the labor-management consultative body at L&F?

**A** The Hanmaum Conference serves as a channel for conveying employees' requests for improvements in working conditions to the management. Employee representatives participating in the Hanmaum Conference are elected through recommendations and votes from employees at each business site. Senior Managers who have served for over 3 years are voted and elected as Hanmaum Conference representatives for a term of 3 years, while mid-level managers and above are restricted from participating as representatives. The Hanmaum Conference is convened quarterly at each plant and annually at the company level, totaling 16 sessions or more per year (12 at plants and 4 at the company level).

**Q** Could you provide an example of how the Hanmaum Conference has contributed to enhancing the working environment for employees?

**A** In many cases, on-site facilities often lack sufficient rest areas. Especially in comparison to the recently established Guji Plants, Daegu Plant and Waegwan Plant were aging and employees had expressed the need for improved rest areas. In response, the Hanmaum Conference approached management with these concerns, leading to a renovation of the rest areas at Daegu Plant and Waegwan Plant. For Guji Plants, input from employees during the design phase led to the creation of more spacious rest areas than initially planned.

**Q** Could you please share your thoughts on the healthy labor-management culture that L&F should pursue?

**A** In my perspective, being a 'good company' is not just an outcome, rather, it is a process that the company and its employees build together. Being a 'good company' requires a foundation of mutual trust between the company and its employees. A sound labor-management culture can be created when employees have confidence in the company's transparent operations and, in turn, dedicate themselves to realizing the company's vision and objectives. L&F can foster an exemplary labor-management culture by achieving its desired organizational culture and distributes the rewards of growth through a fair compensation system. In pursuit of this, both financial and non-financial information must be consistently disclosed to the public.





## Approach 4 Local Communities

A famous African proverb states that ‘It takes a village to raise a child.’ This implies the importance of community in nurturing and supporting individuals.

Similarly, growing a business also requires the assistance and collaboration of the community. Likewise, for a community to thrive, it needs the contribution and involvement of businesses.

Thus, companies and local communities have a symbiotic and mutually beneficial relationship, and cooperation with local communities is a vital element for the sustainable growth of companies.

L&F is engaged in various activities to coexist harmoniously with the local community.

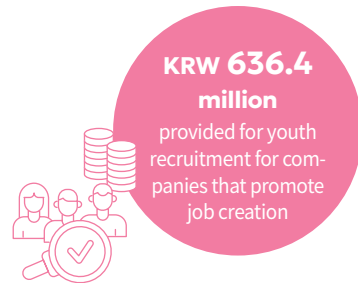


# Recruitment of Local Talent

## Employment-friendly Company Representing Daegu

In 2017, L&F was recognized for its efforts to create local jobs and foster a positive work environment, and was selected as a representative job creation-friendly company in Daegu. In 2022, we hired 714 new employees, continuing to contribute to job creation in Daegu and Gyeongbuk region. In particular, we have earned the reputation as an excellent workplace with outstanding welfare benefits.

### Improvements after Being Selected as Representative Employment-friendly Company



- Promote our flexible working hours system
- Build an in-house library and lounges
- Install fitness equipment in the in-house fitness center
- Renovate the dormitory and gym
- Install air purifiers and improve the conditions of the in-house cafeteria
- Incorporate the results of employee survey into our policies

## Recruiting and Nurturing High School Graduates

L&F identifies high school graduates with potential at an early stage and provides them with education and training to help them develop the skills they need to become exceptional talents. As part of this effort, we recently participated in a job fair for students from specialized high schools, organized by the Dalseo-gu(district) Office in Daegu.

During the event, we provided an overview of our company and offered employment consultations. We have also been signing agreements with high schools in Daegu and Gyeongbuk region to recruit outstanding students, regardless of their academic backgrounds.



Industry-academic cooperation agreement to revitalize local youth employment

## Recruiting Programs

We have signed MOUs with local universities, including Yeungnam University, Kyungpook National University, and Gyeongsang National University, to operate a range of training programs that are tailored to our company's needs. These programs include introducing our vision and values to those interested in our company, as well as mentoring programs such as career consulting to attract outstanding talents. Additionally, we have been participating in LINC+, a customized talent nurturing project, in an effort to employ local young people.



Campus recruiting in Keimyung University



Campus recruiting in Kumoh National Institute of Technology

# Contribution to Local Communities

## Giving Vitality to Local Economy in Daegu Gyeongbuk

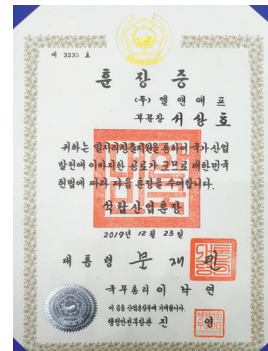
In May 2022, L&F was selected as a company subject to the '2022 regional representative mid-sized enterprise fostering project' by the Ministry of Trade, Industry, and Energy, which was a testament to our stature as a core driver of revitalizing the economies of Daegu and Gyeongbuk region. In August 2022, we further demonstrated our commitment to the local economy by investing approximately KRW 650 billion in the Daegu National Industrial Complex, creating a large number of jobs. On top of that, we have established a large-scale business site that is conducive to job creation, enabling us to share our success with local communities and stimulate economic growth.



MOU signed on investing in the construction of Guji Plant 3

## Shared Growth with Local Communities

L&F has established an extension in Daegu and Gyeongbuk region with the goal of revitalizing the local economy, resulting in ongoing job creation. We have also supported local young people in pursuing their dreams by joining the Hopelink project. These efforts have earned us recognition as an excellent company for human resources development and the Order of Industrial Service Merit (Tin Tower) for job creation. We firmly believe that investing in Daegu and Gyeongbuk region improves the quality of life for local residents, and in turn, enables us to recruit local talent and secure growth engines. We are committed to continuing our investment in this virtuous cycle.



Tin Tower Order of Industrial Service Merit for job creation in 2019

## Volunteer Service and Giving Back to Local Communities

L&F has consistently supported vulnerable members of our community through a variety of volunteer work and donations. This includes participating in the sharing event under the theme of 'filial duty' during the month of family, providing free meals for elderly people living alone, and distributing coal briquettes in Dalseo-gu(district) with our employees actively taking part in these initiatives. In addition to our volunteer work, we have also made significant contributions to the Kyungpook National University Hospital, and sponsoring the Chilgok Gunhoi Scholarship Association and Woodang Scholarship Association, thereby supporting the cultivation of local talent. We have also extended our support to regional festivals such as the ICG International Youth Sports Festival. L&F is committed to giving back to our community through volunteer work, donations, and sponsorship activities.



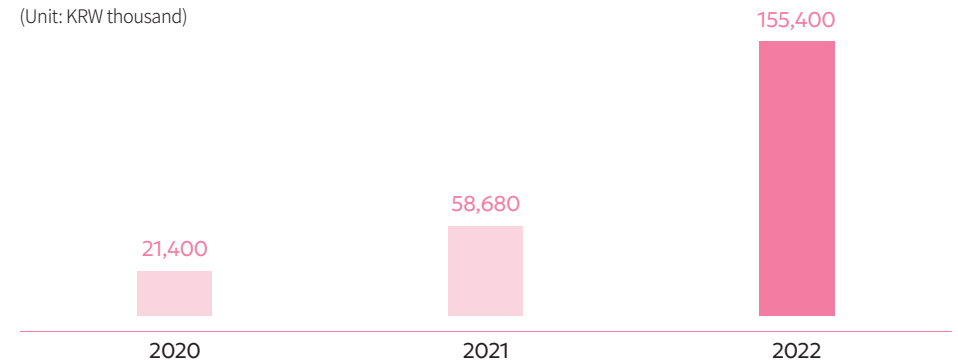
Dalseo-gu Sharing Coal Briquettes of Love



Dalseo-gu Neighbor Charity fundraising

## Donations Made over the Past Three Years

(Unit: KRW thousand)



# Well-organized and Effective Social Contributions

## Roadmap for Social Contribution

L&F is designing social contribution initiatives that align with its ESG strategies. To achieve this, we are developing a mid- to long-term plan. Our focus will shift from one-off donations and event sponsorships to systematic social contribution activities in line with our roadmap. We will explore areas where we can make the greatest impact by targeting predefined stakeholders and leveraging our capabilities. Additionally, we will reach out to stakeholders in need of our help the most and provide services that meet their needs.

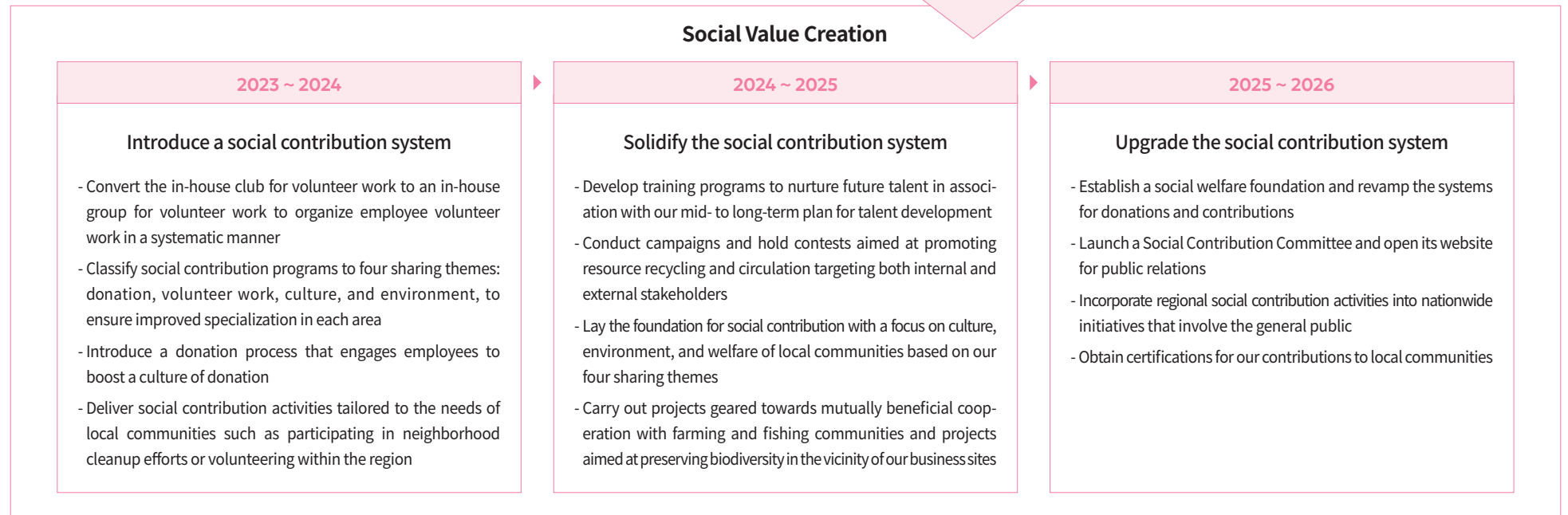
**MISSION** Global Green Energy Material Enterprise for Creating Cleaner Environment

**ESG VISION** We Innovate Materials for Green Energy

### Social Value Creation for Local Communities



### Social Value Creation



# Sustainability by L&F

## Employee

YoungHwan Na, Part Leader  
General Affairs Team / HR Division



**Q** Could you tell me how you manage local communities as stakeholders and what activities you are undertaking?

**A** L&F has experienced unprecedented growth among local companies in Daegu and Gyeongbuk region, firmly establishing itself as a leading regional company. This growth has brought with it a growing demand for the fulfillment of social responsibility towards local communities. L&F recognizes that its success would not have been possible without the support of these communities. Accordingly, we have been actively engaged in a variety of activities, including donations, sponsorships, and support for various events, to discharge our social responsibilities.

**Q** The importance of social contribution initiatives has grown among efforts to respond to local communities, as these initiatives directly benefit local residents.

**A** In the past, our social contribution activities were mainly in the form of donations or sponsorships at the end of the year, which means we focused on immediate responses to requests from local communities. While this is important, we aim to respond to their requests and fulfill our social responsibility in a different way. Unfortunately, our budget is limited and we cannot meet every need. We want to address every request for the sake of our reputation, but it is not possible. Therefore, we are considering how to use our limited resources to create the greatest impact. We are designing a strategic social contribution system and establishing step-by-step plans to achieve tangible outcomes by 2023.

**Q** What do you believe is the most important criterion when planning a social contribution initiative?

**A** The criteria that guide us in accepting requests for sponsorship are the level of importance within the community and the relevance to environmental impact. L&F aims to carry out environmental preservation activities by capitalizing on our green technologies. We will also deliver social contribution activities designed to raise positive awareness of our company, especially among children and teenagers. However, we will ensure that all activities align with our ESG strategies and directions.



# Sustainability with L&F

## Stakeholder

**SeonMi Jin, Assistant Director**  
Investment Promotion Division / Daegu Metropolitan City



**Q** Could you tell us about L&F’s position in the Daegu Gyeongbuk region?

**A** L&F has been rapidly growing and expanding its influence in Daegu and Gyeongbuk region. In the past three years, the company has completed the construction of its Guji Plant 1, 2, and 3 in the Daegu National Industrial Complex, leading to a significant increase in employment. While many companies that started and thrived in regional areas have relocated to the capital region for practical reasons, L&F has remained a pivotal company in Daegu and Gyeongbuk region. This is greatly appreciated.

**Q** As L&F’s influence grows, its responsibilities and roles are also changing.

**A** In my opinion, there is no company that fulfills its economic responsibilities better than L&F. As a manager, I cannot thank L&F enough for that. I deeply appreciate L&F’s employment of talent from Daegu and Gyeongbuk region and would like to ask the company to consider investing in talent development. In particular, I would like to see L&F increase its investment in higher education, such as local universities in this region. I believe that supporting specialized high school graduates in finding jobs and developing their capabilities through expanded investments will enable L&F to secure outstanding human resources that are integral to its future growth.

**Q** What else do you expect L&F to do in addition to economic performance and investments in human resource development?

**A** The recent construction of Guji Plants in the Daegu National Industrial Complex has led to an increase in L&F’s impact on the environment, such as through the discharge of effluent, due to the nature of the cathode material business. I would like to ask the company to pay special attention to this issue. Given L&F’s track record of winning multiple awards and recognitions for its outstanding environmental impact control, I have no doubt about its capabilities. If I may make one final request, I would like to see L&F increase its presence among local residents in this region. Compared to its economic stature, local residents have a relatively low level of awareness of the company. I would like to ask L&F to actively engage in social contribution activities that benefit local residents and provide sponsorships for regional events.





## Approach 5 Governance

Trust from various stakeholders is an integral part of corporate growth. Transparent management underpins earning that trust.

To achieve transparent management, many tasks must be undertaken. The tasks include incorporating ESG elements into our governance system, strengthening ethics and compliance management, proactively identifying and managing risks, reinforcing personal data protection, and transparently disclosing our business data.

L&F is embodying its management philosophy of being a ‘trustworthy and ethical company.’ We will strive to become a company that stakeholders can rely on and invest in.

# Governance

## Management and Board Composition

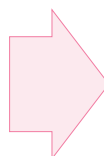
Under the leadership of our CEO, we have a COO responsible for overall business operations, a COO responsible for financial affairs, and a CPO. Our organization is comprised of 10 divisions, 3 manufacturing plants, 3 R&D centers, a Management Planning Division, and a GSM Division. L&F's Board of Directors(BOD) represents a wide range of stakeholders, including shareholders. Its functions include overseeing key management issues and making final decisions on them. To ensure strategic decision-making, our board is composed of four independent directors and three internal directors as of March 2023, with expertise in diverse areas such as management, accounting, and chemistry. The director tenure is decided at general shareholders' meetings within three years. We also require that the CEO not hold the position of board chairman to enhance the function of supervising management and ensure independence.

\*As of December 2022 ● Chairman ○ Member

Category	Gender	Name	Main Career	Area of Specialty	Date of Appointment	BOD	Audit Committee
Internal Director	Male	Jae-hong Heo	CEO of Seronics (present)	Management, chemistry	March 18, 2011	●	-
	Male	Je-hyeon Heo	Senior Vice President of L&F(present)	Management	March 22, 2018	○	-
	Male	SuAn Choi	CEO of L&F (present)	Management, chemistry	March 17, 2021	○	-
Independent Director	Male	Gyun-bal Lee	CEO of DAEGYEONG ACCOUNTING CORP.	Accounting	March 26, 2019	○	○
	Male	Jae-hak Jeong	Chairman of the Informatization Committee of the Korean Institute of Chemical Engineers	Chemistry	March 26, 2019	○	○
	Male	Jeom-su Kim	Professor, Department of Chemical Engineering of Dong-A University	Chemistry	March 17, 2021	○	○

\*BOD's age diversity: Below 40: 0, 40 ~ 50: 2, 50 ~ 60: 2, 60 or above: 2

### Current Board Structure



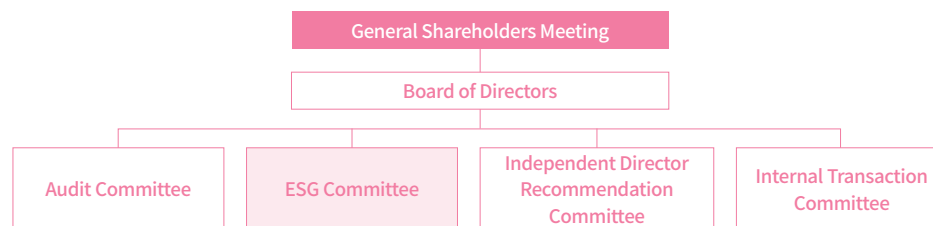
## Board Expertise and Independence

To ensure board expertise and independence, we have made sure that more than half of our board members are independent directors. This allows the board to make decisions independently from management and controlling shareholders. The requirements for appointing independent directors are set out in Article 4 of the Regulations on BOD Operation.

Area	Jae-hong Heo	Je-hyeon Heo	SuAn Choi	Gyun-bal Lee	Jae-hak Jeong	Jeom-su Kim
Senior management	●	●	●	●	-	-
Global company	●	-	●	-	-	●
Management	●	●	●	-	-	-
Accounting	-	-	-	●	-	-
Chemistry	●	-	●	-	●	●

Category	Key indicator	Unit	2020	2021	2022
Expertise	Director with experiences in the industry	Persons(%)	3(60%)	4(67%)	4(67%)
	Financial expert	Persons(%)	1(20%)	1(17%)	1(17%)
Independence	Ratio of independent directors	%	60	50	50

### Expected Board Structure in 2023



# Governance

## Board Operation

Our board has two types of meetings: regular meetings, which are held once a quarter, and ad-hoc meetings, which are held as needed. The Chairman convenes board meetings, or the acting director does so in the Chairman’s absence, in accordance with our Regulations on BOD Operation. In 2022, we held a total of 42 board meetings. A board meeting can be called with three days’ notice or with the consent of all directors and auditors. The agenda for these meetings covers a wide range of management issues, including revisions to our internal accounting control regulations, director remuneration, general shareholders’ meetings, and the expansion of bonds and capital increases.

### Board Attendance Rate

Category	Unit	2020	2021	2022
Internal director	%	100	100	100
Independent director	%	100	100	99

Category	Unit	2020	2021	2022
No. of board meetings convened	Times	29	47	42
No. of agenda items reported and resolved	Items	29	47	42

## Board Remuneration

The remuneration for our BOD is determined by a resolution at our general shareholders’ meetings. The remuneration is decided within the remuneration limit set by our internal regulations, taking into account the expertise, contribution, and responsibility of each director. As of 2022, the remuneration for our directors is as follows.

### Directors’ Remuneration

(Unit: KRW thousand)

Category	No. of members	Total remuneration	Average remuneration per capita
Registered directors(independent directors, Audit Committee members excluded)	3	1,920,989	640,330
Independent directors (Audit Committee’s members excluded)	-	-	-
Audit Committee members	3	87,000	29,000
Audit	-	-	-

\*It refers to the total remuneration from January 1, 2022 through December 31, 2022. Since the members of the Audit Committee assume the position of independent director, the no. of members, total remuneration, and average remuneration per capita are not separately prepared.

\*\*As of March 23, 2022, two of our three independent directors, Gyun-bal Lee and Jae-hak Jeong, who also serve as members of the Audit Committee, were reappointed

## Audit Committee

To ensure the independence and expertise of our governance and to strengthen our internal audit function, we have established an Audit Committee within our board. The members of this committee are appointed by a resolution at our general shareholders’ meetings and consist entirely of independent directors. Our Finance Division supports the committee to help it operate smoothly. The Audit Committee is responsible for auditing our business and accounting practices and reporting its findings to the board. It has the authority to request reports on sales from our directors and to investigate our company’s assets and business operations. If necessary, the committee can also request sales reports from our subsidiaries and investigate their assets and business operations if they fail to report without justifiable reasons.

### Audit Committee Meetings Convened

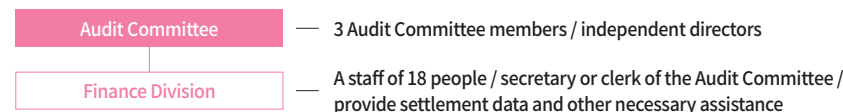
\*Attendance Rate for Audit Committee Over Past Three years: 100%

Category	Unit	2020	2021	2022
No. of Audit Committee meetings convened	Times	19	33	29

### Audit Committee Members’ Concurrent Positions and Tenure

Name	Reason for appointment	Recommender	Field of action	Date of termination	Consecutive appointment
Gyun-bal Lee	Expertise	BOD	Independent director / Audit Committee Chairman	March 22, 2025	1
Jae-hak Jeong	Expertise	BOD	Independent director / Audit Committee member	March 22, 2025	1
Jeom-su Kim	Expertise	BOD	Independent director / Audit Committee member	March 16, 2024	-

### Support Organizations for Audit Committee



# Governance

## Shareholders' Rights

As of March 14, 2023, the largest shareholder of L&F is Seronics, with an ownership ratio of 14.4%. The shares owned by the largest shareholder and related parties account for 23.87% of the total shares issued. To make it easier for shareholders to exercise their voting rights, we have introduced electronic voting pursuant to Article 368-4 of the Commercial Act(Exercise of Voting Rights by Electronic Means). We inform shareholders that they can exercise their voting rights electronically when we notify them of the convocation of general shareholders' meetings. At the end of each fiscal period, shareholders who have shares with voting rights are allowed to exercise their voting rights from ten days to one day before general shareholders' meetings through the electronic voting system operated by the Korea Securities Depository, without having to attend the meetings in person.

## Shareholder Value Maximization

### Investor Relations

To ensure that our corporate data is provided in a sufficient, timely, and fair manner, we have maximized our data disclosure. We also support investors in making informed decisions with accurate data at our general shareholders' meetings. Efforts are being made to facilitate investor relations(IR) work to enhance shareholder value.

### IRs Convened and Details

Date	Target	Materials distributed	Key content
February, May, August, and November in 2022	Domestic and overseas institutional investors, securities firms' analysts, etc.	Published on the listing disclosure system of the Korea Stock Exchange, and distributed at the sites	Introduction of the company and performance briefing, key business developments and outlook, and Q&A session

### Shareholder Return Policy

In order to provide better value to our shareholders, we have established a dividend policy. Our cash dividends are strategically determined, taking into account factors such as investments, business performance, and cash flow.

## General Shareholders Meeting Details

Category	21st	22nd	22nd
Date of convocation	Mar. 17, 2021	Mar. 23, 2022	Mar. 22, 2023
Date of announcement	Mar. 2, 2021 (two weeks before the convocation)	Mar. 8, 2022 (two weeks before the convocation)	Mar. 7, 2023 (two weeks before the convocation)
Resolution	Passed as drafted		
Means of notification	- Notified on our website and the Maeil Business Newspaper - Electronic disclosure of the convocation through the Financial Supervisory Service and the Korea Stock Exchange		

## Protection of Shareholder Rights

We ensure the effective exercise of shareholders' rights by notifying shareholders of the convening of a general shareholders' meeting, maintaining minimum notice periods, avoiding the peak days, and encouraging electronic voting and proxy voting to safeguard shareholders' voting rights.

## Our Efforts to Engage More Shareholders

Category	21st	22nd	22nd
Written ballot	-	-	-
Electronic voting	Implemented	Implemented	Implemented

## Activities to Protect Shareholders' Rights and Interests

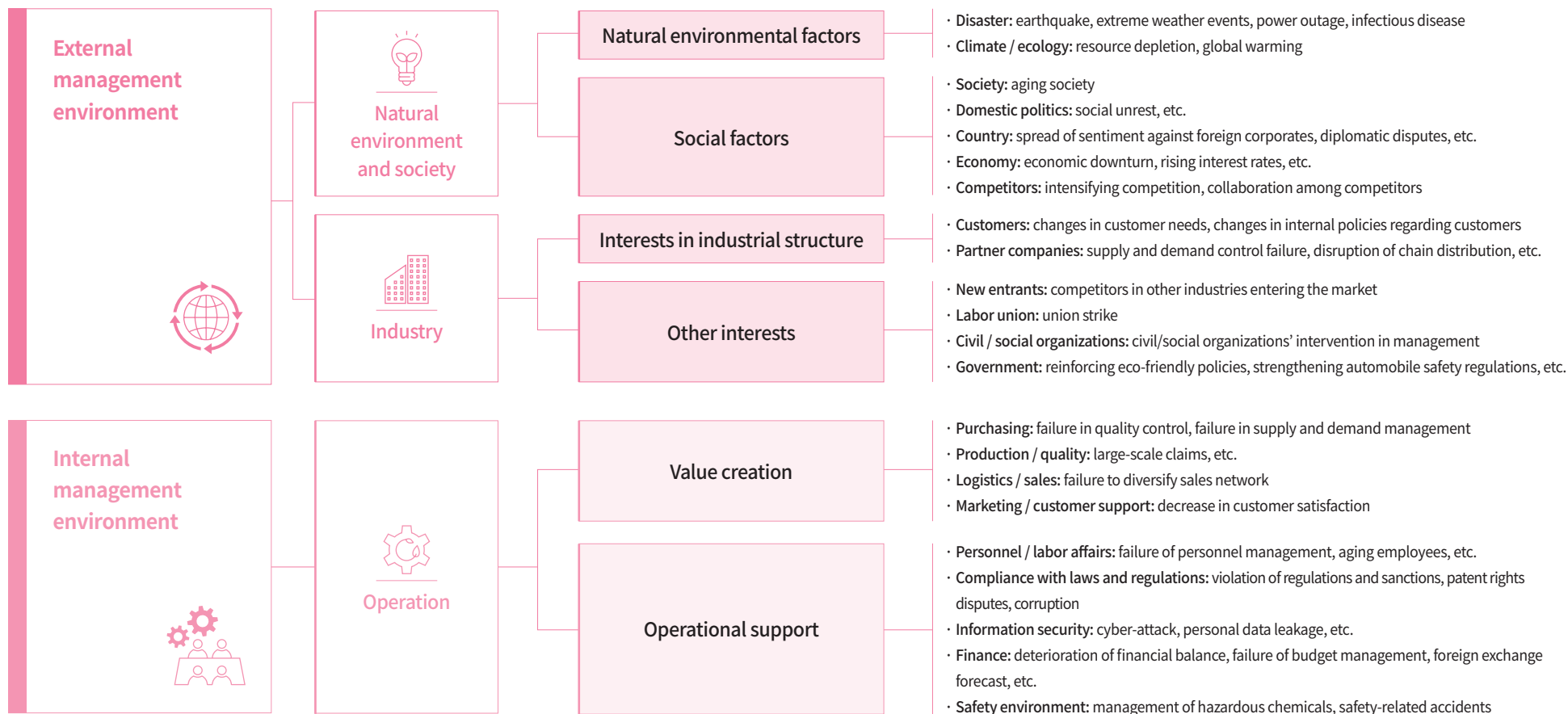
Category	Details
Written ballot system	Not introduced and not implemented
Electronic voting system	Introduced and implemented since 4 to 5 years ago
Cumulative voting system	Excluded from the Articles of Incorporation and not implemented

# Risk Management System

## Risk Identification

L&F has established a system to identify and categorize the risks that may arise in the internal and external business environment, and to proactively address the financial and non-financial risks to minimize the adverse effects of risks. We conduct in-depth analysis and management of the risks related to the natural environment, society, industry stakeholders, and internal corporate factors, and we continuously monitor the financial and non-financial risk factors. We perform a risk identification process on a regular basis to anticipate the changes in the internal and external business environment and market fluctuations while devising appropriate countermeasures.

## Risk Factors





# Risk Management System

## Risk Response Process

L&F has established risk management guidelines and systems to cope with the identified risks. We assign risk grades from S to D based on the level of impact and likelihood of occurrence, and we implement a response plan for risks with an impact level of B or higher. In addition, we select and analyze key risks through internal reviews and evaluations while managing the financial and non-financial risks through an integrated risk management process. We also educate our employees on the lessons learned from the risk management process, embedding a risk management culture.



### Risk Selection Matrix

L&F manages each risk through customized analysis and constant monitoring. We assess the priority and level of management responsibility for the identified risks based on the risk selection matrix, which considers the degree of impact and occurrence of the risks, followed by setting a response plan accordingly.

Category	Likelihood				
	Very likely	Likely	Possible	Unlikely	Very unlikely
Fatal impact on company management	S	S	S	S	S
Considerable damage expected	S	A	A	A	A
Some damage expected	A	A	B	B	C
Small damage expected	B	B	B	C	C
Little damage and recoverable	C	C	C	C	D

### Integrated Risk Management

#### Financial risk

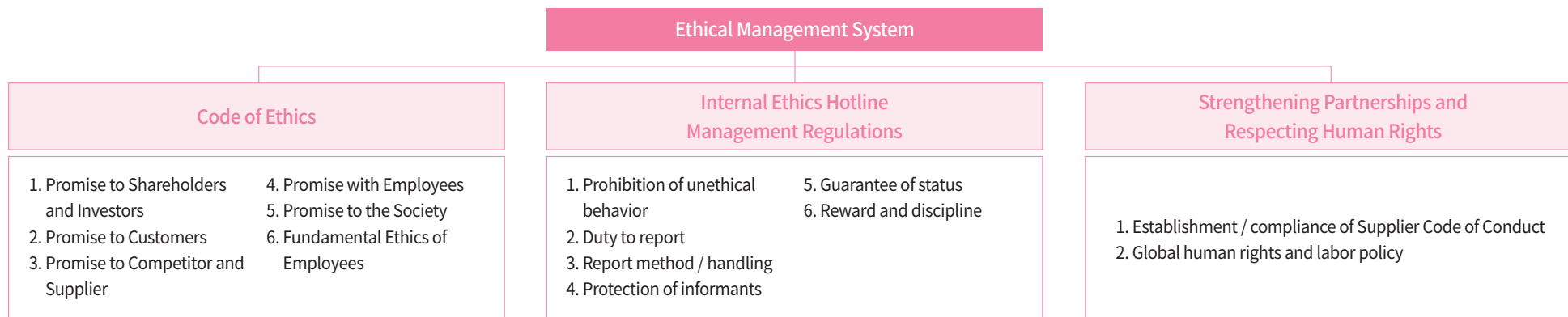
Market	Credit	Forex	Liquidity
Managing risks related to interest rates and exchange rates for stable fund management	Monitoring and verifying the risk limits of the banks and financial institutions we work with	Establishing the foreign exchange risk management policy	Tracking the operating capital needs to anticipate liquidity

#### Non-financial risk

Compliance	Quality	Environment	Society
Establishing compliance control standards and legal handling standards	Preventing the disconnected transactions with customers, claims, withdrawal of international standard certificates, etc.	Compliance with relevant laws, such as environmental pollutant emission standards and fuel quality standards	Establishing a response system in case of emergency by category

# Ethical Management System

L&F has established an ethical management system to enable its employees and stakeholders to make proper actions and value judgments, and to guide them to make decisions on the foundation of the ethical management system. The ethical management system has been built based on the Code of Ethics, internal Ethics Hotline management regulations, enhanced partnerships, and a respect for human rights.



## Code of Ethics

We have established the Code of Ethics to cultivate ethical awareness and implement ethical management based on it. For our key stakeholders, we have specified various matters that the company and employees must comply with.

<b>Shareholders and investors</b>	Protection of shareholder rights and interests / Equal treatment / Active provision of information
<b>Customers</b>	Customer respect / Customer protection
<b>Competitors and partner companies</b>	Fair competition with competitors / Fair trade with partner companies
<b>Employees</b>	Fair treatment / Creation of a good working environment
<b>Society</b>	Compliance with domestic and foreign laws / Contribution to national economic and social development / Environmental protection
<b>Fundamental ethics of employees</b>	Equipped with a sound corporate culture / Prohibition of conflict of interest Protection of company asset and critical information / Sexual harassment prevention Prohibition of political involvement and propagation activities / Prohibition of accepting money and improper service / Compliance with the Code of Ethics

## Internal Ethics Hotline

To proactively prevent risks involving ethics and compliance, we have established an internal Ethics Hotline and enacted internal reporting management regulations. We strictly safeguard the anonymous informants in accordance with the whistleblower protection system as per the management regulations.

### Report Items through Internal Ethics Hotline



- Behavior related to workplace bullying and sexual harassment
- Work-related irregularities / misconduct / damage to dignity, and acts that damage the company's image
- Leakage of internal trade secrets and customer-related information
- Other acts violating the Code of Ethics, etc.

### Report Handling Process



# Ethical Management System

## Strengthening Partnership and Supporting Partner’s Human Rights Policy

### Supplier Code of Conduct

We require our partner companies to sign the Supplier Code of Conduct annually. The latest Code of Conduct, which was revised in May 2023, has been signed by 20 of our key partner companies to date. These partners are undertaking environmental and social responsibility activities and adhering to RBA standards.

### Internalization Efforts for Employee Adherence to Code of Ethics

L&F has adopted the Code of Ethics that sets forth the ethical standards and principles for all employees. As a condition of employment, every employee should receive ethics education and sign a pledge to comply with the Code of Ethics. Furthermore, employees should adhere to the Code of Ethics in all aspects of their work, and report any suspected or observed violations through the established ethics reporting and response system.

#### Ethics Reporting

(Unit: Cases)

2020	2021	2022
0	0	0

#### Violations of Antitrust and Anticompetitive Acts

(Unit: Cases)

2020	2021	2022
0	0	0

#### Antitrust and Anticompetition Fines and Settlements

(Unit: KRW)

2020	2021	2022
0	0	0

### Global Human Rights and Labor Policy

As part of our policy to respect the human rights of our stakeholders, we have publicly declared our global human rights and labor policy. We also adhere to the labor laws in all the countries and regions where we operate. To communicate and disseminate the human rights and labor policy to all the stakeholders who are directly affected by our business activities, such as employees, customers, and partner companies, we have identified the employees, suppliers, and other stakeholders as the target groups for the human rights and labor policy.

### Company-wide Education to Foster Ethical Management Values

Every year, we conduct mandatory training on ethical management for all employees, covering topics such as business ethics, internal whistleblowing procedures and protection measures, enhancing customer and supplier relationships, and respecting the human rights of stakeholders. All employees are required to complete the training 100%.

#### No. of People Completing Ethics Education

(Unit: Cases)

2020	2021	2022
656	1,038	1,488

#### Ethics Education Participation Rate

(Unit : %)

2020	2021	2022
100	100	100

#### Ethics Education in 2022

Education program	Main topic	Target	Participation rate
Legally mandatory education	Prevention of sexual harassment and workplace bullying	Employees	100%

# Tightening Information Security

## Security Simulation Training for Employees

L&F provides annual security training for employees to enhance their security awareness. We also conduct cyber security simulation training to help employees identify and mitigate security risks and respond effectively in case of an incident. This practical security simulation training aims to foster a culture of information security among employees and prevent security breaches.

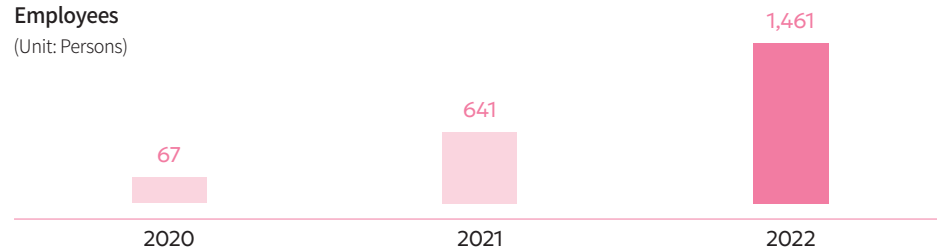
### Security Simulation Training Provided to Employees

Training type	Content	Participation rate
Hacking mail	Sending socio-engineer hacking mails	100%
DDoS attack	Performing DDoS attack against the homepage	Regularly performed every year
Mock-attack	Homepage infiltration through domestic verified hackers	(jointly with related organizations)

### No. of People Completing Information Security Training

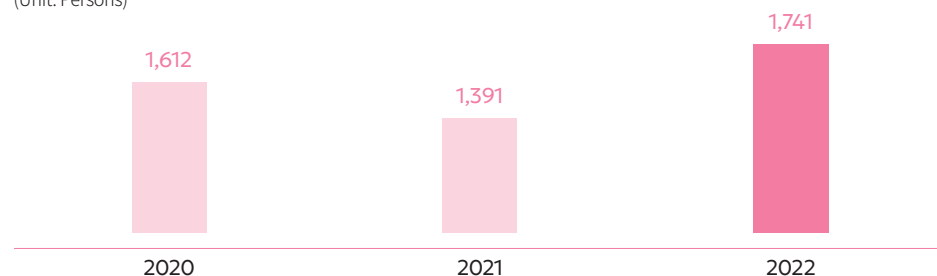
#### Employees

(Unit: Persons)



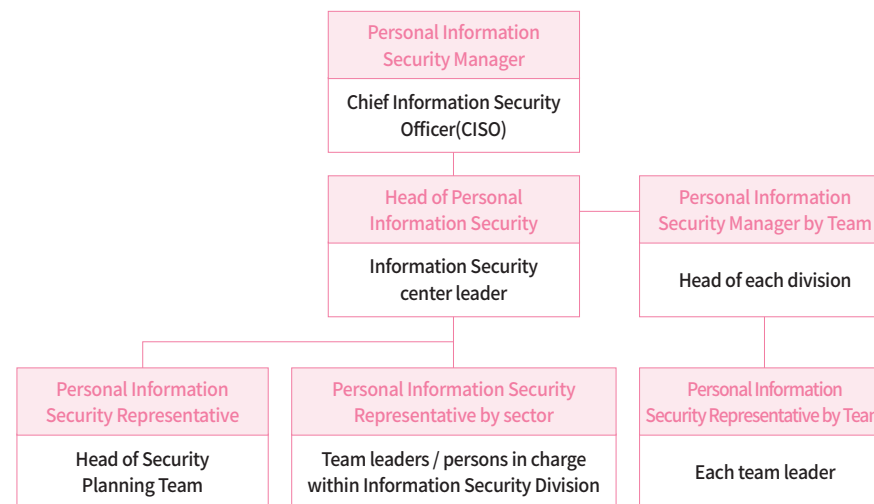
#### Partner companies

(Unit: Persons)



## Personal Data Protection

We are committed to safeguarding the personal information of our customers, employees, partner companies and other stakeholders. We have established a personal information protection management system based on the personal data protection guidelines, which define the roles and responsibilities of the personal information protection organization. We also ensure that stakeholder information is securely managed in accordance with the personal information processing procedures and security measures specified in the guidelines.



### Personal Data Damage Cases

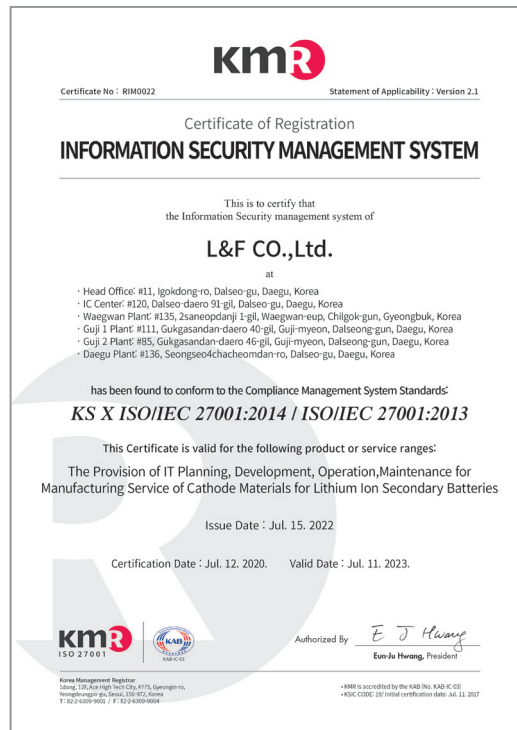
(Unit: Cases)

2020	2021	2022
0	0	0

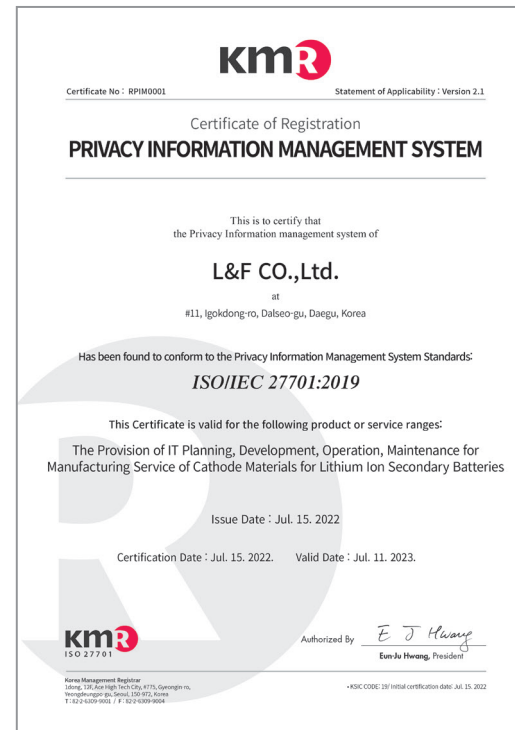
# Tightening Information Security

## Information Security Certifications

We have demonstrated our professional competence in security by maintaining and managing consistent information protection activities. In 2022, we obtained ISO 27001 and ISO 27701 certifications, which are internationally recognized standards for information security management systems for IT planning, development, operation, and maintenance management for cathode material manufacturing services for lithium-ion secondary batteries.



ISO 27001



ISO 27701



# Tax Management

L&F adheres to the principles of ‘tax reporting and payment in accordance with principles’ and ‘social contribution through contributing to the national finance’ in our tax management. We uphold our tax obligations and social responsibilities by complying with the tax laws of the jurisdictions where we operate our business and faithfully paying our taxes.

## Tax Risk Management

We comply with all applicable domestic and foreign tax laws and treaties in every transaction to fulfill our tax obligations as required by law, and contribute to the national finances through accurate tax reporting and timely tax payment. We also maintain a transparent relationship with the domestic tax authorities and the tax authorities of the countries where our local subsidiaries operate.

## Improving Tax Burden Transparency

We disclose information on taxation matters through our business reports to enhance the transparency of our tax burden to our stakeholders. We also comply with the reporting obligations after obtaining the final review by internal and external tax experts on major tax items with an aim to apply the appropriate tax laws and regulations and safeguard our stakeholders’ interests.

## Tax Risk Management Process

We consult with external tax experts before making transactions to assess the risks and make reasonable decisions. For complex and significant tax issues, we seek prior consultation with the tax authority and obtain authoritative interpretation. We also endeavor to prevent various tax risks that may arise from transactions of goods and services, mergers and acquisitions, corporate restructuring, and changes in transaction structures. When making business decisions, we take into consideration the tax risk assessments and various management judgment factors to reach the final decision.



# Sustainability by L&F

## Employee



**WonYoung Park, Team Leader**  
ESG Management Team / Strategy Planning Division

**Q L&F has announced its company-wide ESG management strategy in 2022 and is pursuing its internalization. How will L&F transform if the ESG management strategy is successfully implemented?**

**A** Since L&F is a company that specializes in green energy, I will mention the environmental aspect first. This will highlight L&F's eco-friendly corporate identity. RE100 and carbon neutrality, which have become already global trends, are our goals for 2030 and 2050, respectively. We are currently developing a detailed annual plan to transition to renewable energy sources and achieve RE100 by 2030, and we plan to disclose it by 2030. By adhering to our plan, we anticipate achieving RE100 by 2030 at the latest by progressively increasing the share of renewables from 2024. In addition, we aim to realize carbon neutrality by 2050 by concentrating company-wide capabilities.

**Q Are there any other changes besides the environmental area?**

**A** Governance-related changes are on the horizon. In the changing business environment, establishing and internalizing a sustainable management system is becoming a must for all companies. Companies need to adapt to the external changes, and this will also lead to changes in their governance. With the launch of the ESG Committee in the second half of 2023, ESG will become a key pillar of L&F's management system in the future. Also, this process will further enhance the ESG awareness of our employees. The most crucial factor in establishing a sustainable management system is to improve the employees' understanding, recognition, and active participation in sustainability management. If the ESG-oriented sustainability management system becomes more prominent in the governance change process, I believe that our employees will naturally embrace the trend of invigorating ESG management. Moreover, we plan to internalize ESG in L&F's management environment through consistent efforts, such as providing regular quarterly training for all employees to increase their comprehension of ESG and raise their awareness of its importance.

# Sustainability with L&F

## Stakeholder

**Jungwon Kim,**  
**Managing Director**  
 IMM Credit & Solutions



### Q What are L&F's opportunities and risks from an investor's point of view?

**A** L&F's greatest opportunity lies in its technological edge. Among the future eco-friendly businesses, eco-friendly energy is the most vital, and within it, the secondary batteries that can store energy are especially important. In particular, the cathode material production field, which determines the performance and lifespan of secondary batteries, is crucial. When we decided to invest, L&F was the only company capable of mass-producing high-nickel cathode materials. I think that L&F's opportunity is that it has the most advanced technology in promising businesses.

On the other hand, the risks depend on whether L&F can successfully scale up its mass production capacity to meet the huge demand that it will face in the future. This is a challenge that can be overcome by securing external investment, but it requires transparent disclosure of corporate information. From this perspective, it is a positive sign that L&F has started to disclose non-financial information as well as financial information. As far as I know, L&F is working to diversify its customer base, and if the plan succeeds, we expect major risk issues to be resolved.

## Stakeholder

**Sanghoon Lee,**  
**Managing Director**  
 Head of Risk Management  
 Division / IMM Holdings

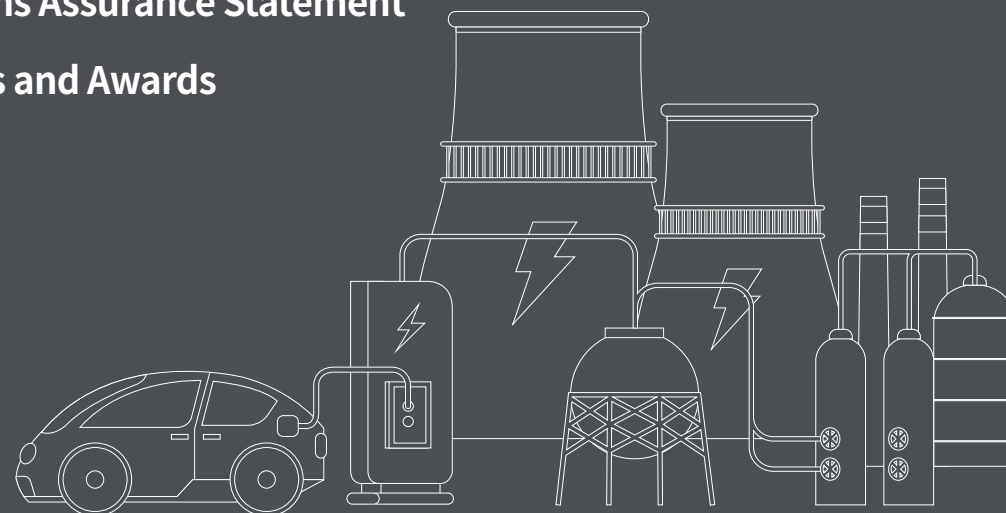


### Q What are L&F's strengths in terms of ESG?

**A** I think that L&F aligns with ESG because its business area itself is aimed at being eco-friendly. It has a good performance in social and governance aspects, as it maintains a distinct separation of ownership and management. However, it seems that there is a need to communicate and share these advantages more effectively with the shareholders. It would be helpful if a more compelling storyline that could easily explain all of this was developed to make it more meaningful to the shareholders. In other words, if strategic and candid stakeholder management is carried out targeting shareholders and investors among various stakeholders, L&F will be more recognized as an ESG-friendly company. In 2022, L&F established an ESG mid- to long-term strategy, which is a positive step towards increasing shareholder value and corporate value if the company implements it step by step. Just as L&F reports its financial performance, I think it is an opportune time to realize shareholder value enhancement in non-financial aspects as well. And I would like to say that the starting point is transparent information disclosure.

# Appendix

<b>93</b>	<b>Economic Performance</b>	<b>103</b>	<b>GRI Standards Content Index</b>
<b>95</b>	<b>Environmental Performance</b>	<b>106</b>	<b>SASB Index</b>
<b>98</b>	<b>Social Performance</b>	<b>107</b>	<b>Third-Party Assurance Statement</b>
<b>101</b>	<b>Governance Performance</b>	<b>109</b>	<b>GHG Emissions Assurance Statement</b>
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# Economic Performance

## Consolidated Statement of Financial Position

(Unit: KRW million)

Category	2020	2021	2022
Current assets	212,044	1,070,617	2,302,552
Cash and cashable assets	21,225	271,776	120,199
Trade receivables and other current receivables	63,433	270,868	800,587
Other current investment assets	5	50	1,248
Inventory	105,276	261,550	1,227,669
Other current financial assets	17,103	213,799	2,318
Designated financial assets measured through 'current income-fair value'	0	35,114	36,749
Other current assets	4,536	17,460	113,782
Current corporate tax assets	465	0	0
Non-current assets	254,174	461,582	721,381
Other non-current investment assets	2,361	3,435	2,666
Long-term trade receivables and other non-current receivables	815	808	934
Tangible assets	237,425	427,126	709,585
Intangible assets	8,861	9,517	7,631
Other non-current assets	575	495	112
Defined benefit assets	0	0	452
Deferred corporate tax assets	4,138	20,201	0
<b>Total assets</b>	<b>466,217</b>	<b>1,532,199</b>	<b>3,023,933</b>

(Unit: KRW million)

Category	2020	2021	2022
Current liabilities	158,120	398,277	1,287,537
Trade payables and other current payables	42,754	218,908	630,123
Short-term borrowings	13,521	129,615	406,140
Current long-term borrowings	96,767	33,932	52,083
Current convertible bond	0	0	869
Other current financial liabilities	4,001	9,666	11,461
Current derivative liabilities	0	0	69,478
Other current liabilities	1,077	1,714	11,067
Current corporate tax liabilities	0	4,442	106,316
Non-current liabilities	110,491	498,732	451,066
Long-term borrowing	90,533	155,960	412,055
Convertible bond	4,716	4,190	0
Bonds with warrants	0	12,688	0
Bonds with RCPS	0	16,415	0
Defined benefit obligation	2,357	3,306	0
Other non-current financial liabilities	978	9,713	32,279
Non-current derivatives liabilities	11,907	296,459	0
Deferred corporate tax liabilities	0	0	6,732
<b>Total liabilities</b>	<b>268,612</b>	<b>897,009</b>	<b>1,738,603</b>
Capital attributable to owners of the parent company	194,441	630,792	1,279,736
Capital	14,029	17,405	18,009
Capital surplus	160,284	693,920	664,899
Other equities	2,224	18,057	25,219
Retained earnings(deficit)	17,904	(98,590)	571,608
Non-controlling interests	3,165	4,398	5,595
<b>Total capital</b>	<b>197,606</b>	<b>635,190</b>	<b>1,285,330</b>
<b>Total capital and liabilities</b>	<b>466,217</b>	<b>1,532,199</b>	<b>3,023,933</b>



# Economic Performance

## Consolidated Statement of Comprehensive Income

(Unit: KRW million)

Category	2020	2021	2022
Sales	356,106	970,760	3,887,294
COGS	332,846	892,627	3,535,891
Gross profit	23,260	78,134	351,402
SG&A expense	21,790	33,882	85,081
Operating profit(loss)	1,470	44,252	266,321
Financial profit	117	6,347	76,464
Financial cost	17,047	181,474	26,028
Other profit	6,937	16,168	217,703
Other loss	9,358	10,932	193,925
Net income before corporate tax(loss)	(17,881)	(125,639)	340,536
Corporate tax expense	2,862	13,376	69,524
Net income	(15,018)	(112,263)	271,012

## Distribution of Economic Value

(Unit: KRW million)

Category	2020	2021	2022	
Employees	Salary, welfare benefits, education and training expenses	28,826	48,858	87,528
Government	Corporate taxes, taxes and the public utilities' charges	394	4,153	96,886
Partner companies	Purchase costs of raw materials and subsidiary materials	277,378	987,687	4,549,407
Communities and NGOs	Total social contribution investments	21	59	155
Shareholders	Dividends*	-8.00%	-	6.16%

\*Negative net profit in 2020, no dividends in 2021

## Corporate Tax

(Unit: KRW million)

Category	Sales	Operating profit	Corporate tax expense
Korea	3,886,225	265,358	68,468
Overseas	29,208	3,744	859

# Environmental Performance\*

Category		Unit	2020	2021	2022	
Product sales		KRW million	356,106	970,760	3,887,294	
Raw material consumption		Tons	18,925	47,785	91,294	
Total consumption		TJ	632	1,831	2,434	
Fuel		TJ(%)	4(0.6%)	5(0.3%)	8(0.3%)	
Electricity		TJ(%)	629(99.5%)	1,827(99.7%)	2,425(99.7%)	
Other***		TJ	0	0	0	
Intensity		TJ/KRW million	0.002	0.002	0.001	
Energy**	Daegu Plant	Total consumption	TJ	632	679	655
		Fuel	TJ	4	4	4
		Electricity	TJ	629	675	651
		Other***	TJ	0	0	0
		Intensity	TJ/KRW million	0.002	0.001	0.000
	Waegwan Plant	Total consumption	TJ	0	246	214
		Fuel	TJ	-	0	0
		Electricity	TJ	-	246	213
		Other***	TJ	-	0	0
		Intensity	TJ/KRW million	0.000	0.000	0.000
	Guji Plant 1	Total consumption	TJ	0	906	1,182
		Fuel	TJ	-	0	0
		Electricity	TJ	-	906	1,181
		Other***	TJ	0	0	0
		Intensity	TJ/KRW million	0.000	0.001	0.000
Guji Plant 2****	Total consumption	TJ	0	0	384	
	Fuel	TJ	-	-	3	
	Electricity	TJ	-	-	380	
	Other***	TJ	-	0	0	
	Intensity	TJ/KRW million	0.000	0.000	0.000	

Category		Unit	2020	2021	2022	
Total emissions*		Tons of CO2e	32,719	90,674	120,657	
Direct emissions(Scope 1)		Tons of CO2e	2,181	3,263	4,584	
Indirect emissions(Scope 2)*****		Tons of CO2e	30,538	87,412	116,073	
Intensity		Tons of CO2e/ KRW million	0.092	0.094	0.031	
GHG	Daegu Plant	Total emissions	Tons of CO2e	32,719	33,961	32,864
		Direct emissions(Scope 1)	Tons of CO2e	2,181	1,668	1,731
		Indirect emissions(Scope 2)	Tons of CO2e	30,538	32,293	31,133
		Intensity	Tons of CO2e/ KRW million	0.092	0.035	0.008
Waegwan Plant	Total emissions	Tons of CO2e	-	12,503	10,589	
	Direct emissions(Scope 1)	Tons of CO2e	-	727	373	
	Indirect emissions(Scope 2)	Tons of CO2e	-	11,777	10,216	
	Intensity	Tons of CO2e/ KRW million	0.000	0.013	0.003	
Guji Plant 1	Total emissions	Tons of CO2e	-	44,211	58,778	
	Direct emissions(Scope 1)	Tons of CO2e	-	869	2,249	
	Indirect emissions(Scope 2)	Tons of CO2e	-	43,342	56,529	
	Intensity	Tons of CO2e/ KRW million	0.000	0.046	0.015	
Guji Plant 2	Total emissions	Tons of CO2e	-	-	18,425	
	Direct emissions(Scope 1)	Tons of CO2e	-	-	231	
	Indirect emissions(Scope 2)	Tons of CO2e	-	-	18,194	
	Intensity	Tons of CO2e/ KRW million	0.000	0.000	0.005	

\*The reporting scope of the first report (2021) (headquarters and Innovation Center, etc.) was excluded from the reporting scope of the second report (2022). Therefore, some of the data reported in the 2021 report has been revised in the 2022 report.

\*\*Only Daegu Plant was measured until 2020. \*\*\* Steam energy and other sources are included. \*\*\*\*Guji Plant 2 is expected to be completed in the second half of 2022. \*\*\*\*\*Rapid increase in electricity consumption from 2021, with the full operation of Guji Plant 1

# Environmental Performance\*

Category		Unit	2020	2021	2022	
Water consumption		m <sup>3</sup>	60,605	77,463	170,702	
Intensity		m <sup>3</sup> /KRW million	0.170	0.080	0.044	
Recycled water		m <sup>3</sup>	0	0	0	
Water recycling ratio		%	0	0	0	
Water	Daegu Plant	Water consumption	m <sup>3</sup>	32,262	24,516	19,705
		Waterworks	m <sup>3</sup>	32,262	24,516	19,705
		Underground water	m <sup>3</sup>	0	0	0
		River water	m <sup>3</sup>	0	0	0
	Waegwan Plant	Water consumption	m <sup>3</sup>	7,756	6,121	6,480
		Waterworks	m <sup>3</sup>	7,756	6,121	6,480
		Underground water	m <sup>3</sup>	0	0	0
		River water	m <sup>3</sup>	0	0	0
	Guji Plant 1	Water consumption	m <sup>3</sup>	20,587	39,078	86,747
		Waterworks	m <sup>3</sup>	20,587	39,078	86,747
		Underground water	m <sup>3</sup>	0	0	0
		River water	m <sup>3</sup>	0	0	0
	Guji Plant 2	Water consumption	m <sup>3</sup>	0	7,748	57,770
		Waterworks	m <sup>3</sup>	0	7,748	57,770
		Underground water	m <sup>3</sup>	0	0	0
		River water	m <sup>3</sup>	0	0	0

Category		Unit	2020	2021	2022
Total discharge		m <sup>3</sup>	1,263	4,853	18,569
Effluent**	Daegu Plant	m <sup>3</sup>	450	493	501
	Waegwan Plant	m <sup>3</sup>	142	220	155
	Guji Plant 1	m <sup>3</sup>	671	4,140	11,825
	Guji Plant 2	m <sup>3</sup>	0	0	6,088
	Intensity	m <sup>3</sup> /KRW million	0.004	0.005	0.005

Category		Unit	2020	2021	2022
Water pollutants***	Total discharge	Tons	-	-	-
	Intensity	Tons/KRW million	-	-	-
Air pollutants	Total emissions	Tons	13	15	20
	Particulate matter	Tons	13	14	16
	NOx	Tons	0	2	4
	SOx	Tons	-	-	0
	Intensity	Tons/KRW million	0.000	0.000	0.000

\*The reporting scope of the first report (2021) (headquarters and Innovation Center, etc.) was excluded from the reporting scope of the second report (2022). Therefore, some of the data reported in the 2021 report has been revised in the 2022 report.

\*\*Wastewater generated from the production process, recycled and appropriately treated through outsourced facilities. \*\*\*Through the process of outsourcing wastewater treatment, various pollutants are treated, resulting in no water pollutant generation.

# Environmental Performance\*

Category	Unit	2020	2021	2022
Total disposal	Tons	936	1,870	3,247
Daegu Plant	Tons	524	552	463
Waegwan Plant	Tons	333	299	231
Waste**				
Guji Plant 1	Tons	79	1,008	2,239
Guji Plant 2	Tons	0	11	314
Intensity	Tons/KRW million	0.003	0.002	0.001
Waste recycling ratio	%	98	99	100
Designated waste				
Total amount	Tons	264	758	602
Recycled waste	Tons	259	750	602
Incineration	Tons	5	8	0
Landfill	Tons	0	0	0
Other	Tons	0	0	0
General waste				
Total amount	Tons	672	1,111	2,645
Recycled waste	Tons	672	1,111	2,645
Incineration	Tons	0	0	0
Landfill	Tons	0	0	0
Other	Tons	0	0	0

Category	Unit	2020	2021	2022
Environmental spending				
Environmental investments	KRW million	0	5,046	7,549
Environmental costs	KRW million	240	1,346	1,807
Environmental management certification				
Environmental management system (ISO 14001) certification scope	%	100	100	100
Violation of environmental laws and regulations				
Violation of environmental laws	Cases	1	8	1
Fines for violation	KRW million	0	125	0

\*The reporting scope of the first report (2021) (headquarters and Innovation Center, etc.) was excluded from the reporting scope of the second report (2022). Therefore, some of the data reported in the 2021 report has been revised in the 2022 report.

\*\*Obtained Zero Waste to Landfill (ZWTL) validation in 2022

# Social Performance\*

## Domestic Employees

Category	Unit	2020	2021	2022
Total number of employees	Persons	656	1,038	1,488
Gender	Male	599	957	1,379
	Female	57	81	109

## New Recruitment

Category	Unit	2020	2021	2022
Total number of new hires	Persons	167	703	714
Gender	Male	159	666	678
	Female	8	37	36

## Voluntary Turnover

Category	Unit	2020	2021	2022
Number of voluntary turnover	Persons	95	313	268
Gender	Male	87	301	259
	Female	8	12	9
Average years of service	Years	1 yr 6mths	8mths	9mths

## Employee Details

Category	Unit	2020	2021	2022		
Total number of employees	Persons	656	1,038	1,488		
Gender	Male(ratio)	Persons(%)	599(91%)	957(92%)	1,379(93%)	
	Female(ratio)	Persons(%)	57(9%)	81(8%)	109(7%)	
Employment type	Full-time(ratio)	Persons(%)	656(100%)	1,038(100%)	1,488(100%)	
	Contract or dispatched (ratio)	Persons(%)	0(0%)	0(0%)	0(0%)	
Age	Under 30(ratio)	Persons(%)	278(42%)	541(52%)	734(49%)	
	30 - 49(ratio)	Persons(%)	346(53%)	463(45%)	710(48%)	
	50 and above(ratio)	Persons(%)	32(5%)	34(3%)	44(3%)	
Domestic	Disabled(ratio)	Persons(%)	13(2%)	20(2%)	27(2%)	
	Managerial position	Persons	2	2	5	
	Non-managerial position	Persons	11	18	22	
Diversity	High school graduates (ratio)	Persons(%)	125(19%)	208(20%)	323(22%)	
	Managerial position	Persons	20	24	38	
	Non-managerial position	Persons	105	184	285	
	Foreigner(ratio)	Persons(%)	0(0%)	0(0%)	0(0%)	
Overseas	Total number of employees	Persons	2	2	2	
	Details	Dispatch to overseas	Persons	2	2	2
		Local recruitment	Persons	0	0	0

\*The reporting scope of the first report (2021) (headquarters and Innovation Center, etc.) was excluded from the reporting scope of the second report (2022). Therefore, some of the data reported in the 2021 report has been revised in the 2022 report.



# Social Performance\*

## Welfare Benefits

Category		Unit	2020	2021	2022	
Total annual welfare expenditures		KRW million	748	872	1,427	
Average welfare expenditures per capita		KRW thousand	1160	840	960	
Parental leave	Number of users	Male	Persons	1	0	3
		Female	Persons	4	3	5
		Subtotal	Persons	5	3	8
	Rate of employees returning to work after parental leave	%	100	100	100	
	Rate of employees working for 12 months after returning to work	%	100	100	100	

## Employee Training

Category		Unit	2020	2021	2022
Number of participants		Persons	656	1,038	1,486
Training hours per capita		Hour	21	15	18
Training cost per capita		KRW	19,615	9,508	11,365

## Labor Practice

Category		Unit	2020	2021	2022
Collective Agreement and Labor-Management Council	Rate of collective agreements applied	%	0	0	0
	Labor-Management Council meetings	Times	5	5	5
Employee Communication	Number of employee grievances reported	Cases	13	17	9
	Number of employee grievances handled	Cases	10	14	9
Equal Pay	Ratio of female to male wage	%	98	106	113

## Safety and Health

Category		Unit	2020	2021	2022	
Occupational accident	Total fatal accidents	Employees	Cases	0	0	0
		Partner companies	Cases	0	0	0
	Number of occupational accidents	Employees	Cases	9	13	16
		Accident rate	%	1	1	1
		Partner companies	Cases	0	2	0
Violations of relevant laws		Cases	0	0	0	
Activities to eliminate risk factors	Scope of occupational health and safety management system(ISO 45001, KOSHA 18001)		%	100	100	100
	Number of risk factors identified at business sites		Cases	60	220	182
	Improvement rate of risk factors		%	100	100	100
Training	Number of safety and health training		Times	4	4	4
	Number of participants		Persons	645	1,038	1,486

## Partner Companies

Category		Unit	2020	2021	2022
Number of partner companies		Numbers	546	685	851
Number of key partner companies		Numbers	39	40	51
Technical support for partner companies		Cases	0	0	0
Win-win cooperation expenses		KRW million	34,247	36,831	388

\*The reporting scope of the first report (2021) (headquarters and Innovation Center, etc.) was excluded from the reporting scope of the second report (2022). Therefore, some of the data reported in the 2021 report has been revised in the 2022 report.

# Social Performance\*

## Quality Management

Category	Unit	2020	2021	2022
Rate of ISO 9001-certified business sites	%	100	100	100
Customer satisfaction	%	98	97	82
Number of customer claims	Cases	0	0	0

## R&D

Category	Unit	2020	2021	2022
R&D expenditure	KRW million	11,960	12,168	33,497
R&D expenditure to sales ratio	%	3	1	1
Intellectual property right	Cases	7	15	10
Patent	Cases	7	11	10
Trademark	Cases	0	4	0

## Information Security

Category	Unit	2020	2021	2022
Number of employees who completed data security training	Employees	67	641	1,461
	Partner companies	1,612	1,391	1,741
Number of data security breaches	Cases	0	0	0
Number of breaches of customer personal data-related laws	Cases	0	0	0
Fines and penalties incurred by the violations of data protection laws	KRW	0	0	0

## Donations

Category	Unit	2020	2021	2022
Political contributions	KRW thousand	0	0	137,000
Donations to scholarship associations	KRW thousand	3,400	3,400	3,400
Donations to associations	KRW thousand	0	0	5,000
Donations to federations	KRW thousand	0	0	0
Donations to the Red Cross	KRW thousand	0	0	0
Donations to foundations	KRW thousand	1,000	0	0
Donations to hospitals	KRW thousand	10,000	10,000	10,000
Donations to fundraisers	KRW thousand	5,000	35,280	0
Donations to community welfare centers	KRW thousand	2,000	0	0
Donations to the Community Chest of Korea	KRW thousand	0	0	0
Donations to science museums	KRW thousand	0	10,000	0

## Social Contribution

Category	Unit	2020	2021	2022
Spending on social contribution	KRW million	21	59	155
Contribution to sales ratio	%	0.006	0.006	0.004
Number of employees participating in volunteer work	Persons	0	0	57
Total volunteer hours	Hours	0	0	114

\*The reporting scope of the first report (2021) (headquarters and Innovation Center, etc.) was excluded from the reporting scope of the second report (2022). Therefore, some of the data reported in the 2021 report has been revised in the 2022 report.

# Governance Performance

## Board of Director

	Category	Unit	2020	2021	2022
BOD composition	Number of internal directors	Persons	2	3	3
	Number of independent directors	Persons	3	3	3
	Ratio of independent directors	%	60	50	50
	Ratio of female directors	%	0	0	0
	Number of directors having industry experience	Persons	3	4	4
	Number of directors having finance experience	Persons	1	1	1
BOD operation	Number of board meetings held	Number	29	47	42
	Average attendance rate	%	100	100	100
	Attendance rate of internal directors	%	100	100	100
	Attendance rate of independent directors	%	100	100	99
BOD remuneration	Number of BOD agenda items	Number	29	47	42
	Total amount of director remuneration	KRW million	597,085	1,100,710	2,007,989
	Average remuneration per capita	KRW million	119,417	157,244	334,664
BOD expertise	Number of education programs targeting independent directors	Number	0	0	1

## Audit Committee

	Category	Unit	2020	2021	2022
	Number of committee members	Persons	3	4	3
	Number of committee meetings held	Persons	19	33	29
	Average attendance rate	%	100	100	100
	Number of education programs targeting audit members	Number	0	0	1

## Compliance

	Category	Unit	2020	2021	2022
Anti-trust and anti-competitive practices	Number of violations of related laws and regulations	Number	0	0	0
	Fines and other financial losses	KRW million	-	-	-
Anti-corruption	Number of violations of related laws and regulations	Number	0	0	0
	Fines and other financial losses	KRW million	-	-	-





## Ethical Management

	Category	Unit	2020	2021	2022
Ethics report	Number of reports	Number	0	0	0
	Number of completed actions taken on reports	Number	-	-	-
Ethical training	Number of people completed the ethical training	Persons	656	1,038	1,488
	Participation rate	%	100	100	100

# UN SDGs Alignment

L&F is dedicated to expediting sustainable development by adopting the UN Sustainable Development Goals(UN SDGs), which encompass 17 overarching goals and 169 specific targets. We have incorporated 9 of these goals into our corporate strategic objectives and will align our business endeavors accordingly. We are geared towards generating both economic and social value, while advancing our commitment to sustainable development.

UN SDGs	Our Key Activities
 <p><b>Goal 5</b> Achieve gender equality and empower all women and girls</p>	<ul style="list-style-type: none"> <li>- Hired employees in a fair manner and secured diversity in employee composition</li> <li>- Provided education on the prevention of sexual harassment in the workplace</li> </ul>
 <p><b>Goal 7</b> Ensure access to affordable, reliable, sustainable and modern energy</p>	<ul style="list-style-type: none"> <li>- Transition to 100% new and renewable energy by 2030</li> <li>- Conducted an energy saving campaign</li> </ul>
 <p><b>Goal 8</b> Promote inclusive and sustainable economic growth, employment and decent work for all</p>	<ul style="list-style-type: none"> <li>- Offered a variety of welfare benefits and become a good place to work</li> <li>- Created a great amount of local jobs</li> <li>- Hired all regular employees and boosted the local economy</li> </ul>
 <p><b>Goal 10</b> Reduce inequality within and among countries</p>	<ul style="list-style-type: none"> <li>- Complied with the global guidelines on human rights and labor</li> <li>- Formulated Responsible Sourcing Policy for conflict minerals</li> <li>- Conducted due diligences in compliance with the OECD guidelines</li> <li>- Endorsed the international standards regarding human rights and labor and abided by the labor law</li> </ul>
 <p><b>Goal 11</b> Make cities inclusive, safe, resilient and sustainable</p>	<ul style="list-style-type: none"> <li>- Engaged in various forms of volunteer work and made donations</li> <li>- Promoted the virtuous circle of local economy through plant extension and construction</li> <li>- Obtained Platinum Level on ZWTL (Zero Waste to Landfill) and recycled 100% waste</li> </ul>

UN SDGs	Our Key Activities
 <p><b>Goal 12</b> Ensure sustainable consumption and production patterns</p>	<ul style="list-style-type: none"> <li>- Developed the ESG evaluation metrics to partner companies</li> <li>- Boosted resource circulation through the activities to recycle waste</li> </ul>
 <p><b>Goal 13</b> Take urgent action to combat climate change and its impacts</p>	<ul style="list-style-type: none"> <li>- Set up a roadmap for net-zero and declared the 2050 carbon neutrality</li> <li>- Carried out R&amp;D activities to develop eco-friendly products</li> <li>- Reviewed the way of converting to new and renewable energy</li> </ul>
 <p><b>Goal 16</b> Promote just, peaceful and inclusive societies</p>	<ul style="list-style-type: none"> <li>- Establishing a transparent governance structure through ethical and human rights management</li> <li>- Operated the BOD in a rational manner</li> <li>- Carried out activities to end child labor</li> </ul>
 <p><b>Goal 17</b> Revitalize the global partnership for sustainable development</p>	<ul style="list-style-type: none"> <li>- Built a management process for new and existing partner companies</li> <li>- Developed the ESG evaluation metrics and globally sourced resources</li> </ul>

# GRI Standards Contents Index

## GRI 1 : Foundation

Item	Remarks
Description	L&F reports data from January 1, 2022 to December 31, 2022 based on the newly revised GRI Standards 2021.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standards	Currently unavailable(as of the report publication date, standards for the industry group applicable to L&F have not been announced)

## GRI 2 : General Disclosures

Topic	Index	Content	Page	Additional Information
The organization and its reporting practices	2-1	Organizational details	7-8	-
	2-2	Entities included in the organization's sustainability reporting	7-8	-
	2-3	Reporting period, frequency and contact point	2	-
	2-4	Restatements of information	2, 95-100	-
	2-5	External assurance	2, 107-108	-
Activities and workers	2-6	Activities, value chain and other business relationships	7-12, 35	-
	2-7	Employees	65	-
	2-8	Workers who are not employees	-	All employees enter into employment contracts due to business type, all employees are employed as full-time (regular) employees
Governance	2-9	Governance structure and composition	80	-
	2-10	Nomination and selection of the highest governance body	80	-
	2-11	Chair of the highest governance body	80	-
	2-12	Role of the highest governance body in overseeing the management of impacts	81	-
	2-13	Delegation of responsibility for managing impacts	81	-
	2-14	Role of the highest governance body in sustainability reporting	20	-

Topic	Index	Content	Page	Additional Information
Governance	2-15	Conflicts of interest	85-86	-
	2-16	Communication of critical concerns	68	-
	2-17	Collective knowledge of the highest governance body	68, 81, 83-86	-
	2-18	Evaluation of the performance of the highest governance body	81	-
	2-19	Remuneration policies	66, 81	-
	2-20	Process to determine remuneration	81	-
	2-21	Annual total compensation ratio	66, 81	-
Strategy, policies and practices	2-22	Statement on sustainable development strategy	14	-
	2-23	Policy commitments	19	-
	2-24	Embedding policy commitments	19	-
	2-25	Processes to remediate negative impacts	83-84	-
	2-26	Mechanisms for seeking advice and raising concerns	85-86	-
	2-27	Compliance with laws and regulations	14	-
Stakeholder engagement	2-28	Membership associations	110	-
	2-29	Approach to stakeholder engagement	46	-
	2-30	Collective bargaining agreements	48, 60, 110	-

## GRI 3 : Material Topics

Topic	Index	Content	Page	Additional Information
Disclosures on material topics	3-1	Process to determine material topics	15-16	-
	3-2	List of material topics	16	-
	3-3	Management of material topics	16-17	-



# GRI Standards Contents Index

## GRI 200 : Economic Performance

Topic	Index	Content	Page	Additional Information
Economic performance	201-1	Direct economic value generated and distributed	94	-
	201-3	Defined benefit plan obligations and other retirement plans	67	-
	201-4	Financial assistance received from government	34	-
Indirect economic impacts	203-1	Infrastructure investments and services supported	74-76	-
Anti-corruption	205-1	Operations assessed for risks related to corruption	83-84	-
	205-2	Communication and training about anti-corruption policies and procedures	85-86	-
	205-3	Confirmed incidents of corruption and actions taken	85-86	-
Anti-competitive behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	86	-
Tax	207-1	Approach to tax	89	-
	207-2	Tax governance, control, and risk management	89	-

## GRI 300 : Environmental Performance

Topic	Index	Content	Page	Additional Information
Materials	301-1	Materials used by weight or volume	95	-
	301-2	Recycled input materials used	52	-
Energy	302-1	Energy consumption within the organization	95	-
	302-2	Energy consumption outside of the organization	95	-
	302-3	Energy intensity	95	-
	302-4	Reduction of energy consumption	48	-
	302-5	Reductions in energy requirements of products and services	48	-
Water and effluents	303-1	Interactions with water as a shared resource	51	-
	303-2	Management of water discharge-related impacts	51	-
	303-3	Water withdrawal	51	-
	303-4	Water discharge	51	-
	303-5	Water consumption	51	-
Emissions	305-1	Direct(Scope 1) GHG emissions	95	-
	305-2	Energy indirect(Scope 2) GHG emissions	95	-
	305-4	GHG emissions intensity	29,48	-
	305-5	Reduction of GHG emissions	29-30	-
	305-7	Nitrogen oxides(NOx), sulfur oxides(SOx), and other significant air emissions	52	-

# GRI Standards Contents Index

## GRI 300 : Environmental Performance

Topic	Index	Content	Page	Additional Information
Waste	306-1	Waste generation and significant waste-related impacts	31-32	-
	306-2	Management of significant waste-related impacts	31-32	-
	306-3	Waste generated	31-32, 97	-
	306-4	Waste diverted from disposal	31-32, 97	-
	306-5	Waste directed to disposal (incineration, landfilling)	31-32, 97	-
Supplier Environmental Assessment	308-2	Negative environmental impacts in the supply chain and actions taken	39-40	-

## GRI 400 : Social Performance

Topic	Index	Content	Page	Additional Information
Employment	401-1	New employee hires and employee turnover	64, 98	-
	401-3	Parental leave	67-68, 99	-
Occupational Health and Safety	403-1	Occupational health and safety management system	21-24	-
	403-2	Hazard identification, risk assessment, and incident investigation	69-70	-
	403-3	Hazard identification, risk assessment, and incident investigation	67	-
	403-4	Worker participation, consultation, and communication on occupational health and safety	23-24, 69-70	-
	403-5	Worker training on occupational health and safety	70	-
	403-6	Promotion of worker health	67, 69-70	-
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	67, 69-70	-
	403-8	Workers covered by an occupational health and safety management system	23-24	-
	403-9	Work-related injuries	99	-
	403-10	Work-related ill health	99	-
Training and Education	404-1	Programs for upgrading employee skills and transition assistance programs	66	-
	404-2	Percentage of employees receiving regular performance and career development reviews	66	-
	404-3	Diversity of governance bodies and employees	66	-
Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	65, 80	-
	405-2	Ratio of basic salary and remuneration of women to men	66	-
Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	65, 68	-
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	25-26, 60, 68	-
Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs	74-76	-

# SASB Index

## Electrical & Electronic Equipment Sustainability Accounting Standard

Category	Code	Content	Page	Additional Information
Energy Management	RT-EE-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	95	No percentage exists for renewable energy usage
Hazardous Waste Management	RT-EE-150a.1	Amount of hazardous waste generated, percentage recycled	97	-
	RT-EE-150a.2	Number and aggregate quantity of reportable spills, quantity recovered	-	No related leaks occurred
Product Safety	RT-EE-250a.1	Number of recalls issued, total units recalled	58	-
	RT-EE-250a.2	Total amount of monetary losses as a result of legal proceedings associated with product safety	-	No related safety incidents occurred
Product Lifecycle Management	RT-EE-410a.1	Percentage of products by revenue that contain IEC 62474 declarable substances	-	No related substances contained in the product
	RT-EE-410a.2	Percentage of eligible products, by revenue, that meet ENERGY STAR® criteria	-	No related products released
	RT-EE-410a.3	Revenue from renewable energy related and energy efficiency-related products	94	-
Materials Sourcing	RT-EE-440a.1	Description of the management of risks associated with the use of critical materials	83-84	-
Business Ethics	RT-EE-510a.1	Description of policies and practices for prevention of: (1) corruption and bribery and (2) anti-competitive behavior	40, 85-86	-
	RT-EE-510a.2	Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption	-	No incidents of corruption or bribery have occurred
	RT-EE-510a.3	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	-	No incidents of antitrust and anticompetitive have occurred
Accounting Metrics	RT-EE-000.A	Number of units produced by product category	-	Not disclosed due to management decisions
	RT-EE-000.B	Number of employees	7, 65, 98	-

# Third-Party Assurance Statement

Han Consulting Group (hereinafter the ‘assurer’) has been asked to provide third-party assurance on the L&F Sustainability Report 2022 (the “Report”). The management of L&F is responsible for the preparation of the Report and the information, and the responsibility of the assurer is to comply with the contract and agreed tasks and issue an assurance opinion.

## Assurance Scope and Criteria

L&F describes the organization’s performance and activities related to ESG included in the report from January 1, 2022 to December 31, 2022 (qualitative and partial data up to the first half of 2023). Data and information about the organization’s overseas subsidiaries, partners, contractors, etc. were excluded from the scope of assurance. As for the level of verification, compliance with the four principles of the AA1000 AP (2018) was confirmed, and the Type 1 verification type and Moderate verification level were conducted. We have conducted an assurance engagement on the data and information in the report for compliance with the principles of Inclusiveness, materiality, responsiveness and impact as set out in AA1000AP (2018) and in accordance with the Global Disclosure Standard below.

We have verified the application of the GRI Standard 2021 disclosure criteria corresponding to the above levels, as well as the application of the Sustainability Accounting Standards Board (SASB) disclosure criteria and the indicators of the United Nations Sustainable Development Goals (UN SDGs).

- ▶ Applying the GRI Standard 2021 Disclosure Principles
  - Universal Standard
    - Applying the GRI 1- Foundation Standard
    - GRI 2- General Disclosure
    - GRI 3- Material Topics Disclosure
  - Topic-Specific Standard
    - Economic Performance 201, 203, 205, 206, 207
    - Environmental Performance 301, 302, 303, 305, 306, 308
    - Social Performance 401, 403, 404, 405, 407, 413413
- ▶ Sustainability Disclosure Topics & Accounting Metrics (SASB)
- ▶ Applies to 9 of the 17 goals of the UN SDGs

## Assurance Methodology

We performed the assurance engagement in accordance with the assurance criteria described above for the agreed scope of the assurance engagement as follows

- A general review of the content of the report
- Review of the dual materiality assessment methodology and results
- Evaluation of the sustainability management strategy and performance information systems and processes
- Interviewing those responsible for the preparation of the report
- Review and verification of data by area of the report presented.

## Limitations

The verification is based on the assumption that the data and information provided by L&F is complete and sufficient. The data verification was conducted to a limited extent by inquiring and analyzing the data collected by L&F and using a limited form of sampling.

## Assurance Results and Opinion

Based on the results of the document review and on-site interviews, We requested revisions to the report from L&F, and reviewed the final version of the report to confirm that the revisions and improvement recommendations were reflected. As a result of the assurance engagement, we found that the report was prepared in accordance with the reporting approach of the GRI Standards 2021 and complied with the Report Assurance Principles set out in the AA1000AP (2018). Our opinion on each principle is as follows.

## Inclusiveness

L&F operates various forms and levels of stakeholder communication channels in order to commit to and implement the organization’s responsibilities to its stakeholder. We were unable to identify any omissions of key stakeholder groups in this process and confirmed that efforts are being made to ensure that their views and expectations are appropriately reflected in the organization’s strategy.

# Third-Party Assurance Statement

## Materiality

L&F determines the materiality of key issues to the organization’s ESG performance through a unique assessment process, and We did not identify any material issues that were omitted from this process.

## Responsiveness

L&F prioritizes the material issues identified and reports on its activities, responses, and future plans in a feasible manner, and We did not find any evidence that L&F’s response activities were inappropriately disclosed in the report.

## Impact

We confirmed that L&F monitors its response activities by identifying the direct and indirect impacts of the major issues identified through the dual materiality assessment, and reports the results and impacts in a quantified form within the scope of the report.

## Recommendations for Improvement

In order to improve its sustainability management performance, we recommend that the company refine its ESG strategy, including climate change response, and strengthen its supply chain management system to regularly manage its implementation performance at the governance level, and disclose more specific ESG management activities and performance by presenting comprehensive sustainability performance in the upcoming sustainability report.

## Qualifications and Independence

We are composed of ESG experts and maintains independence by not having any interest in the business activities of L&F for profit other than providing third-party assurance services.

August 28, 2023



CEO Seung Yong Lee

Team Leader Tae Nong Kang



# GHG Emissions Assurance Statement

## Verification Statement on 2022 Greenhouse Gas Emission Report

Korean Foundation for Quality(hereinafter “KFQ”) has conducted the verification of “2022 Report on Quantity of emitted Greenhouse gas Consumption(hereinafter ‘Inventory Report’)” for L&F Inc.(hereinafter “Company”)

### Verification Scope

KFQ’s verification was focused on all the facilities which emitted the greenhouse gas during the year of 2022 under Company’s operational control and organizational boundary. GHG emissions from direct and indirect emission sources(Scope 1 and 2) were calculated for all GHG emission facilities under the operational control of company.

### Verification Criteria

The verification process was based on ‘Rule for emission reporting and certification of greenhouse gas emission trading Scheme(Notification No. 2021-112 of Ministry of Environment)’, ‘Rules for verification of operating the greenhouse gas emission trading scheme(Notification No. 2022-279 of Ministry of Environment)’.

### Level of Assurance

The Verification has been planned and conducted as the ‘Rules for verification of operating the greenhouse gas emission trading scheme’, and the level of assurance for verification shall be satisfied as reasonable level of assurance. And it confirmed through the internal review whether the process before the verification conducted effectively.

### Verification Limitation

The verification shall contain the potential inherent limitation in the process of application of the verification criteria and methodology.

### Verification Opinions

Regarding to the data of the Greenhouse Gas Emission Consumption from the report through the verification, KFQ provides our verification opinions as below;

- 1) The Inventory Report has been stated in accordance with ‘Rule for emission reporting and certification of greenhouse gas emission trading Scheme’
- 2) The result of Material discrepancy satisfied the criteria for an organization that emits more than 500,000 tCO<sub>2</sub>-eq shall not exceed 5% from total emission as per “Greenhouse Gas and Energy Target Management Scheme”
- 3) Thus, KFQ conclude that the Greenhouse Gas Emissions of Each Company in 2022 is correctly calculated and stated in accordance with ‘Rule for emission reporting and certification of greenhouse gas emission trading Scheme’.

## Appendix A. Summary of GHG Emission Results

### Organization

L&F Inc.

### Emission calculation period

The emission caculation period is from January 1 to December 31, 2022.

### Emission calculation results

tCO<sub>2</sub>eq

Business site	Scope 1	Scope 2	총계
Daegu Plant	1,730.668	31,133.429	32,864
Waegwan Plant	373.265	10,216.088	10,589
R&D Center	30.231	1,177.598	1,207
Guji Plant 1	2,249.214	56,528.974	58,778
Gimcheon Office	0	250.348	250
Guji Plant 2	231.215	18,194.247	18,425
Headquarter	6.127	94.61	100
Sum	4,620.72	117,595.295	122,213

※ There is a difference between the total emissions and the sum of emissions by business site (truncated emissions by business site are added together by company).

May 16<sup>th</sup>, 2023

Korean Foundation for Quality CEO Ji-Young Song *Ji Young Song*

# Memberships and Initiatives



Korea Fire Safety Institute



Korea Electric Engineers Association



Korean Association for Industrial Technology Security



Daegu Enterprises Federation



Daegu Chamber of Commerce and Industry



Korea Battery Industry Association



KOSDAQ Listed Companies Association



Korea Exchange ETS (Emission Trading Scheme) Market



Korea Industrial Technology Association



WORLD CLASS 300



Korea Mech. Const. Contractors Association



Responsible Cobalt Initiative(RCI)



Korea International Trade Association



SSP Association

# Awards

## Grand Prize for Leading Company at the 16th Resource Circulation Awards

Sep. 6, 2022	Awarding Body Ministry of Environment / Korea Environment Corporation	Level of Prize Citation from Prime Minister
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## Grand Prize in the green management category at the 2021 Global Standard Management Awards

Dec. 2, 2021	Awarding Body Korea Management Registrar / Global Management Committee	Level of Prize Citation from the Minister of Trade, Industry and Energy
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## Award for job creation in 2019

Dec. 23, 2019	Awarding Body Ministry of Employment and Lab	Level of Prize Order of Industrial Service Merit, Tin Tower Medal
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## Best company for job creation in 2019

Jul. 25, 2019	Awarding Body Ministry of Employment and Lab	Level of Prize -
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## Project for regional representative medium-sized company development

Jul. 7, 2022	Awarding Body Ministry of Trade, Industry and Energy	Level of Prize -
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## Grand Prize at the 8th Software Industry Protection Awards

Nov. 25, 2020	Awarding Body Ministry of the Interior and Safety / Ministry of Science and ICT / Ministry of Culture, Sports and Tourism	Level of Prize Prime Minister's award
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## Citation in recognition of the promotion of trade in Daegu and Gyeongbuk region on the 56th day of trade

Dec. 12, 2019	Awarding Body Daegu-Gyeongbuk Headquarters of Korea International Trade Association	Level of Prize Citation from the Mayor of Daegu Metropolitan City
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## Citation for Good Taxpayer on the 53rd Day for Taxpayer

Mar. 4, 2019	Awarding Body Ministry of Economy and Finance / National Tax Service / Korea Customs Service	Level of Prize Presidential citation
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