

# Placing the **First Stepping Stone**



## About This Report

### Overview

LG Group has adopted an integrated 2050 Net Zero roadmap with the participation of major affiliates. This Net Zero Special Report is the Group's first integrated report that covers the Group's goal, implementation strategy, and plans for Net Zero. LG Group will execute the global commitment to Net Zero with sincerity and transparently share the progress through subsequent annual Special Reports.

### Scope of the Report

- **Our Net Zero Roadmap**

- Timeline: 2022-2050

- Base year: 2018/Interim target: 2030/Final target: 2050

- **Participating Affiliates (as of 2022)**

- LG Electronics, LG Display, LG Innotek, LG Chem, LG Energy Solution, LG Household & Health Care, and LG Uplus

- **Target facilities**

- Over 147 facilities which include domestic and overseas production sites and R&D centers of seven affiliates, etc. (not including overseas sales corporations/branches)

### Verification

In order to secure objectivity and processability of the contents in this report, third-party verification was completed by the Korea Management Registrar, a verification agency with no special interests in LG.



### Cover Story

Our motto, "Placing the First Stepping Stone" represents our vision to lay a foundation for global Net Zero and prepare ourselves to execute our mid- and long-term roadmaps. With this first stepping stone, we will continue our path towards a sustainable future for our customers and the world.

LG Net Zero Special Reporting 2022

# Placing the First Stepping Stone

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# LG's Global Business

The major business areas of LG Group are electronics, chemical, and telecommunications and services. LG Electronics, LG Display, and LG Innotek are engaged in various types of businesses in the electronics sector; LG Chem, LG Energy Solution, and LG Household and Health Care are in the chemical sector; and LG Uplus, LG CNS, LG HelloVision, and D&O, in the telecommunications and services sector.

LG Group adopted a 2050 Net Zero Integrated Roadmap for seven (out of ten) affiliates\* accounted for 99% of the Group's greenhouse gas (GHG) emissions. The roadmap will enhance the capacity of the Group's response to the global GHG regulations and avoiding potential greenwashing. We will continuously monitor the execution of Net Zero and update the roadmap according to the market and technological changes.

\*LG Electronics, LG Display, LG Innotek, LG Chem, LG Energy Solution, LG Household and Health Care, and LG Uplus

## Main business areas

Electronics	Chemicals	Telecommunications and Services
<b>LG Electronics</b>	<b>LG Chem</b>	<b>LG Uplus</b>
H&A (Household appliances), HE (TV, AV, and other media products), VS (Automotive components) BS (Products and solutions including monitors, PCs, and signage)	Petrochemicals, advanced materials (Cathode materials, Separators, etc.) Life sciences	Mobile services (phone plans and other support services) Corporate infrastructure (Corporate 5G network services)
<b>LG Display</b>	<b>LG Energy Solution</b>	<b>LG CNS</b>
Product display (TV, IT, Mobile, Commercial, Automotive etc.)	Automotive batteries (battery cells, modules, etc.) Small batteries, ESS batteries (power grid, commercial, residential, etc.)	IT consulting, System integration, ERP, IT infrastructure solution
<b>LG Innotek</b>	<b>LG Household and Health Care</b>	<b>LG HelloVision</b>
Optical solutions (Camera, 3D sensing modules, Automotive camera modules), Substrate materials, Electronic parts (Automotive motor sensor; Communication and power modules, etc.)	Cosmetic products (base and color, inner beauty) Household items, Beverages (carbonated, non-carbonated, drinking water, etc.)	Hello TV, Internet, Rental service
		<b>D&amp;O</b>
		Leisure (resort, training centers), AM (Flag One, Courtyard by Marriott Seoul Botanic Park)





# Our First Stepping Stone to Net Zero

LG Group is laying a foundation for climate change response

## The Climate Crisis by Humans

The Paris Agreement of 2015 has opened up a new global climate regime, in which every nation is required to determine their own goals to reduce GHG emissions and monitor their progress. The Intergovernmental Panel on Climate Change (IPCC\*) calls for global efforts to limit the rise of average global temperature to below 1.5C by the year 2100 compared to pre-industrial levels. In August 2022, the United Nations Environment Programme (UNEP) warned in their Emission Gap Report\*\* that the climate crisis calls for rapid social transformation. Even still, vast areas across the globe are currently experiencing the catastrophic effects of climate change even at this moment, and it will only get worse if we fail to limit the rising temperature.

## Our Common Goal, Net Zero

Net Zero is a social responsibility to react against climate change as well as a survival and competitive strategy for sustainable growth in the face of climate crisis. As a multinational enterprise, LG Group is taking part in the worldwide effort to stop global warming by creating a feasible and profitable 2050 Net Zero strategy with a primary goal of sustainable value creation for all stakeholders including customers and shareholders.

Starting from LG Electronics' first declaration of 2030 Net Zero goal in Korea, our six other major affiliates\*\*\* have developed their own goals to accomplish Net Zero as well as 100% renewable energy according to their internal plans. Furthermore, in order to achieve the common goal of Net Zero in a more systematic and effective manner, LG Group has integrated the Net Zero goals and execution plans of such affiliates, which were reviewed with consistent criteria, into a Group-level roadmap in 2022. We will continuously monitor the reduction plans of each affiliate in accordance with the Net Zero execution standards and update our integrated roadmap according to the changing climate agenda and technologies in the market.

## Towards Net Zero, "LG Net Zero Special Reporting"

This report provides LG Group's 2030 interim goal and 2050 final goal as well as detailed strategies, plans, implementation systems and current management with regard to GHG emission reduction. We will continue to transparently disclose the Group's progress to all its the stakeholders through this annual report.

\* IPCC: Intergovernmental Panel on Climate Change

\*\* Emission Gap Report: the analysis report on the gap between national pledges and the limiting global warming goals of the Paris Agreement

\*\*\* LG Electronics, LG Innotek, LG Chem, LG Energy Solution, LG Household & Health Care, and LG Uplus



# Roadmap

LG Group's mid- and long-term roadmap was created by integrating reduction plans of each affiliate. This allows for further advanced vision and strategies reflecting the reduction goals and progresses of the major affiliates, including LG Electronics and LG Chem.



# Roadmap

LG Group adopted an integrated 2050 Net Zero roadmap to reach net zero GHG emissions by 2050. According to the Net Zero path, the Group will accomplish Net Zero by 2050 through the reduction of Scope 1 (direct) and Scope 2 (indirect) emissions from domestic and overseas facilities by 27% by 2030 and 62% by 2040 compared to the base year level of 2018.\*

As for the affiliates, LG Electronics will achieve Net Zero by 2030, and LG Energy Solution and LG Innotek, by 2040. Such an achievement of Net Zero will be a preemptive initiative in the global efforts to reduce GHG emissions. While the integrated roadmap provides that the Net Zero target of LG Display, LG Chem, LG Household and Healthcare and LG Uplus are 2050, it can be updated according to the development level of reduction technologies, etc.

\* Applying Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis, National NDC Base Year

## Management Scope

Over 147 facilities including domestic and overseas production sites and R&D centers from seven affiliates, etc determined based on the system boundary and operation control of the affiliates\*

\* See Appendix for details

## Emission sources

Scope 1 (Direct): Emissions attribute to fossil fuel combustion within facilities

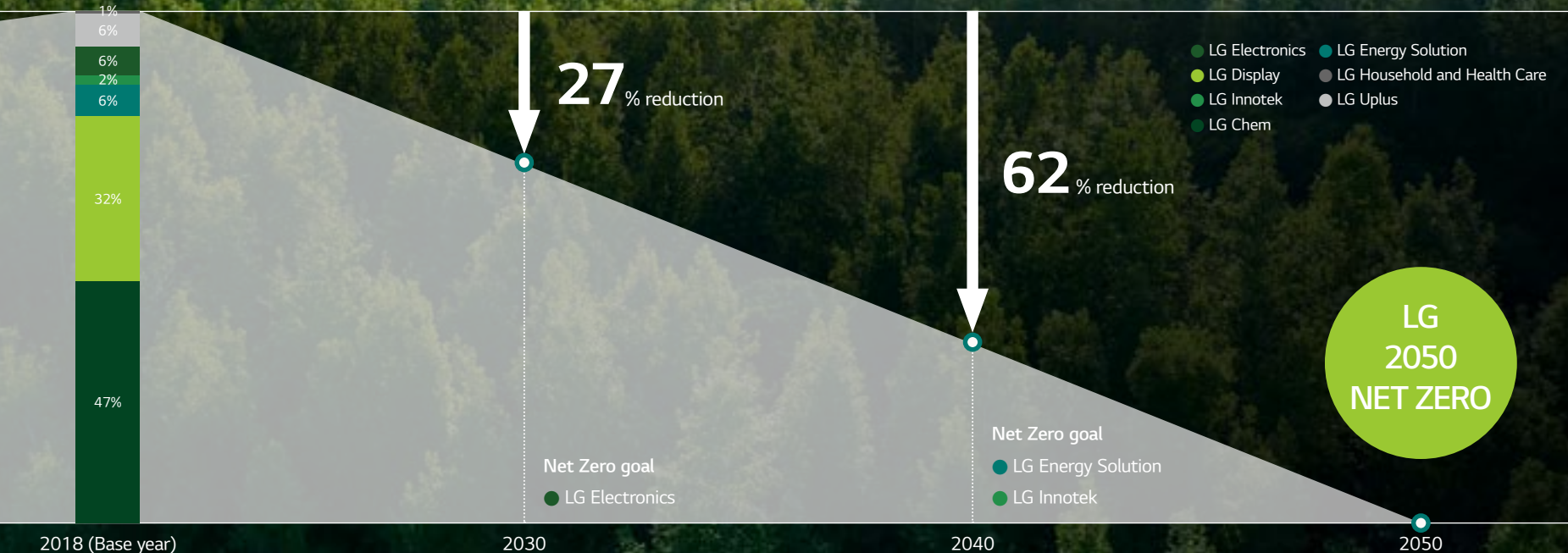
Scope 2 (Indirect): Emissions attribute to use of purchased electricity or steam

## Target greenhouse gases

CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>

※ "Tons" used as the GHG emissions quantity expressed in this report represent carbon dioxide equivalent ton (tCO<sub>2</sub>-eq)

21.12 million tons



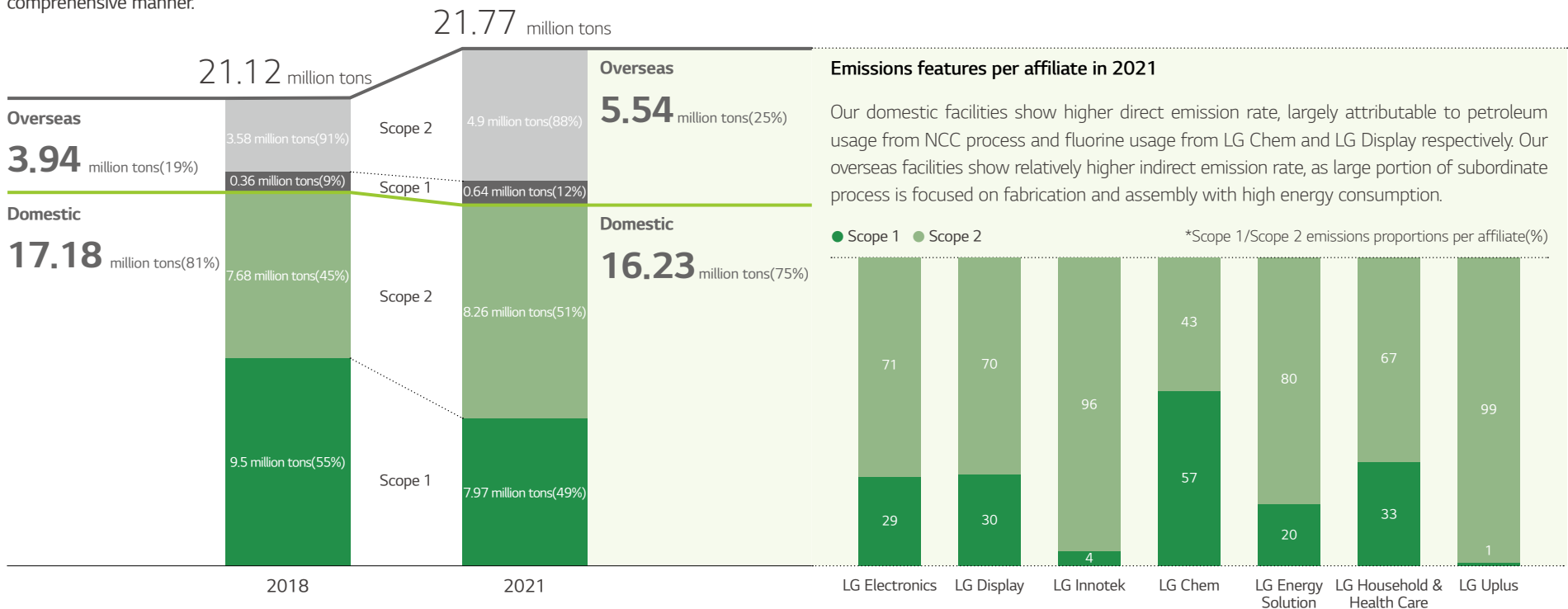


# Roadmap

## GHG Emissions

Accurate measurement, management, and verification of greenhouse gas(GHG) emissions are the indispensable elements for setting a Net Zero strategy. Since the Target Management System for GHG and Energy was first enforced in 2011, LG Group has been conducting third-party verifications for Scope 1 and Scope 2 emissions in the domestic facilities as well as applying this verification process to overseas sites to secure accuracy and completeness. Towards our goal of Net Zero, we will manage and monitor emissions, reductions, costs, implementation tasks, etc. of each affiliate. For this purpose, LG Group developed an ESG IT platform to integrate and systemize ESG non-financial information. The platform will enhance the objectivity and transparency of the data related to the GHG emission of each affiliate as such data will be managed in a comprehensive manner.

The domestic and overseas GHG emissions of LG Group in 2021 were 21.77 million tons. While GHG emissions generated in Korea account for 75% of the total, the GHGs emitted overseas were mostly in China, Europe, and the US. LG Energy Solution's business expansion in North America and Indonesia is expected to cause an increase in indirect emissions for power usage. The overall proportion of direct emissions from domestic facilities dropped from 55% in 2018 to 49% in 2021 as a result of improved energy efficiency of the affiliates as well as reduction of process gases by LG Display, whereas the overall proportion of domestic indirect emissions slightly grew compared to 2018 due to the business growth of LG Chem, LG Energy Solution, etc.





# Roadmap

## Resolution

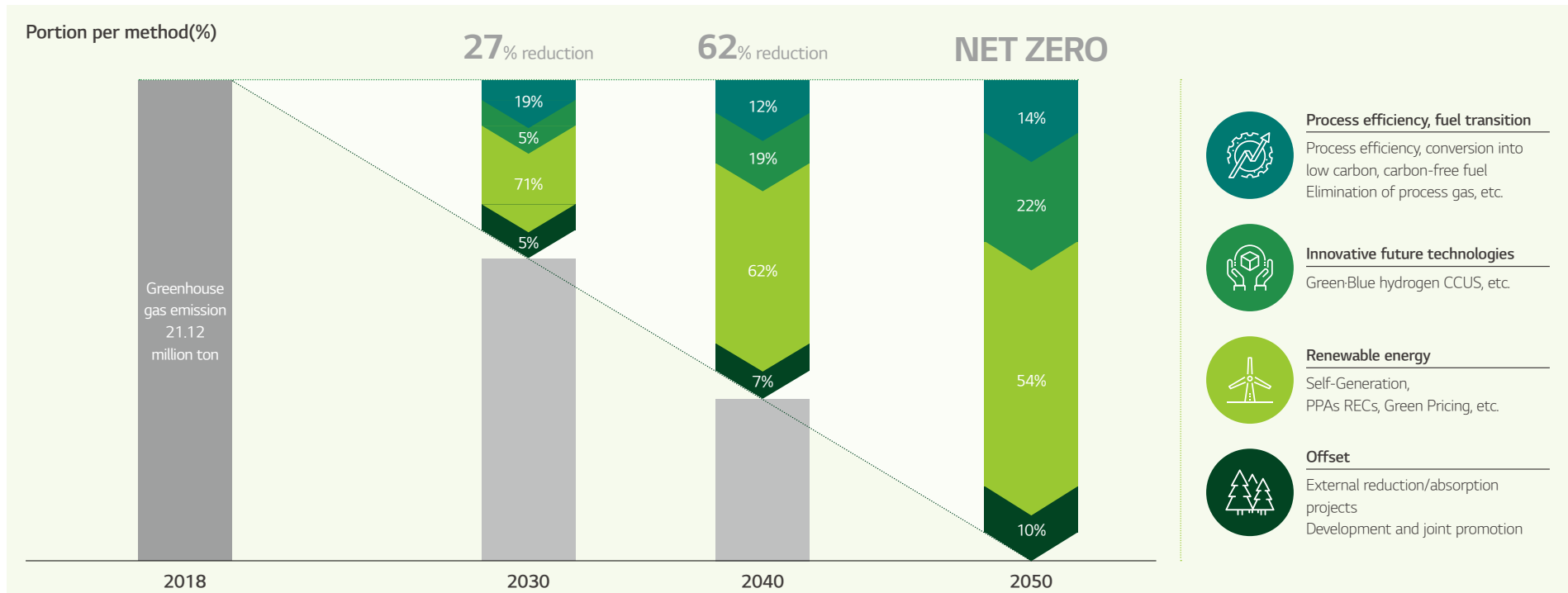
LG Group's integrated Net Zero roadmap is prepared upon the comprehensive review of the NDCs\* of each country presented in accordance with the Paris Agreement, international organizations such as UNFCCC and IEA, and CDP and SBTi\*\* Net Zero Standards. It also reflects the emission features of each affiliate's industry. To reach Net Zero, all available reduction methods both inside and outside of worksites needed to be utilized. Power should be switched to renewable energy, and the portion of GHGs that do not currently have any feasible reduction methods can be dealt with by creating GHG absorption sources like forests or applying innovative future technologies such as CCUS.\*\*\* To achieve the Net Zero goal, LG Group will further explore additional reduction measures as well as drive joint endeavors with its stakeholders including governments, academia, research institutes, local communities, and others.

LG Group's Net Zero goal was finalized with consistent criteria established based on the review of all applicable short-, mid-and long-term reduction methods as well as the cost-benefit analysis of reduction methods necessary for reaching 2050 Net Zero. The integrated roadmap will be updated according to the technology development level. The management coverage will be extended to Scope 3 and the number of affiliates participating in the integrated roadmap will also be increased.

\* NDCs: Nationally Determined Contributions

\*\* Science-based Target Initiative: Global guidelines for supporting the facility of mitigation goals according to the IPCC 1.5°C scenario with the science-based mitigation goal initiative

\*\*\* Technology for capturing, utilizing, and storing carbon dioxide



# Strategy

LG Group pursues practical Net Zero strategies with self-reduction within the facilities as a top priority. The Group will reduce emissions at all stages of a product's lifecycle with innovative future technologies and accumulated experiences and, in the mid- and long-term, renewable energy power procurement.



# Strategy

LG Group's Net Zero strategy is primarily focused on direct reduction, renewable energy power procurement, offset, and climate governance. Through direct reduction methods such as improved process efficiency, transition to low carbon/carbon-free fuels and innovative future technologies, Scope 1 and Scope 2 emissions of domestic and overseas facilities will be reduced first. Transition to renewable energy power will also take place on a step-by-step basis.

The offsetting will only be used for the residual emissions that is technically difficult to reduce. Transparency and sustainable effectiveness of such offsetting will be guaranteed by applying global standards and focusing on those offset businesses allowing joint participation of the affiliates.

## Emission Reduction

Scope 1 and Scope 2 direct reductions

### Process efficiency

- Replacement of high-efficiency equipment
- Expanded use of waste heat
- Enhancement of process gas handling efficiency, etc.

### Transition into low carbon, carbon-free fuel

- Electric boiler replacement
- Implementation of bio-energy, etc.

### Innovative future technologies

- Use of green-blue hydrogen
- Investment and implementation of CCUS, etc.

## Renewable Energy

Stable procurement of renewable energy power

### Establishment of renewable energy procurement portfolio

- Policy monitoring and economic feasibility analysis
- Establishment of regional renewable energy procurement strategy

### Renewable energy partnership

- Joint procurement and development of renewable energy
- Proposal of market activation policies and regulatory improvements

## Offsetting

Limited use of offset

### Utilization of global offset standards

- Limited to residual emissions with technical difficulties
- Prioritize self-reduction and transition to carbon removal

### Joint offset strategy

- Joint response of participating affiliates
- Pursue new greenhouse gas absorption and storage projects
- Construct government and industry-academe-research cooperation system to pursue offset projects

## Climate Governance

Establishment of implement system and reinforced monitoring

### ESG Committee/ESG Team

- Operate ESG Committee and dedicated organization
- Inspect and report execution of the Net Zero road map

### Operate Group climate change council

- Execution management of Net Zero goals
- Discuss procurement of renewable energy



# Emission Reduction

LG Group is concretizing its short-term and mid to long-term implementation plans to achieve 2050 Net Zero. As an interim goal for Net Zero, LG Group plans to reduce 4.55 million tons of emissions through direct reduction by 2023, which is 13% of the total expected emissions. Such direct reduction will include both Scope 1 and Scope 2 reductions, consisting of 3.37 million tons (74%) from Scope 1 and 1.18 million tons (26%) from Scope 2. LG Group will continue to improve energy efficiency by adopting high-efficiency equipment and replacing the fossil fuels used for heat production with waste heat or electricity. Affiliates' reduction efforts will include activities such as the petrochemical sector's increased use of biofuels material and sharing its process of improving gas treatment efficiency. LG Group plans to invest approximately 3.4 trillion KRW in the direct reduction methods including development of innovative future technologies by 2030.

## 74%

### Direct reduction of Scope 1 by 2030

In the Scope 1 emissions, LG Group will reduce 3.37 million tons by 2030 through, for example, elimination of process gas, transition to biofuel-materials, and transition to electric boilers.

## 26%

### Direct reduction of Scope 2 by 2030

In the Scope 2 emissions, LG Group will reduce 1.18 million tons by 2030 through, for example, energy efficiency improvement and, thereby, reduce the demand for renewable energy procurement.

## 3.4

 trillion KRW

### 2022-2030 Investment plan

LG Group plans to invest about 3.4 trillion KRW in developing and applying innovative technologies for direct reduction by 2030. The exact amount of Investment may be varied depending on the status of technological development.

Proportion per method of greenhouse gas direct reduction of the LG Group(%)



# Emissions Reduction

## Down to Zero Emissions

LG Group is planning various reduction methods to be implemented by 2050, the target year of the Group's Net Zero. The Group will also continuously enhance the Net Zero roadmap by exploring innovative and applicable technologies.

### CCUS

Collects emitted CO<sub>2</sub> and uses it as resources or stores it underground or as minerals



### Conversion to pollution-free vehicles

Replace possessed or leased transportation with pollution-free vehicles (EVs, etc.)



### Elimination of process gas

Replace with gas with low global warming potential or install reduction equipment



### Expand low-carbon steam and waste heat

Collect and use waste heat or use waste incineration steam



### Electric boiler replacement

Install electric boilers and electric heaters and use renewable energy



### Replacement with high-efficiency equipment

Replace with high-efficiency motor, inverter freezer, and high-efficiency lighting devices, construct automated system, etc.



### Raw material substitution and/or transition to bio-fuel

Produce energy or replace materials with bio-fuels instead of fossil fuels



### Renewable energy

Use of renewable energy with no discharge of GHG



### Fuel transition to hydrogen

Replace fuels with green-blue hydrogen emitting little or no GHG

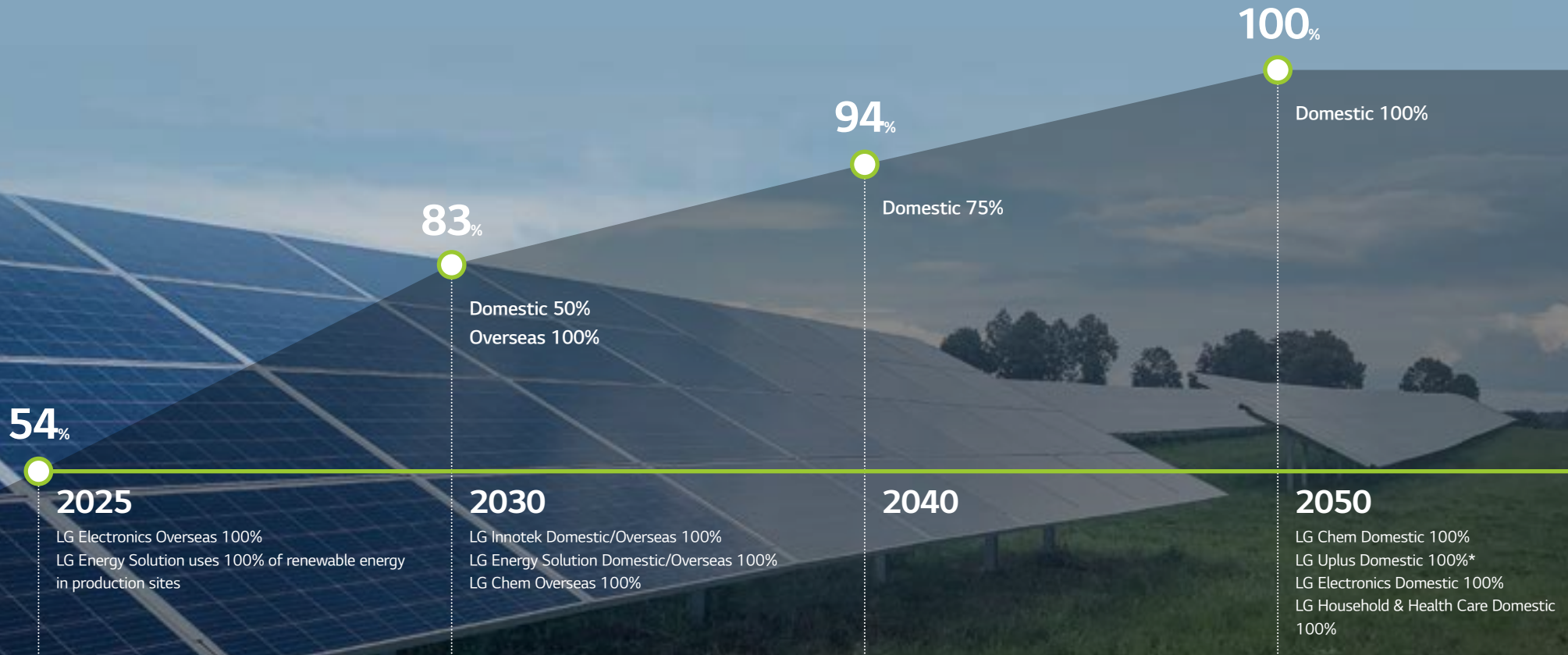


# Renewable Energy

In 2018, LG Group's emissions from electricity usage was approximately 10.6 million tons, which accounted for about 50% of its total emissions. It is expected that the percentage will increase to 60% in 2050 due to the Group's plan to open new facilities in North America, Europe, and Southeast Asia. LG Group will begin to adopt renewable energy in its overseas facilities located in areas where renewable energy usage is feasible. By 2050, it will be able to procure all energy from renewable sources.

LG Group plans to continuously increase its renewable energy transition goal (except LG Display) to 54% by 2025, 83% by 2030, 94% by 2040, and finally 100% for all its domestic and foreign sites by 2050. In order to proactively develop and secure renewable energy, LG Group plans to invest about 1 trillion KRW in Self-Generation from solar photovoltaic energy, purchase PPAs and RECs, etc., by 2030.

\*See Appendix for details



※ The graph shows six affiliates except LG Display, which plans for 100% renewable energy use by 2050

\*LG Uplus has no overseas business sites



# Renewable Energy

## Switch to Zero Carbon

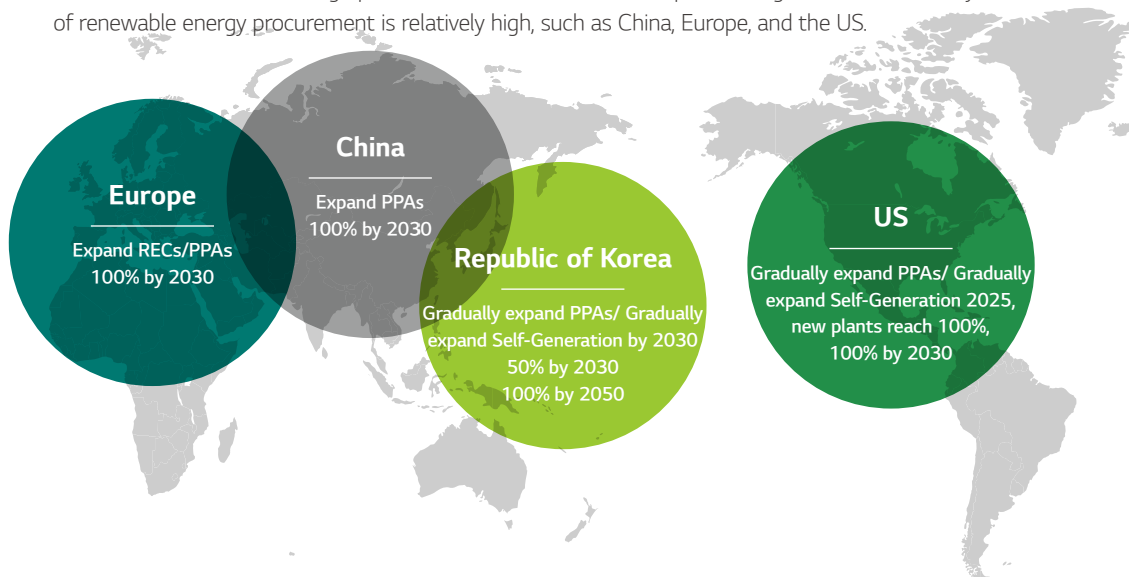
In order to secure stable renewable energy supply, LG Group is continuously monitoring the market and procurement condition in the regions where its facilities are located. Also, LG Group is strengthening its internal communication channels such as the establishment of an inter-affiliate council to identify changes in the Net Zero policies and regulations of each country in a timely manner. Such channels will allow for the sharing of valuable information such as renewable energy procurement policies and technological development among our affiliates and thereby serve as a common ground for joint reaction as required.

For newly constructed overseas facilities, LG Group is planning to procure 100% renewable energy for power usage from the commencement of operations. For the existing overseas facilities, renewable energy procurement portfolios will be optimized for each region to achieve 100% renewable energy by 2030.

For domestic facilities, LG Group will increase its usage of renewable energy to 50% level by 2030 by taking initiatives such as participating in the bidding for Green Premium, purchasing renewable energy certificates (RECs), and others. In the mid- and long-term, LG Group will increase the portion of Self-Generation and PPAs implementation to procure renewable energy for power usage by 2050.

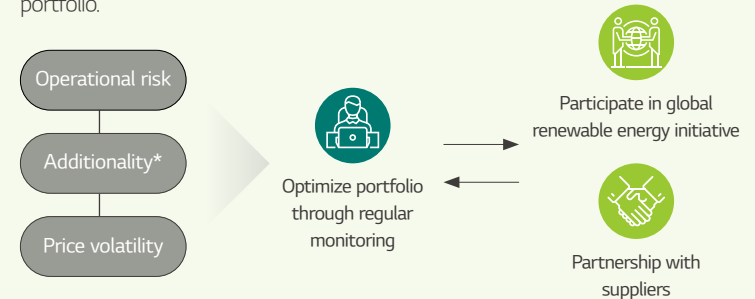
## Renewable energy procurement goals of major countries

Portions of emissions from power usage in 2050 per country is currently estimated as 31% from Korea, 21% from China, 18% from Europe, and 13% from the US. In transition to renewable energy, LG Group plans to increase the portion of renewable energy usage first in the facilities located within the countries where high portion of emissions comes from power usage and the availability of renewable energy procurement is relatively high, such as China, Europe, and the US.



## Scope of our consideration

LG Group will review Scope 2 reduction levels, legal and institutional additionality as well as economic feasibility of each implementation measures to minimize potential risks that can arise during renewable energy procurement. LG Group will endeavor to establish and operate an optimal renewable energy transition portfolio.



\* Additionality: The degree to which an item practically contributes to the expansion of renewable energy generation, based on legal, institutional, and economic perspectives

# Offsetting

LG Group's principles of offsetting projects for Net Zero are currently under review, and it will eventually reflect the global-level recommendations for offsetting projects in the long term. It will seamlessly monitor the process to prevent potentially negative environmental and social impacts, overestimation of reduction, and redundancy of credit application.

※ Expected amount of offset carbon credits to be secured by 2050: Approximately 5 million tons (about 9% of expected emissions in 2050)

LG Group will consider high-quality offsetting projects only for the residual emissions not addressed by other reduction plans for direct emissions (through improved process efficiency, fuel transition, etc.) and indirect emissions (through transition to renewable energy for power usage). Through the Group's offsetting projects carried out under close coordination with governments and regional societies, LG Group aims to contribute to its Net Zero goal and global GHG reduction. For credibility, LG Group will secure reduction credits with external offsetting projects in which strict verification procedures in accordance with internationally recognized UN methodologies are required.

## Principles for Net Zero Aligned Carbon Offsetting\*



Prioritize self-reduction projects over high-quality offsetting



Regular supplementation of offset strategies reflecting technological development



Transition from avoidance and reduction to removal



Transition from short-term storage to long-term storage



Establish trustworthy offset market for Net Zero

\* The Oxford Principles for Net Zero Aligned Carbon Offsetting

## Construct a cooperative network for offsetting

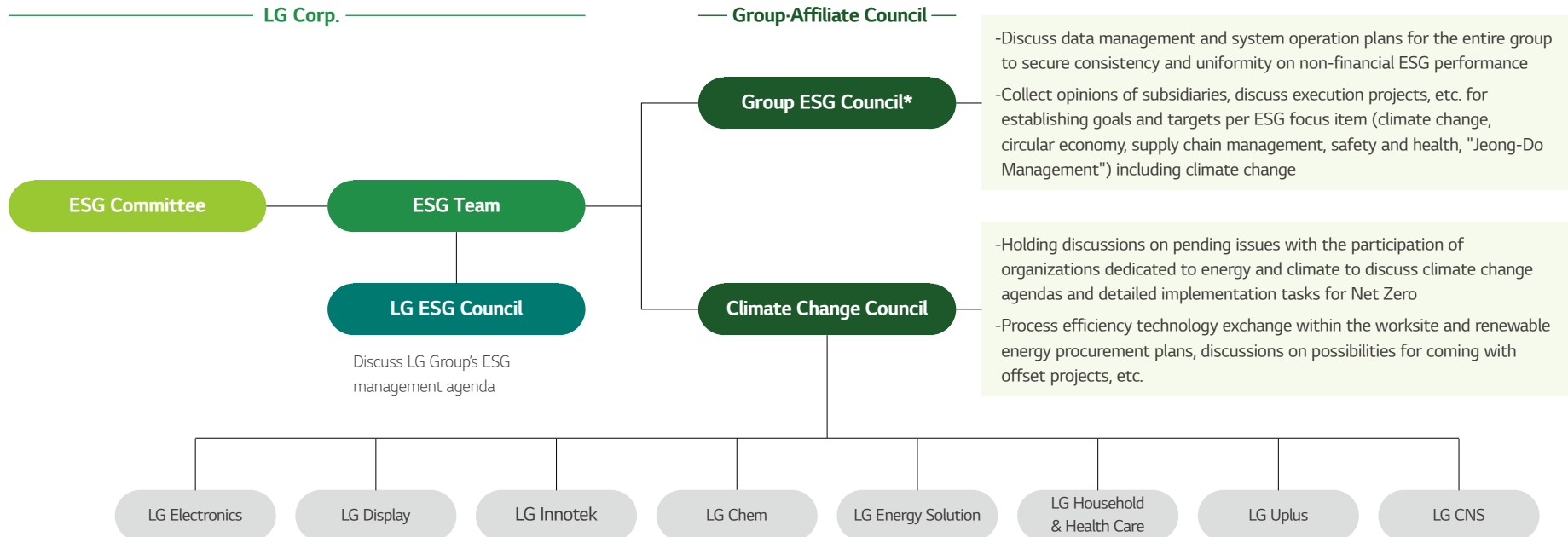
For the efficient execution of offsetting, LG Group will create domestic and global collaborative networks where co-planning and development of government, academia, research institute, and regional society can take place. Our plan includes short-term reduction by distribution of carbon efficient equipment (e.g., water purifier), and long-term absorption and removal by offsetting (e.g., forest development). Beyond the Net Zero, LG Group is committed to establishing sustainable regional ecosystems.

# Climate Governance

LG Group has been operating an ESG Committee under the board of directors since 2021. The ESG Committee functions as the group's key decision-making body to review and approve major agenda including the group's integrated roadmap as well as its ESG goals and strategies. The ESG team, under LG Corp., is responsible for the operation of the committee, with designated manpower to handle various ESG-related issues including social contribution and work health and safety.

LG Group operates the Group ESG Council and Climate Change Council for group-wide coordination and cooperation against ESG and climate change agendas. The Group ESG Council is currently responsible for securing consistency in integrating non-financial ESG data and consolidating inputs from affiliates on respective ESG issues. The Climate Change Council functions as a body in which energy and climate divisions within each affiliate group come together to coordinate the Group's Net Zero implementation tasks, process optimization, and develop plans for renewable energy procurement.

LG Group's execution structure for climate change response



\* Seven participating affiliates and LG CNS, LG HelloVision, D&O



# Next Step

LG Group will establish and operate a system to minimize the risk of climate change. Our detailed plan will effectively reduce greenhouse gases in terms of System, Policy-Process, and Project.



## Next Step

LG Group's realistic and sustainable carbon reduction project will be further expanded by the 2050 Net Zero Integrated Roadmap and implementation system. In preparation for the operation of a system and process to review the risks of climate change in advance, a Group-wide consistent standards that are consistent group-wide will be set and shared with its affiliates to minimize such risks. In terms of reaching targets through system changes, LG Group will operate an inspection and reporting system for the execution of Net Zero so that various change of conditions are reflected in a timely manner. Further, LG Group will enhance its decision-making process by developing a price prediction model to examine economic feasibility and timeliness of its carbon reduction projects.

LG Group will also establish a policy and process to identify and respond to the risks of climate change in advance. LG Group will develop an ESG checklist for large-scale investments as well as consider a policy to reflect the costs of carbon reduction into the total investment costs. Furthermore, a Scope 3 management plan and guideline that reflects business characteristics will be developed in accordance with recent international trends including the U.S. Securities and Exchange Commission's new Scope 3 disclosure obligation. Lastly, from the project aspect, LG Group will seek opportunities to carry out group-wide offsetting projects and secure external offset credits compliant with global reduction methodologies.

### System



#### Operation of LG Group's Net Zero implementation inspection and reporting system

LG Group will regularly review the Net Zero roadmap according to the changes in the market and business plans of the affiliates. Setting of detailed milestones for implementation tasks (e.g., process efficiency, fuel transition, renewable energy transition portfolio, offset projects) for each reduction method will contribute to the actual reduction of carbon emissions.

#### Development of energy, RECs, and carbon emissions credit price prediction model

Economic feasibility, cost effectiveness, and timeliness are major considerations in developing the model. Related to DX, development of a price prediction model can provide practical information at points where cost is associated, such as RECs and carbon credit purchase. We look forward to utilizing the model in making major decisions to invest in carbon reduction.

### Policy Process



#### Operate policies and processes to review climate change risks in advance

LG group will develop a framework to identify and assess climate risks (heat waves, floods, droughts, tropical storms, etc) reflecting the characteristics of each nation, region, and company. For use in large-scale investments or choosing business locations, LG Group will establish guidelines reflecting ESG items including responding to climate change. Our future operation plan will include detailed estimation of carbon reduction cost as a component of total investment cost.

#### Guideline for Scope 3 calculation and management plan\*

LG Group recognizes Scope 3, managing the emission rate throughout the entire value chain, as an essential part of the Group's carbon emission management. However, current ambiguous scope and standard for Scope 3 emissions demands an attentive approach. LG Group will establish calculation and management standards for Scope 3 in a gradual manner, aiming to achieve comparability and verifiability at each affiliate in the long term.

\*See Appendix for details

### Project



#### External offsetting and credit procurement

To accomplish the Net Zero goal, LG Group will deploy limited offsetting to residual emissions with difficulties in reduction by nature of their sources. LG Group's reduction and removal of greenhouse gases will be conducted by a group-wide offset project based on global standards.



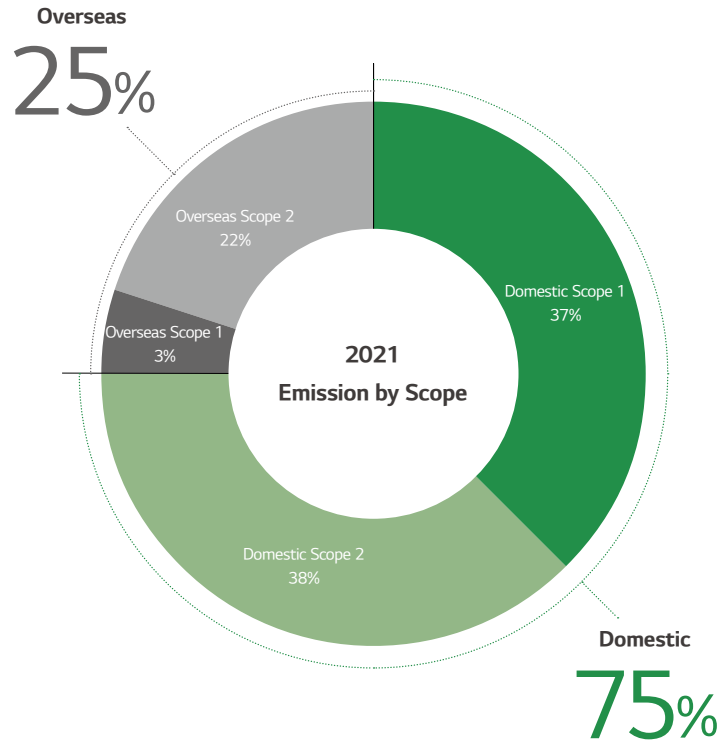
# Appendix

In order to provide accurate information on the 2050 Net Zero Integrated Roadmap and for better understanding of the stakeholders, LG Group provides the LG Group 2021 Domestic and Overseas Emission Features, Net Zero Goal Establishment Scope, Renewable Energy Procurement Method, Scope 3 Management Plan and Third-Party Verification Opinion.





## LG Group 2021 Domestic and Overseas Emission Features



### LG Group 2021 Domestic and Overseas Emission Features

Total 21,772 thousand tons

Participating affiliates	Total	Domestic		Overseas	
		Scope 1	Scope 2	Scope 1	Scope 2
LG Electronics	1,152	173 15%	325 28%	160 14%	494 43%
LG Display	7,036	1,968 28%	2,816 40%	124 2%	2,128 30%
LG Innotek	367	12 4%	292 79%	2 1%	61 16%
LG Chem	10,340	5,708 55%	3,134 30%	149 2%	1,349 13%
LG Energy Solution	1,347	59 4%	214 16%	211 16%	863 64%
LG Household and Health Care	131	44 33%	87 67%	-	-
LG Uplus	1,399	8 1%	1,391 99%	-	-
<b>Total</b>	<b>21,772</b>	<b>7,972</b>	<b>8,259</b>	<b>646</b>	<b>4,895</b>

\* LG Household & Health Care includes emissions of affiliates such as Haitai and Coca Cola Korea

## LG Group Net Zero Goal Establishment Scope

### Scope of establishing goals per facility

Affiliate name	Emission source category	Domestic	Domestic, other	Overseas	Overseas, other
LG Electronics					
LG Display				Includes production sites and some sales corporations	
LG Innotek					
LG Chem	Scope 1, Scope 2 (Electricity/heat)	Common (Includes domestic corporate HQ, all production sites, and R&D centers)		Includes production sites	Only include production corporations for which it owns more than 50% of shares
LG Energy Solution				Business site, office building, and R&D	
LG Household & Health Care			Coca Cola, Haitai Includes domestic production sites	* Exclude overseas business sites	
LG Uplus			Network equipment and all domestic regions Includes domestic companies	※ No overseas branches	

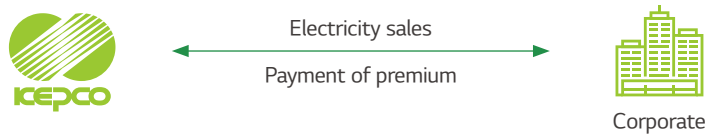
\*There are 271 total business sites worldwide under seven affiliates not including branches and sales corporations, etc. with trivial emissions

## Renewable Energy Procurement Method

LG Group is reviewing various types of renewable energy procurement plans both domestically and internationally. By 2030, we will accelerate our transition to renewable energy by focusing on green premiums and RECs purchases. From 2031, our long-term plan to maximize utilizing methods to directly procure renewable energy such as PPAs and self-generation will be concretized.

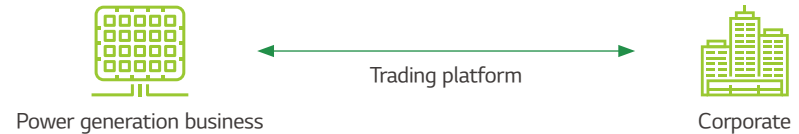
### Green premium

Green premium in renewable energy procurement program is an item for implementing K-RE100 in which additional charges due to power usage being utilized to generate renewable energy. With the implementation of the 2021 Green Premium Program, LG Chem procured a total of 120GWh of renewable energy and LG Display also purchased 57GWh worth of electric energy as part of its efforts to procure renewable energy.



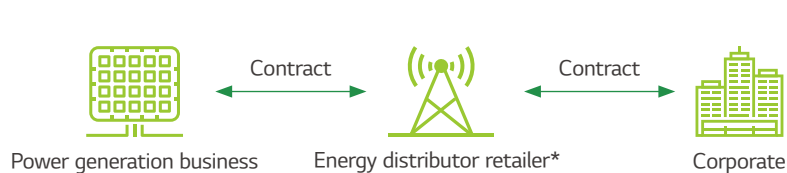
### RECs(Renewable Energy Certificates)

RECs is issued by reflecting the weighted average to renewable energy generation produced by a power generation business from facilities registered with the Korea Energy Agency. By purchasing RECs and converting into renewable energy usage certificate, any business with electric power usage can have its energy consumption recognized as renewable energy use. LG Chem is the first Korean company to enter long-term RECs purchase agreements with Korea South-East Power and the Samcheonpo Solar Power Plant.



### PPAs(Power Purchase Agreements)

PPAs is a program to exchange renewable energy under agreed price. It is further divided into of third-party PPA, involving Korea Electric Power Corporation as a mediator, and direct PPA, in which generator business and consumer directly makes a deal. LG Electronics became the first in Korea to enter a solar power plant construction MOU with off-grid direct PPA in September 2022.



### Self-Generation

Self-generation is a method in which an electricity consumer installs renewable energy equipment and uses its produced power, and it is considered the most effective method in terms of procuring renewable energy for reducing greenhouse gases. LG Energy Solution, LG Household and Health Care, etc. are planning to invest in solar generator within its business sites.



\* Contract details may vary corresponding to electricity sales involvement



## Scope 3 Management Plan

In addition to Scope 1 and Scope 2 management, LG Group will establish a consistent management system for Scope 3 emissions produced outside of our facilities. Our future guideline will include implementation standard for integrated management of Scope 3. Furthermore, we will prepare to monitor and disclose emissions from all scopes of interest.

### Scope 3 Category\*

External fuel and energy-related activities, upstream and downstream items of establishments, including transportations and logistics, etc.

\* In accordance with "Technical Guidance for Calculating Scope 3 Emissions", GHG Protocol



### Step 1. Develop Scope 3 management standards and guidelines

Improve usability of global standard-based data and ensuring data-completeness for emission sources in relation to products

#### Reflect Scope 3 global standards

Review Scope 3 calculation standards such as GHG Protocol, SBTi, etc.

#### Scope 3 management status inspection

Scope 3 management status survey per affiliate  
Estimate Scope 3 emission

#### Draw up Scope 3 management standards

Define target, scope, activity data, parameters, etc.

### Step 2. Review Scope 3 emissions calculation and goal establishment

Construct a management baseline for emission calculation and goal control per Scope 3's category

#### Collect data per emission source

Collect data per upstream/downstream item

#### Calculate Scope 3 emission per each source

Apply calculation methodology based on management standards and collected data

#### Establish Scope 3 reduction goal and detailed execution plans

Set Scope 3 reduction goals per short and long-term timepoints  
Deduce detailed application methods per item

## Third-party Verification Opinion

### To readers of the 2022 LG Net Zero Special Reporting

#### Preface

The Korea Management Registrar (KMR) received a request to verify the 2022 LG Net Zero Reporting (hereinafter referred to as Report). Responsibility on the drafting of the report lies with the management of LG, and the responsibilities of KMR are limited to issuing verification opinions for specific data and information within the scope explicated below.

#### Verification scope and standards

LG describes its Net Zero road map and strategies for achieving its Net Zero goals. The verification team applied the SRV1000 verification review model commentary guide of the KMR Global Management Committee and referred to the information disclosure requirements proposed by the CCRF of CDSB to perform verification with limited guarantee for the report. The verification team verified the reliability of the information of the Net Zero integrated roadmap and reduction strategies listed in the report based on the rule of understandability and verifiability.

Confirmation on whether the reporting requirements of the report were satisfied were reported in the scope of verification, and the verification team reviewed the following to confirm.

#### 'Strategic analysis' information disclosure requirements proposed by CCRF

- Impact of climate change for the long-term and short-term strategy goals
- Long-term and short-term strategies including greenhouse gas reductions to respond to climate change
- Explanations on the impact of climate change issue on business strategies and application of decision-making by the board of directors
- Details on the current and future financial impact related to climate change strategies, risks, and greenhouse gas emissions
- Information for internal use and external disclosure to make decisions on strategies and goals

Among the reporting boundaries of the report, data and information from outside of the organization such as LG's partners and contracted parties were excluded from the scope of verification.

#### Verification procedure

The verification team of KMR completed the following procedures for verification according to the verification standards described above for the agreed-upon verification scope.

- Review on the possibility for understanding and verifying the Net Zero road map and strategies described in the report
- Review on the completeness of application of information required to be disclosed
- Confirmation of organizational boundaries and scope of operational control rights set among the 7 participating affiliates
- Review on consistency of greenhouse gas emissions disclosed by participating affiliates
- Interview with persons responsible for drafting the report

#### Verification results and opinions

The verification team discussed about the revisions of LG's report several times based on document reviews and interviews and reviewed the final version of the report to check whether revisions and recommendations were applied. Verification results showed that our verification team did not discover any inappropriate parts regarding compliance listed in the LG's report. Furthermore, no evidence that the above data included in the scope of verification were inappropriately described was discovered.

**| Possibility of understanding |** The LG report provides a road map and strategy for achieving Net Zero and provides accurate and sufficient information in detail. It is judged that the information provided in the report is clearly and simply categorized and characterized, and it is judged that it is concrete and described in a manner making it easy to compare.

**| Possibility of verification |** During the verification process, the review team discovered errors in some data and information, and LG corrected these prior to publishing the final report. It is judged that the data and information carried in the report were described accurately and reliably, and no evidence was found that LG's response activities for major issues were published inappropriately in the report.

#### Proposals for improvements

KMR hopes that the report published by LG will be actively utilized as a communication tool for stakeholders, and it recommends the following in the hopes of continuous improvements.

LG drafts and discloses the Net Zero report for carbon neutrality, and it gathered the will and goals of the seven participating affiliates of LG Group for carbon neutrality into one, and well expresses the direction of the LG Group's intent to move forward to. It is recommended to continue research and investments so that reduction activities with high rate of mitigation can be applied to greenhouse gas emission reductions.

The Research provides the road map and strategies for achieving the Net Zero goals concretely and systematically. In order to make information for the disclosed report more useful, it is recommended to include information that may be relevant to climate change risks, Net Zero strategies, financial performance, and greenhouse gas emissions reduction goals.

#### Independence of verification

KMR has no profit-related interests with the business activities of LG excluding the work of providing third-person verification services, and it is maintaining independence from LG.

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CEO Hwang Eun-ju



128, Yeoui-daero, Yeongdeungpo-gu, Seoul, Republic of Korea  
+82-2-3773-2434 | <https://www.lg.co.kr> | [esg@lg.com](mailto:esg@lg.com)