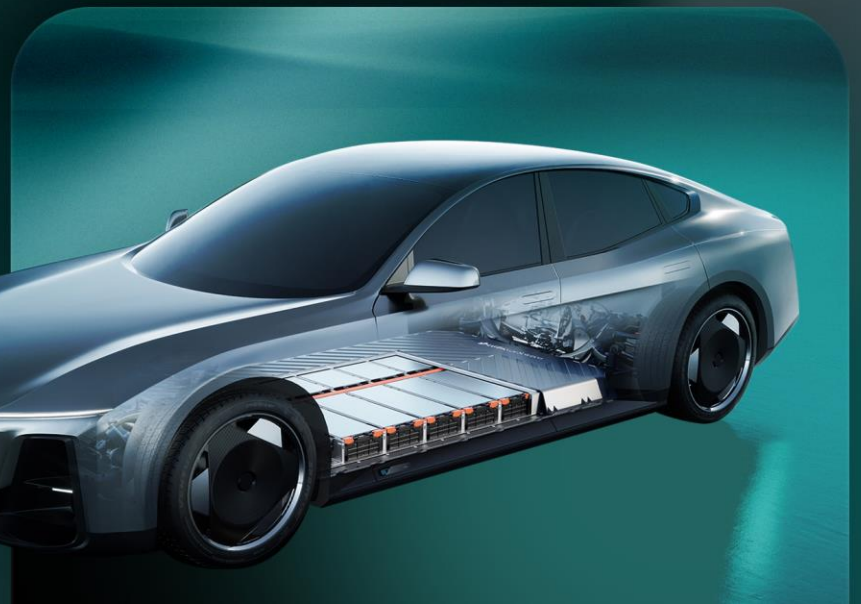
LG Energy Solution

LG ENERGY SOLUTION
COMPANY INTRODUCTION



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LG Energy Solution

+ LG Group Introduction

LG Group | Overview

Established 1947.1

Affiliated companies 60+

Overseas subsidiaries 290+

Employees 270K+
Korea 140K
Overseas 132K

Chemicals 31%
LG Chem
LG H&H
Farmhannong
...

Communications / Services 10%
LG U+
LG CNS
LG HelloVision
...

Electronics 59%
LG Electronics
LG Display
LG Innotek
...

+ LG Group Introduction

LG Group | History

1947
Established Lucky Chemical Co., Ltd.
(Today's LG Chem)

1958
Established Goldstar
(Today's LG Electronics)

1987
Completed the construction of Lucky Goldstar Twin Tower

1995
Changed Group CI from Lucky Goldstar →to LG

1996
Established LG Telecom
(Today's LG U+)

2003
Launched LG Corporation, the holding company

2017
70th anniversary of founding LG

2020
Established LG Energy Solution

+ LG Group Introduction

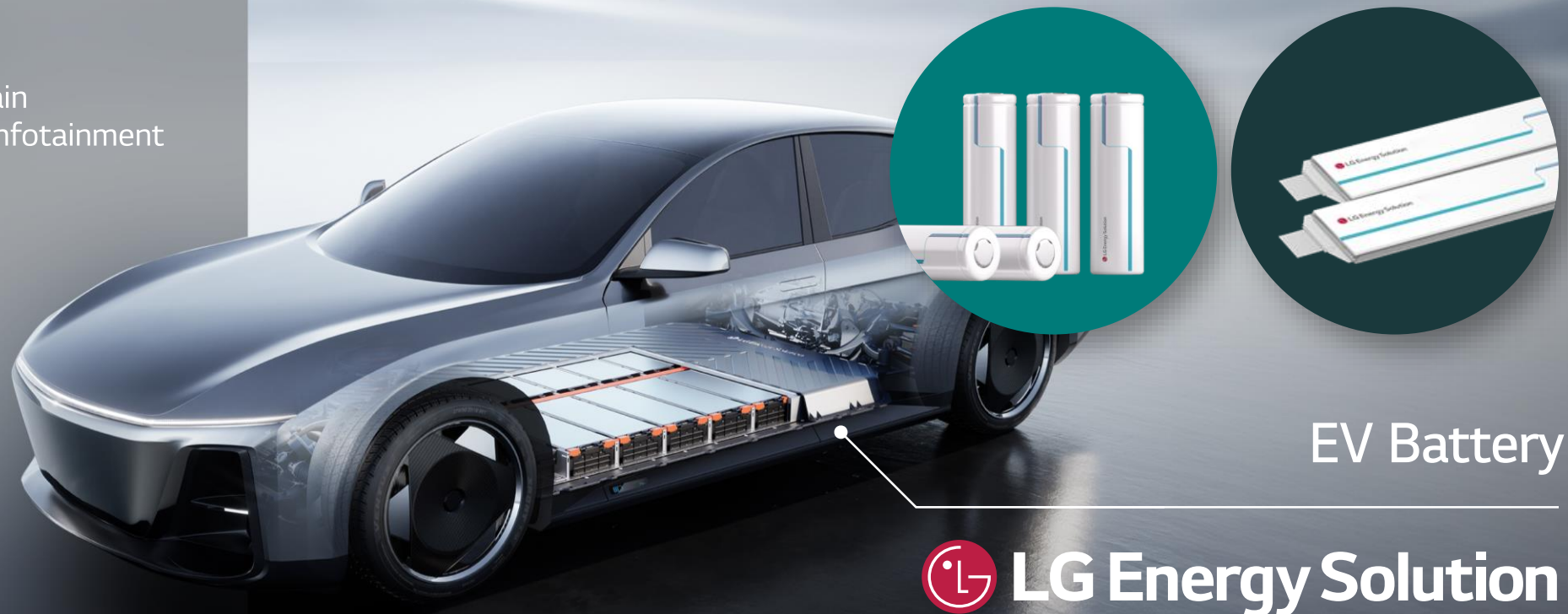
LG Group | Next-Generation growth engine

LG Electronics
- Telematics • E-powertrain
- Head Lights • In-vehicle Infotainment

LG Chem
- Cathode, Separator, CNT

LG Display
- In-vehicle Display

LG Innotek
- EV Components
- Camera/Sensors



EV Battery

LG Energy Solution

LG ENERGY SOLUTION

+ Overview

LG Energy Solution

Company name
LG Energy Solution

Established
2020.12

CEO
Kim, Dong-Myung

Employees(2024)
32,071
Domestic 11,760 / Overseas 20,311

Sales(2024)
$18.8B

Business Area

Advanced Automotive

Mobility & IT

ESS

+ Overview

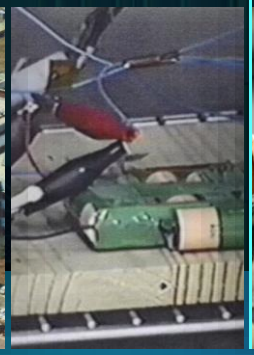
History

History

1947
LG Chem Founded
(start of LG Group)

1992
Began Lithium-Ion Battery Research

1996
Began Lithium-Ion Battery Development



1999
Mass-Produced Cylindrical Lithium-Ion Batteries

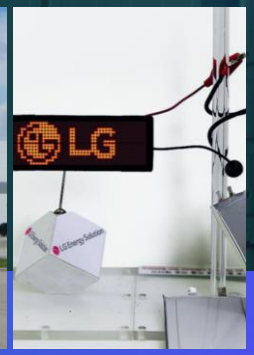
2000
Founded United States R&D Office

2004
Completed Construction of Nanjing Plant in China

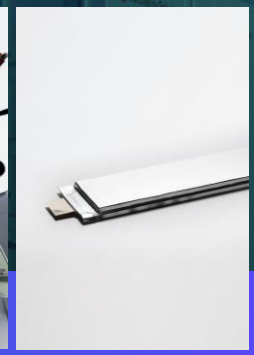
2009
Supplied the World's First Mass-Produced EV Batteries
(GM Volt)

2012
Completed Construction of EV Battery Plant in the U.S.

2013
Developed the World's First Future Batteries
(Stepped, Curved, Wire Battery)



2015
Began mass production of ESS battery cell



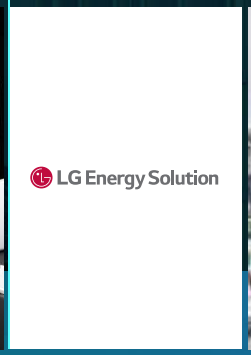
+ Overview

History

History

2018 Developed the World's First Free-Form Battery

2020.12 LG Energy Solution Established



2017
Completed Construction of EV Battery Plant in Poland

2020.12
Established 'Ultium Cells' with GM

2021.9
Established 'HLI Green Power' with Hyundai Motor Group

2022.3
Established 'NextStar Energy' with Stellantis

2023.3
Groundbreaking for LG Energy Solution - Honda joint venture plant

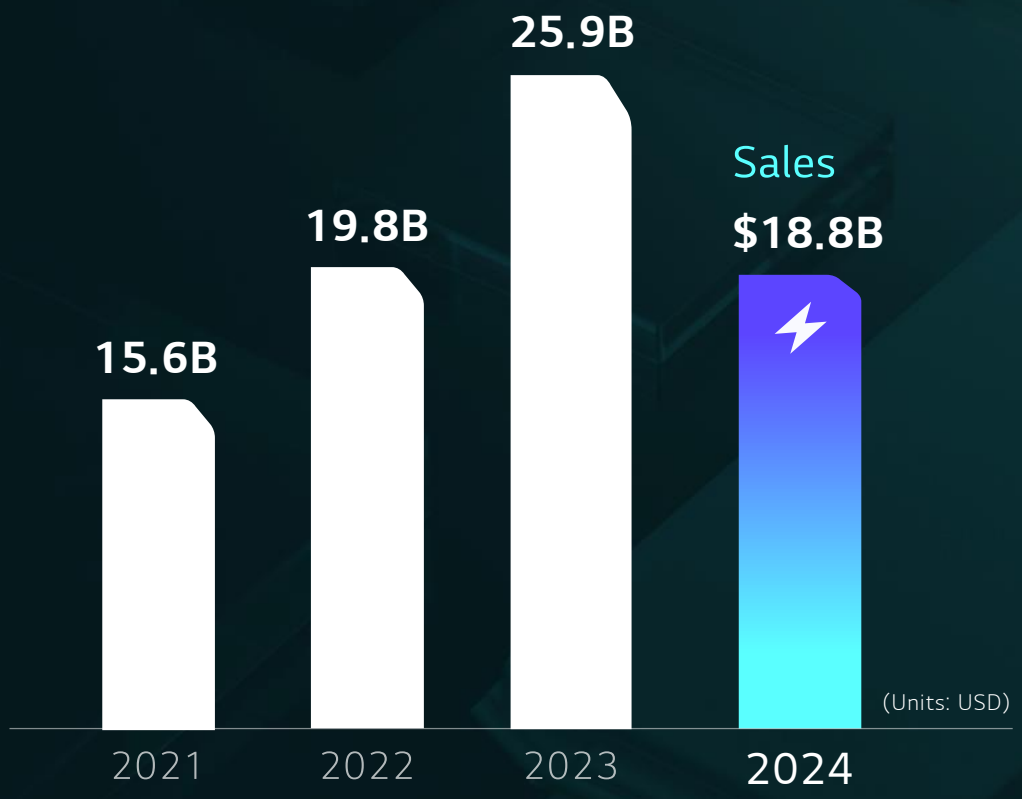
2023.5
Established EV Battery Cell Plant with Hyundai Motor Group, USA

2023.8
Established Battery Recycling Joint Venture with Huayou Recyclin

2024.4
Groundbreaking of Arizona complex, USA

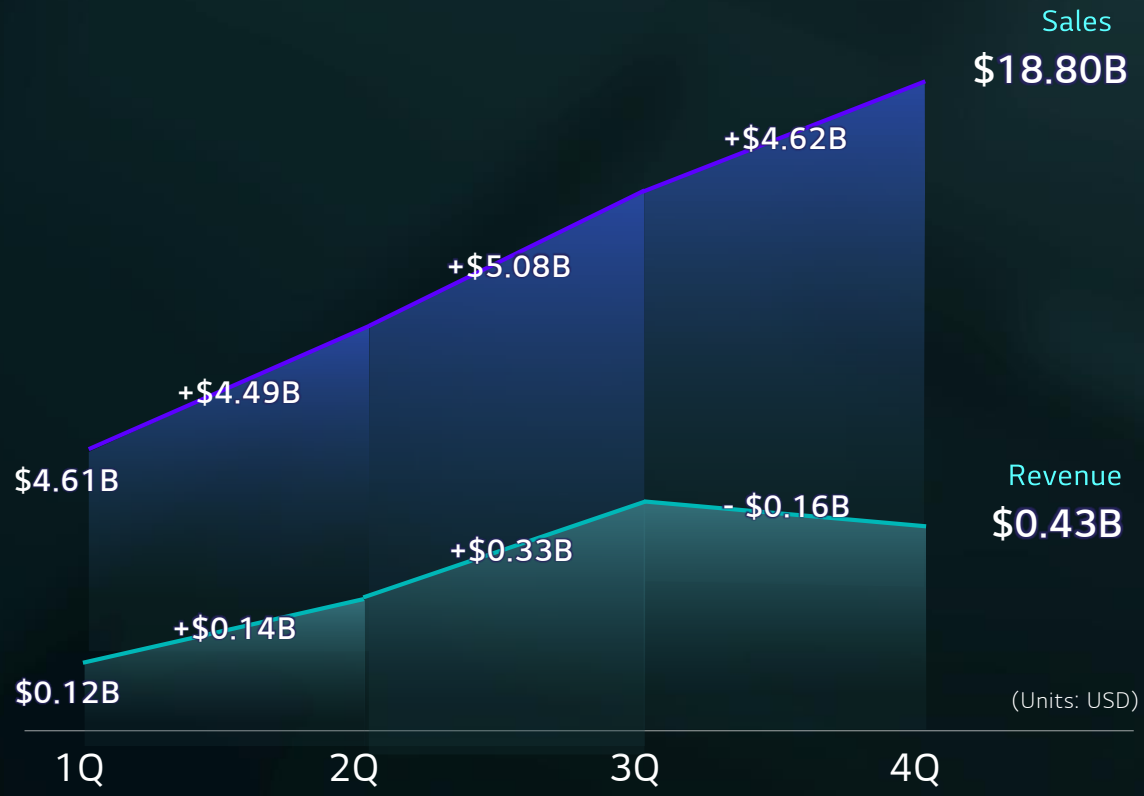
+ Overview

Management Performance



Spin off in December 2020

Sales and Revenue Quarterly



※Cumulative Basis

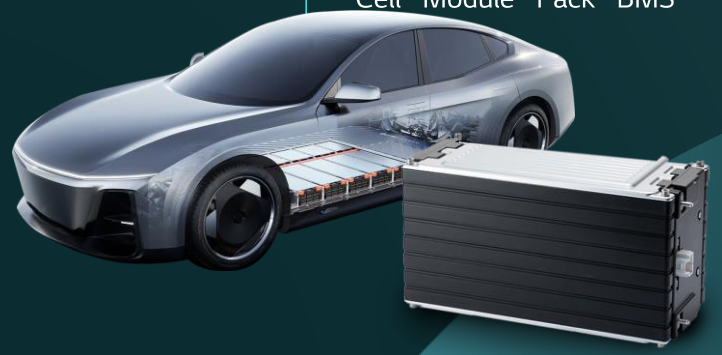
+ Business

Business Area

Advanced Automotive

Contributing to the popularization of electric vehicles with the world's best high-tech battery products

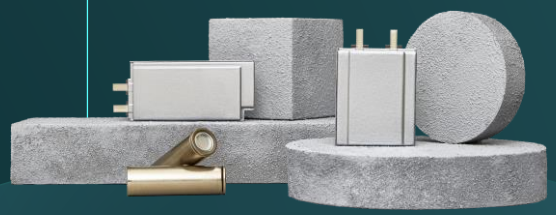
EV / PHEV / HEV / μ-HEV
Cell · Module · Pack · BMS



Mobility & IT

Leading wireless innovation by actively targeting new markets, such as IT and LEV

IT Equipment / Power Tools / LEV
Cylindrical · Pouch · Free-Form



ESS

Unlocking the smart grid era by providing various ESS battery products

Grids / Commercial / Residential
Cell · Pack · Rack

LG Energy Solution

+ Business

Product Line-up

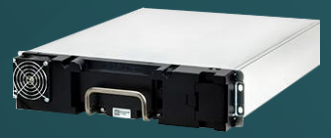
Cell

Cylindrical

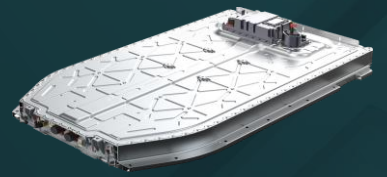
Pouch (small)

Pouch (medium and large)

Module



Pack /Rack



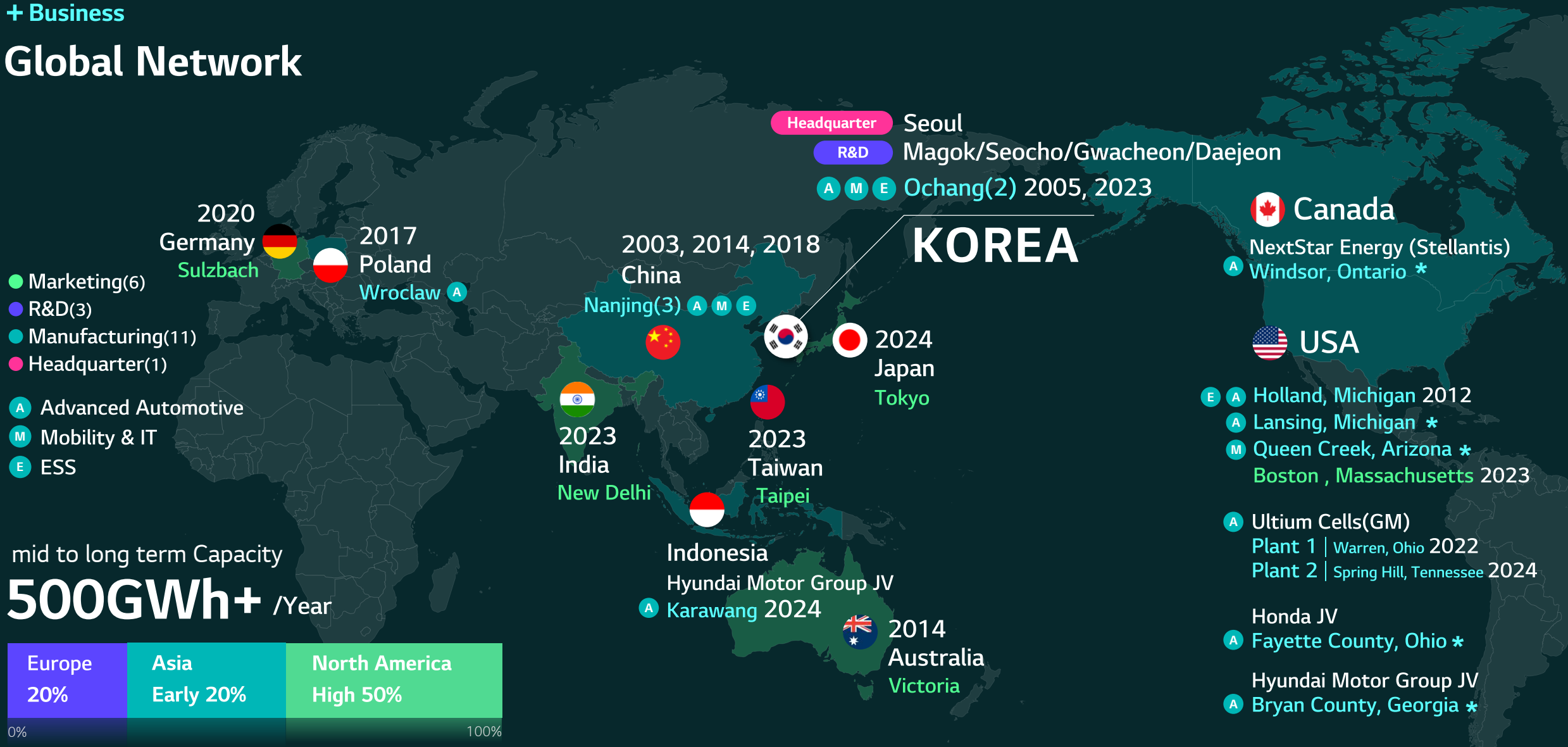
EV Pack

ESS Rack/Pack

BMS

+ Business

Global Network



- Marketing(6)
- R&D(3)
- Manufacturing(11)
- Headquarter(1)

- A Advanced Automotive
- M Mobility & IT
- E ESS

mid to long term Capacity

500GWh+ /Year

Europe	Asia	North America
20%	Early 20%	High 50%

0% 100%

As of May 2025 * Under construction

+ Business

Global Production System

Asia Early 20%

China 2003, 2014, 2018
Nanjing(3)

Indonesia 2024
Hyundai Motor Group JV — Karawang

Europe 20%

Poland 2017
Wroclaw

KOREA

Ochang(2) 2005, 2023

North America High 50%

Canada
Stellantis JV — NextStar Energy
Windsor, Ontario *

USA
Holland, Michigan 2012
Lansing, Michigan *
Queen Creek, Arizona *
GM JV — Ultium Cells
Plant1_Warren, Ohio 2022
Plant2_Spring Hill, Tennessee 2024
Honda JV — Fayette County, Ohio *
Hyundai Motor Group JV — Bryan County, Georgia *

mid to long term Capacity
500GWh /Year

Advanced Automotive
Mobility & IT
ESS

As of May 2025 * Under construction

+ R&D

Core Technologies

Material

01 High-Ni Cathode Material

02 HV(High Voltage) Mid-Ni Cathode Material

03 Si based Anode Material

Process /Pack Design / SW Algorithm

01 Dry Electrode Process

02 CTP (Cell to Pack)

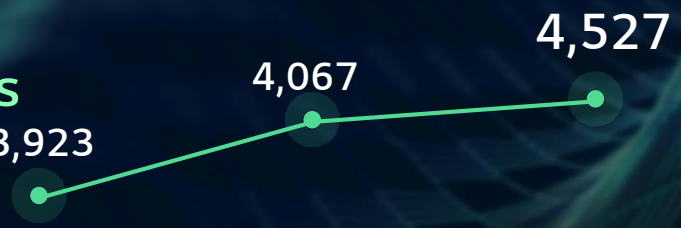
03 Diagnostics Technology

+ R&D

R&D Status

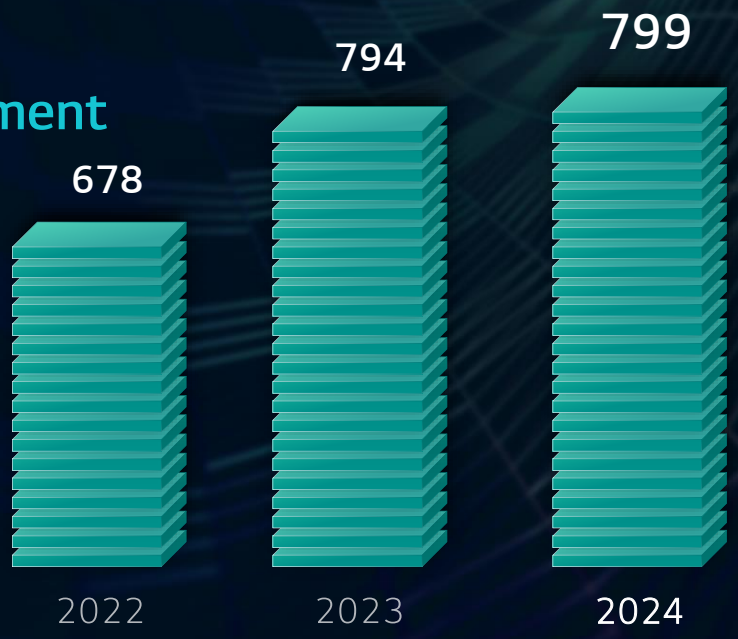
Human Resources

(Units: Person)

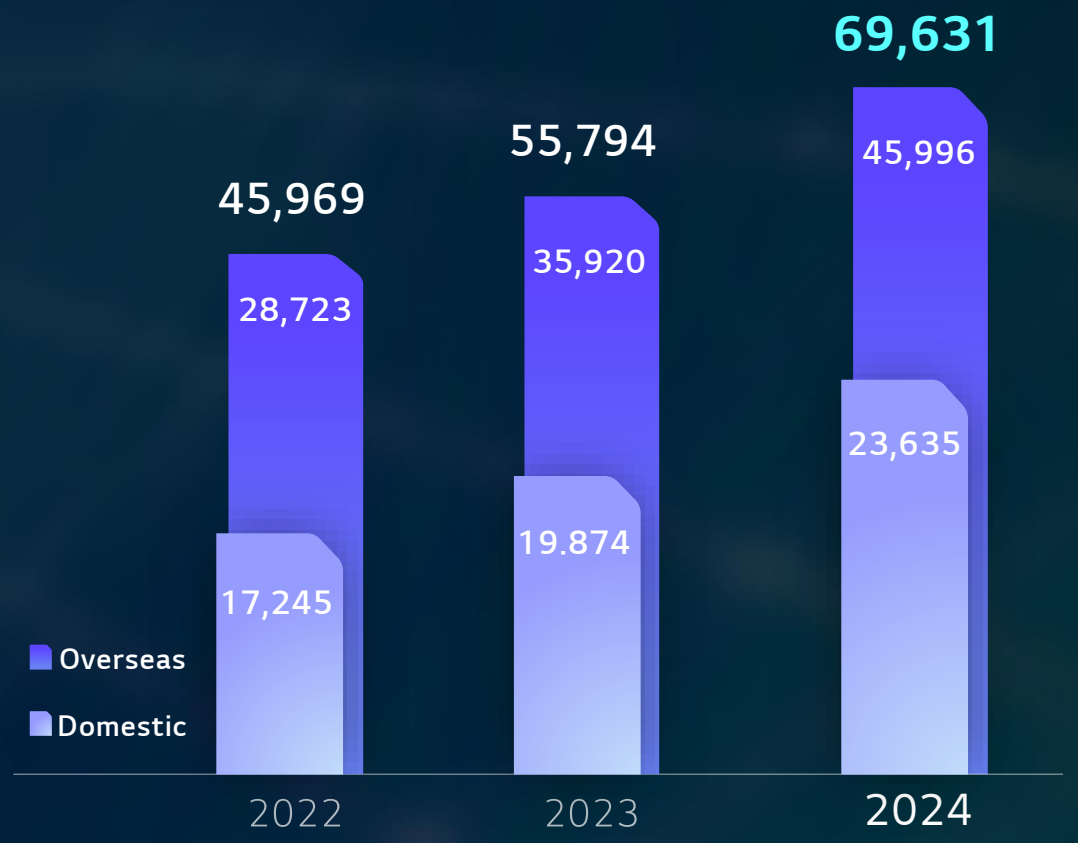


Investment

(Units: M$)



Intellectual Property Rights



(as of Dec 2024, Grant and Pending)

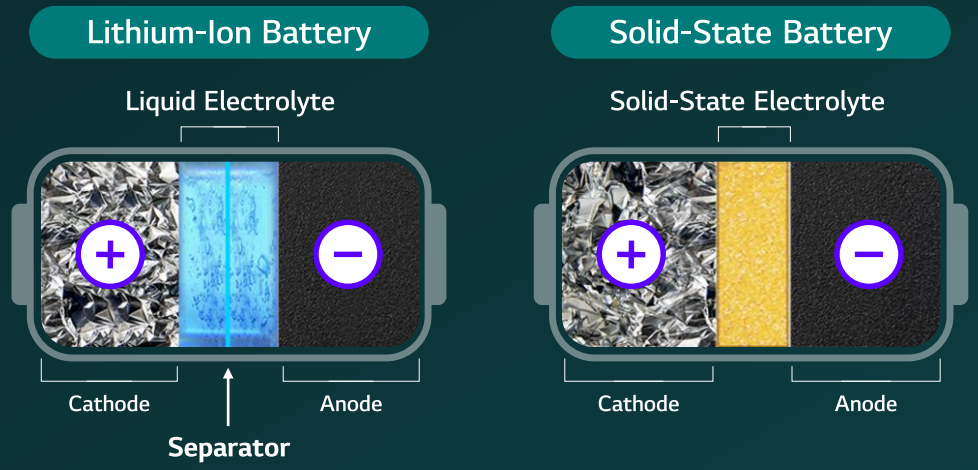
+ R&D

The Next-Generation Batteries

Solid-State Battery

E-mobility, Wearable Devices, Ships/Aircraft, Robots

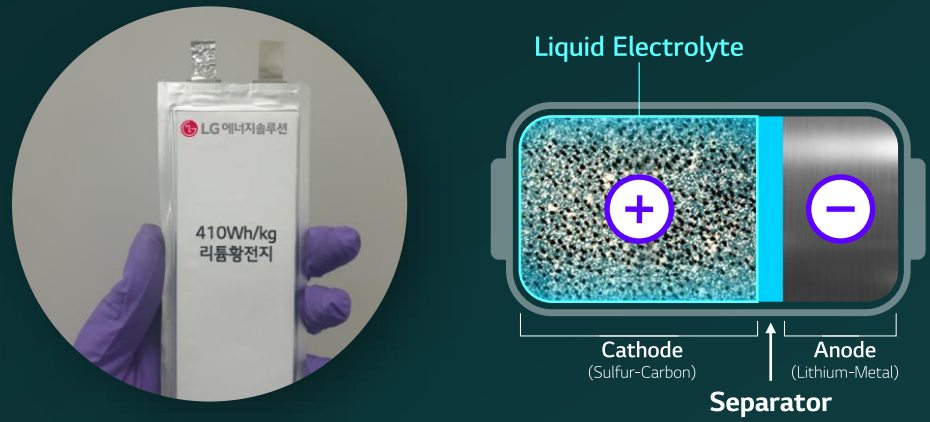
Solid-state batteries are rechargeable batteries with a solid-state electrolyte between a cathode and an anode, enabling high energy density and high capacity with a low risk of combustion



Lithium-Sulfur Battery

UAM, Drones

Lithium-sulfur batteries are made from lightweight materials, such as sulfur-carbon composite in the cathode and lithium-metal in the anode, giving them an energy density 1.5 times higher than conventional lithium-ion batteries.



+ ESG

ESG Vision

We CHARGE Toward a Better future

- **C** Climate Action & Circular Economy
- **H** Human Value Management
- **A** Advanced EH & S
- **R** Responsible & Impactful Business
- **G** Good Governance
- **E** ESG Disclosure & Communication

Climate Action

Achieving carbon neutrality by 2050

Circular Economy

Establishing closed loop at global sites

Human Rights Management

Creating human rights risk-free business sites

Human Capital Management

Fostering diverse talent

Product Stewardship

Managing eco-friendliness, safety and quality across product life cycle

EH&S

Environmental impact, Biodiversity protection, Workplace EH&S management

Responsible Supply Chain Management

Securing over 90% of ESG low-risk group by 2030

Shared Growth &Greater Impact on Local Communities

Reinforcing brand image for mutual growth and cooperation

Compliance & Ethics management

Governance

ESG Disclosure

Stakeholder Communication and Engagement

8 Critical Areas | **4 Key Enablers**

+ ESG

Global Initiatives

ESG

UN Global Compact UNGC

Uphold 10 principles of UNGC in the areas of human rights, labor, environment and anti-corruption

*Disclose SDGs-related activities & achievements

Global Battery Alliance GBA

Contribute to establishing ESG standards for sustainable battery ecosystem, and participating Battery Passport system development

*Serves the Board of Directors of GBA

E

RE100 Renewable Electricity 100%

Aim to source 100% of electricity at all global sites renewably by 2030

EV100 Electric Vehicles 100%

Aim to convert company-owned vehicles to EV 100% by 2030

*First Korean battery manufacturer to join both RE100/EV100

Taskforce on Climate-related Financial Disclosures TCFD

Strengthen climate-related risks and opportunities assessment and disclosure

*First Korean battery manufacturer to officially declare support for the TCFD

S

Responsible Business Alliance RBA

Responsible Minerals Initiative RMI

Responsible Labor Initiative RLI

ESG risks management across entire value chain

*First Korean battery manufacturer to join RBA

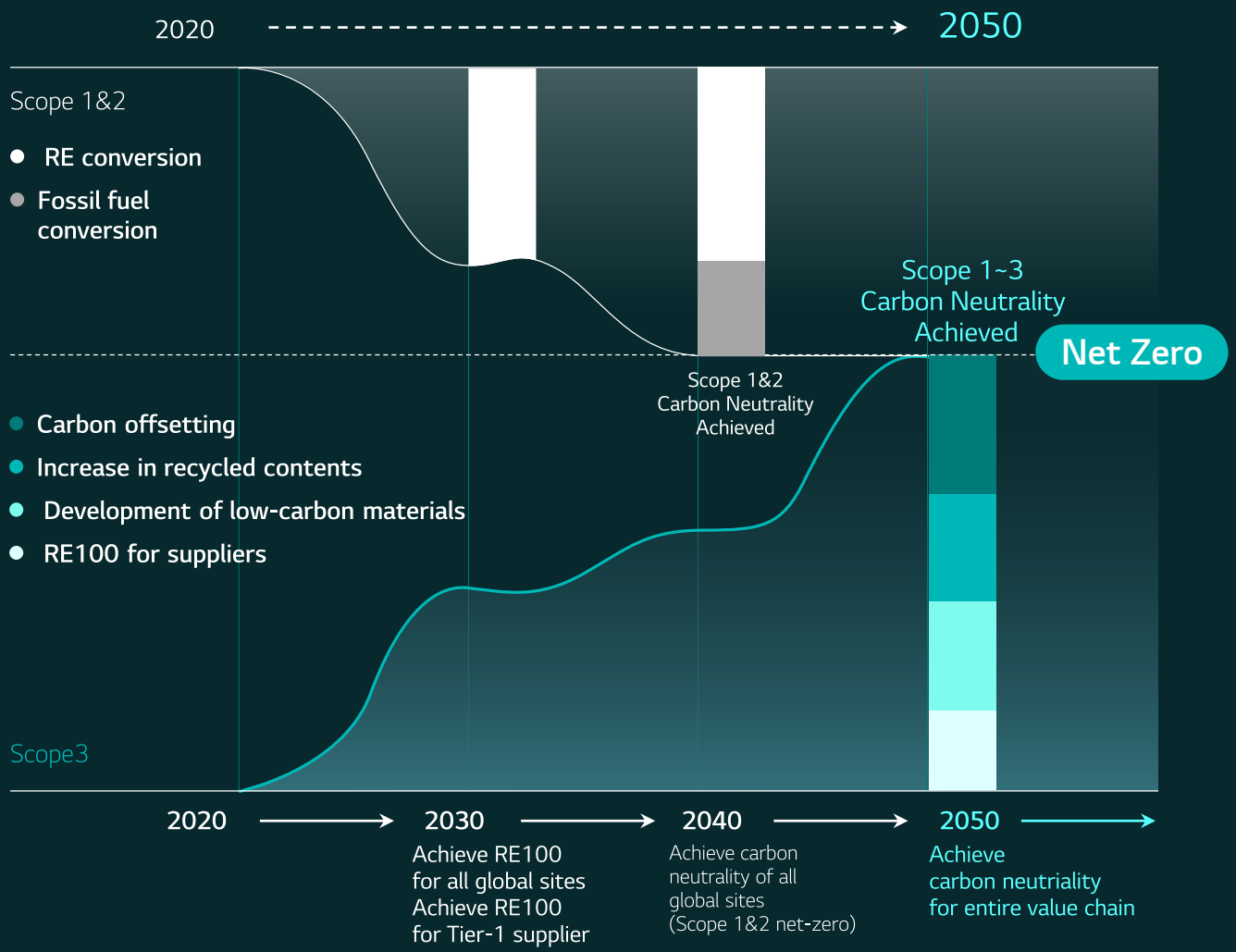
Fair Cobalt Alliance FCA

Contribute to eradication of forced labor and child labor in cobalt mines in DRC and supporting local communities

*First Korean company to join FCA

+ ESG

Carbon Negative



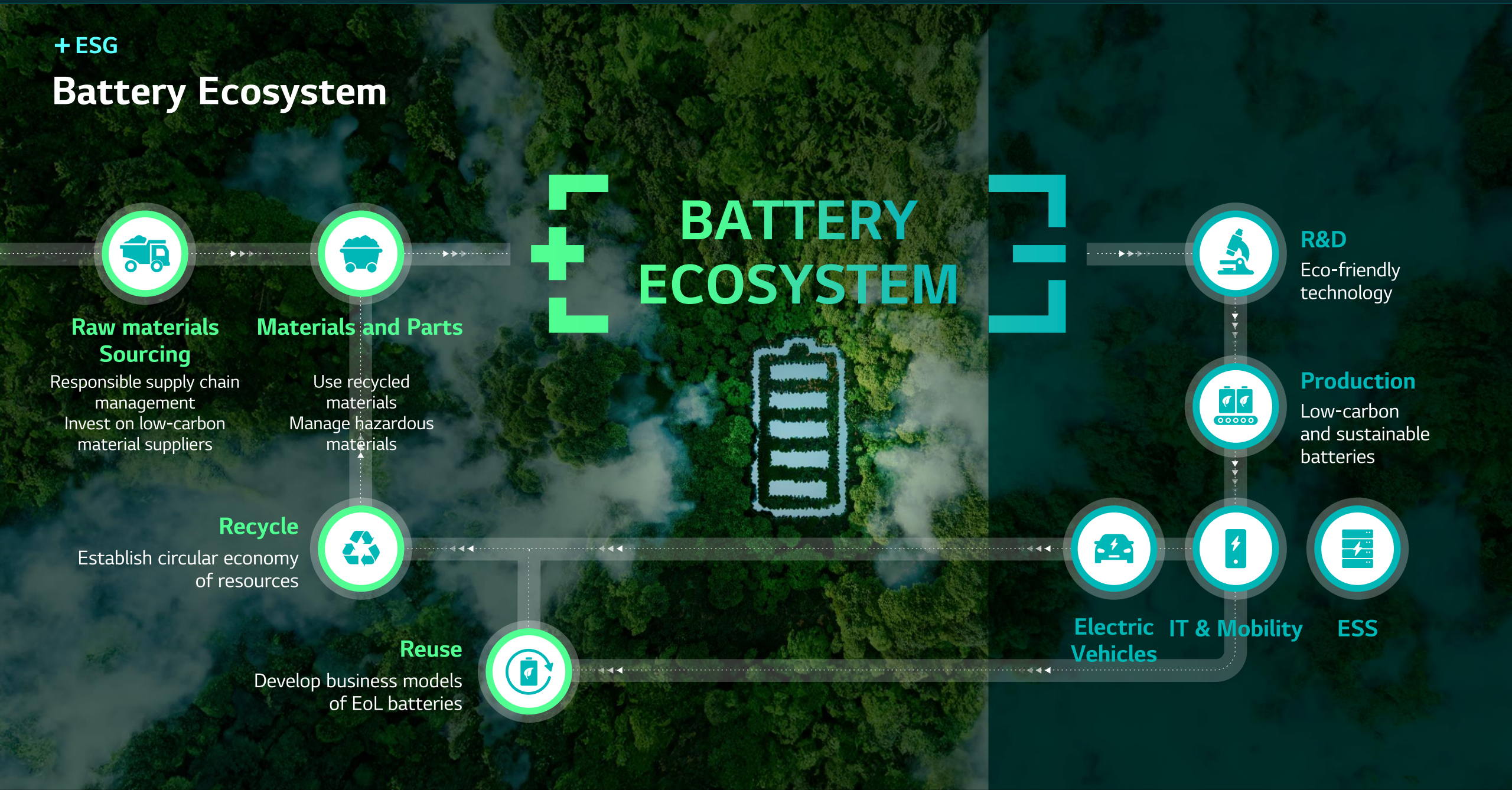
	LG Energy Solution	Suppliers
2030	A • Achieve RE100* / EV100 at all business sites • Achieve 53% emission reduction from BAU emission	E • Achieve RE100 • for Tier-1 suppliers * Core battery materials (ex. CAM, AAM, Cu-Foils)
2040	B • Achieve Scope1&2 carbon neutrality (Scope 1&2)	F • Achieve RE100 of core value chain
2050	C • Achieve carbon neutrality throughout the value chain (Scope 1-3)	
Post-2050	D • Achieve carbon negative	

RE Conversion

2021	2023	2030
1,180 GWh	1,881 GWh	7,889 GWh (예상)

+ ESG

Battery Ecosystem



THANK YOU

Parc1 tower1,108 Yeoui-daero, Yeongdeungpo-gu, Seoul, Korea
02-3777-1114 | www.lgensol.com