

2 0 2 2

# LG Chem INVESTOR DAY

Towards **Top Global Science Company**





We **Connect** Science

To Life for a Better Future



LG Chem

Towards **Top Global Science Company**

| **Sustainable Growth**

- 3 Future Growth Drivers
- R&D Capabilities

| **Carbon Neutral Growth**



# 3 Future Growth Drivers



**Sustainability Business**



**Battery Materials**



**Innovative New Drugs**



# Sustainability Business



Recyclable  
Material



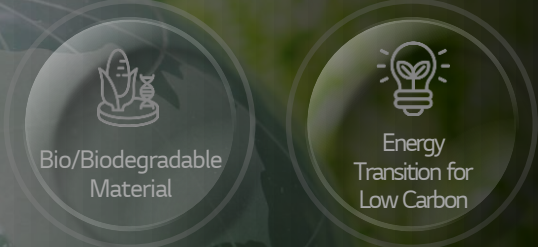
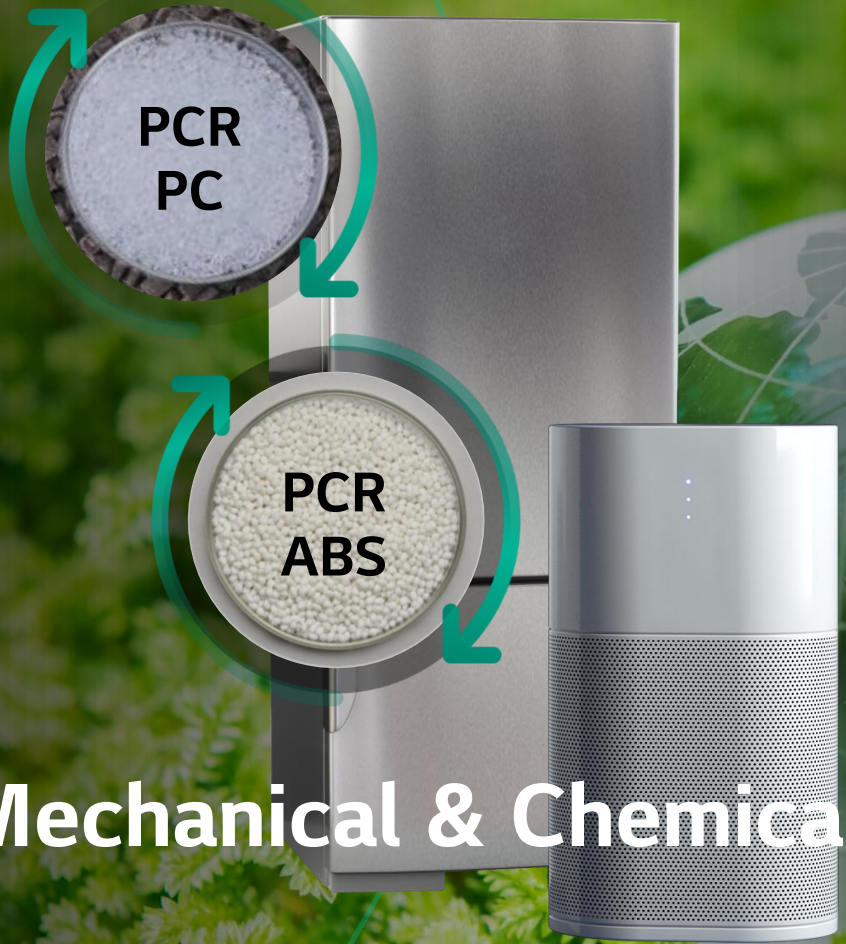
Bio/Biodegradable  
Material



Energy  
Transition for  
Low Carbon



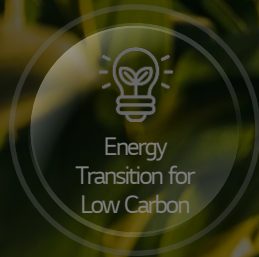
# Sustainability Business



## Mechanical & Chemical Recycling



# Sustainability Business



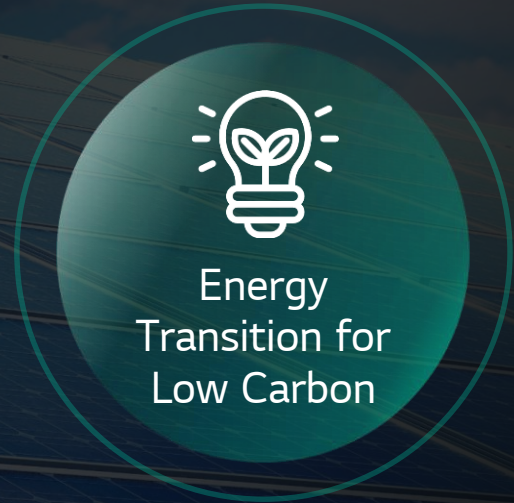


# Sustainability Business





# Sustainability Business



## Photovoltaic Encapsulants (PVEN, Solar Panel Encapsulant) **POE/EVA**



# Sustainability Business - LG Chem Sustainability Business Sales

(Unit: KRW tn)

LETZer

Recycle / Bio Material



Renewable Energy Materials

50x Growth in 9 Years



※ The estimated amount of the business target is based on our business plan and may differ from the actual amount due to changes in the business environment and strategy modifications.



 Battery Materials

Global Top  
Comprehensive  
Battery Materials  
Company

Cathode

Separator

Global  
Top

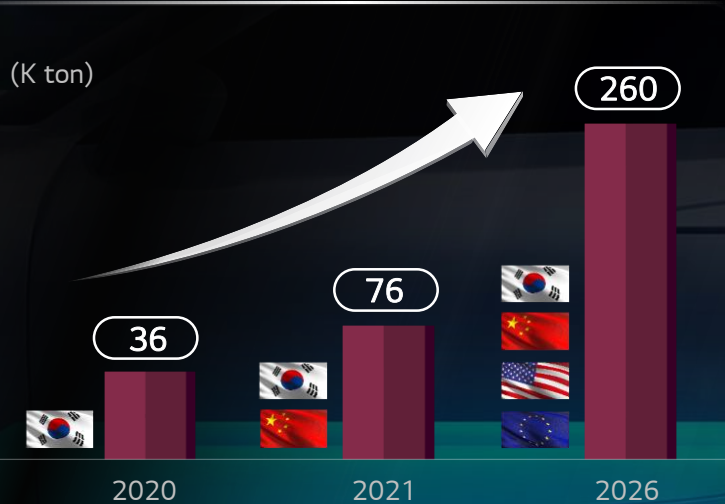
Additional  
Battery  
Materials



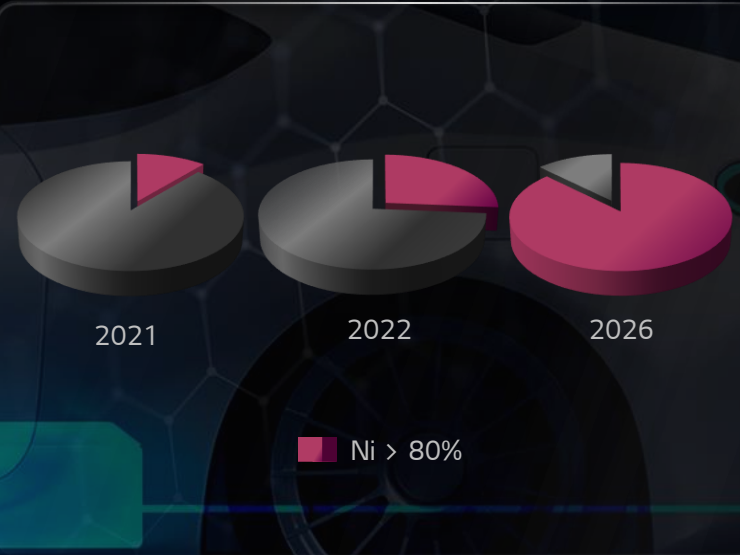
# Battery Materials - Cathode



## Expansion of Capacity



## Increase in High Performance Product

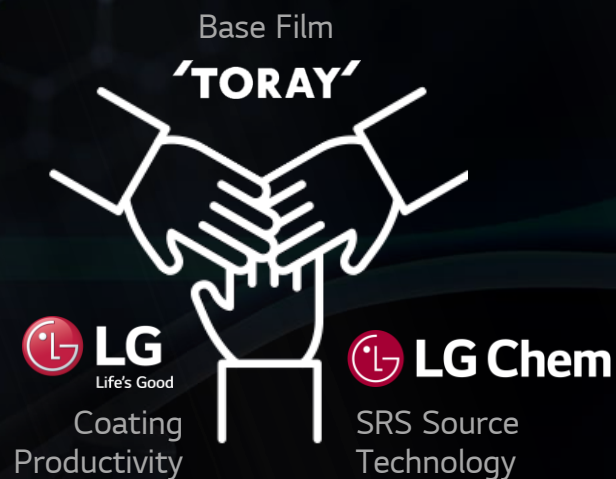


## Diversification of Client Portfolio





# Battery Materials - Separator



Strengthen Business Leadership  
Capa Expansion (Europe / US)  
Diversification of Client Portfolio

Foundation of Business

Consolidation of Competitiveness

Expansion of Business

2021

2022~2023

2024~



 Battery Materials - Additional



# New Battery Materials



CNT



TCA

(Thermally Conductive Adhesive)



Binder



BAS

(Battery Assembly Solution)



# Battery Materials - Sales Forecast for Battery Materials Business

- Additional Battery Materials
- Separator
- Cathode

(Unit: KRW tn)

**12x Growth  
in 9 Years**

1.7

2021

2.8

2022

8.4

2026

21.0

2030



# Innovative New Drugs

A Global Pharmaceutical Company With  
**Innovative Drugs**

Main Therapeutic Area

**Category Leader**

Oncology &  
Immunology

Diabetes &  
Metabolism

Platform Technologies

Multi-Modality

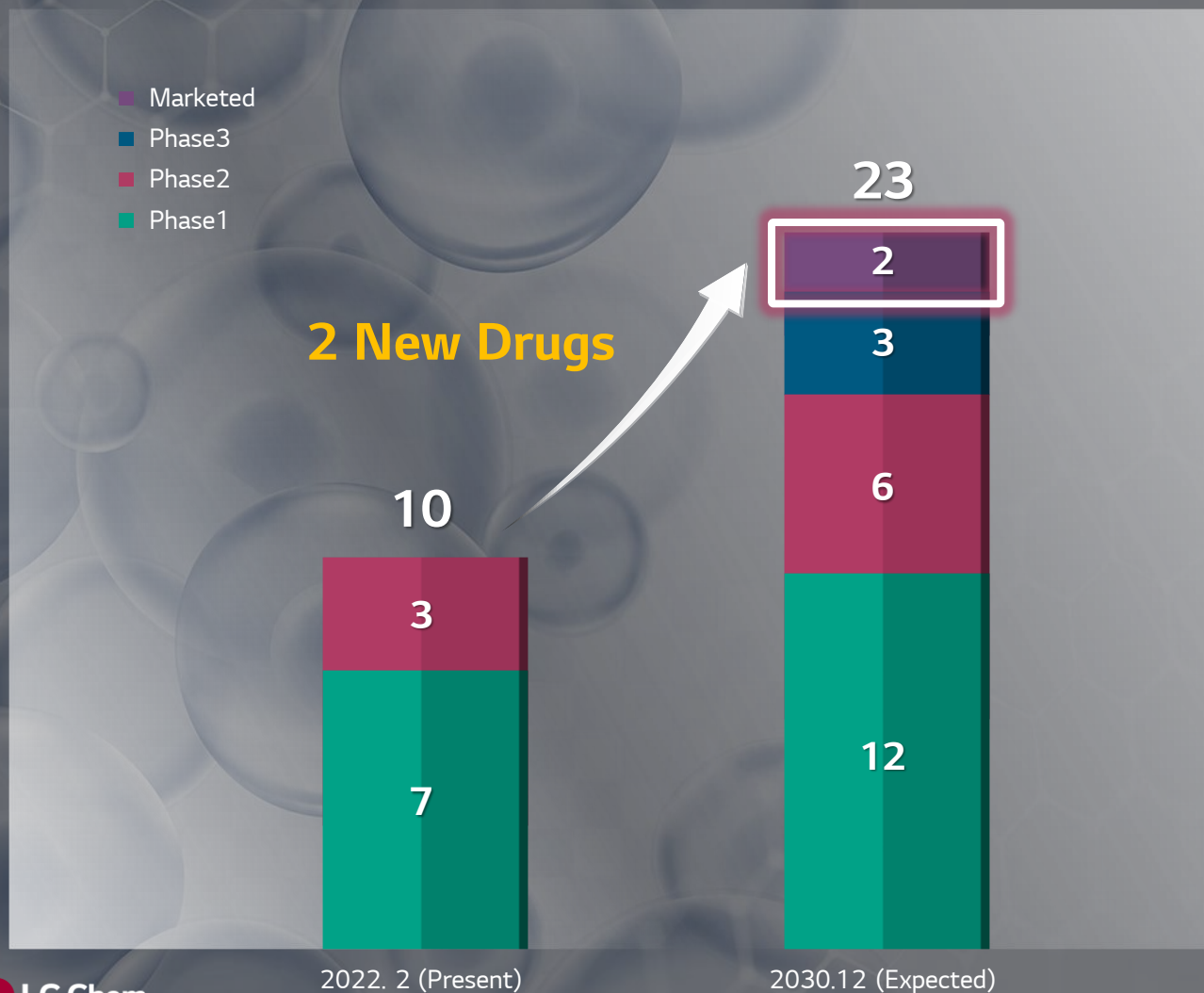
Small  
Molecule

Biologics

Cell  
Therapy



# Innovative New Drugs - New Drugs Pipeline

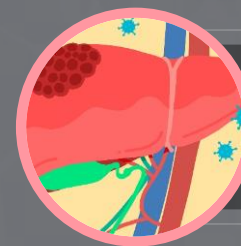


## Key Progress for 2022



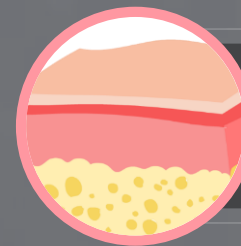
Initiation of Global Phase 3

Gout (Tigulixostat)



Initiation of Global Phase 2

NASH



Completion of Global Phase 1

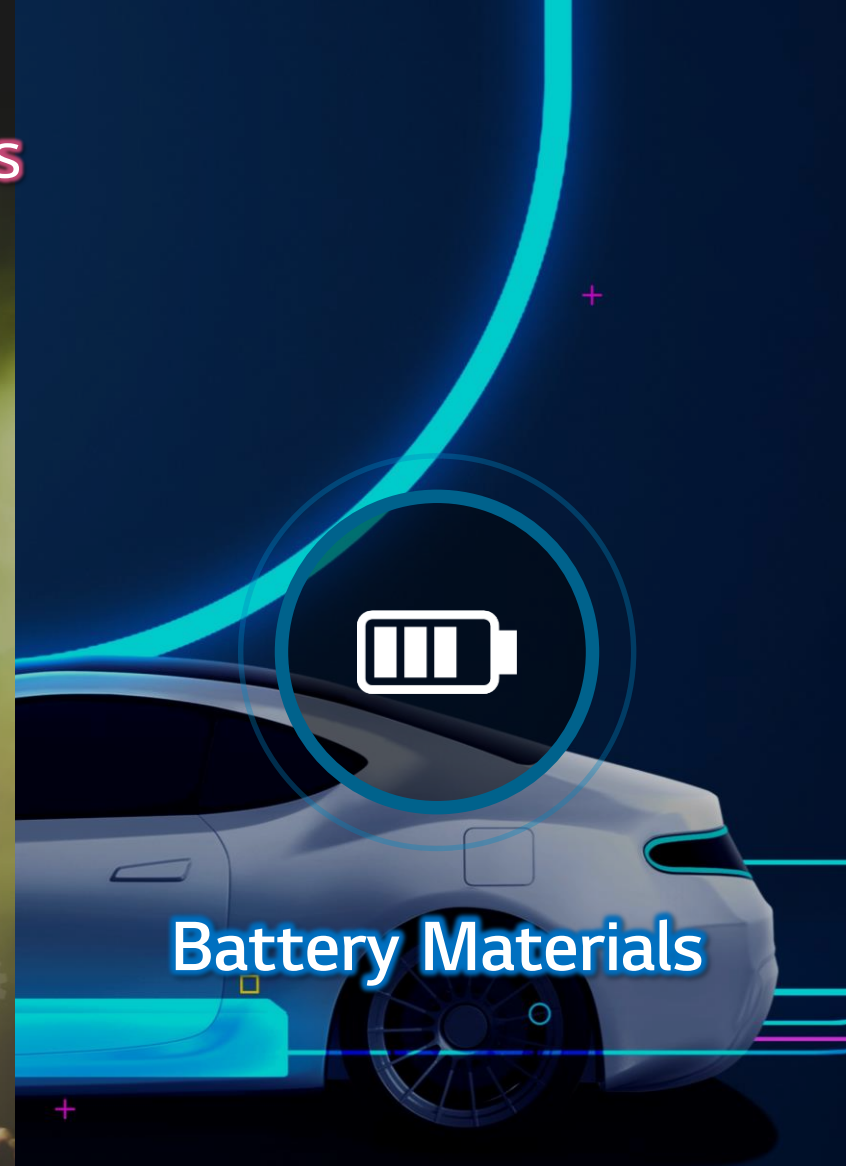
Obesity



# 3 Future Growth Drivers



Sustainability Business



Battery Materials



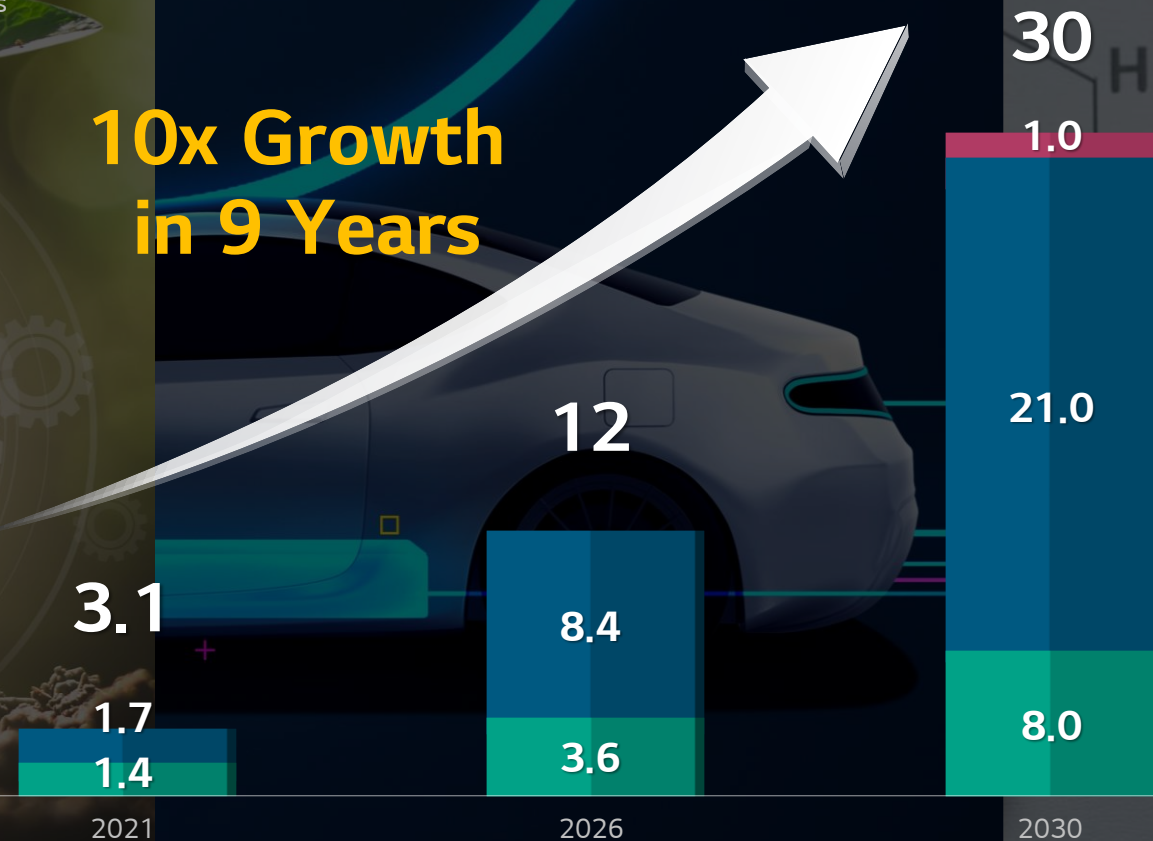
Innovative New Drugs



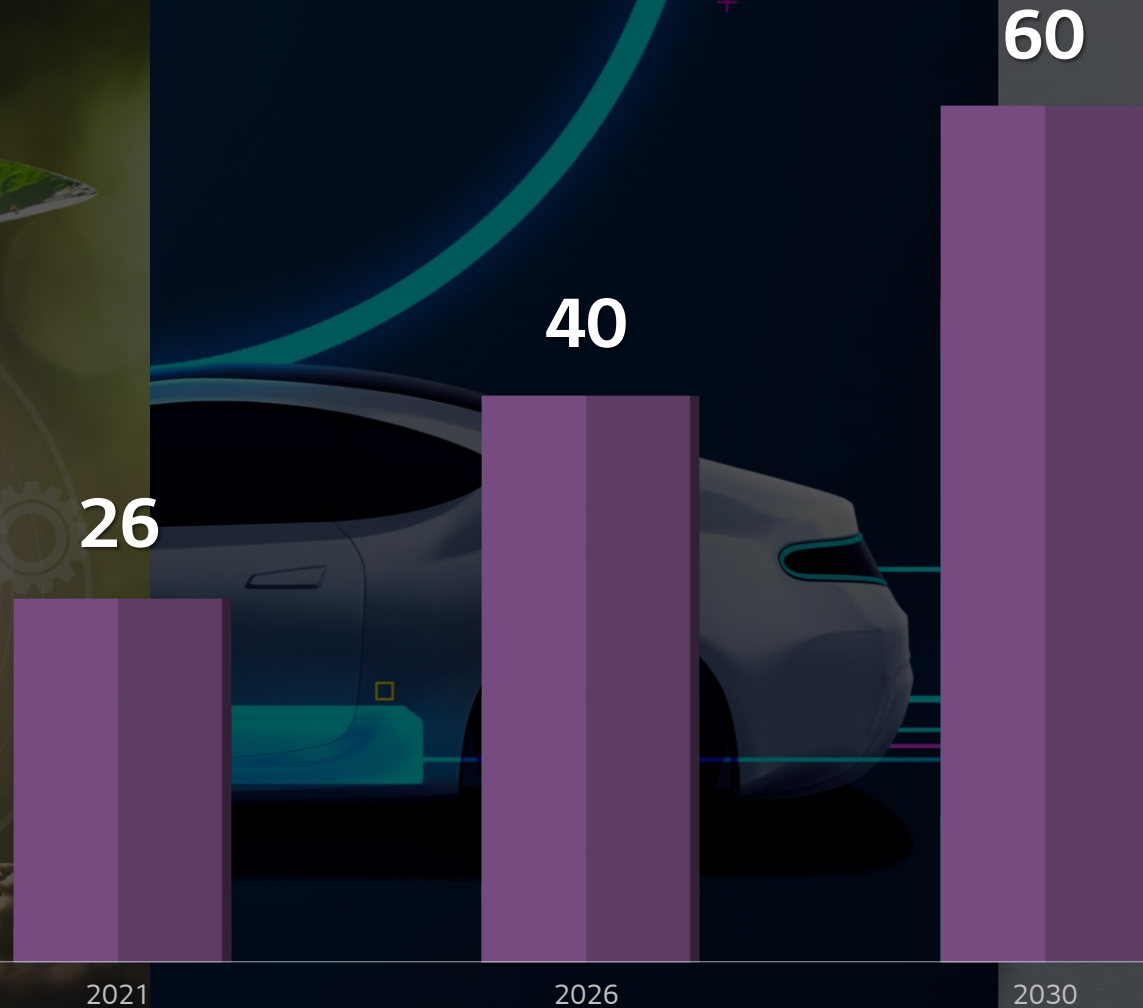
## Revenue Outlook for LG Chem's 3 Future Growth Drivers

- Innovative New Drugs
- Battery Materials
- Sustainability Business

10x Growth  
in 9 Years



# Revenue Outlook for LG Chem (Excluding LG ES)



(Unit: KRW tn)

※ The estimated amount of the business target is based on our business plan and may differ from the actual amount due to changes in the business environment and strategy modifications.



LG Chem

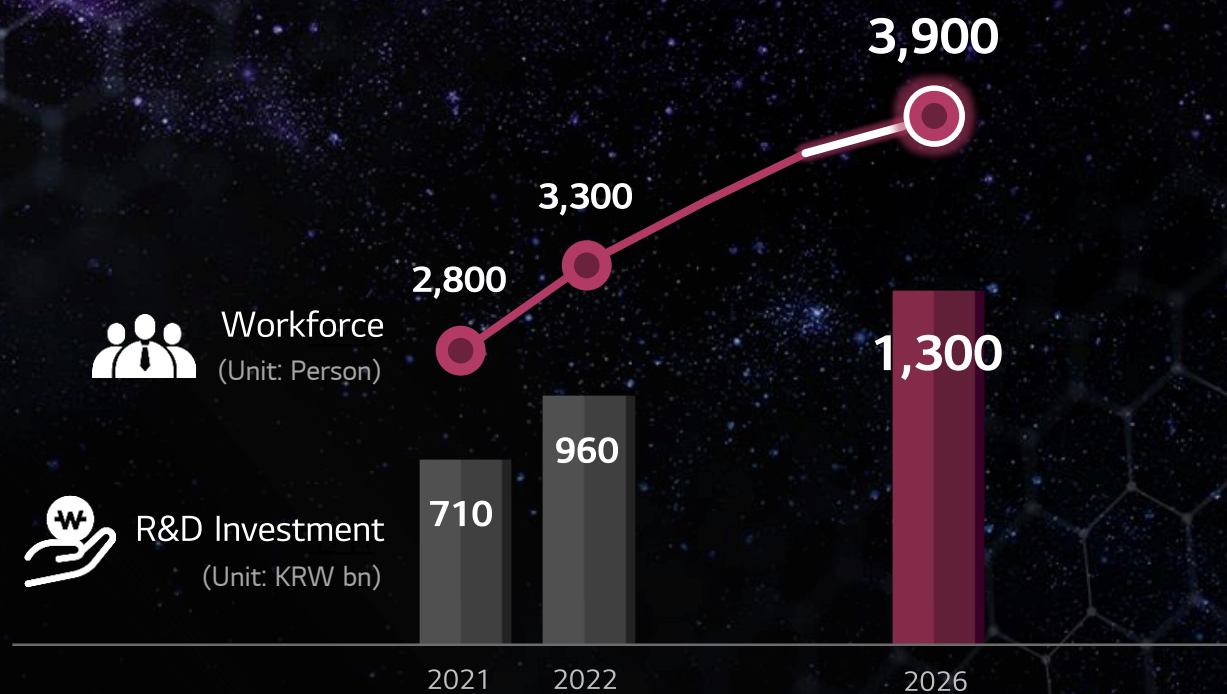
Towards **Top Global Science Company**

## Sustainable Growth

- 3 Future Growth Drivers
- R&D Capabilities
- | Carbon Neutral Growth



# Investment on R&D Technology



R&D Workforce / Investment (Excluding LG ES)



R&D Strategic Area



# Development for Sustainability Business

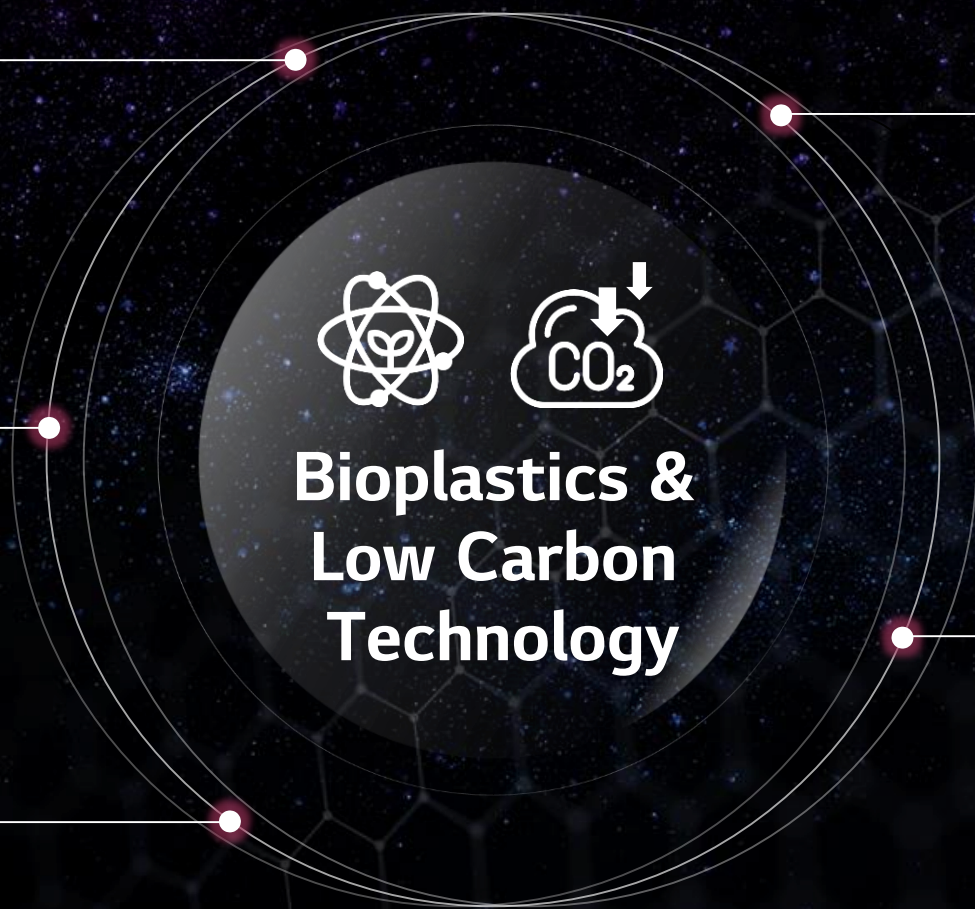
**Chemical Recycling**  
: Exploring Breakthrough  
Technology

**Mechanical Recycling**  
: Enhancing Recyclability

PCR-PVC

**CO<sub>2</sub> based Polymers**

CO<sub>2</sub> Plastics



**Bio-degradable Plastic**

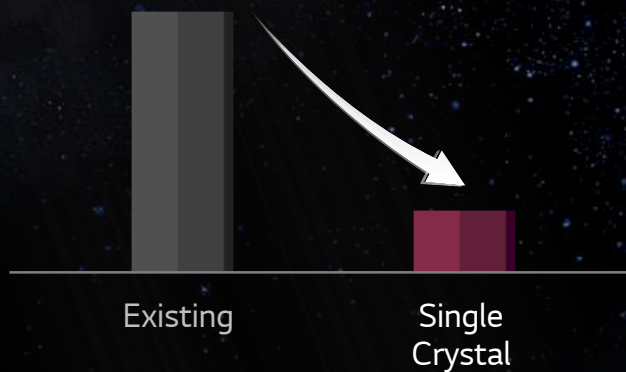
PLH

**CO<sub>2</sub> Capturing**  
: Open Innovation



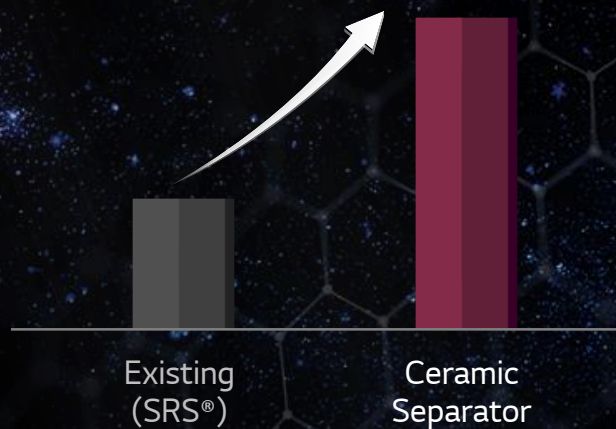
# Development of Advanced Technology for Battery Materials

Gas Generation



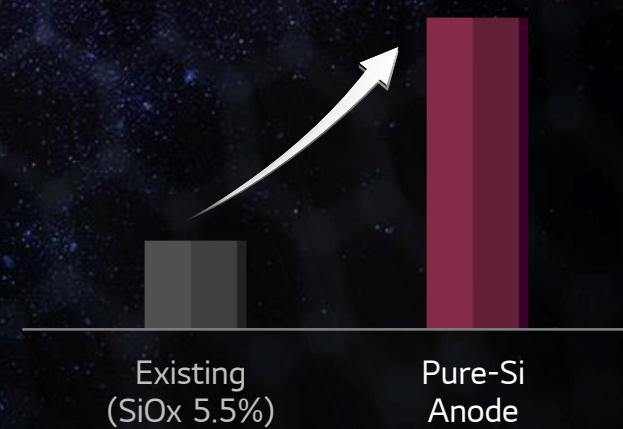
Single Crystal  
Cathode Material

High Temp. Safety



Ceramic Separator

Energy Density of Pure-Si Anode



Pure Silicon Anode



# Our Capabilities and Beyond

Additional Inorganic Growth Opportunities





M&A Records in 2021

JV with Toray for Separator Business

Acquisition of LG Electronics' Separator Coating Business

JV plan with ADM for PLA Business

**INORGANIC  
PROJECTS  
30+**



Sustainability Business



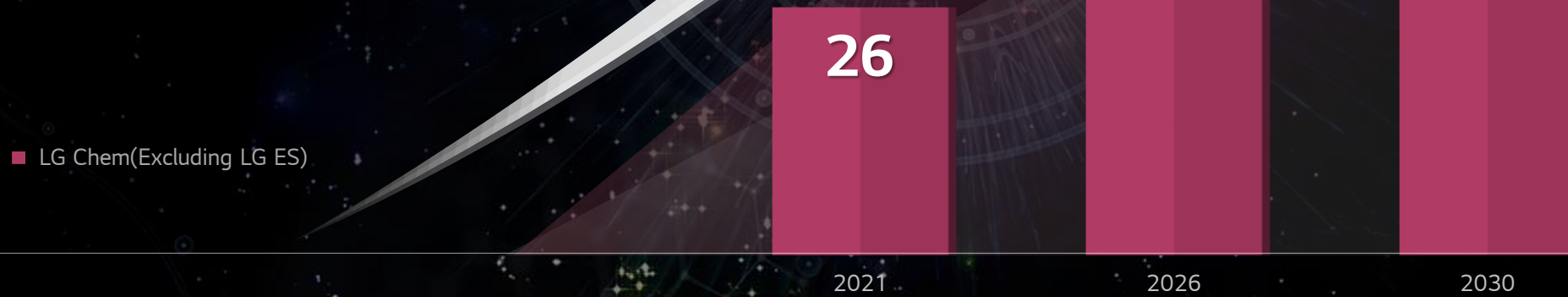
Battery Materials



Innovative New Drugs



# Additional Growth Potential to be Top Global Science Company



※ The estimated amount of the business target is based on our business plan and may differ from the actual amount due to changes in the business environment and strategy modifications.



LG Chem

Towards **Top Global Science Company**

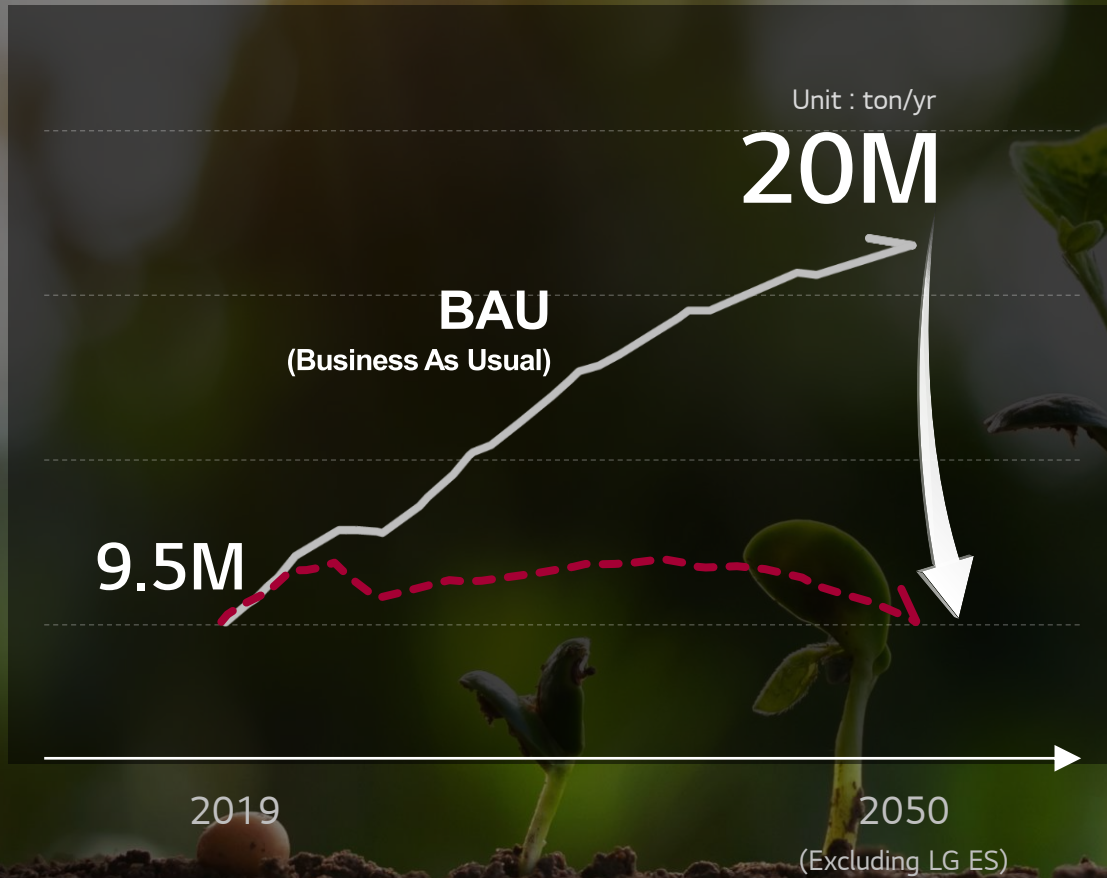
| Sustainable Growth

- 3 Future Growth Drivers
- R&D Capabilities

**Carbon Neutral Growth**



# Committed to Carbon Neutral Growth by 2050 (in July 2020)



# 10,000,000t



**4.2M**  
Fossil Fuel Vehicles'  
Carbon Emissions a year



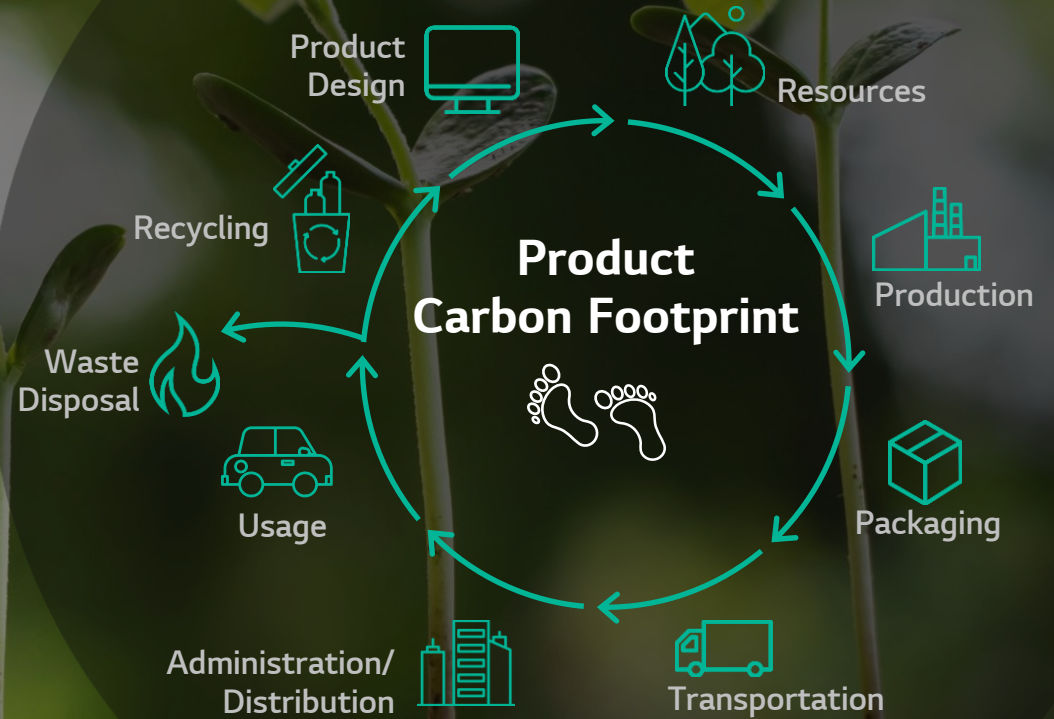
**71M**  
Pine Trees



# Actions to Reduce Carbon Emissions



## Life Cycle Assessment





# Engaged with the World's Leaders

## World Economic Forum



The First CEO of Korean Company  
to Speak at WEF Davos Agenda Climate Session

## The Alliance of CEO Climate Leaders

Largest CEO-led  
Climate Alliance  
In the World



**119**  
Companies



**12**  
Industries



**27**  
Countries

The Only CEO Representing Korean Company  
in the Alliance of CEO Climate Leaders

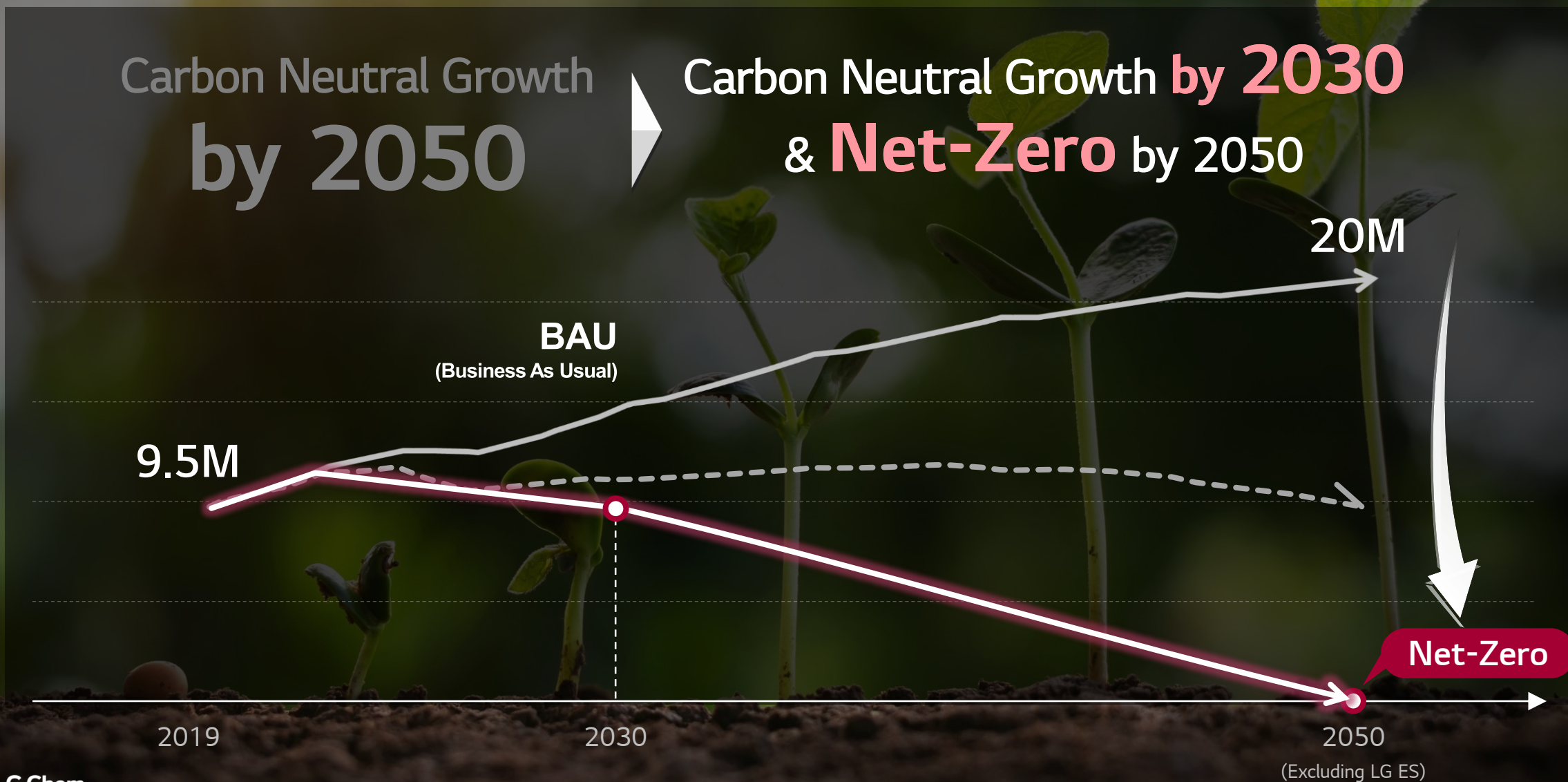


# New Target : Net Zero

Unit : ton/yr

Carbon Neutral Growth  
**by 2050**

Carbon Neutral Growth **by 2030**  
& **Net-Zero** by 2050



Net-Zero

(Excluding LG ES)





**Top Global Science Company**



**Sustainable  
Growth**



**2050  
Net Zero**





*We* **Connect** *Science*

To Life for a Better Future