



Leading with **Science**  
for **Sustainability**

**LG Chem**

*We***ConnectScience**



# Contents

Introduction of LG Chem

- 01 — Introduction of LG Group
- 02 — Introduction of LG Chem
- 03 — Business of LG Chem

# LG Group | History

1947



Established as  
Lucky Chemical  
Industrial Co.  
(now LG Chem)

1958



Established as  
Goldstar Co.  
(now LG Electronics)

1987



Completed  
'Lucky Gold Star Tower'

1995



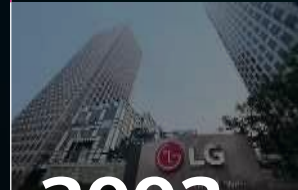
Established as a New  
Corporate Identity  
(Lucky Goldstar → LG)

1996



Established as  
LG Telecom  
(now LG U+)

2003



Established as  
LG Corp.

2017



LG Group's 70th  
Anniversary

2021



LG Group spined-off  
LX Group

## Chemicals



LG Chem  
LG Energy Solution  
LG Household & Healthcare  
etc.



Affiliates

**63**

\*Overseas Corporations 350 (Approx.)

## Electronics



LG Electronics  
LG Display  
LG Innotek  
etc.



Workforce(Worldwide)

**280,000** (Approx.)

## Telecommunications & services



LG U+  
LG CNS  
LG Sports  
etc.



Annual Revenue

**USD 120.8bn** (Approx.)



# Sustainable Innovation for a Better Life

## Chemicals



ABS Plastics  
**Global No.1**



Life Sciences  
**Domestic 1st New Drugs**  
U.S FDA Approval

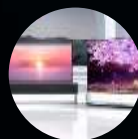


Battery for EV  
**Global No.1** (by Contract Size)



Cosmetics  
**Domestic No.1**

## Electronics



Large OLED TV Panel / Rollable TV  
**World's 1st Global No.1**



Home Appliance  
**Domestic 1st** (W/M, REF, A/C)



Automotive Display  
**Global No.1**



Smartphone Camera  
/3D Sensing Module  
**Global No.1**

## Telecommunications & services



5G Network  
**World's 1st**



Home IoT  
**Domestic No.1**

Platform Business



Since its founding, LG Chem is vigorously moving forward towards a sustainable future



## 1947 - 1999

- 1947** Established as Lucky Chemical Industrial Corporation
- 1969** Listed on Korea Stock Exchange
- 1974** Renamed as Lucky Corporation
- 1976** Completed construction of Yeosu PVC Resin Plant
- 1979** Opened Daedeok Central R&D Center
- 1991** Developed the world's first 4th-generation cephalosporin antibiotics
- 1995** Renamed as LG Chem, Ltd.  
Completed construction of Tianjin PVC plant in China

## 2000 - 2009

- 2001** Spinned off business entities (LGCI, LG Chem, LG Household & Healthcare)
- 2003** Acquired Hyundai Petrochemicals  
Factive became first Korean new drug to receive U.S. FDA approval
- 2004** Developed the world's first nanotechnology-applied new EP material
- 2005** Established LG Chem (China) Investment Co., Ltd.  
Established a sales subsidiary in Europe (in Germany)
- 2007** Merged with LG Petrochemicals Co., Ltd
- 2008** Developed Korea's first metallocene-based elastomer
- 2009** Spinned off Industrial Materials Business (now LX Hausys)

## 2010 - 2022

- 2016** Acquired Dongbu Farm Hannong (Farm Hannong)
- 2017** Merged with LG Life Sciences Co., Ltd.
- 2019** Completed construction of Korea's largest petrochemical tech center (in Osan)  
Opened the Global Innovation Center in the bio sector (in Boston)  
Spinned-off battery business (now LG Energy Solution)
- 2020** Acquired separator business
- 2021** Started construction of Cathode Material Plant for Gumi-type jobs (LG BCM)
- 2022** Established a separator joint venture with Toray in Hungary











2019 : First Korean  
Chemical Company in

# GLOBAL TOP 10

\* Source: Chemical & Engineering News, American Chemical Society)



## Top 10 Most Valuable Brands

1	 <b>BASF</b> We create chemistry	—	2021 : \$8.3bn 2020 : \$7.3bn	+15%
2	 <b>سابك</b> SABIC	▲ 1	2021 : \$4.7bn 2020 : \$4.0bn	+16%
3	 <b>LG Chem</b>	▲ 1	2021 : \$4.3bn 2020 : \$3.6bn	+19%
4	 <b>DOW</b>	▼ 1	2021 : \$4.3bn 2020 : \$3.7bn	+15%
5	 <b>Linde</b>	—	2021 : \$3.6bn 2020 : \$2.7bn	+34%
6	 <b>Lyondellbasell</b>	—	2021 : \$3.0bn 2020 : \$2.3bn	+33%
7	 <b>AsahiKASEI</b>	—	2021 : \$2.3bn 2020 : \$2.1bn	+9%
8	 <b>ShinEtsu</b>	NEW	2021 : \$2.3bn 2020 : \$1.6bn	+43%
9	 <b>MITSUBISHI CHEMICAL</b>	—	2021 : \$2.1bn 2020 : \$1.9bn	+14%
10	 <b>RONGSHENG</b>	NEW	2021 : \$2.1bn 2020 : \$1.4bn	+55%

Brand value of  
chemical companies

# "Global No.3"

\* Source: Brand Finance Group, U.K.

# Prospering In the pandemic **TOP 100**

\* Source: Financial Times, 2020





To achieve our vision, “**We Connect Science to Life for a Better Future,**”  
LG Chem will become **Top Global Science Company** that leads with **Science for Sustainability.**

## **We**Connect**Science** to life for a Better Future



**Leading with Science for Sustainability.**



# LG Chem Sustainability Roadmap

Through the implementation of our sustainability strategy,  
we will **secure future growth engines and enhance ESG competitiveness.**

## LG Chem Innovative Sustainability



\* LG Chem's top priority



# Carbon-neutral growth by 2030, Net-Zero by 2050



## Accelerate decarbonization

Convert to low-carbon fuel  
by introducing hydrogen  
and eco-friendly raw materials

Convert 100% to renewable energy

Offset carbon emissions



## Strengthen competitiveness of low-carbon products through LCA

To be applied  
To all Korean/overseas products in 2023



## Become a global leader in climate response

The first and only Asian member of  
WEF Alliance of CEO Climate Leaders

\*Alliance of CEO Climate Leaders : Climate alliance with over 30 corporate CEOs and government officials worldwide



# Towards Top Global Science Company



## Sustainable business centered around eco-friendly materials

Accelerate development of bio materials

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Establish circular economy  
of waste plastics

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Foster renewable energy material business



## Battery material-oriented e-Mobility

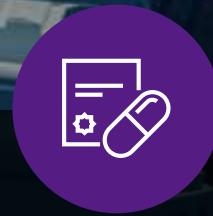
Produce first-rate cathode  
materials in the world

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Expand core material business  
for secondary batteries

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Reinforce R&D for  
next-gen battery materials



## World-class innovative drug development

Expand domestic top-level pipelines

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Develop global clinical trials  
and accelerate business

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Bolster investment in R&D  
for new drug development





## Eco-friendly Material Brand LETZero

A compound word of "Let" and "Zero," which means "to turn harmful substances to the environment and the net increase in carbon emissions into zero."

### LETZero Product Line

#### Recycle



##### PCR ABS

Electrical/electronic products, automobiles, construction materials, etc.



##### PCR PC, PCR PC/ABS

Electrical/electronic products, automobiles, industrial materials, building materials



##### PCR PP, PCR PE

Packaging materials, medical instruments



##### Bio-circular balanced SAP

Diapers, menstrual pads



##### Bio-circular balanced NPG

Paint, PET film, coating agents, adhesives, UPR



##### Bio-circular balanced IPA

Semiconductor/LCD manufacturing detergent, paint, pharmaceuticals, and cosmetics



##### Bio-based PA56

Electrical/electronic products, automobiles, Fiber

...



##### PLA

Packaging materials, film, 3d printing



##### PLH

Disposable bags and gloves



##### PBAT

Agricultural film, packaging materials

### LETZero Certification



Royal Botanic Toothpaste by LG Household & Health Care with LETZero Certification



PCR (Post Consumer Recycled)  
Bus stop built , remote control  
With PCR materials



# Towards Top Global Science Company



## Foster bioplastics and low-carbon technology

Mechanical/chemical recycling technologies

Develop and commercialize biodegradable plastics

CO2 capture/utilization technology



## Improve battery performance and safety Develop next-gen battery materials

Develop single-crystal cathode materials

Develop new materials for separators /pure silicon electrode materials

Material technology for all-solid-state batteries



## Gain leadership in cancer /autoimmune diseases, diabetes /metabolic diseases

Accelerate global clinical development for new drug projects, e. g., gout, NASH, and obesity

Implement multi-modality strategies for cell/gene therapy

\* Various approach to drugs

# LG Chem | R&D Status

\* Included Subsidiaries

## R&D Expense

Unit : Million USD



## R&D Workforce

Unit : Person

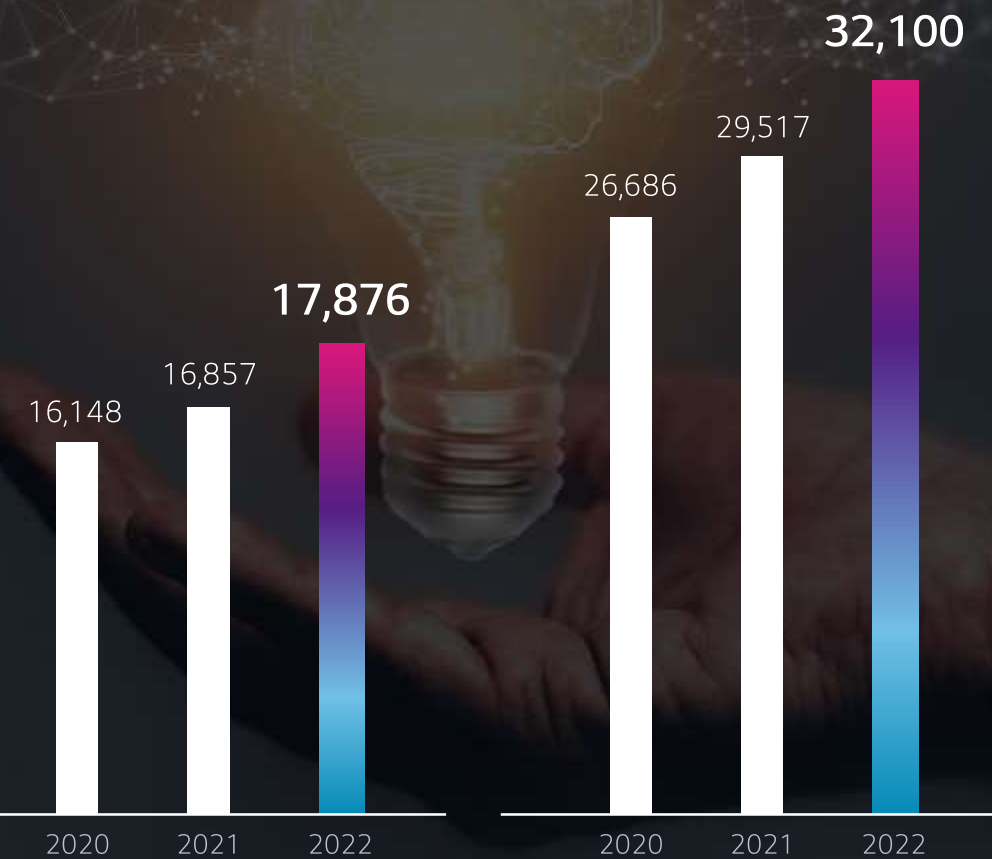


## Intellectual Properties (Patents & Trademarks)

Unit : Number of registrations

| Domestic

| Overseas





# LG Chem | Financial Results

\* Included Subsidiaries



Sales in 2022

USD **40.2bn**  
(Approx.)



Workforce

**19,500** (Person)

Domestic 14,500 / Overseas 5,000



Sites of business

**60**

Domestic 17 / Overseas 43

## Sales

(Unit : Billion USD)

## Operating profit

(Unit : Billion USD)



# LG Chem | Domestic Sites



**Headquarter/R&D Campus Magok**  
(Est.1987/Est.2018)



**Leadership Center / CS Center**  
(Est.1991/Est.2019)



**R&D Campus Daejeon**  
(Est.1979)



**Osong Plant** (Est.2009)  
Bio Similar, Vaccine



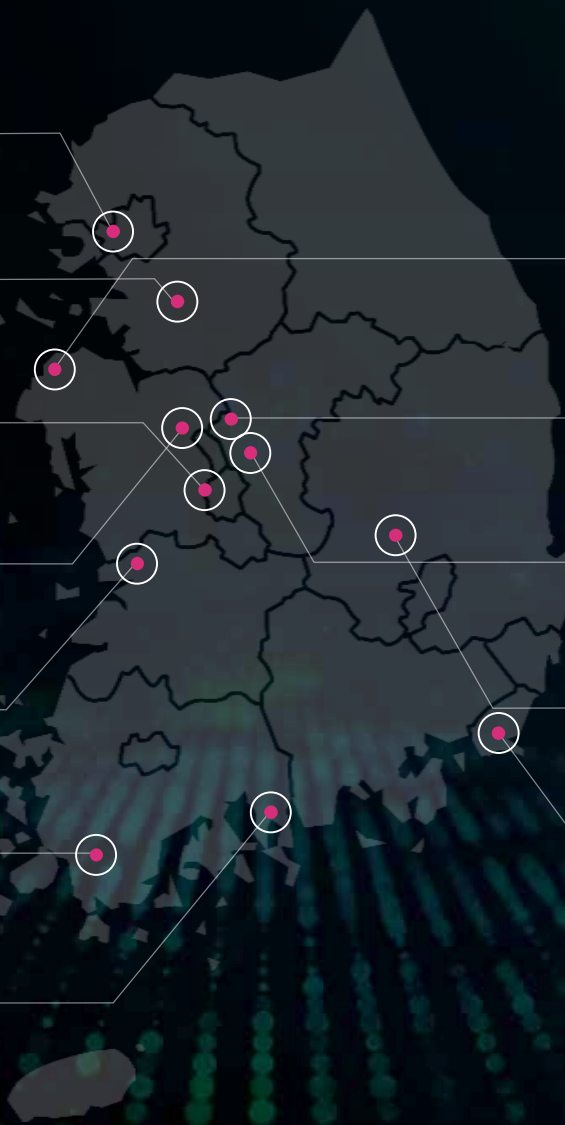
**Iksan Plant(3)**(Est.1991 / Est.1995/Est.2011)  
EP, ABS / Pharmaceutical / Battery Materials



**Naju Plant** (Est.1984)  
Octanol, Butanol, Plasticizers



**Yeosu Complex** (Est.1976)  
NCC, PVC, ABS, SAP, PE, AA



**Daesan Complex** (Est.2005)  
NCC, SSBR, PVC



**Ochang Plant** (Est.2005)  
Stripper



**Cheongju Complex(2)**(Est.1980 / Est.2009)  
OLED Material, Photoresist, Cathode Material,  
RO membrane / Battery Separator



**Gimcheon Plant** (Est.2008)  
SAP

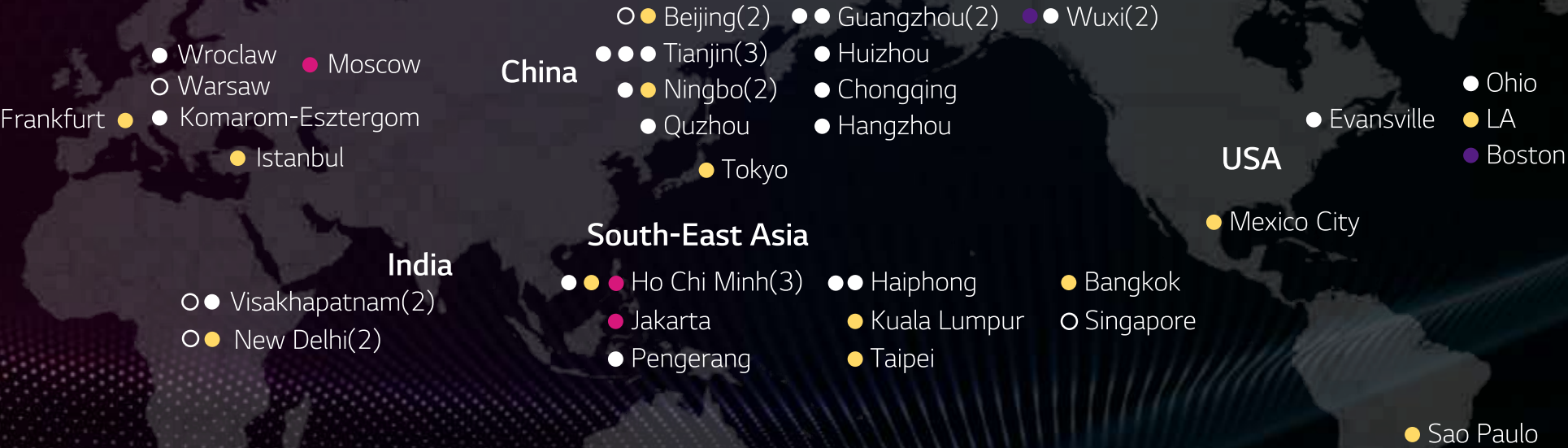


**Onsan Plant**(Est.1979)  
Fine Chemical





# LG Chem | Overseas Sites



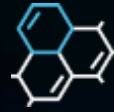
● Manufacturing Subsidiaries (20)   ● Sales Subsidiaries (13)   ● Regional Branch Offices (3)   ● R&D Center (2)   ○ Etc. (5)

Europe	Asia	India	America
<ul style="list-style-type: none"><li>● Wroclaw (Est.2005) – EP</li><li>○ Warsaw</li><li>● Moscow</li><li>● Frankfurt</li><li>● Istanbul</li><li>● Komarom-Esztergom (Est. 2022) – Battery Saporator</li></ul>	<ul style="list-style-type: none"><li>○ ● Beijing (Est.2004)</li><li>● ● Tianjin (Est.2004) - EP (Est.2005) - PVC,VCM,EDC (Est.2009) - SBS</li><li>● ● Guangzhou (Est.2002) – EP (Est. 2018) – FSPM</li><li>● Chongqing (Est.2015) - EP</li><li>○ ● Ningbo (Est.1996) - ABS, SBL, EP</li><li>● Huizhou (Est.2009) - ABS</li><li>● Wuxi (Est.2018) - Cathode Material</li><li>● Quzhou (Est.2018) - Precursor</li><li>● Hangzhou (Est.2021) - Display materials</li><li>● Taipei</li><li>● Tokyo</li><li>○ Singapore</li></ul>	<ul style="list-style-type: none"><li>○ ○ ● India (Est.1996)</li><li>● ● Haiphong (Est.2017) - Polarizer (Est.2018) - EP</li><li>○ ● ● Ho Chi Minh (Est.1995) - Plasticizers</li><li>● Bangkok</li><li>● Jakarta</li><li>● Kuala Lumpur</li><li>● Pengerang</li></ul>	<ul style="list-style-type: none"><li>● Atlanta</li><li>● Boston</li><li>● Evansville (Est.2018) - Sealant</li><li>● Ohio (Est.2022) - ABS</li><li>● LA</li><li>● Sao Paulo</li><li>● Mexico City</li></ul>



## Petrochemicals

- Sustainability
- Nexolution
- NCC / Polyolefins
- PVC / Plasticizers
- ABS
- Acrylates
- HPM(High Performance Materials)
- Catalyst



## Advanced Materials

- Cathode Materials
- Battery Separator
- Engineering Materials
- IT Materials
- RO Filter



## Life Sciences

- Primary Care
- Specialty Care
- Aesthetic

01

Introduction of LG Chem

# Petrochemicals Company



# Petrochemicals Company

**Establishment** (Year)

1976

**Sales** (\$) \*As of 2022

17.5bn (Approx.)

**Workforce** (Person)

Domestic 6,660 / Overseas 2,294

**Business Area**

Petrochemical Products

- **2022** Launched Asia's first plant-based eco-friendly ABS  
Signed a joint venture agreement to build an eco-friendly bioplastic plant with ADM in Illinois, US
- **2021** Acquired \*ISCC for Korea's first eco-friendly (bio-circular balanced, Chemical Recycle) product. \* ISCC (International Sustainability and Carbon Certification)  
Launched digital CRM system LG Chem On
- **2019** Established the largest petrochemical tech center in Korea (Osan CS Center)
- **2015** Launched Hwanam Tech Center in Nanjing, China
- **2010** Acquired Dow Polycarbonate business
- **2007** Merged with LG Petrochemicals Co., Ltd.
- **2003** Acquired PVC Business of Hyundai Petrochemicals Co., Ltd.
- **1995 ~ 1998** Established Manufacturing Subsidiary in China / India / Vietnam (PVC, ABS)
- **1976** Completed construction of Yecheon PVC resin factory  
Entry into the petrochemical business



# Leading Business Sustainability with Eco-Friendly Materials

Promoting bio materials, recycling, and energy transition as future growth engines



## Bio Materials

- About 50 bio products certified by ISCC Plus
- World's first mass production of bio-circular balanced SAP
- Launched Asia's first plant-based ABS
- Strengthened partnership to internalize bio materials production/development (e.g. joint venture with ADM)



## Recycle

(Establish circular economy of waste plastics)

- Produce mechanical recycling products
- Establish mass production and chemical recycling system
- Establish Closed-Loop system of waste plastics



## Energy Transition

(Discover new renewable energy materials)

- Produce high value-added products for solar panels
- Establish eco-friendly biomass power plant
- Establish CCU plant to produce blue hydrogen

# Production Capacity (As of 2022)

Unit : KTA

Ethylene	3,350	POE	280	Oxo-Alcohol	299
Propylene	1,980	HDPE	730	Acrylic Acid	715
BD	510	LDPE/EVA	460	Acrylate	732
BZ	900	mLLDPE	600	IPA	205
EG	180	PP	380	NPG	175
SM	515	CA/EDC	1,150	SAP	502
Phenol	710	VCM	1,353	NBR Latex	344
BPA	505	NAOH	1,020	Specialty Resin	315
ABS/SAN	2,290	PVC	1,278	Synthetic Rubber	365
PS	40	Plasticizer	278	CNT	1.7
EPS	90	PC	170		





# Sustainable Materials

LG Chem's key competitiveness is in sustainability business, a global mega-trend that includes renewable energy and biomaterials. Using biodegradable plastics, recycling, and biomaterials, we are reducing the generation of carbon during our manufacturing processes. POE, used as a heat-sealing sheet for solar power, and carbon nanotubes (CNT), the conductive additives for lithium-ion batteries, are critical materials for eco-friendly energy development.

Biodegradable(PLA, PLH, PBAT)  
Recycle, Bio-circular balanced,  
Renewable energy (POE, CNT)



## Applications



Mulching Film



Compostable Bag



Electronics housing



Solar power film



lithium-ion batteries



Conductive Plastics

# Nexolution materials

LG Chem is working ceaselessly to develop new functional materials with high technology barriers.

Our super absorbent polymer (SAP), a highly absorbent resin used in diapers and feminine hygiene products, acquired the world's first ISCC+ certification using plant-based materials, and our NBR latex, used in medical and industrial gloves, is recognized for the world's highest quality with excellent tensile strength and chemical resistance. Aerogel is an effective insulant with high durability used in industrial applications such as plant piping.

SAP, NBR Latex,  
Aerogel



Applications



Diapers



Diapers for Seniors



Medical Gloves



Industrial Gloves



Petrochemical Plant Insulant

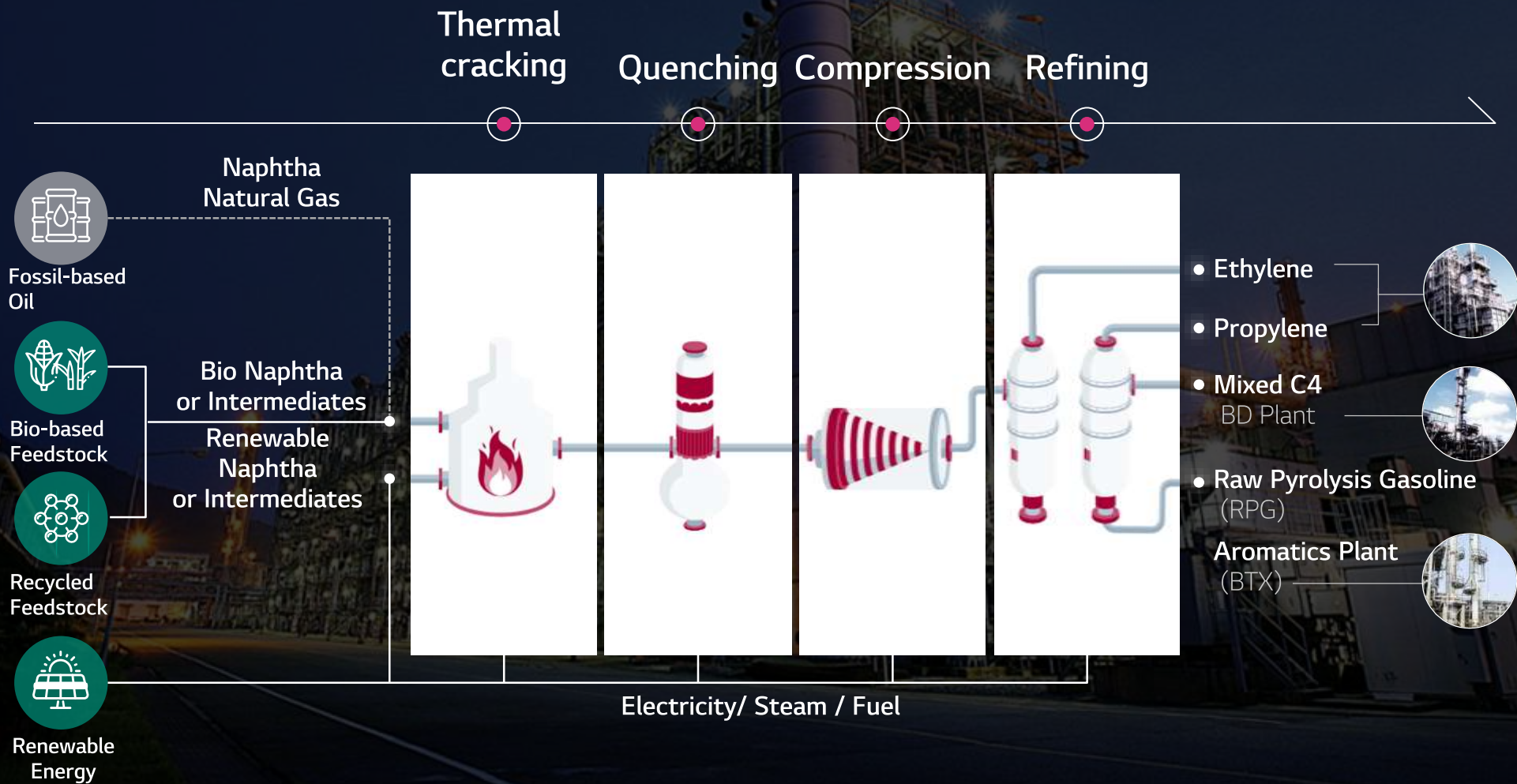


Marine Plant Insulant



# Naphtha Cracking Center (NCC)

NCC (Naphtha Cracking Center) is a process for producing base oils for petrochemical products, such as ethylene and propylene. They are supplied as raw materials for various products such as PO, synthetic rubber, and ABS. In addition to achieving the world's highest energy efficiency, LG Chem discovers and supplies alternative raw materials such as bio-materials and pyrolysis oil from waste plastic to reduce carbon, and develops various technologies for renewable energy and carbon capture for the eco-friendly conversion of our petrochemical plants.



# Polyolefin (PO)

PE (polyethylene) and PP (polypropylene) are general-purpose plastics that are used in everyday life, used to make containers, packaging, and medical equipment. After use, discarded products transform into PCR PE and PCR PP through LG Chem's mechanical recycling technology, used to produce packing film and containers.

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LD, LLD, HD, EVA



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Applications



Medical equipment



Ondol pipes



product containers



Cable insulators



Packaging film



Automotive interior  
and exterior parts



# PVC / plasticizers

PVC (polyvinyl chloride) is a material used in flooring, window frames, and building materials, characterized by excellent thermal insulation and durability.

LG Chem supplies PVC made from renewable plant-based materials.

Plasticizers give flexibility to PVC, and caustic soda is used in a variety of advanced industries such as wastewater neutralization and manufacturing of cathode materials.

PC (polycarbonate) has excellent impact resistance and heat resistance properties and is used in home appliance housings and automotive materials.

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PVC, caustic soda,  
plasticizers, alcohol, PC

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Applications

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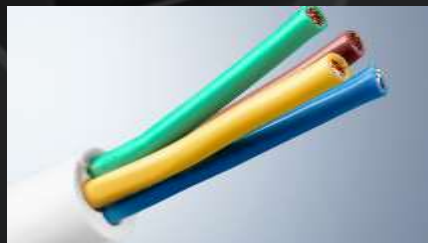
Sashes



Flooring



Pipes



Cable sheath



Cathode materials



Car headlamps

# Acrylonitrile Butadiene Styrene (ABS)

Acrylonitrile Butadiene Styrene (ABS) is a highly functional material mainly used in automobiles, home appliances, and IT devices for its excellent heat resistance, shock absorbance, and processability. LG Chem provides differentiated solutions to our customers, from producing chemical industry's very first white-colored PCR ABS and Asia's first eco-friendly ABS made of plant-based materials.

ABS, PCR-ABS,  
SAN, PS, EPS



## Applications



Electronics housing



Automotive interior/  
exterior materials



Building materials



Toys



Product containers



Recycle Materials(PCR)



# Acrylates

LG Chem is the only manufacturer of acrylic acid, IPA, and NPG in Korea, and produces high-quality products based on proprietary technology.

Mainly used in paints, plasticizers, and SAP, Acrylates have a myriad of applications in various fields for its excellent chemical reactions.

IPA is a semiconductor cleaning agent with the highest level of purity, and NPG is a highly favored eco-friendly material used to make powder coating.

## Acrylates, IPA, NPG



## Applications



SAP Resin



Semiconductor cleaning agent



Eco-friendly powder coating



Paint



Hand Sanitizers



Bathroom Appliances



# High Performance Materials (HPM)

Synthetic rubber is used to produce automotive tires and golf balls.

Methacrylate Butadiene Styrene (MBS) is used as an additive for impact reinforcement agents and for enhancing adhesion with other resins in bio plastic compounds.

Styrene Butadiene Styrene (SBS) is used as a modifying agent for asphalt and a special additive that imparts various functions.

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## Rubber, SBS, MBS



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## Applications



Asphalt modifiers



Golf balls



Shoes



Impact modifiers



Bio degradable



Asphalt

# Catalyst

Catalysts are the core technology for various petrochemical processes. We are the Korea's first and world's fourth company to independently develop catalysts for acrylic acid production. Polymer catalysts are used to manufacture metallocene polyolefins and functional chemical materials. We provide tailored solutions to customers with exceptional technology.

## Process Catalyst, Polymer Catalyst



## Applications



Acrylic acid



CNT



BD



mPO(PE/PP)



POE



Synthetic rubber

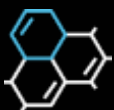


02

Introduction of LG Chem

# Advanced Materials Company





# Advanced Materials Company

**Establishment** (Year)

1999

**Sales** (\$) \* As of 2022

6.4bn (Approx.)

**Workforce** (Person)

Domestic 4,049 / Overseas 2,217

**Business Area**

Battery Materials,  
Engineering Materials,  
IT Materials

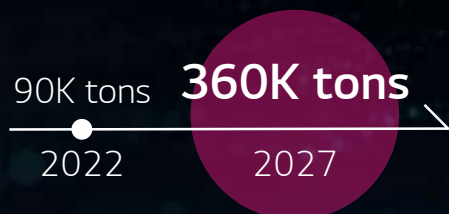
- **2022** Established a cathode material joint venture with B&M, a subsidiary of Zhejiang Huayou Cobalt Co., Ltd. (Gumi)  
Established a separator joint venture LG-Toray
- **2021** Commercialized battery separators  
(Acquired separator business from LG Electronics, established LG-Toray J/V in Hungary)
- **2019** Reorganized Advanced Materials Company  
(to provide customized solutions in high-performance materials)
- **2018** Established Chinese joint venture for manufacturing Precursor and cathode material
- **2016** Acquired GS E&M, a renowned cathode manufacturer
- **2006** Commercialization of battery materials (cathode material, electrolyte)
- **2003** Established IT&E Manufacturing Subsidiary in Nanjing, China
- **2000 ~ 2004** Commercialized LCD, OLED, Process materials
- **2000** First to develop PDP fluorescent substance in Korea.

# Towards World's Top Comprehensive Battery Materials Company



## Global Top Tier Cathode Materials

- Strengthen metal competitiveness through owning mines and strategic cooperation with smelting and refining companies
- Develop leadership in high capacity and cost-innovative technology
- Expand business sites worldwide



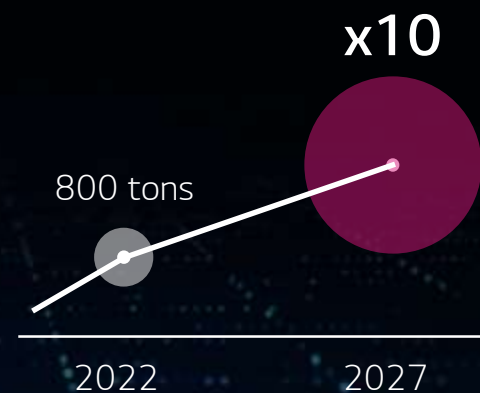
## Separator Business

- Initiated the development of next-generation high-safety separators
- Established a global production base in Poland (2021) and Hungary (2022)



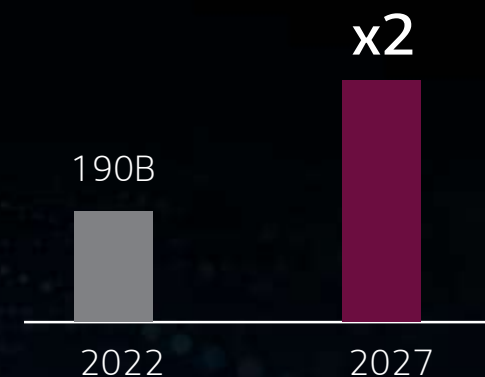
## CNT Capacity Expanded Over 10x

- Bolster market leadership in battery conducting materials



## Focused Resources for R&D

- Differentiate technology and gain market leadership



# Battery Materials

In addition to cathode binders and dispersants, LG Chem is producing over 10 types of battery materials, including cathode materials and separators, which are core materials for secondary batteries. We are also bolstering R&D across a wide range of fields, such as developing new materials for the technological advances in the next-generation batteries. LG Chem will continue to strive to become the world's No. 1 comprehensive battery materials company with the highest level of safety and competitiveness.

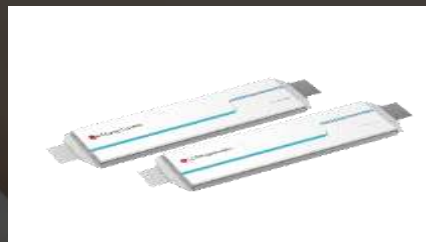
Cathode materials, separators,  
anode binders and CNT



Applications



Mobility & IT batteries

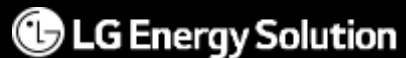


Automotive batteries



ESS batteries

Major Customers





# Engineering materials

In mega trends such as e-mobility and sustainability, LG Chem is striving to create world no. 1 products by producing high-strength, lightweight automotive materials and eco-friendly PCR materials that are optimized for customer products and processes.

EPC, TPEE,  
Specialty Compound



Applications



Automotive interior and  
exterior materials



Engine parts



Recycled materials(PCR)

Major Customers



# IT Materials

LG Chem produces light-emitting materials and various high-functional film materials for OLED, which are critical for IT devices, as well as materials for the back-end process of manufacturing semiconductors.

OLED Materials,  
Display Materials,  
Advanced semiconductor  
Materials



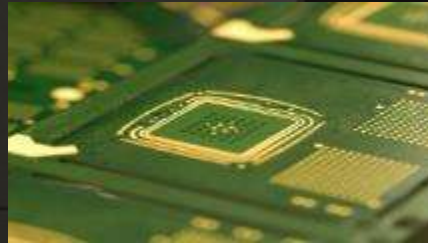
Applications



OLED Display Materials



OLED TV



Board for Semiconductor  
Packages

Major Customers





# RO Filiter

LG Chem's seawater desalination and industrial RO filter is a water treatment filter that utilizes our proprietary Thin-Film Nanocomposite (TFN) nanotechnology.

This product is leading the global market with an unrivaled removal efficiency of 99.89%.

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SW R/ES/ GR/SR



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Applications



Seawater Desalination



Industrial Water



Wastewater Reuse

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Major Customers



METITO

GS Inima





03

Introduction of LG Chem

# Life Sciences Company



# Life Sciences Company

**Establishment** (Year)

1984

**Sales** (\$) As of 2022

0.7bn (Approx.)

**Workforce** (Person)

Domestic 1,933 / Overseas 271

**Business Area**

Pharmaceuticals, Vaccines, Aesthetic

- **2022** Applied for global Phase III clinical trial for Tigulixostat (new drug for gout) with the US
- **2021** Established LG Jiansheng Life Science in China  
Successfully completed Phase II clinical trial for new gout drug in the US
- **2019** Established Life Sciences Innovation Center in Boston, USA
- **2012** Developed 1<sup>st</sup> Korean diabetes medicine, 'Zemiglo'
- **2003** 1st Korean new chemical entity (NCE) approved by U.S. FDA (Factive)
- **1996** 1<sup>st</sup> Korean hepatitis B vaccine 'Euvox' approved by WHO PQ
- **1991** Developed World's first 4<sup>th</sup> generation Cephalosporin
- **1984** Start of pharmaceutical business  
(Established Pharmaceuticals business division)
- **1961** Acquire of manufacturing license pharmaceuticals products



# Toward a World-Class Innovative Drug Developer



**2 or more innovative  
new drugs by 2030**



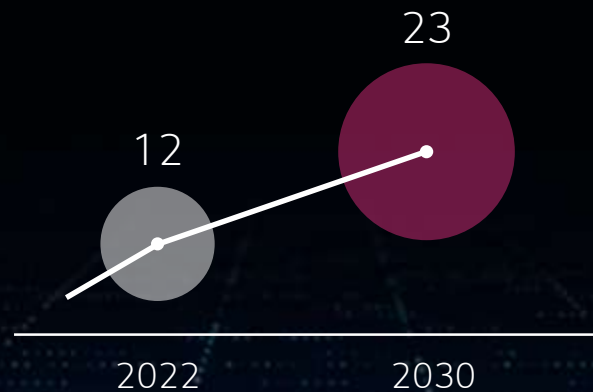
**Diabetes, metabolic diseases,  
cancer, autoimmune diseases**

Expand new drug pipelines in clinical development stage



**Accelerate clinical developments  
and business growth worldwide**

- First-rate pipelines in Korea
- Invest over USD 250mil in annual R&D
- Open innovation



- Reinforcing talent pool of clinical/regulatory specialists
- Increase overseas sales by 50%

# Primary Care

LG Chem has developed Korea's first diabetes drug, Zemiglo, and arthritis drug, Synovian, increasing its competitiveness in Korea as well as overseas, and has expanded its efforts to develop new drugs and to collaborate with other companies through partnerships in the areas of diabetes and cardiovascular, musculoskeletal, and autoimmune diseases.

## Representative Products



Diabetes (Zemiglo, Zemimet SR)



Cardiovascular Disease (Rovatitan)



Musculoskeletal Disease (Hyruan One)



Autoimmune Disease (Eucept)



# Specialty Care

LG Chem is the first company in Korea that has successfully developed a growth hormone stimulator, and is also concentrating its R&D capabilities on treatments for special diseases.

LG Chem has been strengthening competitiveness in the global market with its WHO-approved hepatitis B and pentavalent combination (5-in-1) vaccine..

## Representative Products



Grow Hormone (Eutropin S pen)



Ovulation Induction (Follitrope)



Pentavalent Combination (Eupenta)



Polio Vaccine (Eupolio)

# Aesthetic

YVOIRE, the first hyaluronic acid filler developed with LG Chem's proprietary technology in Korea, is receiving attention for its superior product quality leading to expanding market share.

## Representative Products



Y-SOLUTION, Global



YVOIRE, Global

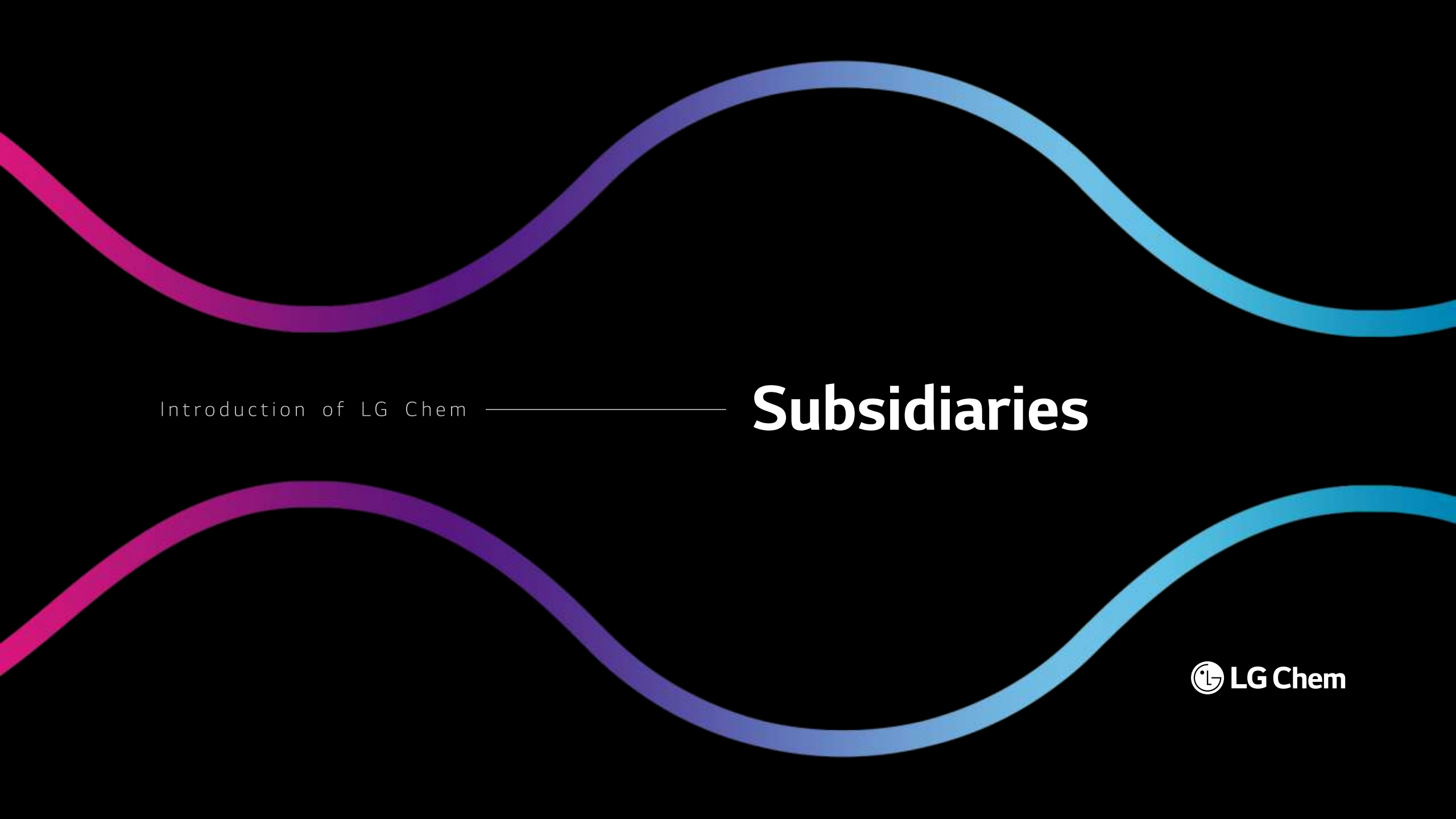


YVOIRE, China



Y-SOLUTION, China





Introduction of LG Chem

# Subsidiaries



## LG Energy Solution

LG Energy Solution embarked on a new journey as a global battery company when we became a separate entity from LG Chem's battery business in 2020.

We were the first to mass-produce lithium-ion batteries and supply them for electric vehicles, and have been offering a comprehensive portfolio of products related to automotive batteries.

LG Energy Solution also provides battery systems for ESS batteries in various applications, including power grids, residential and commercial use, and uninterruptible power supplies (UPS).



### Automobile Battery



No. 1 in automotive battery  
global market

### Mobility & IT Battery



1st in Korea to successfully  
mass produce small  
lithium-ion batteries

### ESS Battery



No. 1 in  
ESS batteries globally





## Farm Hannong

Farm Hannong, an LG Chem's affiliate, is the top domestic agricultural company—No. 1 in agricultural chemicals and No. 2 in the fertilizer and seed in the Korean Market—and aims to be a global leader in green agriculture and ICT industry technologies.

## Farm Hannong

### Crop Protection Products



No.1  
domestic  
market share

### Fertilizer



No.2  
domestic  
market share

### Seed



No. 2  
domestic  
market share



# THANK YOU

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