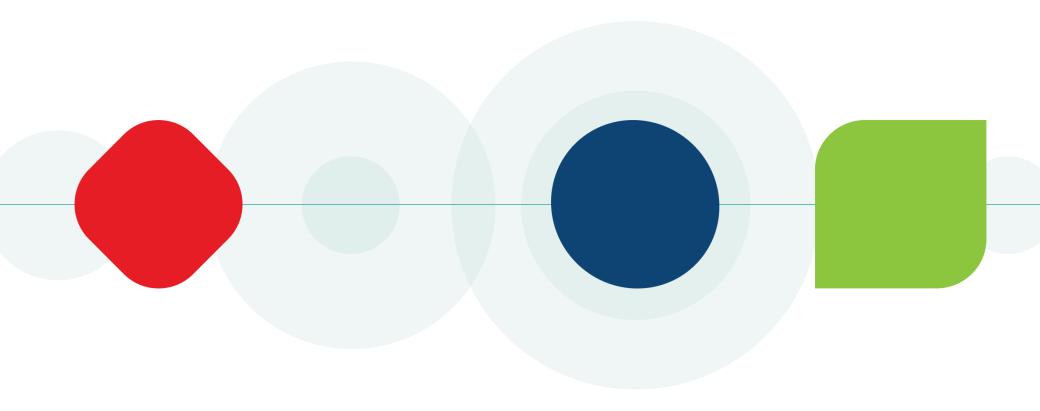
## LOTTE CHEMICAL CORPORATION

**2025 COMPANY PROFILE** 





## CONTENTS

- LOTTE GROUP
- LOTTE GROUP Chemical Division
- LOTTE CHEMICAL CORPORATION
- LOTTE CHEMICAL BUSINESS



### 1. LOTTE GROUP

Lifetime Value Creator that adds value of abundance to human life, LOTTE

LOTTE made continuous challenges and innovations in various fields such as chemistry, food, distribution, and tourism, and is offering new lifestyles.

LOTTE is making a more convenient and fun lifestyle, and a happy tomorrow where everyone can grow.





#### Change Today, Create Tomorrow

**VISION** 

## Lifetime Value Creator

MISSION

We enrich people's lives by providing superior products and services that our customers love and trust.



#### FINANCIAL HIGHLIGHTS



Assets 1) Debt rato Number of affiliates

KRW 129.8 trillion 125.8 % 96

1) May 2024 announcement by the Korea Fair Trade Commission (Based on fair assets)

#### SALES BREAKDOWN BY BUSINESS IN 2023



#### **BUSINESS PORTFOLIO**

LOTTE has built a successful business portfolio in food, retail, chemical, hotel and construction-rental-infra.

#### 200111200 1 01111 0210

Food
LOTTE Wellfood
LOTTE Chilsung Beverage
LOTTE GRS
LOTTE R&D Center
LOTTE Asahi Liquor
LOTTE-Nestlé (Korea)
LOTTE People Networks
LOTTE International

# Retail LOTTE Department Store LOTTE Mart LOTTE Super LOTTE e-commerce LOTTE Homeshopping Korea Seven LOTTE Hi-Mart LOTTE GFR FRL Korea Samantha Thavasa LOTTE LOTTE Members

# Chemical LOTTE Chemical LOTTE Fine Chemical LOTTE Energy Materials LOTTE Aluminium (LOTTE Infracel/LOTTE Packaging Solutions) LOTTE Chemical Titan LOTTE Chemical USA LOTTE MCC LOTTE INEOS Chemical LOTTE Versalis Elastomers

LOTTE GS Chemical

Hotel
LOTTE Hotels & Resorts
LOTTE Duty Free
LOTTE World
LOTTE JTB

Construction · Rental · Infra				
LOTTE E&C	Daehong Communications			
LOTTE CM Division	Canon Korea			
LOTTE Property & Development	Korea Fujifilm			
LOTTE Rental	LOTTE AMC			
LOTTE Global Logistics	LOTTE Giants			
LOTTE Innovate	LOTTE Institute of Economy & Business Strateg			
LOTTE Biologics	LOTTE Scholarship Foundation			
LOTTE Ventures	LOTTE Welfare Foundation			
LOTTE Capital	LOTTE Samdong Welfare Foundation			
LOTTE Cultureworks	LOTTE Foundation for Arts			

#### **GLOBAL BUSINESS**

LOTTE is engaged in more than 30 countries, across Asia, Europe, the Americas, Oceania, the Middle East and Africa.

	ASIA
Laos	Dining Franchises
Russia	Hotels/Confectionery/Chemical/Construction/Trade
Malaysia	Chemical/Construction
Mongolia	Dining Franchises
Myanmar	Dining Franchises/Beverages/Hotels/Confectionery
Vietnam	Department Stores/Marts/Hotels/Dining Franchises/Cinema/ Chemical/CM/Construction/Multiplex Development/Trade/ Logistics/IT/Advertising Agency/Rental/Duty Free Shops/ Property & Development/Venture Investment/Others
Singapore	Confectionery/Construction/Duty Free Shops
Uzbekistan	Chemistry/Hotels/Logistics
India	Confectionery/Chemical
Indonesia	Department Stores/Marts/Chemical/Construction/Manufacturing/Logistics/IT/Capital/Advertising Agency/Cinema/Others
Japan	Beverages/DutyFreeShops/Chemical/Construction/Hotels/Others
China	Beverages/Chemical/CM/Manufacturing/Logistics/Others
Kazakhstan	Confectionery/Logistics/Dining Franchises
Cambodia	Dining Franchises/Construction
Thailand	Chemical/Rental
Pakistan	Confectionery/Beverages/Chemical/Construction
Philippines	Beverages/Chemical/Construction/Logistics

Chemical/Logistics

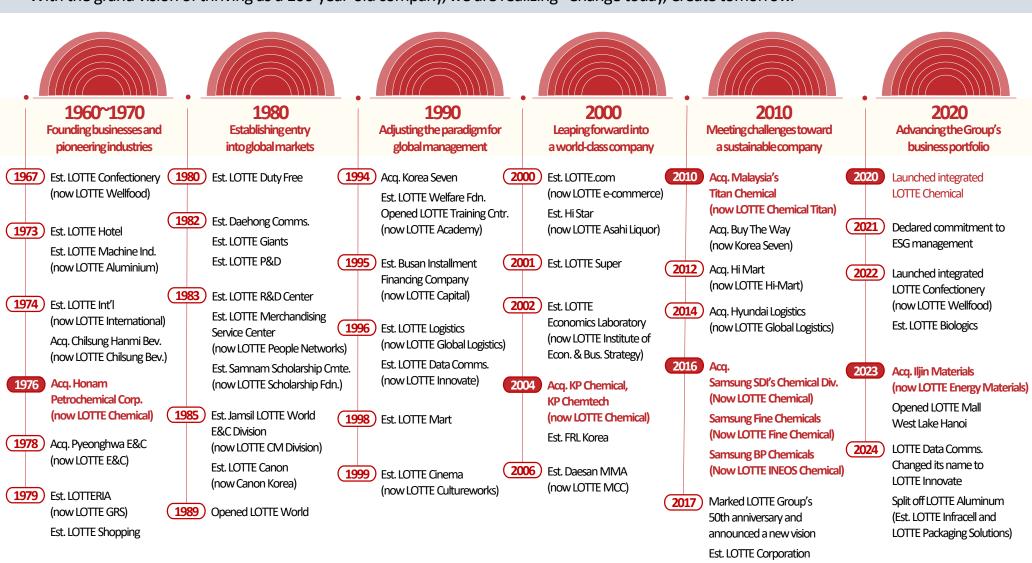
Hong Kong

	AMERICAS		
USA	Hotels/Chemical/CM/Trade/Duty Free Shops/ Logistics/Biopharmaceutical/Others Chemical/Logistics		
Mexico			
Peru	Chemical		
	EUROPE		
Germany	Chemical/Logistics		
Belgium	Confectionery		
Spain	Chemical		
Slovakia	Chemical		
Italy	Chemical		
Hungary	Chemical/CM/Logistics/Manufacturing		
	AFRICA		
Nigeria	Chemical		
	MIDDLE EAST		
United Arab Emirates	Chemical		
Türkiye	Chemical		
	OCEANIA		
New Zealand	Duty Free Shops		
Australia	Trade/Duty Free Shops		



#### **LOTTE HISTORY**

With the grand vision of thriving as a 100-year-old company, we are realizing "Change today, Create tomorrow."

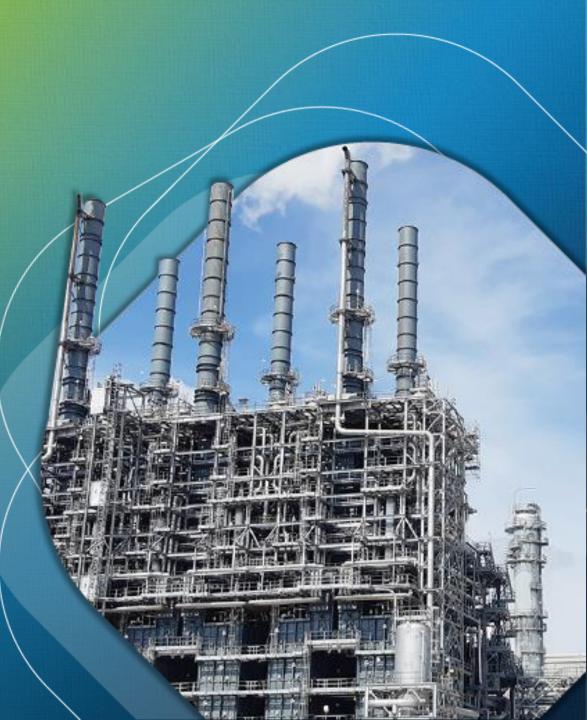


\*Est.: Established / \*Acq.: Acquired

## 2. LOTTE GROUP Chemical Division

**LOTTE Group Chemical Division leading Korea's chemical industry based on a history of challenges and innovations** 

LOTTE Group Chemical Division made up of LOTTE CHEMICAL, LOTTE FINE CHEMICAL, LOTTE ALUMINIUM, LC TITAN, LC USA, and other subsidiaries offers products that enhance the value of life ranging from basic materials to high value-added & specialty products, battery materials, hydrogen energy and it is doing its best to become the world's best chemical company.



LOTTE Group chemical division has entered 20 countries around the world including Asia and Europe and its business portfolio ranges from chemical product raw materials to polymers, monomers, aromatics, synthetic rubbers, interior/construction materials, and even high-value businesses such as engineering plastics and fine chemicals. Furthermore, it has recently been expanding their business for a sustainable future, including Hydrogen energy, Battery materials, and Recycled materials.

## LOTTE GROUP Chemical Division

- LOTTE CHEMICAL
- LOTTE FINE CHEMICAL
- LOTTE ENERGY MATERIALS
- LOTTE ALUMINIUM

  [LOTTE Infracell / LOTTE Packaging Solutions]
- LOTTE CHEMICAL TITAN
- LOTTE CHEMICAL USA
- LOTTE MCC

  [JV with Mitsubishi Chemical (JPN)]
- LOTTE INEOS CHEMICAL [JV with INEOS (UK)]
- LOTTE Versalis Elastomers
   [JV with Versalis (ITA)]
- LOTTE GS CHEMICAL [JV with GS Energy (Kor)]



[LOTTE CHEMICAL]



## 3. LOTTE CHEMICAL CORPORATION

**LOTTE CHEMICAL** creating an 'Abundant and Green World' with leading technologies

We are creating a more convenient lifestyle for people and a better environment for nature, as we build tomorrow that is more beneficial to both people and nature.



We Lead Every Step for a Greener and Better Tomorrow

## Every Step for GREEN



#### **People Oriented**

Value toward people – stability and harmony



#### **Forward Thinking**

Start of innovation – products and technology



#### Life Enriching

Abundant life and sustainable future

#### **GREEN PROMISE 2030**



Net - Zero

Carbon neutral and eco-management



#### **Circulation and Coexistence**

creation of circulating/coexisting social values



#### **Green Innovation**

Leading sustainable future industries

#### **Global Leading Chemical Company**

that makes humanity healthier and life more abundant through creative challenges and innovations



**Employees** 

9,319

Domestic 5,206 / Overseas 4,113

(Including major domestic & foreign subsidiaries)



**Total Equity** 

**14,654** million USD

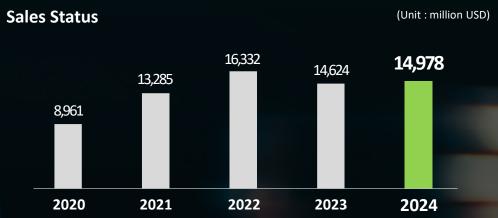


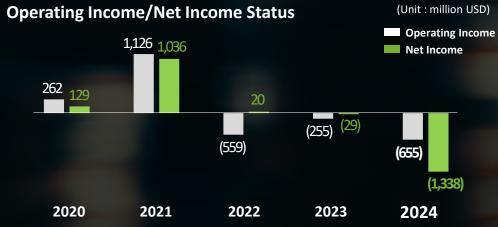
('24.12.31)



**Operation Income** 

(655) million USD





#### **STOCK INFORMATION**

Other Stockholders 45.46%

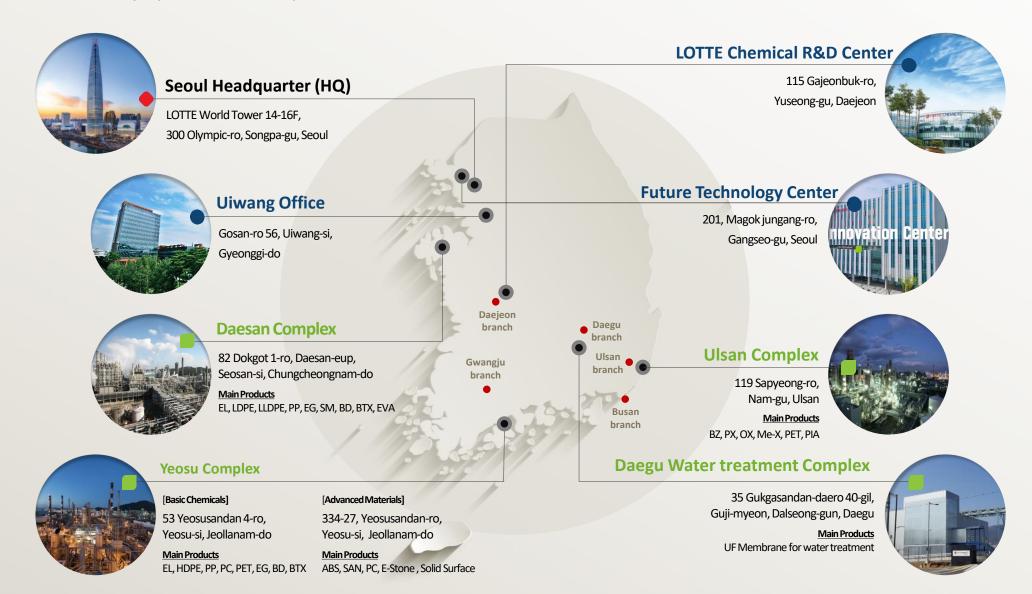
**LOTTE Corporation** (The largest shareholder) 25.31%

& Development 20.00%

LOTTE 9.19%

Holdings(J) Specially-Related person 0.04%

LOTTE CHEMICAL operates the Seoul HQ, Uiwang business place, Seoul/Daejeon Research Centers, and three major petrochemical complex in Korea such as Yeosu, Daesan and Ulsan.







**Entered into** 

19 countries



**Exported to** 

119 countries

Manufacturing & Sales Corporation

14

Basic Chemicals: 2 Advanced Materials: 11 Battery Materials: 1 **Sales Corporation** 

6

Basic Chemicals: 2 Advanced Materials: 4 Branch / Office

23

Basic Chemicals: 5 Advanced Materials: 18 LOTTE CHEMICAL is leading Korea's chemical industry through active changes and challenges, and we will build the history of creation to become the world's top chemical company.



1976.3

Established Honam Petrochemical

1979.6

LOTTE Groups, Acquired Honam Petrochemical

(Privatization completed)

1979.12

Started commercial production at all plants

1982.11

Achieved USD 100 Million Export

1991.5

Initial public offering

1991.6

Completed construction of the Daejeon R&D Center





#### 2010-2019

#### 2010.11.

Acquired TITAN Chemicals (LOTTE CHEMICAL TITAN)

#### 2011.11.

Established LOTTE MITSUI CHEMICALS

#### 2012.12

Merged KP Chemical and changed the corporation name to "LOTTE CHEMICAL"

#### 2014.4

Established Hyundai Chemical (JV with Hyundai Oil Bank)



#### 2020 - Present

#### 2020.1

Merged LOTTE Advanced Materials

#### 2020.2

Established LOTTE-GS CHEMICAL (JV with GS Energy)

#### 2021.2

Announcement of Eco initiative 'Green Promise 2030'

#### 2000 - 2010

#### 2003.6

Acquired Hyundai Petrochemical (LOTTE CHEMICAL Daesan Plant)

#### 2004.7

Acquired KP Chemical (LOTTE CHEMICAL Ulsan Plant)

#### 2006.7.

Established Honam Petrochemical Trading in Shanghai (The first subsidiary in China)

#### 2006.8.

Established LOTTE MCC (JV with Mitsubishi Chemical)



#### 2015.10

Completed the Uzbekistan gas project (UZ-Kor)

#### 2016.5

Acquired LOTTE ADVANCED MATERIALS, LOTTE FINE CHEMICAL from SAMSUNG Group

#### 2019.5

Completed construction of the Ethane Cracking Center and Ethylene Glycol Plant in U.S.

#### 2022.1

Investment in the Indonesia LINE project (3.9 bn USD)

#### 2022.4

Establishment of the

'Hydrogen energy business division' and 'Battery materials business division'

#### 2022.5

Announced the '2030 Vision'

#### 2023.3

Merged ILJIN MATERIALS
(Current LOTTE Energy Materials)





The diverse product lineup of LOTTE CHEMICAL such as synthetic resins, basic petrochemicals, monomers, construction/interior materials, etc. are being applied in everyday goods as well as for farming, industry, medical products, electric-vehicle battery, advanced new materials, and hydrogen energy.

#### **Basic Chemicals**

- Basic/Intermediate Petrochemicals
- Polymers, Monomers, Aromatics

#### **Advanced Materials**

- High Performanced Plastics
- Construction Materials
- Water Treatment Membrane

#### **Battery Materials**

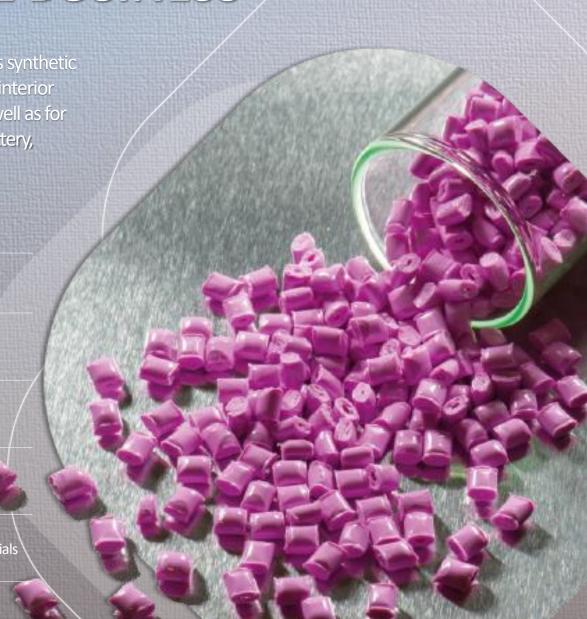
- LiB battery materials
- Solid-state battery materials
- Vanadium battery materials

#### **Hydrogen Energy**

- By-product / reformed hydrogen
- Clean hydrogen and ammonia
- Hydrogen energy utilization business

#### **Fine Chemicals**

- Chlorine / Ammonia relatives
- Industrial / Food & Pharmaceutical materials
- Toner for laser printers





#### **Basic Chemicals**

LOTTE CHEMICAL's Basic Chemicals business possesses a wide-ranging product portfolio spanning across intermediate materials for petrochemical products, synthetic resins, and monomers based on the **Top Ethylene Production Volume** among Korean chemical companies at 4.5 million tons per year.



#### **Field of Business**

Basic/Intermediate Petrochemicals, Polymers, **Monomers, Aromatics** 



#### **Production Site**

Korea, Malaysia, Indonesia, USA, Uzbekistan

#### **Basic / Intermediate Petrochemicals**

LOTTE CHEMICAL has global petrochemical production bases in the US, Malaysia, Indonesia, Uzbekistan, as well as in Yeosu, Daesan and Ulsan,





#### Polymer / Monomer

They are applied broadly in not only construction, textile and industrial products, but also everyday goods and even high-tech new materials to enhance the value of life.

Polymer	• HDPE • PP	• LDPE • PET	• LLDPE / EVA
Monomer	• EO • PIA	• EG/GE • MMA/P	• EOA MMA (LOTTE MCC)
Synthetic Rubber & Other Products	• SSBR/EPI • MTBE	DM (LOTTE Ver	salis Elastomers) PD/PIP















**ECOSEED** is an integrated sustainable plastic material brand, which is consisted with mechanical/chemical recycling, and bio plastics materials.



#### **ECOSEED PRODUCT LIST**

#### **RECYCLE PLASTICS**

#### MECHANICAL RECYCLING

ECOSEED Mechanical Recycling(MR) is defined as raw plastic material that is mechanically recycled by discarded plastic from everyday life.

r-PC, r-ABS, r-PE, r-PP

[KEY MATERIALS]

#### CHEMICAL RECYCLING

Chemical recycling is the process of converting polymeric waste by changing its chemical structure and turning back into substances that can be used as raw material enhancing its purity and utility.

#### **[KEY MATERIALS]**

DEPOLY- MERIZATION	SOLVENT PURIFICATION	PYROLYSIS
r-PET,	r-SAN,	r-ABS, r-PC,
r-ABS	r-ABS	r-PP, r-PE,
		r-BD, r-SM,
		r-MMA

#### **BIO-PLASTIC**

#### **BIO-PLASTIC**

Bio-based materials are eco-friendly products that reduce carbon emissions at the raw material stage, utilizing biomass-derived raw materials.

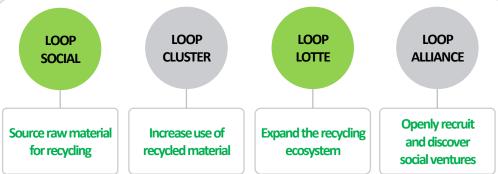
#### **BIO-DEGRADABLE**

Bio-degradableplastics(PHA) are based on petrochemicals which naturally decompose into water and carbon dioxide by micro organisms within a few months.

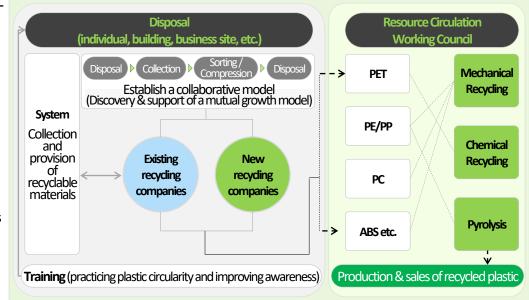


#### Project LOOP is a LOTTE Chemical's waste plastic recycle project,

that citizens, companies, and institutions cleanly discard plastic, process it into raw materials, and reuse it as a product.



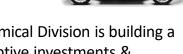
#### **BUILDING A RECYCLING ECOSYSTEM**



#### **Every Step for Batteries**



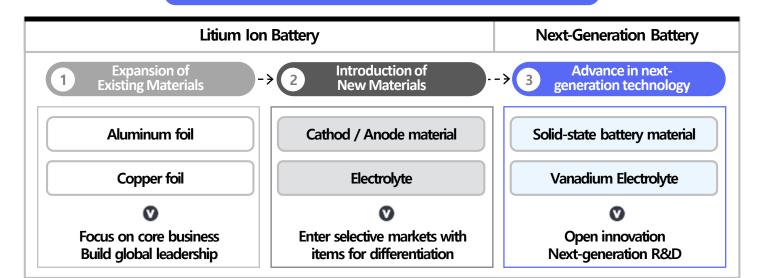


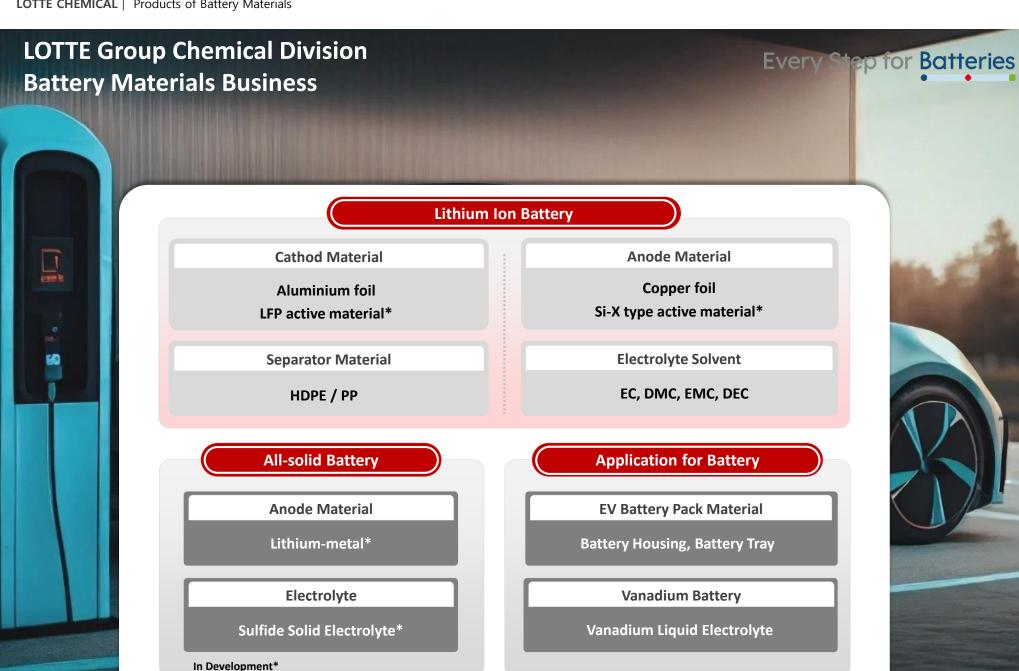


With the goal of 'Battery material's global leading company', LOTTE Group Chemical Division is building a global production base for aluminum foil and copper foil, and is making preemptive investments & business cooperation in advanced technologies related to the lithium-ion battery materials.

In addition, technology development & open innovation are underway with various startups to dominate the next-generation battery materials including solid-state battery materials, vanadium electrolyte, and lithium metal cathode material.

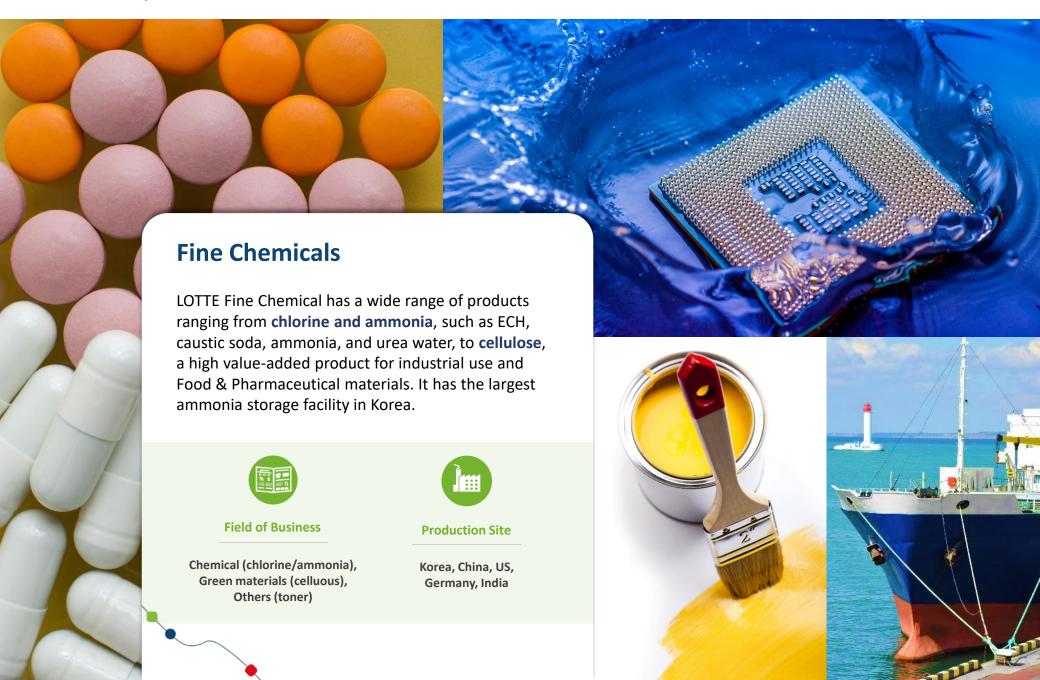
Goal for 2030: KRW 5 trillion in Investment | KRW 7 trillion in Revenue







Power plant operation in 2025 (Ulsan)



#### **Chemical Business**

#### **Chlorine Relatives**

#### **ECH**

Colorless toxic liquid to increase viscosity and hardness. A feedstock to epoxy resins, which are widely used in paints for ships, vehicles, and construction.



Colorless toxic liquid, a key material for semiconductor developing fluids (TMAH) used for manufacturing semiconductors, LCD and OLED.

#### **Caustic Soda**

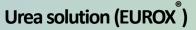
Strong alkali, colorless toxic liquid, used for metal surface treatment, bleaching for pulp manufacturing, and as basic materials for various chemical products.



#### **Ammonia Relatives**

#### **Ammonia**

Chemical containing nitrogen atoms. It is colorless and liquefied gas with very pungent odor, being used for urea and caprolactam manufacturing.



Urea solution contains urea, being used as a catalytic reduction agent to get rid of NOx, an air pollutant from vehicles. Eurox, the private brand of urea solutions of LOTTE Fine Chemical, tops in therms of domestic sales for 17 consecutive years.





#### **Green Materials Business**

#### **Industrial Use**

#### **MECELLOSE®**

MECELLOSE® provides excellent workbility and rheological behaviors enabled by its thickening effect, repairability, and air entraining property, being applied for constructions such as tile grouts, plasters, and putties.



#### **HECELLOSE®**

HECELLOSE® is used as thickening agents, humectants, lubricants, or stabilizers for paints, household goods, construction, and oils.



#### **Food & Pharmaceutical Materials**

#### **AnyCoat®**

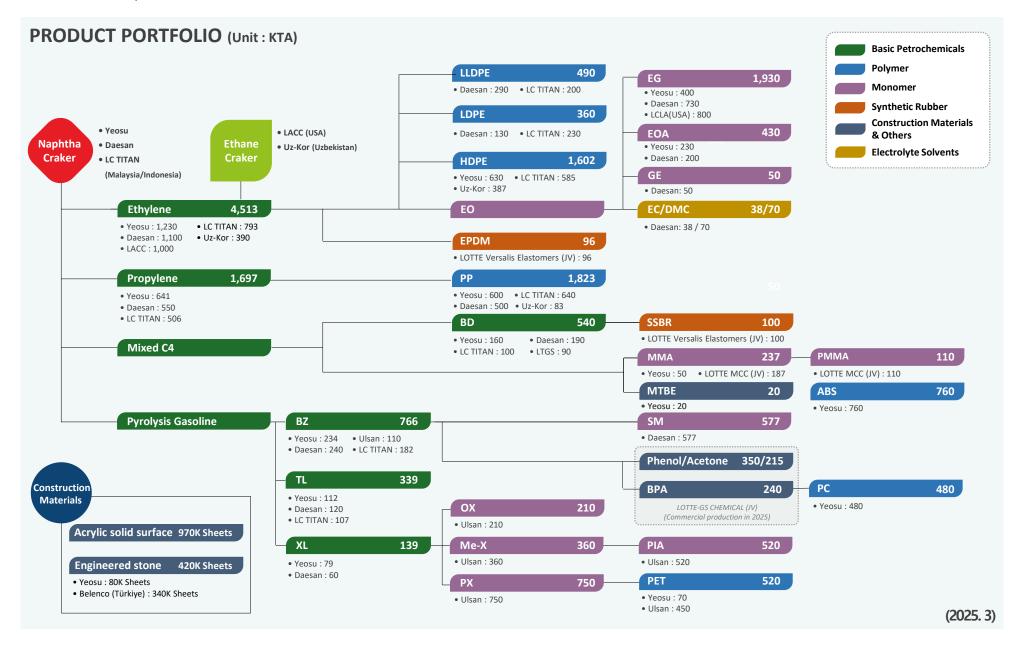
AnyCoat® is cellulose ether brand for drugs. There are two products, AnyCoat-C for tablet coating and vegetable capsule production, and AnyCoat-P for enteric coating to protect a drug from gastric acid and deliver it to intestines.



#### **AnyAddy**<sup>®</sup>

AnyAddy® is cellulose ether brand for foods. It is widely applied to foods, food supplements, and personal care thanks to its thickening, emulsification, texture enhancement properties, stabilized emulsification, and film-forming performance.





#### **'LOTTE ENGINEERING PLASTICS'\* Compounding Plant**

**Business** Construction of Korea's largest compound production plant in Yulchon, specializing in functional materials

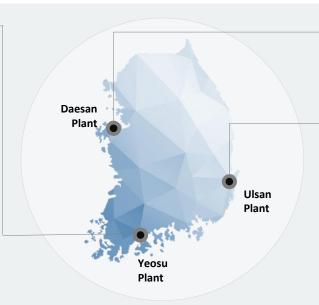
Total I/C 306.1 billion KRW

Products Compound materials (ABS, PC 500KTA)

Completion 2026. 2H

<sup>\*</sup> Former 'Sambak LFT' ('24.09 Name Change)





#### 'LOTTE-Air Liquide Ener'Hy' Hydrogen shipment center

Total I/C 9.3 billion KRW (Total 55 billion KRW)

Products Hydrogen 5KTA Completion 2025. 1H

\* LOTTE Chemical (40%) / Air Liquid Korea (60%)

#### 'LOTTE SK ENEROOT' Hydrogen fuel cell generation business

Total I/C 15 billion KRW (Total 110 billion KRW)

Products 20MW (Hydrogen 10KTA)

Completion 2025, 1H

Indonesia LINE Project \*

2025. 1H

Completion

<sup>\*</sup>LOTTE Chemical (45%)/SK Gas (45%)/Air Liquid Korea (10%)



#### Anode foil Joint production facilities in US

Business
Contents
Contents
Contents
Contents
Construction of an anode foil production facility
for EV battery

Total I/C

584.6 billion KRW (0.45 billion USD)

Products
Anode Foil 3.6KTA

Completion 2024. 2H - 2026. 2H





\* LINE Project : LOTTE Indonesia New Ethylene Project



New Business / Expansion

Joint Venture

(2025.3)

<sup>\*</sup> LOTTE Battery Materials USA (70%) LOTTE Aluminium Materials USA (30%)

#### **AWARD & CERTIFICATION**



#### **SPE Award**

#### [2014]



Non-stamped metallic materials Luminous PC/ABS

Application in the 2015 Ford Mondeo

#### [2017]

**Dual injection dimensional patterns** Luminous ABS+PC Application in the 2018 Ford Fiesta



#### **IR52 Jang Young Sil Award**



Interior LFT rear seat cushion frame

[2018]

Engine room Thermal aging blocking PPA

[2017, 2020, 2021]

PC alloys for TVs

Thin film/highly-durable materials

[2022]

Exterior eco-friendly/Light Weight

[2024]

**Interior** eco-friendly materials

#### **NET new technology certification**

#### [2013]



Development of carbon fiber

#### [2015]

#### Automobile interior

Dual injection dimensional patterns technology

#### **Automobile interior**

Non-stamping foaming injection technology

#### [2016]

#### **Engine room**

Thermal aging blocking PPA technology

#### [2017]

#### Automobile injection stiffener

3D-tow insert technology

#### [2020]

**Floating** eco-friendly foaming polypropylene technology

#### [2021]

#### Lightweight Hydrogen Tank

**Towpreg Winding technology** 





#### iF Design

### il

#### [2015~2025]

- Eco-friendly pattern + particle solution
- Eco-friendly visualization of bio-materials
- Antibacterial materials, Near-Future mobility
- Antiviral materials etc.







#### reddot Award



#### [2016~2024]

reddot design award

- Natural circulating QR code patterns
- 3D pattern materials with optical properties
- LDS materials Replacing PCB substrates
- Transparent PC with light scattering effect
- Natural gradation color implementation between exotic colors



#### **Desired Qualities of Employees**



Challenger

#### Top talents driving execution

Top talents in their fields who take on New opportunities and tough challenges with high energy and enthusiasm

- Attracts Top Talent
- Action Oriented

**H**armonizer

Harmonious talents respecting diversity

Talents who recognize values of different perspective and culture to organization therefore collaborate for shared objectives

- Collaborates
- Values Differences

Expert

Talents with business Insight and Strategic Mindset

Talents who anticipates future possibilities and build strategies within knowledge of business and the marketplace to reach organizational goal

- Strategic Mindset
- Business Insight

**M**otivator

Talents who are self-develope under responsibility

Talents who do their best to achieve organizational goal based on sense of ownership and accountability

- Drives Engagement
- Ensure Accountability



#### **MISSION**

We enrich people's lives by providing superior products and services that our customers love and trust



#### 05551

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www.lottechem.com (LOTTE CHEMICAL Website)

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