

Nano Science, Technology and Industry Scoreboard

S Korea's LG Chem to Up Battery Material Sales by 2030

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South Korean petrochemical and battery producer LG Chem plans to raise its battery material sales to 30 trillion won/yr (\$22.6bn/yr) in 2030, it said on 16 May.

The firm seeks to become one of the top global battery material manufacturers. This is part of a larger plan to grow its sales of battery materials, eco-friendly materials and innovative new pharmaceutical drugs to 40 trillion won/yr in 2030, which will constitute 57pc of its total sales. Under this plan, the firm's battery material business grows by more than fivefold to 30 trillion won/yr in 2030 from 4.7 trillion won/yr in 2022.

It is also pursuing growth in value-added battery materials other than its current cathode materials business, such as separators and carbon nanotubes (CNT), given that separators are considered as a battery component under the US' Inflation Reduction Act. Separators are vital in electric vehicles as they separate the positive and negative electrodes of battery, preventing vehicles from catching fire, while CNTs are generally used for heating in vehicles.

The firm said it will explore high-voltage mid-nickel, lithium-iron-phosphate and manganese-rich cathode materials, but will continue to expand the high-nickel side with a focus on pouch and cylindrical batteries. It also looks to mass produce 95pc ultra-high-nickel cathode materials and disclosed its plan to establish a global cathode materials production system for South Korea, China, US, and Europe. It seeks to raise its cathode material production capacity from 120,000t in 2023 to 470,000t in 2028.

LG Chem's subsidiary LG Energy Solution (LGES) in April secured near 30 trillion won worth of high-nickel cathode materials until 2029 from South Korean battery material producer Posco Future M. LGES aims to increase its cathode material production capacity to 271,000 t/yr by 2025 and 610,000 t/yr by 2030.

LG Chem will also actively research and develop new battery materials like pure silicon anode materials and solid-state battery electrolytes, which are vital to producing safe and effective solid-state batteries.

<u>South Korea</u> in April unveiled its plan to invest 20 trillion won to commercialise solid-state batteries, with the help of domestic public and private sectors. LGES will join forces with fellow battery firm SK On and Samsung SDI to build a "mother factory" with cutting-edge processes, and a solid-state battery prototype production plant in <u>South Korea</u>, according to the country's trade and industry ministry.

Read the original article on Argus Media.