

April 21, 2025  
Idemitsu Kosan Co.,Ltd.

**Completed construction to increase capacity of Plant 1,  
small pilot facilities for mass production of solid electrolytes  
(all-solid-state battery materials)**

**Expanding production capacity to more than a dozen tons and accelerating  
development of mass production technology to contribute to the widespread use of all-  
solid-state batteries**

Idemitsu Kosan Co.,Ltd. (Headquarters: Chiyoda-ku, Tokyo; Representative Director, President: Noriaki Sakai, hereinafter referred to as “Idemitsu”) has completed construction to increase the capacity of its Plant 1 (located on the premises of Idemitsu’s Chiba Complex in Ichihara City, Chiba Prefecture), a small pilot facilities for the mass production of solid electrolytes used in all-solid-state lithium-ion rechargeable batteries (hereinafter referred to as “all-solid-state batteries”), and a completion ceremony was held on April 18, 2025.

With this capacity increase, we have expanded our solid electrolyte sample supply capacity from several tons per year to more than a dozen tons per year. We also have facilities for mass production technology development. Idemitsu will accelerate technological verification to establish mass production technology in a large pilot facility as the next stage, aiming for practical application of all-solid-state batteries in 2027 to 2028, and beyond that, commercialization of solid electrolytes.



Appearance of Plant 1



Completion ceremony

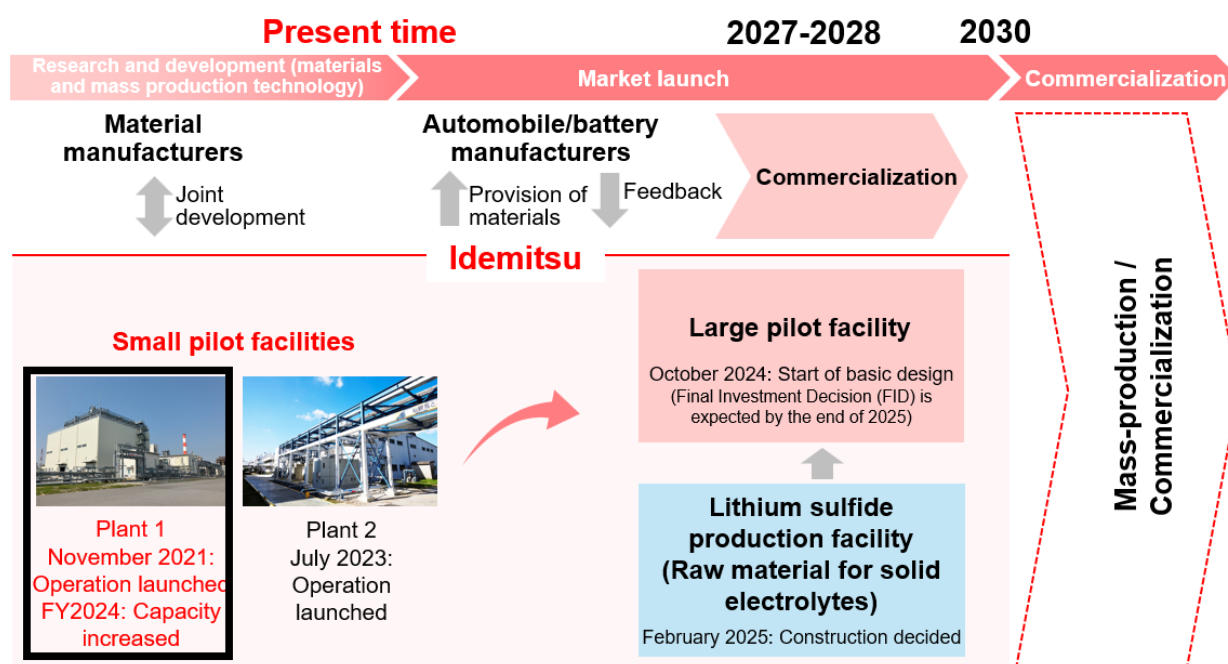
Idemitsu is developing solid electrolytes, an essential material for all-solid-state batteries, which contribute to the evolution of electric vehicles (EVs) and the creation of a resource-recycling society, as well as building a mass production system. Two small pilot facilities are currently in operation, of which the capacity increase work started in FY2023 at the Plant 1 has been completed.

With this capacity increase, we have increased our capacity to supply samples of solid electrolytes from several tons to more than a dozen tons per year, and we have also expanded our facilities to verify mass production technology for the future. We will accelerate the development of mass production technology for solid electrolytes, which will lead to the next stage of establishing mass production technology in a large pilot facility.

The basic design of the pilot facility was started in October 2024. And as with Plant 1, it is scheduled to be constructed within the Chiba Complex. In February 2025, we also announced our decision to construct a large-scale production facility for lithium sulfide (Li<sub>2</sub>S, an important intermediate raw material for solid electrolytes).

We will accelerate the development of solid electrolyte performance improvement and mass production technology, and steadily build an integrated value chain from raw materials to finished products, aiming to contribute to the social implementation of all-solid-state batteries, which are considered to be the mainstay of next-generation batteries.

#### [Project Roadmap]



#### [Reference]

Press Release: Idemitsu has decided to construct a large-scale production facility for lithium sulfide, an intermediate raw material for the mass production of all-solid-state battery materials (solid electrolytes) (February 27, 2025)

[https://www.idemitsu.com/jp/news/2024/250227\\_en.pdf](https://www.idemitsu.com/jp/news/2024/250227_en.pdf)

Press release: Basic Design of Large Pilot Facility Begins for Commercialization of solid electrolytes for All-Solid-State Batteries (October 28, 2024)

[https://www.idemitsu.com/jp/news/2024/241028\\_en.pdf](https://www.idemitsu.com/jp/news/2024/241028_en.pdf)

Press Release: Decision made to increase supply capacity of solid electrolytes for next-generation batteries (all-solid lithium battery) (June 19, 2023)

[https://www.idemitsu.com/en/news/2023/230619\\_2.html](https://www.idemitsu.com/en/news/2023/230619_2.html)

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