



August 22, 2023
Kureha Corporation

Kureha to Boost PVDF Production

Kureha Corporation today announced its plan to increase production capacity for polyvinylidene fluoride (PVDF) at its Iwaki Factory in Fukushima, Japan.

PVDF is used as a binder material for lithium-ion batteries (LiBs) and as an engineering plastic in various industrial applications. In recent years, as electric vehicles rapidly expand on the back of heightened environmental awareness, demand for LiB binder is robust and growing in the automotive market.

The Kureha Group currently manufactures PVDF at the Iwaki Factory in Japan (6,000 tons/year) and its wholly-owned subsidiary in China (5,000 tons/year). To address growing customer demand and further expand the PVDF business, which is the most promising business at the Group, Kureha will undertake a capacity expansion project as outlined below. This project involves technologies to reduce the impact of manufacturing operations on the environment and is carried out with the Group's largest-ever investment.

New PVDF manufacturing facility:

Location: Kureha Iwaki Factory (16 Ochiai, Nishiki-cho, Iwaki-shi, Fukushima, Japan)

Assets to be acquired: Building and equipment

Completion of facility construction: March, 2026

Production capacity: 8,000 tons / year

Paid-in capital: Approx. ¥70 billion

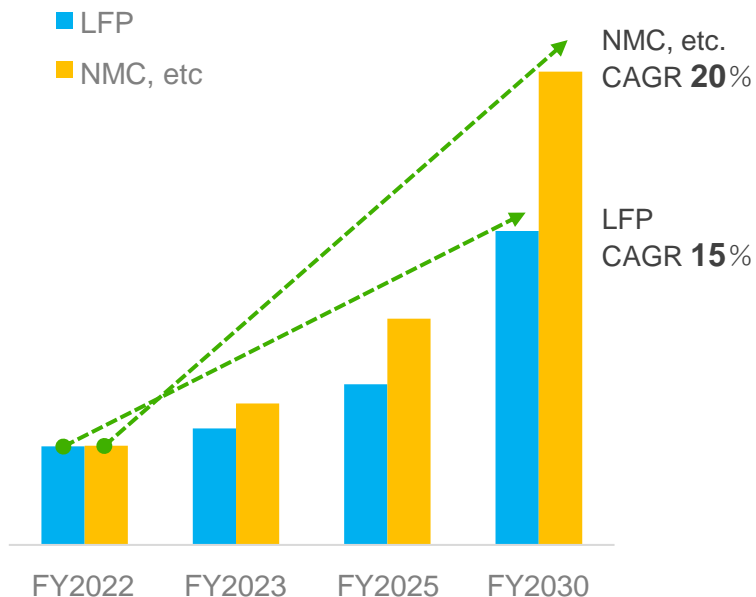
Under the new mid- and long-term management plan 'Toward Creating a New Future,' Kureha has an expansion strategy, focusing on the Advanced Materials, in particular, PVDF, which is positioned as a key growth driver. In addition to building the above new manufacturing facility, which will become operational a few years later, Kureha will until then implement measures to improve earnings in the business, such as debottlenecking and improving capacity at its existing facilities, developing new polymer grades, and strengthening and optimizing its global supply system.

Kureha has been qualified to receive government grants for the above expansion project. Also, impact of this investment on FY2023 financial results is expected to be marginal.

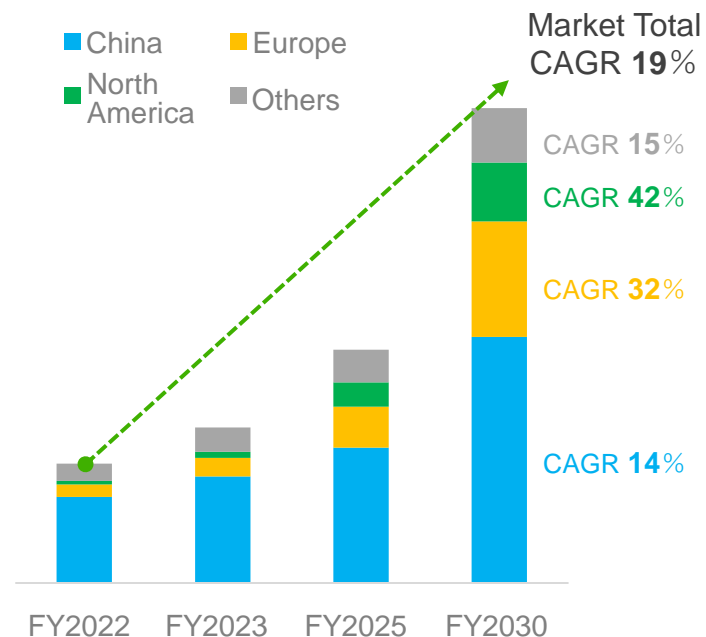
For further information, please contact Kureha Corporation, Corporate Planning Department (IR Group) at +81-3-3249-4651

PVDF Market Forecast

Projected PVDF Binder Volume for Automotive LiBs by LiB Type



Projected PVDF Binder Volume for Automotive LiBs by Region



[Volumes projected by Kureha based on market data]

Growth Scenario for Kureha PVDF Business

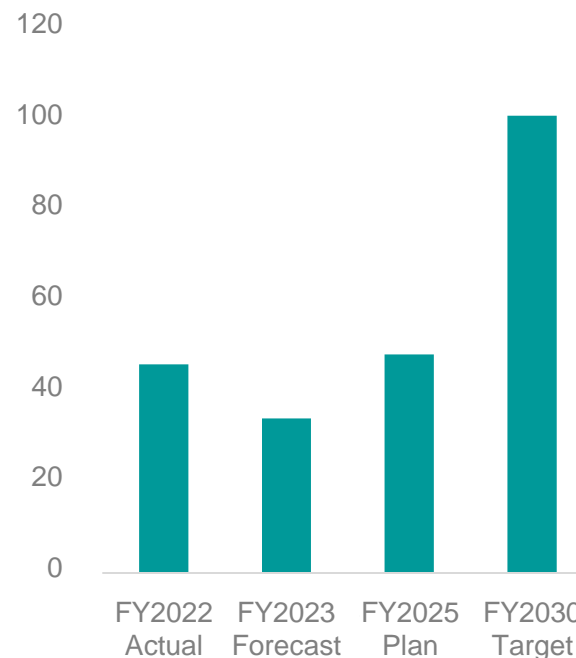
Measures to realize sustainable business growth

	China Key LiB type: LFP	Europe : NMC	North America : NMC
Production	<ul style="list-style-type: none"> - Establish an optimal global supply system 11,000tpa (FY23) → 30,000-40,000tpa (FY30) - Debottleneck existing plants and increase capacity 10% or more - Expand production facility at Iwaki Factory (to be completed by FY25 end) 		
R&D	Develop binder for LFP battery	Develop binder with superior adhesiveness	
	Advance the research and development for next-generation batteries		
Response to environmental regulations	Lobby against proposed PFAS* restrictions with scientific data to ensure they do not affect our business (public comments, etc.)		
Other risks	Intensifying competition with local LiB binder makers		Impact of US Inflation Reduction Act

*A generic term that includes perfluoroalkyl substances (fully fluorinated) and polyfluoroalkyl substances (partly fluorinated)

PVDF Sales Plan

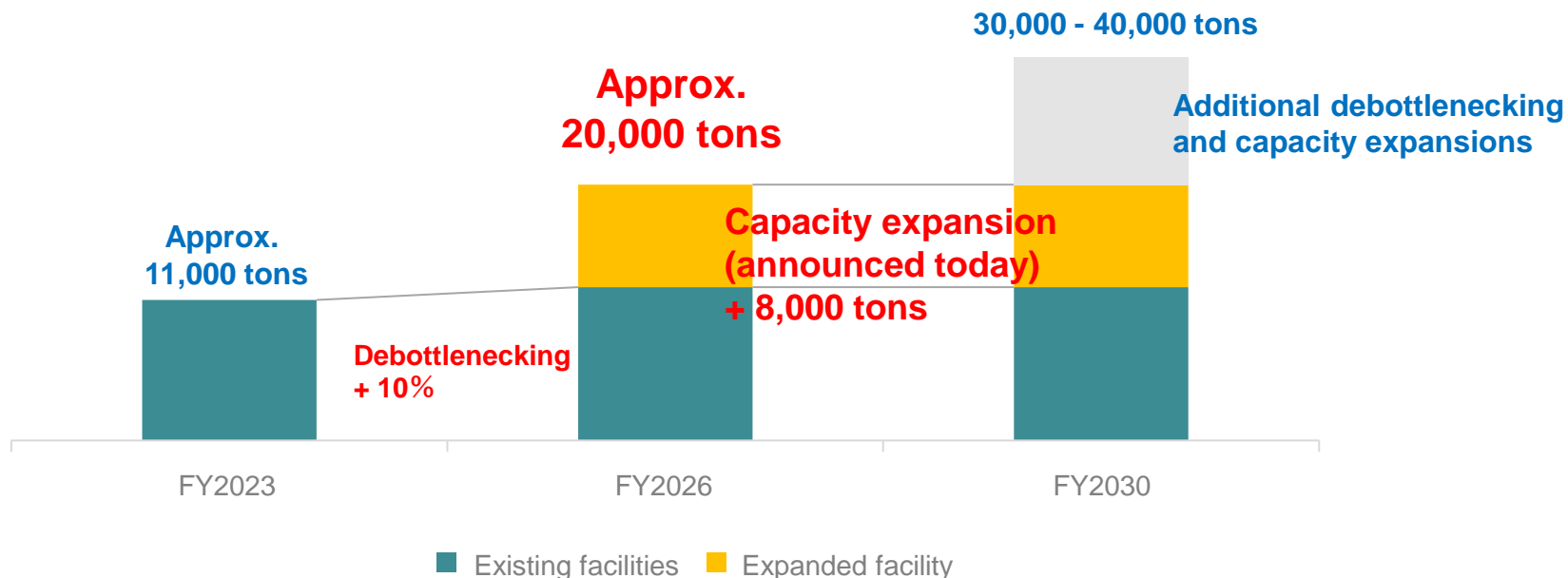
(¥ billion)



■ Sales revenue

PVDF Capacity Expansion at Iwaki Factory

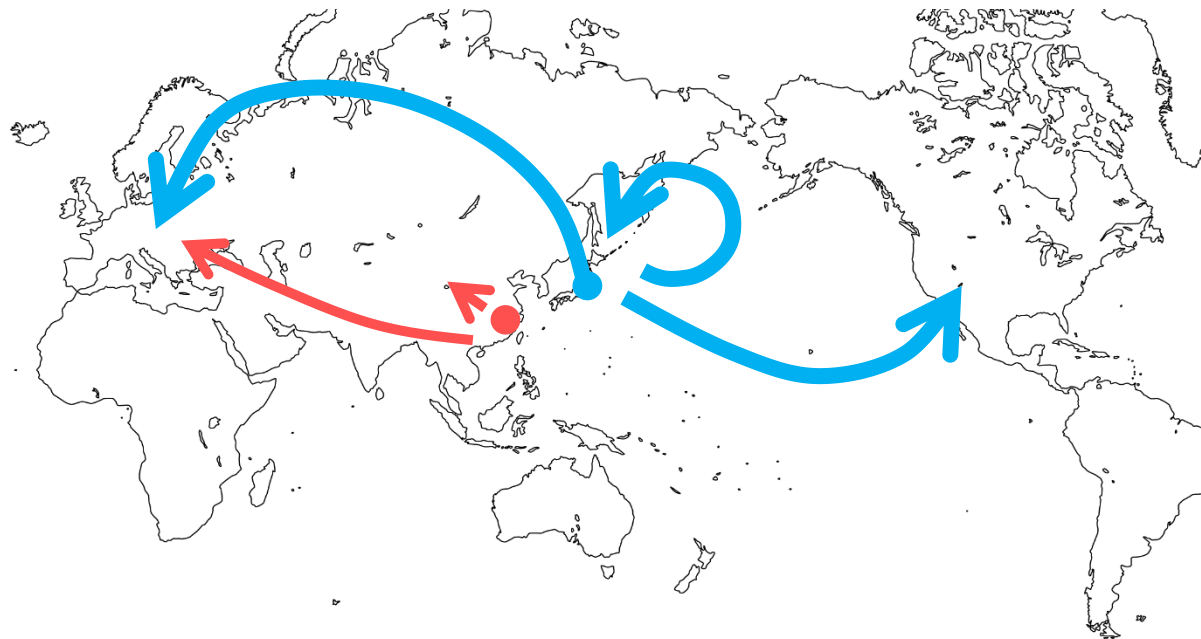
Positioning of capacity expansion (+8,000t)
in Kureha's new mid-/long-term management plan



This 8,000 ton expansion is a first step to our goal for 30,000-40,000 ton production capacity to be achieved by FY2030 under the new mid-/long-term management plan
Additional capacity expansions to be finalized and announced later

Kureha PVDF Global Supply System

PVDF Production & Supply



- Japan Iwaki Factory → North America, Japan, Europe
- China Changshu Plant → China, Europe

Building and optimizing a global PVDF supply system for growing market