Japanese team to visit India to aid battery industry with tech

Both nations already have partnerships related to lithium battery technology

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A Japanese delegation comprising senior government officials and industry representatives will visit India in the first week of July to help the country with its 30 gigawatt hour (GWh) advanced chemistry cell (ACC) battery production by providing technology support, a senior Japan embassy official said here.

This comes against the backdrop of three beneficiary firms — Reliance New Energy, Ola Cell Technologies, and Rajesh Exports facing initial hurdles in meeting timelines for setting up 30 GWh capacity under the production-linked incentive (PLI) ACC scheme. While Ola Cell Technologies installed 1.4 GWh capacity against 20 GWh, the other two have not made any progress.

The delay in meeting the timeline was mainly due to technology unavailability, skilled manpower gap, essential import of equipment and machinery, and non-availability of upstream components, Heavy Industries Minister H D Kumaraswamy had told *Business Standard* in an earlier interview.

"The Indian government initiated 30 GWh capacity for the battery sector to begin production domestically. To make it happen, Japanese companies can provide technology and some raw materials, including graphite, lithium, and cobalt. There are several types of batteries and sometimes the combination is very complicated," the official said.

This assumes significance as India is making strides to become self-sufficient in battery manufacturing, particularly for electric vehicles (EVs), but is facing challenges in securing raw materials like lithium, cobalt, and nickel, and establishing a fully integrated domestic supply chain. Further, India heavily relies on imports to cater to its domestic demand of 15 GWh for lithium-ion batteries, with 75 per cent coming from China and Hong Kong. For manufacturing equipment, the country depends on China, Germany, and South Korea. The latest economic survey expects the demand for lithium-ion batteries to grow at a compound annual growth rate (CAGR) of 23 per cent by 2027. "The lack of



THIS ASSUMES SIGNIFICANCE AS INDIA IS MAKING STRIDES TO BECOME SELF-SUFFICIENT IN BATTERY MANUFACTURING, PARTICULARLY FOR ELECTRIC VEHICLES

viable alternative battery technologies reinforces China's dominant position in lithiumion batteries," the survey said on January 31.

India and Japan already have agreements and partnerships related to lithium battery technology. Notably, Indian Oil Corporation (IOC) and Panasonic Energy Co have signed a term sheet to form a joint venture (JV) for manufacturing lithium-ion cells in India, focusing on batteries for two- and threewheeler vehicles, and energy storage systems.

Asked about any addition to the existing agreements, the official said: "We don't know what kind of batteries will be made in India in those factories. That's what the visit is for."

"A battery is made of many sub-components, and different technologies are required there. An important point is B2B (businessto-business) marketing among these players. Hence, we are going to send a delegation of industry and senior government officials from the ministries of education, culture, sports, science and technology (MEXT), and economy, trade and industry in the first week of July," the official added.

Ministries discuss ways to boost rare earth supply chains

An inter-ministerial meeting on rare earth and critical minerals took place on Tuesday between the Ministry of Coal and Mines, Ministry of Atomic Energy, Ministry of Heavy Industries, and Ministry of Commerce to secure a supply chain for electronics industry, energy, and national security. The discussion was focused on strengthening the value chain, from mining to refining to end-use. The Narendra Modi government has implemented the National Critical Mineral Mission and is adopting a whole-of-government approach to make India Atmanirbhar in minerals. Coal and Mines Minister G Kishan Reddy said in a post on X. **BS REPORTER**

Queries sent to the secretaries and spokespersons for external affairs, commerce, and heavy industries ministries, as well as the Japan embassy in New Delhi, remained unanswered till press time.

To reduce India's dependence on imports for lithium and lithium-ion batteries, particularly from China amid rare earth supply disruptions, Shyamasis Das, a fellow in the Energy, Resources & Sustainability vertical of the Centre for Social and Economic Progress, suggested investment in recycling batteries, research & development (R&D), and technology, as well as exploring other battery types. "It's important to improve the recycling process to make it cost-effective. A strong recycling industry is needed because lithiumion batteries require careful handling compared to older battery types. India should look into different types of batteries, like sodium-ion and metal-air. These alternatives could reduce reliance on lithium... However, new battery types need more R&D since they currently do not store as much energy as lithium-ion batteries," Das said.