GOVERNMENT OF INDIA MINISTRY OF HEAVY INDUSTRIES LOK SABHA UNSTARRED QUESTION NO. 2624 ANSWERED ON 16.12.2025

DEMAND FOR LITHIUM-ION BATTERIES

2624. MS. S JOTHIMANI:

Will the Minister of HEAVY INDUSTRIES be pleased to state:

- (a) whether the Government has mapped the current and projected demand for lithium-ion batteries in the country across electric mobility, consumer electronics and grid-storage sectors;
- (b) the status of domestic lithium-ion cell manufacturing capacity, including operational Giga factories and those under construction;
- (c) whether the Government has taken steps to secure critical mineral supply chains, particularly lithium, through overseas mineral agreements and domestic exploration;
- (d) the measures in place to ensure safe disposal and recycling of end-of-life lithium-ion batteries and the progress made under the Battery Waste Management Rules, 2022; and
- (e) whether the Government proposes any incentives in 2025-26 to promote indigenous cell chemistry innovation and reduce dependence on imports?

ANSWER THE MINISTER OF STATE FOR HEAVY INDUSTRIES (SHRI BHUPATHIRAJU SRINIVASA VARMA)

- (a): As per the NITI Aayog report "Advanced Chemistry Cell Battery Reuse and Recycling in India" published in May 2022, the projected annual demand for lithium-ion batteries for 2025 is 40 GWh and is expected to reach about 210 GWh by 2030.
- (b): The Ministry of Heavy Industries is administering the Production Linked Incentive (PLI) scheme namely "National Programme on Advanced Chemistry Cell (ACC) Battery Storage," approved in May 2021 with a total outlay of ₹18,100 crore to establish 50 GWh of domestic Advanced Chemistry Cell manufacturing capacity.

Under the PLI ACC Scheme, the Government is supporting the establishment of 50 GWh ACC capacity. Besides the PLI ACC scheme applicants, at least 10 manufacturers have announced a cumulative capacity of about 178 GWh in the country over the next five years.

Under the PLI ACC Scheme, the beneficiary-wise details of their projected and current cell manufacturing capacities are as under:

Sl. No.	Beneficiary firms under PLI ACC Scheme	Projected Manufacturing Capacity (in GWh)	Current Manufacturing Capacity (in GWh)
1.	ACC Energy Storage Pvt. Ltd.	5	0
2.	Ola Cell Technologies Pvt. Ltd.	20	1
3.	Reliance New Energy Battery Storage Ltd.	5	0
4.	Reliance New Energy Battery Ltd.	10	0
	TOTAL	40	1

- (c): As per the information received from M/o Mines, M/o Mines has taken several steps to secure critical mineral supply chains, including Lithium, through domestic exploration and overseas mineral agreements, which *inter alia* include:
 - i. The Union Cabinet approved the establishment of National Critical Minerals Mission (NCMM) on 29th January 2025, with a financial outlay of ₹16,300 crore from FY 2024–25 to 2030–31. The NCMM aims to secure India's critical mineral supply chain and to strengthen all stages of the value chain, including mineral exploration, mining, beneficiation, processing, and recovery from end-of-life products.
- ii. Geological Survey of India (GSI) intensified exploration of critical and strategic minerals. GSI took up 195 critical mineral exploration projects in 2024–25, and 230 projects in 2025–26 across the country. Additionally, National Mineral Exploration and Development Trust (NMEDT) has sanctioned 62 projects for exploration of critical minerals during 2024-25 and 36 projects during 2025-26.
- iii. M/o Mines has successfully auctioned 34 blocks of critical minerals.
- iv. M/o Mines has successfully auctioned 7 blocks of Exploration License, out of which, three are of critical minerals.
- v. Khanij Bidesh India Limited (KABIL) is a Joint Venture Company under the aegis of the M/o Mines, has acquired five lithium brine blocks in the Catamarca province of Argentina for exploration and development.
- vi. M/o Mines engages in various multilateral and bilateral platforms such as Minerals Security Partnership (MSP), India-US Strategic Mineral Recovery Initiative, Indo-Pacific Economic Framework (IPEF), and India-UK Technology Security Initiative (TSI), etc. for strengthening the critical minerals value chain.
- (d): As per information provided by M/o Environment, Forest & Climate Change (MoEFCC), the MoEFCC has notified Battery Waste Management Rules (BWMR), 2022, dated 24th August 2022, to ensure environmentally sound management of waste batteries. The rules cover all types of batteries, including Lithium-Ion batteries. Under the rules, the producers, including importers, have been given mandatory Extended Producer Responsibility (EPR) targets for collection and recycling or refurbishment of waste batteries.

A Centralized online EPR portal has been developed for registration of producers and recyclers/ refurbishers, to facilitate the exchange of EPR certificates between producers and recyclers/ refurbishers and filing returns by producers and recyclers/ refurbishers. So far, 3,391 producers of lithium-ion batteries and 43 recyclers of lithium-ion batteries have registered on the portal. Around 15,370 tonnes of lithium-ion battery waste has been recycled till date since the notification of the Battery Waste Management Rules, 2022.

(e): The PLI ACC scheme is technologically agnostic, which ensures that superior technologies receive higher incentives. The scheme is designed to attract substantial investments, promote research and development, and reduce dependency on imports for ACCs. Further, under the scheme, expenditures incurred by beneficiary firms on Research and Development are permitted to meet investment criteria, allowing them to integrate the latest technology in the implementation of their projects.
