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LITHIUM-ION BATTERY WASTE EXPORT BAN

Critical Minerals and India's Domestic Recycling Ecosystem

Battery Waste Export Ban: Latest News

The Directorate General of Foreign Trade (DGFT) has prohibited the export of lithium-ion battery black mass and related battery waste with immediate effect. The measure is intended to strengthen India's domestic battery recycling and critical mineral processing ecosystem.

1. Government's Export Ban on Black Mass

Through a notification issued on November 10, 2026, the DGFT, under the Ministry of Commerce and Industry, amended the export policy for specified waste and scrap of batteries and electric accumulators.

The export category, previously classified as 'Free', has been changed to 'Prohibited', with immediate effect.

The measure aims to ensure that battery waste generated in India is recycled and refined domestically rather than exported to international markets.

2. Understanding Lithium-Ion Battery Black Mass

Black mass is a powder-like material obtained after waste lithium-ion batteries and consumer electronics are dismantled and processed.

It contains valuable minerals and materials, including:

- Lithium
- Cobalt
- Nickel
- Manganese
- Graphite
- Silicon
- Tin
- Rhenium

Recycling black mass enables the recovery of these materials, which can subsequently be reused in battery manufacturing and other industrial applications.

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3. Strategic Importance of the Export Ban

India has limited domestic reserves of several critical minerals required for battery manufacturing and remains heavily dependent on imports. Discarded batteries and electronic waste therefore represent an important secondary source of these resources.

The government expects the export prohibition to achieve the following objectives:

Ensure Domestic Feedstock Availability

Provide a steady supply of black mass to Indian recycling and refining units.

Increase Mineral Recovery

Improve domestic recovery of lithium, cobalt, nickel and other critical minerals.

Reduce Import Dependence

Lower dependence on imported minerals and associated foreign exchange expenditure.

Encourage Investment

Improve capacity utilisation and attract investment and employment in battery recycling and refining.

Strengthen Supply Chains

Support battery manufacturing, electric vehicles (EVs), energy storage and clean-energy technologies.

4. Linkage with the Critical Mineral Processing Scheme

The export ban follows the Union Cabinet's approval of a new scheme for providing capital expenditure support to critical mineral processing industries.

The scheme has an outlay of ₹2,814 crore and focuses on establishing an ecosystem for lithium and nickel processing.

It is expected to support sectors such as:

- Electric mobility
- Battery Energy Storage Systems (BESS)
- Electronics
- Defence
- Specialty steel

Together, the two policy measures seek to strengthen domestic mineral processing and battery recycling capabilities.

5. India's Battery Recycling Capacity

Government data highlights the existing recycling infrastructure:

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- 57 lithium-ion battery recyclers are registered on the Central Pollution Control Board's (CPCB) Battery Waste Extended Producer Responsibility (EPR) portal.
- Their combined annual processing capacity is 5.17 lakh metric tonnes.
- The estimated input capacity specifically for processing lithium-ion battery black mass is approximately 75,500 metric tonnes per annum.

This distinction highlights the need to strengthen specialised black mass processing and refining capabilities.

6. Challenges in Building a Domestic Recycling Ecosystem

Limited Technical Expertise

Recovering minerals from black mass and ensuring that they meet the required industrial grades requires specialised technical knowledge and experience.

Competition from International Recyclers

China has substantial battery recycling capacity and demand for black mass, making exports commercially attractive for some Indian industry players.

Dependence on Imported Lithium

India's entire current lithium demand is met through imports, making its EV supply chain vulnerable to external disruptions.

Limited Domestic Cell Manufacturing

A strong domestic battery cell manufacturing base is necessary to create an integrated battery circular economy.

Global Export Controls

China's export controls and licensing requirements on high-performance lithium-ion batteries, cathode materials, artificial-graphite anodes and associated manufacturing technology could further tighten global supply conditions.

7. Conclusion

The prohibition on black mass exports marks an important step towards securing India's critical mineral supply chains.

However, restricting exports alone will not establish a competitive domestic recycling ecosystem.

Investment in advanced recycling technologies, mineral refining, technical expertise and battery cell manufacturing will be essential to convert battery waste into a reliable domestic resource.