# BatX Energies opens new lithium-ion battery recycling plant in Uttar Pradesh



BatX Energies Pvt. Ltd., a leader in lithium-ion battery recycling in India, has officially opened its cutting-edge Critical Minerals Extraction plant, known as HUB-1, in Uttar Pradesh. The inauguration took place on December 30, 2024, and signifies a substantial advancement in procuring indispensable materials such as lithium, cobalt, nickel, and manganese from discarded lithium-ion batteries. This initiative directly aims to tackle the challenges of resource scarcity and supports the burgeoning electric vehicle (EV) sector in India while reducing dependence on imports. It aligns with national goals for achieving Net Zero emissions by 2070 and fostering self-reliance under the AtmaNirbhar Bharat initiative.

The new facility builds upon BatX’s success with its initial Black Mass production facility located in Sikandrabad, which was launched in late 2022. Following a thorough 21-month industrial pilot that started in mid-2023, the HUB-1 aims to scale operations to a commercial level. By utilising BatX's proprietary chemical processes, the plant is capable of extracting high-purity critical materials suited for specialised applications and the manufacturing of lithium-ion cells. The facility is designed and fabricated in-house using advanced hydrometallurgical technology, optimised for the effective recycling of all types of lithium-ion battery waste, including manufacturing rejects from upcoming gigafactories.

The launch of HUB-1 is particularly critical given the rising global adoption of electric vehicles, as securing critical materials outside of China poses significant challenges, including high costs and complex extraction processes. To combat these challenges, BatX Energies employs a vertically integrated model that couples its material extraction expertise with the development of second-life energy storage applications, effectively providing a comprehensive solution for batteries throughout their lifecycle.

A highlight of the new facility is its commitment to zero-emission and zero-waste processes, achieving significantly low energy consumption while adhering to strict Environmental, Social, and Governance (ESG) standards. This innovative approach not only makes critical materials for EV batteries more economically viable but also aligns with the Ministry of Environment and Forest’s Battery Waste Management Rules 2022. BatX Energies is redefining sustainable recycling practices, establishing new standards for India's evolving electric vehicle ecosystem.

At the inauguration, the CEO and Co-founder of BatX Energies, Utkarsh Singh, emphasised the importance of the facility, stating, “Electric vehicles are at the forefront of the clean energy revolution, and BatX Energies is proud to lead this transition. The Hub-1 facility reflects our dedication to sustainable extractive metallurgy, creating a circular economy by recycling used batteries and reintegrating critical materials. India’s reliance on exporting black mass underscores the need for facilities like this. By collaborating with domestic R2 recyclers and battery producers, we aim to convert black mass into valuable metals at low cost, making battery recycling sustainable and economically viable for every stakeholder in the supply chain, and positioning India as a global hub for critical mineral refining by 2040.”

Vikrant Singh, the CTO and Co-founder of BatX Energies, expressed gratitude for the extensive support received, adding, “This plant is the result of rigorous four years of R&D and the hard work of our passionate team. We are grateful to our investors, stakeholders, and the Government of India, including initiatives like Startup India, MSME, and the PSA Office for EU-TTC initiative, as well as EXIM Bank of India, for their crucial support.”

BatX Energies continues its commitment to innovation and sustainability, integrating data analytics and predictive modelling to enhance performance in the energy materials sector. The company's focus on reducing waste, encouraging circularity, and delivering high-performing, cost-effective solutions for EV manufacturers addresses pressing issues of climate change and resource availability. BatX believes that pursuing circularity is essential for a sustainable future, thereby leading the way in establishing best practices for a cleaner and more resilient environment.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

* <https://www.pv-magazine-india.com/2024/12/30/batx-energies-opens-lithium-battery-recycling-facility-in-uttar-pradesh/> - Corroborates the opening of BatX Energies' lithium battery recycling and critical minerals extraction plant in Uttar Pradesh, the use of hydrometallurgical processes, and the scaling of operations after a successful industrial pilot.
* <https://www.pv-magazine-india.com/2024/12/30/batx-energies-opens-lithium-battery-recycling-facility-in-uttar-pradesh/> - Supports the information about BatX’s initial Black Mass production facility in Sikandrabad and the proprietary chemical processes used for extracting high-purity critical materials.
* <https://orfamerica.org/newresearch/batteries-ev-india> - Provides context on India’s efforts to reduce dependence on imports for critical minerals like lithium, nickel, and cobalt, aligning with BatX Energies' goals.
* <https://www.mining.com/web/india-to-offer-incentives-for-critical-minerals-extraction-govt-source-says/> - Details India’s initiatives to develop a critical minerals industry, including funding for research and collaborations, which supports the national goals mentioned.
* <https://m-mines.com/critical-minerals-from-mining-to-market-for-battery-production-in-india/> - Highlights India’s current reliance on imports for critical minerals and the efforts to enhance domestic production, such as Hindustan Copper Limited’s nickel production facility.
* <https://www.pv-magazine-india.com/2024/12/30/batx-energies-opens-lithium-battery-recycling-facility-in-uttar-pradesh/> - Explains the facility’s commitment to zero-emission and zero-waste processes, and adherence to ESG standards and the Battery Waste Management Rules 2022.
* <https://orfamerica.org/newresearch/batteries-ev-india> - Discusses the challenges of securing critical materials outside of China and the importance of vertical integration in the battery supply chain, as employed by BatX Energies.
* <https://www.mining.com/web/india-to-offer-incentives-for-critical-minerals-extraction-govt-source-says/> - Mentions the government initiatives and funding for developing extraction technology, which aligns with BatX Energies' innovative approaches and government support.
* <https://m-mines.com/critical-minerals-from-mining-to-market-for-battery-production-in-india/> - Details the importance of domestic production of critical minerals like nickel and cobalt, and the role of companies like Hindustan Copper Limited in reducing import dependence.
* <https://www.pv-magazine-india.com/2024/12/30/batx-energies-opens-lithium-battery-recycling-facility-in-uttar-pradesh/> - Quotes from the CEO and CTO of BatX Energies highlighting the facility’s significance, the company’s dedication to sustainable extractive metallurgy, and the support received from various government initiatives.