



greenli·ion

GLMC

Multi-Cathode Precursor Platform

CLOSING THE LOOP ON CRITICAL MINERALS



Greenli-ion.com

GLMC: NMC Cathode Precursor Material

GLMC is Green Li-ion's multi-cathode precursor platform. It uses the proprietary GREEN HYDROREJUVENATION™ process to recover **nickel, cobalt, manganese, and lithium** from end-of-life batteries and convert them directly into battery-grade precursor cathode active material and lithium carbonate, bypassing the long, fragmented supply chains that have tied U.S. battery recycling material to overseas refining. Where most recycling routes separate cobalt and nickel through solvent extraction and then remix them downstream, GLMC co-precipitates the cathode metals in one step.

What makes GLMC unique

Commercial Capacity: ~730 metric tonnes of black mass per unit, per year

Chemistry Flexibility: Processes LCO, LMO, NMC, and NCA black mass, with the chemical process dosed to match incoming feedstock spec

Direct Integration: Produces pCAM ready for cathode manufacturing, with no intermediate sulfate export step

Co-precipitation Route: Patented co-precipitation recovers nickel, manganese, and cobalt together in precursor form rather than separating and recombining them

Modular Scale: Modular equipment with a small footprint, capable of incremental growth to meet future demand and easy to co-locate in existing facilities

Traceable: Domestic chain of custody that meets U.S. regulatory requirements and EU import constraints

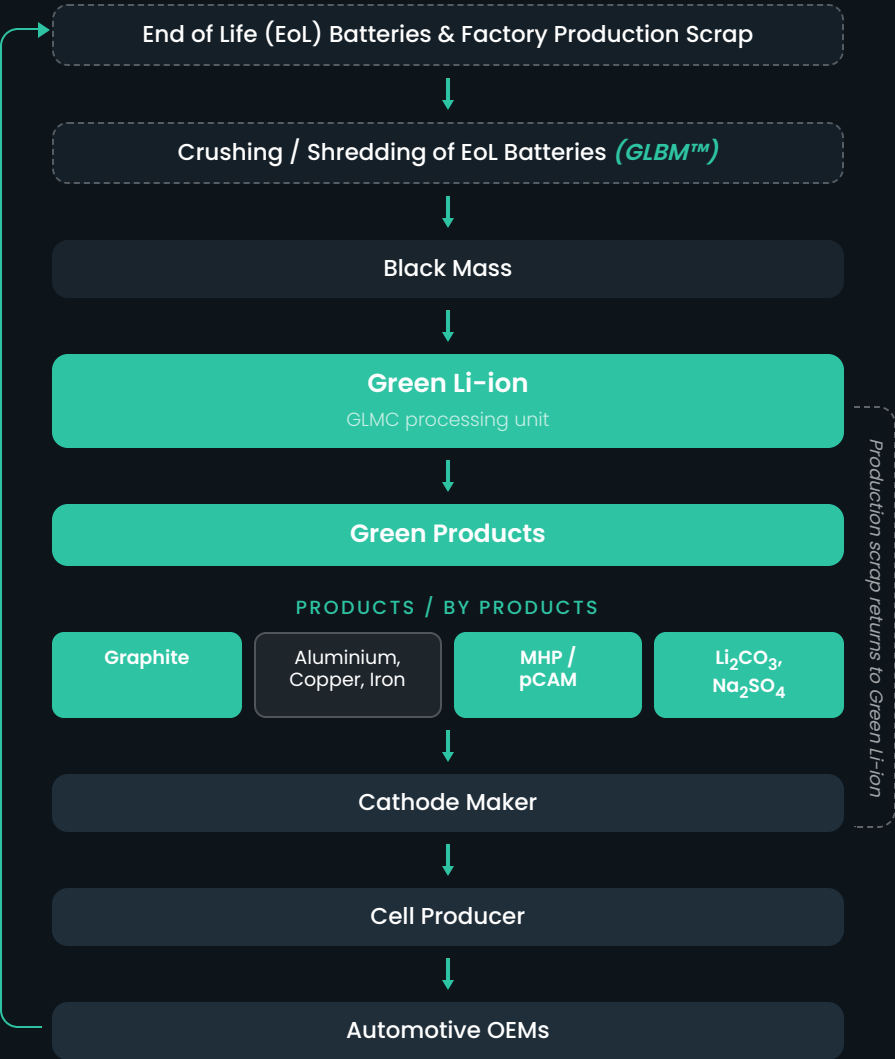


GREEN HYDROREJUVENATION™

Aluminum, copper, iron, fluoride, graphite, nickel, manganese, cobalt, and lithium recovered in sequence from black mass: alkaline leach, acid leach, fluoride and copper ion exchange, iron removal, patented co-precipitation of the nickel-manganese-cobalt precursor, and lithium carbonation. Operating windows [VERIFY parameters], stage count [VERIFY count].

≥98% nickel, cobalt and manganese extraction efficiency, and ≥80% lithium extraction efficiency. Resin columns regenerated; fluoride and copper reused. Sodium sulfate recovered as a saleable byproduct.

CLOSED LOOP: BATTERY TO MATERIAL TO BATTERY



Closing the loop.

Green Li-ion builds modular hydrometallurgy technology that converts spent batteries and factory scrap into cathode and anode material ready to drop into new cell manufacturing. GLMC is the multi-cathode line of that platform: an on-site process that adds to existing recycling operations rather than replacing them, improving the efficiency and economics of what is already running, and scaling in standardized units that integrate into existing industrial facilities.

Platform

MATERIAL

Chemistry	NMC / NCA cathode precursor material
Composition	Nickel-manganese-cobalt precursor
Feedstock	All chemistries: LCO, LMO, NMC, NCA
Output	NCM / NCMOH pCAM, Li ₂ CO ₃
Annual capacity	~730 mt/yr black mass per unit
Feedstock particle size	[VERIFY] μm
Recovered products	NCM, NCMOH, Li ₂ CO ₃ , sodium sulfate, graphite
Feedstock impurity limits	[VERIFY] Al, Cu, F limits

PRODUCTION

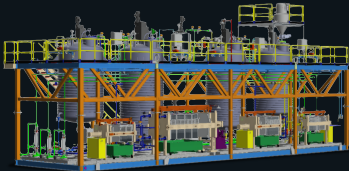
Process	GREEN HYDROREJUVENATION™
Operating cycle	Automatic batch, PLC controlled, 6 hr cycle
Equipment standards	ASME, ISO and IEC compliant
Compliance	Domestic content aligned

“Green Li-ion technology plays an integral part in securing your critical mineral supply chain, producing meaningful intermediary products that plug back into your supplier network and scale with your project planning and market growth, keeping CAPEX in line with today’s needs while leaving room to grow.”

Leon Farrant, CEO, Green Li-ion

Site requirements

FOOTPRINT



Overall length	29 m / 95 ft
Overall width	7.5 m / 25 ft
Overall height	6.7 m / 22 ft
Occupied area	218 m² / 2,340 sq ft, main skid
Factory floor required	39.7 × 92.2 ft per unit
Crane hook height	47.6 ft minimum
Floor load capacity	307 lb/ft² minimum
Ancillary space	19.4 × 77.8 ft MLD, outdoor; 18 × 36.4 ft scrubber, indoor
Installed weight	100 t / 110 US tons

UTILITIES

Electrical supply (U.S. / EU)	460/120 V 60 Hz · 400/230 V 50 Hz
Connected load	440 kW 3-phase, 11 kW 1-phase
Demineralized water	40 GPM @ 36 psig, 14,530 gal/day
Compressed air	225 SCFM @ 125 psig, oil-free (ISO 8573-1)
Steam	3,750 lb/h @ 150 psig, 367 °F
Nitrogen	25 SCFM @ 90 psig
Cooling water	660 GPM @ 58 psig, 190 Rton

Ways to partner

Green Li-ion is undertaking a phased deployment of its technology through direct machine sales and site-specific partnership agreements, and is looking to explore comprehensive partnerships across four commercial structures.

Machine sales Purchase with ongoing support and licence

Offtake agreement Contracted mineral and intermediaries supply

Tolling agreement Process your feedstock, you keep the product

Joint venture Shared investment and returns

Critical-mineral bearing

Nickel, cobalt, manganese, and lithium recovered from a single feedstock stream

Closed-loop

Spent batteries return to cathode manufacturing as new material

Export-restricted

August 2026 federal rule directs U.S. black mass to domestic buyers

Basel-constrained

EU classifies black mass hazardous from Nov 2026, limiting cross-border movement



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