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Next generation battery recycling

Recycling as a Core Element of a Circular EU Battery Ecosystem

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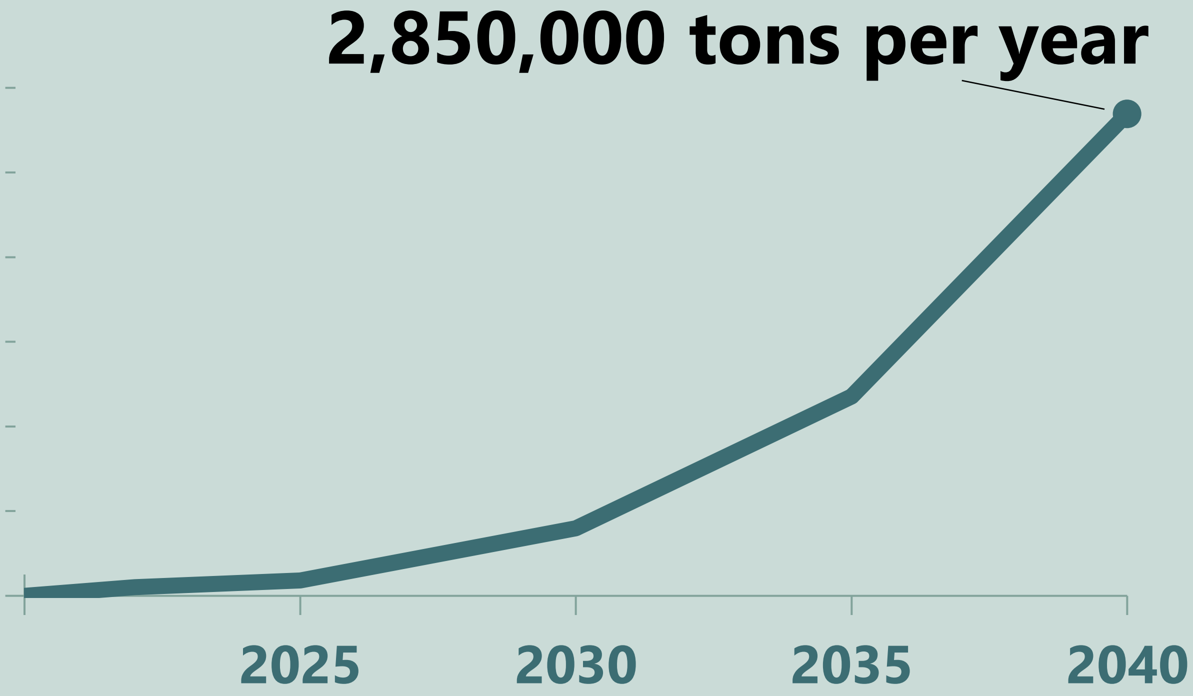
Battery Innovation Days 2025

European industry competitiveness is under threat

Mining, refining, CAM, & cell manufacturing concentrated in China



Battery waste will be piling up exponentially in Europe. Recycling is the answer.

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Starting in R&D at RWTH Aachen University

…to a production company with an end-to-end battery recycling plant

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Superior water-based battery recycling technology

Battery Packs | **Battery Modules** | **Production Scraps** | **Black Mass**

Discharging & Dismantling → **Mechanical Processing** → **Thermal Processing** → **Optimized Lithium & Graphite Recovery** / **LFP[2] Hydrometallurgy** → **Refining**

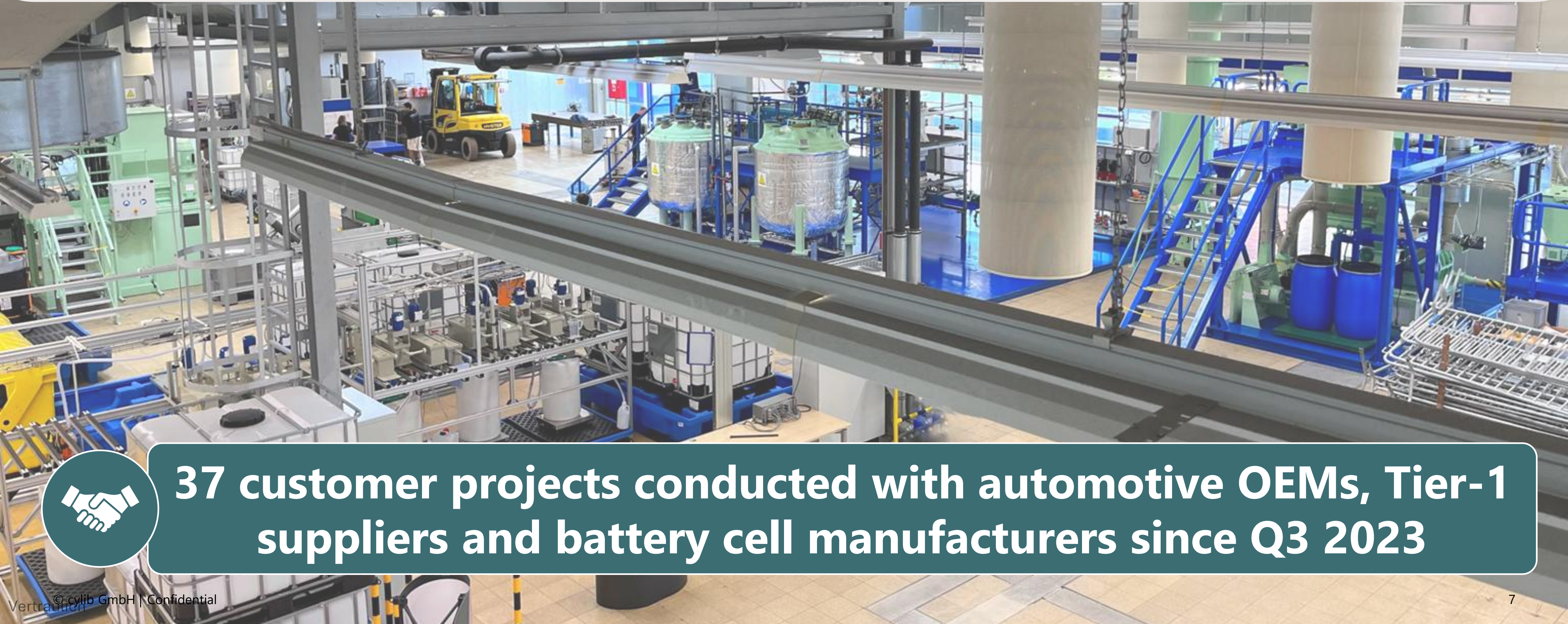
Water-based lithium-first process with 90% recycling efficiency

Lower chemical consumption, waste generation & energy use

80% lower carbon footprint

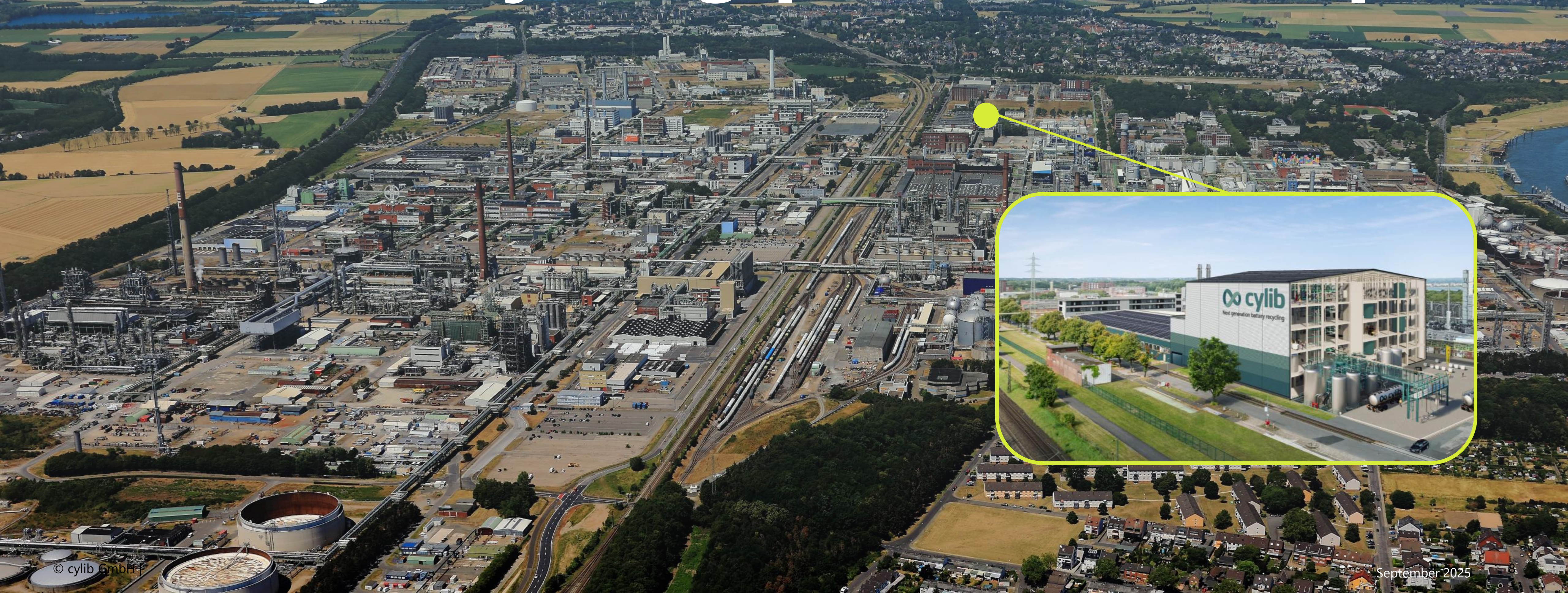
High purity battery raw material products

Demo plant validated product quality and enabled strong commercial partnerships



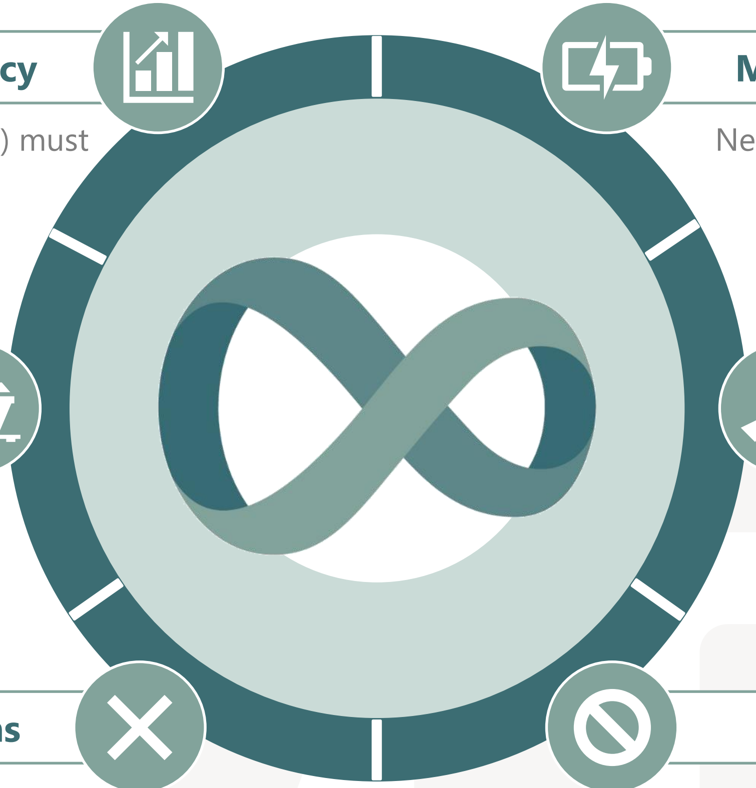
37 customer projects conducted with automotive OEMs, Tier-1 suppliers and battery cell manufacturers since Q3 2023

Building landmark industrial battery recycling plant for Europe



Agnostic to battery types, geometries and chemistries, recycling feedstock equivalent to 140,000 EVs p.a.

The national and European regulatory framework sets a clear strategy



Minimum Recycling Efficiency

A minimum recycling efficiency (65% in 2027) must be proven for every battery

Minimum Recycled Content

New batteries must contain recycled materials by 2031 (e.g. 6% Lithium; by 2036 12%)

Critical Raw Materials Act

Target to build recycling capacities by 2030 to secure critical materials

Extended Producer Responsibility

Producers are obligated to ensure battery recycling complying with mandatory standards

Black Mass Export Restrictions

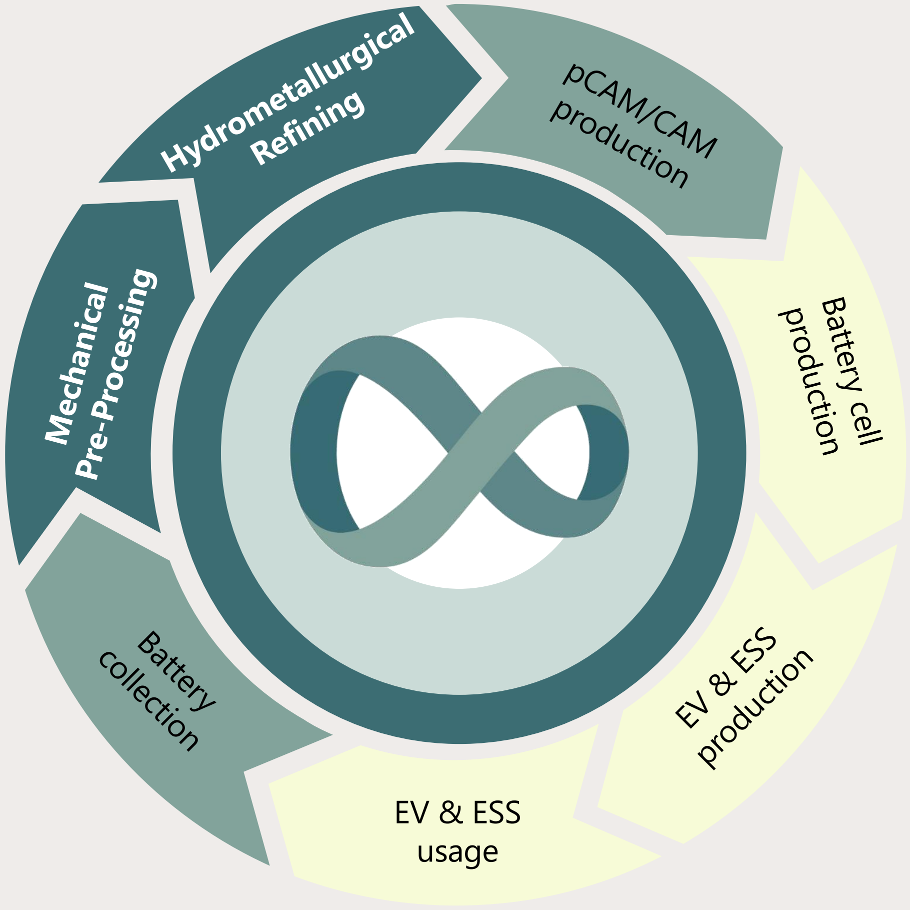
Classification as hazardous waste prevents export to non-OECD countries

Permitting

A rigorous permitting process safeguards highest standards for health, safety and environmental

Regulatory framework leading to massive volumes of EoL batteries to be recycled - Yet cylib is the only company translating this into action.

Battery recycling is key to close the loop in Europe



Next Generation Battery Recycling

Mine once. Recycle forever.