# Powering the UK's battery supply chain



#### Cradle to cradle, battery raw material recovery and processing

#### Lithium, the white gold of a net-zero future

Our recent battery demand forecast predicted that by 2030 over 25% of all installed battery capacity in European-manufactured vehicles will be reliant on Lithium Iron Phosphate or its derivatives. At the same time, a potential global lithium deficit could negatively impact forecasted BEV production volumes by more than 37%.

Securing a sovereign lithium extraction and refining supply chain is paramount to safeguard UK BEV production. Recognising this, through the Automotive Transformation Fund, we're working with several companies around the country to complete feasibility study projects to increase the supply of domestic lithium chemicals.

This investment has resulted in British Lithium's pilot plant in Cornwall, the first ever commercial extraction of 99.9% pure battery-grade lithium carbonate from mica found in granite. It has also enabled Cornish Lithium to construct an hydrometallurgical section for its demonstration scale processing plant at the Trelavour Lithium Project.

We are also proud to be supporting other lithium extraction and refining companies, 2022 such as Green Lithium, Weardale Lithium, and Northern Lithium.



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### East Yorkshire becomes the second-largest magnet materials refiner outside of China

Critical materials account for almost 60% of the value of permanent magnet motors used in electric vehicles. The planned new Pensana Saltend processing hub transforms the UK into one of the only places in Europe with the capability to refine the rare earth oxides used in the creation of Neodymium magnets.

Currently, China has 90% of the processed rare earth element market. These components are often irreplaceable in products we rely on for our daily lives, from electric vehicles and mobile phones to wind turbines and jet engines. Establishing domestic processing capabilities is essential if we are to de-risk the UK supply chain and ensure future competitiveness by onshoring the essential 2021 building blocks for further net-zero innovation.

