

Pensana establishing an independent rare earth supply chain in the UK

LSE listed Pensana plc (PRE.LSE) is backed by major shareholders M&G and the Angola SWF who have invested US\$56 million to fund the establishment of a world-class, independent and sustainable, rare earth supply chain.

Magnet metal rare earths are the critical minerals essential for electric vehicles and wind turbine power generation.

The Saltend facility, located in the Saltend Chemicals Park in the Humber Freeport, will be one of the first rare earth separation facilities established in over a decade and will become one of only three major rare earth producers located outside of China.

Used in everything from electric cars to modern consumer electronics, the global demand for rare earth materials is expected to increase sevenfold by 2040. The electrification of motive power is forecast to generate a demand growth for magnet metal NdPr of 7.5% CAGR over the next decade.

The US\$250 million Saltend project draws on the UK's competitive advantages of Chemical Parks linked to offshore wind and will supply approximately 5% of the 2025 projected world demand for rare earth magnet metals.

The successful development of Saltend would be an important step in supporting the UK automotive supply chain, which employs over 780,000 people, as it transitions to electric vehicles.

By 2030 the UK is expected to have transitioned from being a major European producer of internal combustion engines to be a world leader in the manufacture of electric drive units (EDUs), producing three million EDUs annually, with a large proportion destined for export.

Without a secure magnet metal supply chain this is under threat.

Funding will come from a 'Green Bond' arranged by ABG Sundal Collier and from UK Government support such as the recently announced offer from the Automotive Transformation Fund and other agencies.

Saltend will be supplied by the Longonjo mine in Angola; one of the world's largest undeveloped rare earth mines and one of only three with a JORC Reserve greater than 100,000 tonnes of the magnet metal, NdPr.

The upfront capital cost of US\$200 million for the fully permitted mine and processing facilities is amongst the lowest amongst its peers.

The Angolan Sovereign Wealth Fund, South African bank ABSA and African multilateral agencies are expected to finance the US\$200 million capital requirement without recourse to Pensana.

Angola has an untapped critical minerals endowment, exceptional rail, hydro and port infrastructure and a highly supportive Government. The US\$550 million Lobito Corridor is anticipated to become one of Africa's most important rail transport systems.

Initially, Pensana will produce materials from our own mining resources but as it looks to the future, it is fully supportive of the circular economy.

Pensana has partnered with leading energy provider, Equinor, to develop a low-energy method for recycling end-of-life wind turbine magnets using low-carbon hydrogen produced by their Hydrogen to Humber project at the Saltend facility. Completing the circle of rare earth minerals and securing supplies for the future.

Pensana has also partnered with the electric car manufacturer, Polestar, on its moonshot goal of creating the first truly climate-neutral car by 2030.

This collaboration is amongst great international interest in the project from leading automotive and offshore wind producers.

Pensana has also been awarded a grant by Innovate UK under the CLIMATES program to further develop the sustainability of our project, working with Polestar, Route2 and the Universities of Leeds and Hull.

The ultra-modern facility being constructed at Saltend Chemicals Park will create 450 jobs during construction. Once in operation, it will create a further 125 high-value full-time jobs which will include:

- Chemical Engineers
- Control & Automation Engineers
- Process Operatives
- QC and QA Technicians
- Maintenance Engineers
- Health and Safety Supervisors
- Logistics, Planning and Warehouse Supervisors
- Procurement Managers

