



17 February 2020

## Downstream Processing at Longonjo Project

Pensana Rare Earths plc (ASX:PM8) (the “Company”) is pleased to announce that it has committed to studying downstream processing of the high-grade magnet metal concentrate it plans to produce at the Longonjo project in Angola.

The Longonjo project is being developed as one of the only major upstream suppliers of the NdPr magnet metals critical to energy transition, which are required by Electric Vehicle (“EV”) and Offshore Wind Turbine manufacturers.

The Company has previously reported a Preliminary Feasibility Study (the “PFS”) co-ordinated by FTSE250 listed Wood Group of a sustainable operation producing, on average, 56,000 tonnes per year of NdPr concentrate for export. The initial capital cost of the project was estimated at approximately US\$131 million.

Whilst the Company strategy in the PFS is to process onsite and ship a high-grade concentrate, the new study, which will form part of the current Definitive Feasibility Study, will investigate the feasibility of the downstream processing of 50,000 tonnes per annum of concentrate into a high grade NdPr carbonate for export, which could enable the Company to capture a substantially increased proportion of the product value in Angola.

Preliminary discussions with potential customers and major trading houses have indicated that customers in China, Japan, Korea, Germany and the UK may be interested in importing high grade NdPr carbonate from the Company.

The new study will review the economics of this and preliminary studies have indicated that this is expected to require an increase in the capital cost of the project from US\$131 million to around US\$200 million.

The Angolan government's mining code and fiscal regime, customs exemptions and the easing of foreign exchange controls provides encouragement for additional investment of this nature.

Baroness Northover the UK Prime Minister's Trade Envoy for Angola commented: *"Energy will take centre stage at COP26 this year. If we are to transform the world's economy and reach net zero emissions by 2050 we need secure supplies of the metals which are crucial for energy transition, for electric vehicles and offshore wind turbines. The Pensana rare earth project will contribute to the achievement of these goals, at the same time bringing jobs and training opportunities to Angola as it opens up its economy and seeks to diversify away from reliance on oil."*

The project is being designed by Wood Group to high levels of ESG compliance and reporting. Environmental and Social licencing will meet IFC standards, Equator Principles and Greenhouse Gas scope 1,2 and 3 compliance.

The re-domiciling of the Company to the UK and admission to the Official List, Standard Segment and to trading on the London Stock Exchange's Main Market for listed securities is expected before the end of Q1 2020, subject to the receipt of the required regulatory approvals.

The Company has further held preliminary discussions with sovereign wealth funds, international financial institutions and mining financiers who have indicated a strong interest in engaging further on the project as it develops through the Definitive Feasibility Study stages.

Chairman Paul Atherley commented: *"The IEA recently reported that there is over US\$1 trillion being invested by China, Britain and the EU into offshore wind as the main source of renewable energy for these developed economies."*

*Each offshore wind turbine uses 3-5 tonnes of permanent magnets compared to 1-2 kilograms for an EV. With demand for these permanent magnets growing at 1500% over the next 20 years offshore wind is set to overwhelm the demand from EVs.*

*Pensana is investigating the potential of the Longonjo project to be one of the first major rare earth carbonate suppliers to be developed in a decade and to meet the growing demand for critical magnet metal materials."*

The information in this announcement relating to the production target for the Longonjo project is derived from the Company's ASX announcement entitled "Preliminary Feasibility Study" dated 15 November 2019 which is available to view on the Company's website and on the ASX website [www.asx.com.au](http://www.asx.com.au). The Company confirms that: a) it is not aware of any new information or data that materially affects the information included in the original ASX announcement and b) all material assumptions and technical parameters underpinning the production target and related forecast financial information derived from the production target included in the original ASX announcement continues to apply and have not materially changed.

Authorised by the Board of Pensana Rare Earths Plc

For further information please contact Tim George (CEO) at:

[contact@pensana.co.uk](mailto:contact@pensana.co.uk)