Pensana Rare Earths Plc

(LSE:PRE)
(ASX:PM8)

Bringing online the world's first major Rare Earth Mine in over a decade

Overview

- The Longonjo NdPr Project in Angola is centred on a 1.5km blanket of mineralization situated within a 3,670km2 approved mining license area. The Company intends to develop it into one of the world's major sources of neodymium and praseodymium, which are the critical rare earth metals with applications in modern energy technologies. The Company is targeting release of a bankable feasibility study in mid-October to be followed by main financing of the Project whereafter the Company is looking to commence main construction of the project in the first quarter of 2021 and achieve first production of concentrate in mid-2022.
- On 4 May 2020, the Group further announced that it had been granted a new prospection licence over a 7,456 square kilometres area located 16 kilometres from the Longonjo Project (the "Coola Project"). There are two known carbonatites in the licence area with reported NdPr rare earth mineralisation (as per academic studies) at this site with initial exploration work having recently commenced.

Attractive PFS Economics

- Upfront mine development capital cost of circa US$200m, significant capital infrastructure already in place with access to $2billion railway line that runs through to $1.8billion Port of Lobito catering for ease of product export.
- 14-month construction and commissioning period.
- Annual production 60ktpa concentrate containing 4.6kt NdPr and 20.7kt TREO with a phase 2 expansion after three years.
- Access to low carbon power from Luaca hydro-electric dam, as well as power infrastructure and rail is key to low capital and operating costs.
- Drilling results show potential for extension of mineralization which could extend the open pit operation. Resources remain open along strike.
- Additional exploration upside with grant of additional exploration licence for 7,456km2 Coola Project located 16km from Longonjo and containing two known carbonatites with reported NdPr rare earth mineralization.
- Bankable Feasibility underway and updated Mineral Resource estimate due in September
- DFS underway.

Rare Earth Market

- The US$16 trillion post COVID stimulus programmes are transforming the renewable energy sector, creating unprecedented demand for critical rare earth magnet metals. Electrification of motive power is seeing the replacement of fossil fuels in a wide range of major industries from air, sea and land transportation; to clean power generation and as the world emerges from lockdown evidence of this step change is becoming more prevalent daily. Germany recently announced the biggest ever financial support for the German auto industry with €130 billion allocated to 70,000 charging stations and doubling the vehicle subsidy to €6,000 targeting annual production of 10 million vehicles by 2030 and the UK, France and other EU countries have been quick to follow suit.
- Industry specialist Adamas Intelligence has highlighted that EVs will drive a 350% increase in magnet metal demand over the next five years leading to shortages in NdPr oxide supply however even more importantly that the demand from offshore wind over the next 20 years is forecast to grow at 1,500%, overwhelming the demand from EVs. Longonjo aims to be the first rare earth mine to be developed since 2012 outside China. High ESG Standards

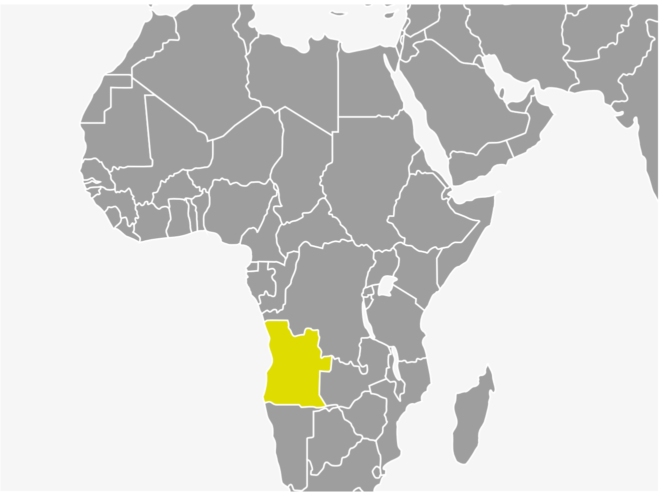
High ESG Standards

- Hydro-electric dam to supply low carbon power and low impact tailings design.
- Investment designed to meet Equator Principles and Scope 1, 2 and 3 under the Green House Gas Proposal.
- Intention to create local jobs and provide training programmes.

Reserves and Resources

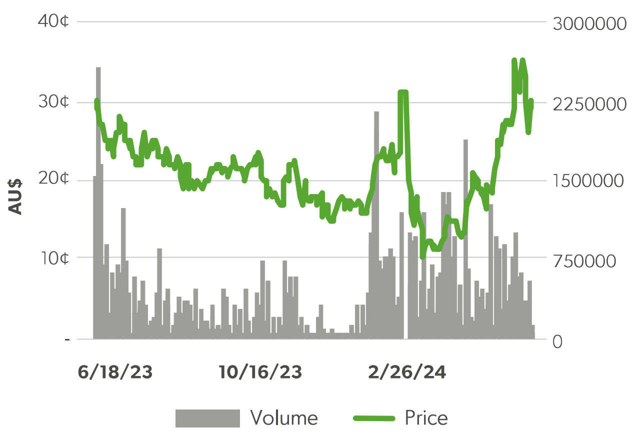
	Tonnes (Mt)	REO (%)	NdPr (%)	REO (mt)	NdPr (mt)
Longonjo					
Indicated	60	1.9	0.4	1.1	2.3
Inferred	167	1.3	0.3	2.2	5
Total	**226**	**1.5**	**0.3**	**3.3**	**7.4**

Sites



Financial Performance

Values in US$m unless otherwise stated	
Share Price (GBp)	0.29
Share Price (US¢)	0.19
Shares Outstanding (m)	160.6
FDSO	-
Market Cap	30.5
Debt	0.3
Cash & Equivalents	3.3
Enterprise Value	27.5



*Pursuant to a Scheme of Arrangement in Jan 2020, Pensana Metals' existing shareholders had their shares transferred to Pensana Rare Earths Plc, settled via a CDI. Pensana Rare Earths was admitted to the Official List of the ASX on 7 Feb 2020. A main market LSE listing is anticipated before the end of 1H20.

Key Shareholders and Management

Firm	Stake
QG Africa Mining L.P	17.7%
Selection Capital	4.82%
National Nominees	4.81%
J.P. Morgan Nominees Australia	3.35%
Richard Lockwood	2.7%
Citicorp Nominees (Pty) Ltd	2.7%

Individual	Position
Paul Atherley	**Chairman**
Tim George	**CEO**
Rob Kaplan	**CFO**
David Hammond	**COO**
Paulo Nunes	**Country Manager (Angola)**