



16 March 2022

THIS ANNOUNCEMENT CONTAINS INSIDE INFORMATION

Pensana Plc

Update on Project Delivery

Pensana Plc is pleased to announce the following update on development of the Saltend rare earth separation facility in the Humber Freeport UK and the Longonjo concentrator in Angola.

Highlights

- FEED for both Saltend and Longonjo completed with material improvement in project economics, including:
 - Estimated Capex reduced from US\$525 million to US\$494 million with further reductions anticipated
 - Post tax NPV increased by 14% to US\$2.4 billion with an IRR of 61%
- Reduction in the project execution schedule with commissioning now targeted for late 2023
- Approaches received from major European and US electric vehicle and wind turbine OEMS to secure magnet metal supply chain
- Memorandum of Understanding executed with key Asian trading house for 50% of Saltend's production

Pensana Chairman, Paul Atherley commented:

“Reducing our capital and operating costs is a significant achievement by the technical team led by CEO Tim George, especially given the inflationary pressures and supply chain constraints affecting projects globally. The lower capital and strong operating margins will make the project attractive to our Financiers and are expected to lower the overall cost of finance.

We continue to have very positive discussions with some of the world's major automotive and wind turbine manufacturers, who recognise the strength of Pensana's model and the security of supply we can provide for these essential industries. With only one major magnet metal rare earth producer outside China, transparent and independent capacity is urgently required, particularly in Europe.

Pensana is excellently positioned to bring high value manufacturing back to the UK and be a first mover in meeting this burgeoning demand for critical magnet metals.”

Project Delivery

Saltend is being designed as the UK's first rare earths processing facility and will produce 12,500 tonnes of separated rare-earth oxide per annum, of which 4,500 tonnes per annum will be magnet metal rare earths neodymium and praseodymium (NdPr) oxides, equivalent to approximately 5% of the projected world demand.

The Front-End Engineering Design (FEED) for each of Saltend and Longonjo is now complete. A comprehensive value engineering and optimisation programme is well advanced and is expected to be reported next month and is expected to result in further reduction in the capital costs to the ones reported in this announcement.

Working alongside Wood Group's Perth, Reading and Johannesburg offices, Paradigm Project Management (PPM), a specialist Africa centric project management and engineering company, and Professional Cost Consultants (PCC), with offices in South Africa and the UK, the estimated capex has been reduced from US\$525 million to US\$494 million (Saltend: US\$195 million and Longonjo: US\$299 million).

Worldwide supply chain constraints and inflationary pressures, which could have impacted both Saltend and Longonjo projects, have been largely mitigated by the detailed optimisation and value engineering processes.

Specific workstreams involving capital and operation cost savings currently underway include:

- Spent acid regeneration to maximise the recycling efficiency of the sulphuric acid plant integrated with off-gas from the calcining of concentrate at Longonjo, which is an important aspect of the process and constitutes a significant reduction of the carbon footprint through reduced reagent consumption
- Piloting on a more cost-effective flotation concentrate calcining process offered as a vendor alternative post FEED, which would enable a significantly shorter lead time for fabrication and ease of installation at Longonjo
- Optimisation of Saltend's civil & earthworks for load bearing structures undertaken alongside the completion of detailed geotechnical investigation, which will shorten the construction period and allow for future affordable expansion into downstream activities associated with magnet metal production, magnet recycling and processing of HREO
- Piloting of process simplification opportunities discovered in the MRES precipitation circuit in Longonjo

Financial Summary:

		Dec 2021	Revised estimates
Capex	Saltend refinery	US\$ 190m	US\$ 195m
	MRES refinery	US\$ 152m	US\$ 127m
	Longonjo concentrator	US\$ 134m	US\$ 123m
	Longonjo mine and infrastructure	US\$ 49m	US\$ 49m
Opex	US\$ per kg of total rare earth oxide	US\$ 15/kg	US\$ 15/kg
Revenue	Average per annum based on first 5 years	US\$ 648m ¹	US\$ 705m ²

EBITDA	Average per annum based on first 5 years	US\$ 413m ¹	US\$ 459m ²
NPV8	Unleveraged, post tax	US\$ 2.1bn ¹	US\$ 2.4bn ²
IRR		50% ¹	61% ²
Payback from first production		2.3 years ¹	2.1 years ²

Notes:

1. Revenue based on the Shanghai Metals Market November 2021 NdPr spot price of \$120/kg. Real price escalation of 3.2% p.a. to 2030, kept flat in real terms thereafter.
2. Revenue based on NdPr price of \$150/kg, kept flat in real terms thereafter.

The current NdPr oxide price as quoted by Shanghai Metals and Materials is in excess of US\$165,000 per tonne.

The combination of the reduction in Capex and the shorter lead times in the delivery of key equipment, is expected to reduce the overall project execution schedule with commissioning scheduled for late 2023.

ESG

Pensana became a signatory to the United Nations Global Compact and a partner of the Taskforce for Climate-related Financial Disclosure (TCFD). These actions underline the Company's commitment to transparency and further efforts have included testing the robustness of the Group's strategy under future climate scenarios.

Pensana is looking to develop a carbon lifecycle assessment for rare earth products with full traceability for all material from mine to end-use, which will include a comprehensive and transparent quantitative monitoring of ESG performance.

In January, it was announced that Pensana has signed a cooperation agreement with leading energy provider Equinor New Energy Limited (Equinor), to form a working group to share technical and commercial information to develop a low energy method for recycling of end-of-life magnets in Saltend, moving the Company further towards offering a circular solution for the rare earth material supply chain.

Angola

Angola continues to de-risk as an investment destination with Moody's credit rerating, the recent World Bank Group Angola Economic Update and positive comments by Christine Lagarde, Chairman of the IMF.

In October 2021, the World Bank Group reported that Angola had handled the Covid pandemic extremely well, that it had a Fiscal Surplus (due to oil price rises), had reduced its Debt to GDP ratio from 135% to 95% and that Moody's had upgraded its credit rating to B3 with a stable outlook. Concurrently, it has been reported that Anglo American, De Beers, Rio Tinto and other majors are now re-investing in the country.

Pensana will host a UK Department of International Trade trip to Angola at the end of this month. The visit includes delegates from several major mining houses and UK Export Finance. As part of the trade summit, the delegation will be visiting the Longonjo site, traveling via the recently upgraded US\$2 billion Benguela railway line, which provides a direct link from Longonjo to the Port of Lobito.

The information contained within this announcement is considered by the Company to constitute inside information as stipulated under the Market Abuse Regulations (EU) No.596/2014. Upon the publication of this announcement via a Regulatory Information Service, this inside information will be considered to be in the public domain. The person responsible for arranging for the release of this announcement on behalf of the Company is Paul Atherley, Chairman.

ENDS

For further information, please contact:

Shareholder/analyst enquiries:

Pensana Plc

Paul Atherley, Chairman

IR@pensana.co.uk

Tim George, Chief Executive Officer

Rob Kaplan, Chief Financial Officer

Virginia Skroski, Head of Investor Relations & Communications

Media enquiries:

Finsbury Glover Hering:

Gordon Simpson / Richard Crowley

Pensana-LON@finsbury.com

The information contained within this announcement is considered by the Company to constitute inside information as stipulated under the Market Abuse Regulations (EU) No.596/2014. Upon the publication of this announcement via a Regulatory Information Service, this inside information will be considered to be in the public domain. The person responsible for arranging for the release of this announcement on behalf of the Company is Paul Atherley (Chairman).

About Pensana plc

The electrification of motive power is the most important part of the energy transition and one of the biggest energy transitions in history. Magnet metals are central to the transition and critical to high value manufacturing applications such as electric vehicles and offshore wind turbines.

Pensana plans to establish Saltend as an independent, sustainable supplier of the key magnet metal oxides to a market which is currently dominated by China. The US\$194 million Saltend facility is being designed to produce circa 12,500 tonnes per annum of rare earth oxides, of which 4,500 tonnes will be neodymium and praseodymium (NdPr), representing circa 5% of the world market in 2025.

The Saltend facility is located within the world class Saltend Chemicals Park, a cluster of leading chemicals and renewable energy businesses at the heart of the UK's energy estuary, and host to a range of companies including BP Petrochemicals technology, INEOS, Air Products, Triton Power, Nippon Gohsei and Tricoya.

Pensana's plug and play facility will create over 500 jobs during construction and over 125 direct jobs once in production. It will be the first major separation facility to be established in over a decade and will become one of only three major producers located outside China.

Initial feedstock will be shipped as a clean, high purity mixed rare earth sulphate (MRES) from the Company's Longonjo low impact operations in Angola. A state-of-the-art concentrator and MRES processing plant are being designed by Wood to the highest international standards. They will be powered by minimal carbon hydro-electric power and connected to the Port of Lobito by the recently upgraded Benguela railway line.

Pensana is of the view that provenance of critical rare earth materials supply, life cycle analysis and GHG Scope 1, 2 and 3 emissions will all become significant factors in supply chains for major customers. The Company intends to offer customers an independently and sustainably sourced supply of the metal oxides and carbonates of increasing importance to a range of applications central to the energy transition, industrial, medical, military and communications sectors.

For many miners around the world who are looking to access the European and US supply chains, it is becoming increasingly clear that the proposed EU and possible UK carbon border taxation would mean that it is no longer acceptable for manufacturers to source material extracted or processed unsustainably.

Pensana is aiming to establish Saltend as an attractive alternative to mining houses who may otherwise be limited to selling their products to China, having designed the facility to be easily adapted to cater for a range of rare earth feedstocks.

www.pensana.co.uk