

21 August 2023

### THIS ANNOUNCEMENT CONTAINS INSIDE INFORMATION

### Pensana Plc ("Pensana" or the "Company")

### Longonjo Operations Update

Pensana Plc (LSE: PRE) is pleased to provide an operations update on the Longonjo rare earth project.

#### Highlights

Following the revised financing and development strategy announced on the 27 June 2023, which will see Longonjo fully funded into production on a staged basis, with the upfront capital expenditure reduced to US\$200 million, the project team has been heavily focussed on the re-engineering design and the due diligence required for the financing, namely:

- Re-engineering of the mine and process plant to the Stage 1, US\$200 million Capex design;
- Preferred vendor re-pricing for the revised equipment schedule;
- Redesign of the monthly mine schedule and Run-of-Mine blending strategy for years 1-5 to meet the redesign throughput rates;
- Completion of the optimised Tailings Storage Facility (TSF) design;
- Site infrastructure development to facilitate commencement of main construction activities; and
- Execution of the Livelihood Restoration Programme arrangements with the local community under the Relocation Action Plan.

#### **Engineering Developments**

The revised process plant design is a scaled-down version of the existing processing route with revised mining, comminution, flotation, thickening, calcining, leaching and product precipitation throughput rates.

Key components of the redesign are:

- All the main permits remain valid including the exploitation licence, the environmental and social impact assessment (ESIA), the construction permit, the Livelihood Restoration Programme and the Relocation Action Plan as developed in conjunction with the local community and the relevant provincial authorities;
- Minimising pre-production spend while ensuring that the project's potential for generating economic benefits on a larger scale is not compromised;
- Production of a standardised, highly marketable, radionuclide-free, Mixed Rare Earth Carbonate;
- The modular sulphuric acid plant is the pivot point around which the engineering and design work is currently being undertaken and optimised;
- The historical metallurgical testwork and extensive pilot plant trials conducted in collaboration with equipment vendors in Australia and elsewhere continue to underpin the plant design criteria;

- All of the selected vendors of major and long-lead equipment items have been re-engaged and they remain committed to the project;
- Recent pricing reviews and updated quotations have been obtained in preparation for a Class 2 AACE study which will provide a high degree of confidence and adequate contingency;
- Enhanced modularisation will enable off-site pre-fabrication, testing and containerised transport which will ensure a faster and more efficient construction; and
- High levels of local job creation, training and skills transfer remain as previously planned.

#### **Site Activities**

Site infrastructure development in preparation for main construction continues – being largely unaffected by the revised development strategy – including earthworks (Group Nov), electrical reticulation (Elecktra) and water/sewerage services in preparation for camp construction.

The SRK team is making good progress on the geotechnical investigations in support of the dual purpose TSF detailed design. The selected TSF site has been confirmed as providing suitable excavated material for use in the TSF starter walls, pit haul roads, plant terracing, and other construction related requirements, thus mitigating visual impact and the need to develop borrow-pit sources and associated licensing and material transport costs.

Integration of the Longonjo project bulk reagent consumption requirements (including sulphur and caustic soda) into the Trafigura/Mota Engil led strategic mineral focussed Lobito Corridor port and rail concessions is being pursued as part of the ongoing operations readiness preparation. Logistic and opex benefits are obvious in terms of broader reagent supply to the existing DRC Copperbelt mines, alongside the limestone which will be sourced from the existing quarries in the Lobito area.

#### **Engineering Team Strengthened**

Following the existing workstreams completed in the Wood FEED study and the identified long-lead equipment suppliers, Pensana has engaged with the African based ADP Group and ProProcess to develop and implement the detailed design and execution plan within the initial US\$200 million capex envelope.

ADP Group, which is part of the Lycopodium Group, has designed, built and commissioned metallurgical plants in Angola since 1997, with particular emphasis on a modular approach to optimise regional fabrication, installation and commissioning time. ProProcess is an Africa-centric vertically integrated hydrometallurgy engineering and modular fabrication company servicing the global mining community over the past 14 years.

Expansion of the owner's team under Paradigm Project Management supervision continues to be an integral part of the Longonjo project development with a growing capacity within the Angolan subsidiary, Ozango Minerais. The owner's team has matured well over the past two years. Initially assuming responsibility for the design and execution of the operational support infrastructure (electrical, civils, earthworks, camp and water infrastructure) the owner's team responsibilities now extend to an overarching co-ordination of execution of the project as well as the procurement, construction, operational readiness and commissioning activities.

#### **Community Development**

A key focus area for the Company is ensuring that the project delivers a strong Resettlement Action Plan and Livelihood Restoration Programme as an integral part of its activities. The project will not displace housing or any

existing structures and involves only economic displacement of subsistence agricultural activities within the licence area, which will be compensated for on a land for land basis.

Two extensive nearby land blocks have been identified to provide new land for those economic activities displaced by the project following positive meetings with the Sobas (traditional leaders) and other relevant parties. The replacement land is currently in the latter stages of agricultural quality and yield assessment by experienced personnel in agricultural potential and ecology, led by Vuna Agri, with a view to the land being acceptable and available as needed during the project development and implementation.

Transitional support for an initial twenty-eight project affected households (PAHs) pending Livelihood Restoration Programme roll-out has been implemented in the form of fortnightly food packages of local produce supplied from a dedicated warehouse in the Longonjo village, in quantities proportional to the size of the agricultural fields currently under siteworks or development. This process will continue until PAHs are able to fulfil their previous crop yields through a robust Livelihood Restoration Programme.

#### Pensana CEO, Tim George commented:

"We are pleased to confirm that the team is on schedule with the Stage 1 re-engineering to the US\$200 million Capex design and are also well advanced on the financial due diligence for the main financing later this year.

We acknowledge and very much appreciate the ongoing support from the Government of Angola, the ongoing financial support from FSDEA and the engagement from ABSA and others for the financing and development of this important strategic minerals project over the next two years.

Longonjo hosts a world class, high-grade, near surface magnet metal rare-earth orebody, with direct access to affordable hydroelectric power and the Lobito Corridor rail and port infrastructure which are now both operated under recently announced long-term concession agreements.

Longonjo will produce a highly marketable, clean (radionuclide-free), Mixed Rare Earth Carbonate independent of the timing of any other developments.

We will continue to advise on Longonjo's progress and expect to provide further news on results from exploration activities at the promising Coola Project, adjacent to Longonjo, in the near future."

#### About Longonjo

Longonjo hosts one of the world's largest undeveloped rare earth deposits, containing a JORC Compliant Ore Reserve of over 166,000 tonnes of NdPr oxide, with an initial 20-year mine life and with considerable exploration potential to extend the resource base both immediately below the existing orebody as well as at the recent discoveries on the nearby Coola exploration licence.

| Longonjo Proved and Probable Ore   | Reserve September 2022 rep   | ported using a 0.3% NdPrO | (approx.) cut-off |
|------------------------------------|------------------------------|---------------------------|-------------------|
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| Classification | NdPrO<br>cut-off (%) | Tonnes<br>(Mdt) | NdPrO (%) | TREO (%) | NdPrO<br>(t) | TREO<br>(t) |
|----------------|----------------------|-----------------|-----------|----------|--------------|-------------|
| Proved         | 0.3–0.4              | 13.3            | 0.67      | 3.19     | 89,300       | 424,000     |
| Probable       | 0.3–0.4              | 16.8            | 0.46      | 2.05     | 77,000       | 323,000     |
| Total          | 0.3–0.4              | 30.1            | 0.55      | 2.55     | 166,000      | 767,000     |

Notes:

- Million tonnes are dry and rounded to one decimal place. Grades are rounded to three significant figures.
- No fixed cut-off is applied to the rare earths NdPrO, the cut-off varies between 0.3% NdPrO and 0.4% NdPrO.
- The variable NdPrO cut-off reflects the block cash flow positive method used to determine the economically viable portion of the resource.
- NdPrO tonnes and grade is inclusive of the TREO and not additional to it.

The near surface, deeply weathered orebody, has an average depth of less than 30 metres, with an average mine grade of 3.73% TREO and 0.79% NdPr over the first five years.

The process routes and key equipment required for beneficiation of the mined material at Longonjo are those commonly used in the broader minerals processing industry.

Following comminution and flotation, the rare earth mineral concentrate is subjected to acid roast, leaching and selective precipitation to produce a refined Mixed Rare Earth product providing customers with a clean, radionuclide-free product available for export via the recently refurbished Port of Lobito.

The Longonjo operation is located close to major existing infrastructure in the form of the recently upgraded Benguela railway line, linking the project to the Atlantic Port of Lobito, (the Lobito Corridor) and hydro-power infrastructure.

The US International Development Finance Corporation is currently performing due diligence for a potential US\$250 million investment to finance the Lobito Atlantic Railway Corridor to connect the DRC Copperbelt with the Port of Lobito. The Lobito Corridor is anticipated to become one of most important rail transport infrastructure systems within the South African Development Community (SADC) region over the next 25 years.

This follows the award of a US\$450 million contract by the Angolan Ministry of Transport to a consortium of Trafigura, Mota-Engil and Vecturis to operate and maintain the Benguela railway through to the DRC Copperbelt on a private concession basis, as part of the Lobito Corridor development.

This is expected to have a positive impact on the transport logistics during the construction period and for reagent and product transport during operations.

At full production, after completing the phased development, the mine will target production of up to 38,000 tonnes per year of refined Mixed Rare Earth product containing 14,000 tonnes of TREO and up to 4,400 tonnes of NdPr oxide, equating to around 5% of the global annual production of NdPr oxides for downstream processing or sale on the international market.

The Longonjo Ore Reserve estimate was prepared by Snowden Optiro in August 2022 as part of the Longonjo Project Feasibility Study, using the guidelines of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).

The Competent Person's statement for Longonjo Ore Reserves was released on 23 September 2022 and is available on the Company's website at <u>www.pensana.co.uk/company-reports</u>

### About Angola

The Angolan government has implemented a modern mining code with an attractive fiscal regime and a range of investment incentives including tax exemptions and customs duty exemptions.

Over the past decade it has also made significant investments in business-critical infrastructure such as railways, ports, bridges, and roads.

Angola's economic profile has improved significantly over recent years, with the country's public debt falling from 131% of gross domestic product in 2020 to 66% in 2022. The IMF has projected that the economy will grow by 3.5% in 2023.

Following an upgrade by Moody's in late 2021, all three major rating agencies raised their credit assessment of the country's sovereign debt in 2022, with Fitch and Moody's upgrading the country outlook from neutral to stable in the second half of the year.

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*.

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For further information, please contact:

Shareholder/analyst enquiries: Pensana Plc Paul Atherley, Chairman Tim George, Chief Executive Officer Rob Kaplan, Chief Financial Officer

IR@pensana.co.uk