



9 May 2023

ASX: FYI | OTCQB: FYIRF

## FYI enters the Rare Earths Sector

*Strategy to secure critical rare earth minerals from the mineral sands industry and partner with Arafura in an integrated rare earth value chain*

### Highlights

- FYI Resources Limited (FYI) expands its critical minerals strategy into the rare earths sector through a binding heads of agreement that provides for the staged acquisition of 100% of Minhub Operations Pty Ltd (MOPL) (subject to conditions).
- MOPL is collaborating with potential suppliers of rare earth rich mineral sands concentrate to provide a midstream processing solution via offtake of such concentrate, including from the heavy rare earth rich Gippsland and Murray Basins.
- MOPL and Arafura Rare Earths Limited (ASX: ARU) (Arafura) have signed a non-binding Co-operation Agreement to investigate the joint development of the Minhub Mineral Sands Processing facility in Australia's Northern Territory (Minhub or Minhub Project).
- The Minhub Project seeks to process third-party mineral sands concentrate (including from the Gippsland and Murray Basins) to separate the high-grade rare-earth minerals xenotime and monazite from other valuable mineral sands products such as zircon and ilmenite.
- Under the Co-operation Agreement, Arafura has the first right of offtake for the neodymium (Nd) and praseodymium (Pr) rich monazite and heavy rare earth rich xenotime concentrate from the Minhub Project
- Arafura and MOPL will also jointly explore further downstream development options for separated heavy rare earths including dysprosium (Dy) and terbium (Tb).
- While continuing to advance its core HPA Project, FYI plans to leverage its development experience, ESG platform and capital base into the rare earths sector to strengthen the Company's broader critical minerals production objectives.
- FYI's rare earths strategy aligns with Australia's Critical Mineral goals through value-capture in Australia and establishing new, secure sustainable supply chains for critical mineral products that are essential in decarbonisation and many modern technologies.
- FYI will host an Investor Webinar today, Tuesday 9<sup>th</sup> May 2023 at 11.30am AEST to discuss its expansion into the rare earths sector.



## ASX Release

Emerging critical minerals company FYI Resources (ASX: FYI) (**FYI** or the **Company**), is pleased to announce plans to enter the rare earths sector, via execution of a heads of agreement for the staged acquisition of Minhub Operations Pty Ltd (**MOPL**) (subject to conditions) which entity has separately entered into a non-binding Co-operation Agreement with Arafura Rare Earths Limited (ASX: ARU) (**Arafura**).

**FYI Managing Director Roland Hill commented:** *"This is an exciting opportunity for FYI and demonstrates our commitment to be a key contributor to Australia's critical minerals sector. While we continue to advance and de-risk our core high purity alumina (HPA) project, the planned acquisition of MOPL will create a great opportunity to be part of a unique integrated rare earth production strategy with Arafura that complements our production intentions as well as assisting Australia's sovereign supply objectives for critical minerals.*

*MOPL and Arafura are exploring options for the development of the Minhub Project, with a view to establishing an innovative, collaborative and potentially high return rare earths and mineral sands processing hub in Darwin, Northern Territory.*

*Through FYI's acquisition of MOPL, we can quickly move into the development and construction phases of Minhub with project partner Arafura. MOPL is well advanced in the engineering for the project and has well-developed existing relationships with the stakeholders, including upstream concentrate suppliers. FYI can leverage these assets and relationships, and its own capabilities, to create a project that will provide downstream value-add and help develop a rare earths supply chain in Australia to service local and global needs.*

*New and reliable sources of rare earths production are required to satisfy growing global demand. Many markets are looking for suppliers outside of China, which currently dominates global rare earths supply chains. The development of Minhub enables us to take advantage of the excellent work already completed by MOPL to accelerate our entry into the rare earth market.*

*Through working with Arafura, we aim to deliver a reliable and consistent supply chain for rare earths, from Australian mineral sands producers to end users such as wind turbine and electric vehicle manufacturers, enabling them to provide ethically sound options to their customers.*

*With the acquisition of MOPL, our next step is to complete a Feasibility Study for the Minhub project early in the 2024 calendar year, with the goal of developing Minhub in parallel with Arafura's Nolans Project."*

**Arafura Rare Earths Limited Managing Director Gavin Lockyer stated:** *"Arafura is pleased to explore opportunities associated with the Minhub Project as a possible pathway to expand downstream processing at the Nolans Project, further strengthening the position of the Northern Territory as a key contributor to the global clean energy revolution."*



## MOPL

MOPL was specifically established to develop, construct, and operate a mineral processing plant in Australia to facilitate the development of rare earth rich mineral sands deposits, which currently have significant barriers to entry.

### MOPL Feedstock

MOPL is seeking to finalise initial agreements with existing and potential mineral sand producers. These agreements include technical cooperation with the intention of moving to binding offtake agreements. The signing of feedstock agreements by MOPL is a condition precedent to entering into the formal share purchase agreement (refer summary of HOA below).

### Minhub and Arafura Co-operation Agreement

MOPL has signed a non-binding Co-operation Agreement with Arafura (**Co-operation Agreement**) under which Arafura may elect to earn up to 50% in the Minhub Project by:

- contributing pro-rata funding toward the Minhub Project Feasibility Study; and
- notifying MOPL it wishes to pursue development of the facility jointly with MOPL (**Development Decision**) following completion of the Feasibility Study.

Subject to a Development Decision being finalised, Arafura and MOPL would:

- develop a partnership structure in which the parties would pursue development of the Minhub Project;
- agree their respective ownership interests based on the ratio of funding committed to the Minhub Project by both parties; and
- finalise the terms of an agreement necessary to give effect to the partnership structure.

Under the Co-operation Agreement, Arafura has the first right of refusal to purchase xenotime and monazite from the Minhub Project for further downstream processing at its Nolans Project. Arafura and MOPL will also jointly investigate options for further processing of heavy rare earths sourced through the Minhub project.

MOPL is also working with several emerging mineral sands projects to supply rare earth feedstock to Nolans via their processing facility.

MOPL will act as project manager through the Feasibility Study and the Minhub Project's development phases and will be responsible for operating the processing facility once in production.

### Government Support

MOPL's strategy strongly aligns to the Federal Government's Critical Minerals Policy, and the A\$30M grant awarded to Arafura under the Modern Manufacturing Initiative Collaboration Stream in March 2022. Grant funding under this stream is provided to a small number of transformational projects that aim to create and facilitate collaborative developments, such as the proposed partnership between MOPL and Arafura.

The development of the Minhub Project is also being facilitated by the office of the Northern Territory Major Projects Commissioner.



### Timing and delivery

The Minhub Project is proposed as a collaborative, staged development strategy to align with the key feedstock projects and the development of Arafura's Nolans Project. The Minhub Project Feasibility Study is expected to be completed early in the 2024 calendar year.

### Rare earths from mineral sands

Mineral sand deposits often contain small amounts of monazite and xenotime (high-grade rare earth minerals) in addition to other valuable minerals (including zircon, rutile and ilmenite).

High-grade rare earth minerals monazite and xenotime, recovered from Australia's mineral sands deposits have historically been a major value component of mineral sands deposits and a significant contributor as feedstocks for the global rare earth market. Increased low-cost Chinese production from the 1980's led to lower rare earth prices and a wind down and closure of rare earth processing operations in the western world.

For a period of approximately 20 years most of Australia's monazite production was returned to the pit as waste or stockpiled. The dramatic growth in Chinese domestic mineral processing since the early 2000's has led to the development of a global trade in unprocessed or partly processed zircon rich concentrates to China. This concentrate contains significant rare earths mineral content as a by-product.

With the shift towards global electrification and de-carbonisation, the rare earths used in rare earth magnets have become a major value driver for new mineral sands projects, particularly from the rare earth rich mineral sands deposits of Victoria's Gippsland and Murray Basins

### MOPL Transaction

FYI has executed a binding heads of agreement with Mr. Neil O'Loughlin (the **Vendor**) where it is granted an exclusivity period of 3 months (with extensions) to complete due diligence, satisfy certain conditions precedent and finalise a share purchase agreement to acquire up to 100% of MOPL (**HOA**). The key terms and conditions of the HOA are as follows:

- (a) **Exclusivity** – FYI has paid a fee of \$200,000 in consideration for the grant by Minhub of the exclusive right to deal during a period of 3 months after signing for FYI to undertake due diligence on Minhub and the project. The funds must be directed by Minhub towards furthering the Minhub strategy and on due diligence development after consultation with FYI. The 3-month period may be extended for a further period up to an additional 3 months, at a fee of \$50,000 per month.



- (b) **Share Purchase Agreement** – At any time during the exclusivity period, FYI may elect to proceed to prepare a formal unconditional agreement to purchase the Shares by providing MOPL and the Vendor with a formal Share Purchase Agreement (**SPA**). The key terms of the SPA (and therefore the key terms of the transaction) are as follows:
- (i) FYI is to acquire the MOPL Shares through the following payments:
    - A. On execution of the SPA, the Vendor must transfer 50% of MOPL's share capital (**First Tranche**) for a consideration of 4,000,000 FYI shares (with a voluntary escrow period of 12 months). FYI commits to fund a minimum of \$450,000 (in addition to the Exclusivity Fee) towards funding of the feasibility study for the processing facility (**Feasibility Study**).
    - B. At the election of FYI, and conditional upon completion of a successful Feasibility Study, the remaining 50% of MOPL's share capital (**Second Tranche**) may be purchased by FYI, on the issue of 15,000,000 FYI shares (with a voluntary escrow period of 12 months) or the payment of \$2.5 million at the Vendor's discretion.
  - (ii) FYI agrees to co-fund up to \$1.1 million over a period of 18 months (with Arafura paying 50% of the costs) with an additional co-funding of a provisional amount of \$500,000 for cost overruns (these requirements are subject to change).
  - (iii) If FYI does not elect to proceed with the Second Tranche and ceases development of the facility, FYI will transfer the share capital in MOPL acquired under the First Tranche back to the Vendor on a cost recovery basis.
  - (iv) MOPL will be managed by Mr. Neil O'Loughlin under a management contract to be agreed as a condition precedent.
  - (v) The SPA will include certain obligations with respect to restrictions on the sale of the shares in MOPL including, that if FYI ceases funding prior to completion of the Feasibility Study then FYI will transfer the share capital in MOPL acquired under the First Tranche back to the Vendor on a cost recovery basis, and that if Minhub is sold, merged or listed (in its own right or as part of a package) within 5 years, then an amount 15% of the transaction price less all FYI expenditure above \$600,000 (**Transaction Price amount**) will be paid to the Vendor if within 18 months of signing, 10% of the Transaction Price amount will be paid if within 3 years of signing or 5% of the Transaction Price amount will be paid if within 5 years of signing (subject to certain conditions).
  - (vi) The Transaction and completion under the SPA is subject to satisfaction (or waiver by FYI) of the following key conditions precedent:
    - A. An agreement being reached with Arafura in relation to collaboration and co-funding of 50% of the Feasibility Study expenditure.
    - B. An offtake option in relation to heavy mineral concentrates on terms agreed with key suppliers.
    - C. An access agreement with the Darwin Port and a binding lease over a proposed site.
    - D. The Management Contract with Mr O'Loughlin being agreed.



### Strategic Rationale for FYI

- Alongside Arafura and feedstock partners, the development of a unique integrated value-add production strategy with numerous opportunities for organic growth.
- Near term, low risk production approach.
- Complementary to FYI's core HPA activity and critical minerals production objectives.
- Harnessing strong Australian Federal and Northern Territory Government support for domestic processing/value-add of critical minerals.
- Growing demand for 'magnet feed' rare earths from geopolitically stable supply chains.
- Logistically advantageous site in Darwin close to international shipping channels and access to international markets.
- Assisting the development of sovereign supply chains for critical minerals.
- Contribute to the global transition to carbon net-zero.

### Next Steps

- MOPL will advance technical work and offtake discussions with feedstock partners and plans to complete the Feasibility Study by early 2024.
- Establishment of binding commercial arrangements between MOPL and Arafura, following confirmation of a Development Decision by Arafura.
- Site finalisation and permitting of the Minhub processing facility in Darwin.
- Continue discussions with potential rare earth customers and develop a customer outreach program.
- FYI to initiate ESG practices for the Minhub strategy.

### Investor Webinar

FYI Managing Director Roland Hill will host an investor webinar to discuss the MOPL acquisition and the Minhub Project strategy today, Tuesday 9<sup>th</sup> May 2023 at 11:30 AEST. To register for the session and for more information on the conference click here:

[https://us02web.zoom.us/webinar/register/WN\\_aBSdydfXStq78B0rSBgo\\_w](https://us02web.zoom.us/webinar/register/WN_aBSdydfXStq78B0rSBgo_w)

Investors can submit questions prior to the webinar to [simon@nwrcommunications.com.au](mailto:simon@nwrcommunications.com.au) or do so via the Q&A function on Zoom.

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This announcement is authorised for release by Roland Hill, Managing Director

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### **About FYI Resources Limited**

FYI has a critical minerals project development focus and is positioning itself to be a significant producer of high purity alumina (HPA) and is entering downstream rare earths production via the acquisition of Minhub Operations Pty Ltd.

FYI has developed an innovative process design for the integrated production of high quality, high purity alumina (HPA) predominantly for electric vehicles (lithium-ion batteries), sapphire glass (LED) and other broader tech applications.

FYI applies both an ESG and economic overlay of the Company and its operations to ensure long-term sustainability and shareholder value is created via the development of the Company's innovative, high quality, ultra-pure HPA project.

HPA is increasingly becoming the primary sought-after input material for certain high-tech products, principally for its unique characteristics and chemical properties which are required for high specification products such as LED's and other sapphire glass products.

The longer-term driver for HPA, with forecasts of >17% year on year growth (GAGR)\*, is the outlook for the burgeoning electric vehicle and static energy storage markets. HPA's primary function is in its use as a separator material between the anode and cathode in batteries to increase power, functionality and safety of battery cells. As the market grows, so will the global demand for this material.

Rare earths are used in the components of many applications and devices used daily in our modern society, such as: the screens of smart phones, computers, and flat panel televisions; the motors of computer drives; batteries of hybrid and electric cars; and new generation light bulbs. The rare earths market is forecast to grow from \$7.0b revenue in 2021, and it is expected to reach \$15.4b by 2030.\*\*

\* CRU HPA Industry Report 2021

\*\* P&S Intelligence: REE Market Report 2023

### **About Arafura Rare Earths Limited**

Arafura Rare Earths is developing the Nolans Project in the Northern Territory. The project is Australia's first vertically integrated rare earths operation, where single-site mining and processing operations (including waste disposal) will provide a secure and traceable supply chain to meet domestic and international economic and security interests and the ESG needs of global customers. Nolans has received Major Project Status from the Northern Territory Government (refer to Arafura ASX Announcement dated 31 July 2020) and support from Federal ministers (refer to Arafura ASX Announcement dated 13 May 2021).

Arafura has received conditional letters of support for debt facilities from Export Finance Australia (EFA) and the Northern Australia Infrastructure Facility (NAIF) for \$200m and \$150m respectively (refer to ASX Announcements dated 7 May 2021, 18 June 2021 and 29 March 2023). In March 2022, Arafura was awarded grant funding of \$30m under the Federal Government's Modern Manufacturing Initiative (MMI) (refer to ARU ASX Announcement dated 16 March 2022).