

# ASX ANNOUNCEMENT

## QUARTERLY ACTIVITIES REPORT AND APPENDIX 5B

25 July 2022



### HIGHLIGHTS

- **NdPr pricing continues its strong performance, closing at US\$139/kg in the quarter, providing confidence of sustained higher prices and strong Nolans project economics.**
- **MoU with Hyundai Motor Company to negotiate an offtake agreement for the sale of 1,000 to 1,500 tonnes per annum of NdPr Oxide over a 7-year term commencing 2025. Hyundai and Arafura working towards a definitive offtake agreement by September 2022 and agree to work collaboratively with relevant Export Credit Agencies.**
- **Further MoU signed with General Electric Renewable Energy (GE) for collaboration in establishing a sustainable supply chain for NdPr for the manufacture of offshore wind turbines and energy transition. GE to consider potential strategic investment.**
- **Appointment of Societe Generale and National Australia Bank as Mandated Lead Arrangers to execute Export Credit Agency driven debt funding strategy.**
- **Mandated Lead Arrangers, EFA and NAIF complete a project financing kick off meeting and site visit to Nolans.**
- **SRK Consulting appointed as the lenders' independent technical expert. The SRK preliminary due diligence report completed and reviewed by the MLAs and other lenders.**
- **Hydrometallurgical plant FEED nearing completion in readiness for tendering and engagement with construction contractors advanced.**

## NOLANS NdPr PROJECT

### Front-End Engineering and Design

Front-end engineering and design works (**FEED**) for the hydrometallurgical plant of the Nolans Project, which will provide a high level of project definition in readiness for tendering is nearing completion by Hatch. As well as the FEED in the hydrometallurgical plant, work continued during the quarter across multiple other fronts including:

- Beneficiation plant
- Sulphuric acid plant
- Power station
- Process control system
- Non-process infrastructure

Activity across these project areas is outlined below.

### Hydrometallurgical Plant

Hatch is nearing completion of the hydrometallurgical plant FEED with the following activities completed during the quarter including:

- Completion of Hazard and operability workshops and mark-up of the piping and instrumentation diagrams (**P&IDs**).
- Completion of tendering, adjudication, negotiation and selection of long-lead and critical mechanical equipment with tendering of other equipment largely completed to support the design and costing process.
- Placement of orders for detailed design and delivery of certified vendor data, including kick off meetings with vendors, for the majority of the long-lead or critical mechanical equipment.
- Completion of the hydrometallurgical plant layout, predominately to the 60% design review status with material take-offs being commenced for all disciplines.
- Value engineering on the hydrometallurgical plant, including:
  - Optimisation of the plant layout which has reduced the footprint of the overall plant site by 200m length and 100m width.
  - Rationalisation of individual area layouts to reduce structural steel and concrete while improving constructability and operability.
  - Selection of the high efficiency vibratory shear enhanced process (VSEP) for purification of the phosphoric acid product, followed by ongoing confirmatory testing.
  - Rationalisation site tankage to reduce the proportion of site fabricated tankage and maximise off-site built tankage.
  - Reviewing of technology for evaporators and similar equipment with the selection of thermal vapour recompression for some duties, coupled with air-cooled condensers, to reduce site energy and water consumption.
  - Careful selection of materials of construction for equipment, tankage and piping to balance serviceability with cost.
- Completion of a fire and risk engineering review by the insurers nominated risk engineer.
- Finalisation of the hydrometallurgical plant construction scope of work and contract ready for the commencement of tendering in July 2022.

## Beneficiation Plant

As part of the FEED process an updated engineering study was completed by GR Engineering Services to consider value improvement opportunities and other optimisation in the beneficiation plant including:

- Reduction of plant footprint and conveyor lengths by optimising the size of the coarse ore bin.
- Deferral of the installation of an on-stream analyser and the use of mass recovery as a measure of flotation performance.
- Updating of the process flowsheet to include the addition of a froth stability modifier, which in turn greatly increased the tailing disposal slurry density.
- Updating of the flotation residence time and flotation cell sizing to match the latest flotation test work optimisation.

Deliverables from the engineering study included updated process flowsheets, mechanical equipment list, beneficiation plant layout and indicative capital cost estimate and construction schedule. From this study the optimised plant footprint will be used to reduce bulk earthworks quantities for the process plant with an aim to reduce construction costs.

## Sulphuric Acid Plant

Hatch continued the FEED engineering and procurement for the sulphuric acid plant during the quarter. As part of this, tenders were received from a number of vendors for the supply of the sulphuric acid plant, including from low - cost countries for manufacture. These tender submissions have been reviewed and are generally in-line with savings expectations when compared to the modular sulphuric acid plant proposed in the definitive feasibility study.

Hatch also continued the balance of plant engineering in parallel with the tendering of the sulphuric acid plant supply completing process flow diagrams, mechanical equipment list, tendering of supplementary mechanical equipment and completion of hazard and operability reviews.

## Power Station

Alice Springs-based consultant, Ekistica have completed their scope of work to develop a detailed carbon reduction pathway for power generation at the Nolans Project. This has included development of a draft term sheet for a power purchase agreement to drive reduction in greenhouse gases over the course of the project's power station contract.

Additionally, the Arafura has completed the development of the scope of work for tendering of the power station, which includes site steam generation, ready for tendering to independent power providers (IPPs). Kick off meetings have been held with short-listed IPPs with formal tendering to commence in the third quarter ready for award following FID.

Project Consultancy Services has been engaged to assist with tendering, evaluation and negotiation of the gas agreement for the Project. Project Consultancy Services is a highly experienced provider of independent advice for commercial, economic and regulatory services to government, regulators, oil and gas, mining, industrial and commercial energy users. It is intended that a gas supply term-sheet will be agreed prior to FID with a gas provider to the Amadeus Gas Pipeline.

## Non-Process Infrastructure

Non-process infrastructure (NPI) design and tendering progressed in several areas during the quarter, including:

- Bulk earthworks engineering including:
  - Approved for tender design for the site access road.
  - Approved for tender design for the mine access road.
  - Approved for tender design for the village site.
  - Approved for tender design for the mine and plant areas surface water management.
  - Development of an updated concept design for the process plant site, aligning with the natural topography and reduced site footprint to minimise earthworks quantities.
  - Updating of bulk earthworks quantity estimates across the project.
- Tendering and adjudication of the minor earthworks packages with a focus local earthworks contractors.
- Commencement of detailed bore designs for the southern basin bore and development of the scope of work for bore drilling, including the large number of monitoring bores for the borefield.
- Development of the borefield headworks and pumping systems designs.
- Tendering of the borefield headworks, main pipeline installation and pipeline supply contracts.
- Updating of the accommodation village strategy to split the fly-camp, construction camp rental and permanent village supply into separate packages. This has included continuing work with NT Link, a local transportable building manufacturer and village installer, initially to negotiate for the supply of the construction camp.
- Completion of an update to the residue storage facility preliminary design to cater for the increased life of mine residue tonnages and the changes to the slurry density delivered to the facility.
- Commencement of an independent peer review, which will also be submitted as part of the mine management plan approval process, of the surface water management and residue storage facility designs.
- Updating of the design of the intersection between the Nolans site access road and Stuart Highway, following feedback from the Department of Planning and Infrastructure, with discussions ongoing.
- Continuation of the communications system design, including temporary communications for early works, considering both microwave and fibre optic options.
- Tendering of modular and steel framed plant site buildings.
- Further engagement with APA Group around the development of designs and completion of detailed risk assessments in line with AS2885 requirements for facilities located close to an underground gas pipeline.
- Updating of the site water balance.

## Project Execution

Preparation for project execution continued during the quarter including the following activities:

- Commencement of tendering of the operational logistics contract for the transport of reagents and other supplies to site and the transport of rare earth and phosphoric acid products to port.
- Tendering of an over-arching construction logistics contract, including updating of the route surveys from Darwin, Adelaide and other import locations to better understand to possible transport window for modularised and large equipment.
- Adjudication of the laboratory build-own-operate contract.

- Finalisation and completion of an internal audit of the construction health and safety management plan to meet the requirements of, and for submission to, NT WorkSafe.
- Tendering of minor contracts for construction support, such as fuel supply, generating set rental, temporary facilities, temporary communications etc. with tendering of these contracts to continue through to the commencement of construction.
- Preparation of a high-level commissioning strategy and plan for the Project, focussing on the processing plant, to feed into the operational readiness planning and overarching project schedule.
- Updating of the project construction schedule in-line with information from equipment vendors, suppliers and potential construction contractors with an updated schedule planned to be released in the next quarter.

### Hydrometallurgical Plant Tendering

Early engagement with potential construction contractors for the hydrometallurgical plant have been ongoing as part of FEED. Given the current climate for construction work, feedback from potential construction contractors indicate that preference is to develop fixed prices for works as part of an alliance contracting model rather than in a fully competitive tendering situation. Such an alliance style model allows for clearer understanding of the scope, negotiation of the optimal risk sharing between the contractor and the Company as well as allowing time for the contractor to have an influence on the design with an aim to reducing the cost and schedule for the construction.

The Company has addressed this by adopting a hybrid tendering for an alliance approach with the following characteristics:

- Call for proposals from a range of construction contractors for a competitive review of the engineer's preliminary estimate and schedule arising from the FEED process clearly identifying a series of key performance indicators and norms that are construction cost drivers such as manhour rates, productivity factors, installation norms, overheads etc.
- Selection of two contractors to carry out the competitive review of the engineer's preliminary estimate and schedule and develop a target cost estimate for the construction scope of work.
- Based on the target cost estimate along with identified opportunities for cost saving and non-economic factors such as safety, indigenous engagement, local sub-contractor engagement etc., select the preferred contractor and enter into an alliance style contract.
- Over the following period through to FID, work collaboratively with the preferred contractor to optimise the project, agree the risk sharing between the contractor and the Company and agree a fixed price contract for the construction of the works.

Of this process the Company has completed the selection of the two contractors to carry out the competitive review process and this review will commence in August 2022.

### Capital and Operating Cost Estimates

As part of continuing the FEED, including equipment tendering, the Company continues to monitor pricing, quantities and market conditions and their potential impact on the capital and operating costs for the Project. Cost pressures on the capital cost are evident in the following areas:

- Construction labour rates, which continue to be higher than estimated for the purposes of the definitive feasibility study (DFS) in 2019 and the Nolans Project Update (refer ASX announcement dated 11 May 2021) (**Project Update**). The Company is currently seeing signs that future labour rates may be reduced from their current high level.
- Raw material costs are reducing from their historically high levels, which is reducing pressure on the prices of mechanical equipment and bulk materials required for the Project, however this has not yet flowed through

into updated pricing from vendors and suppliers. This is also impacting delivery times for some of the key equipment for the Project.

- Professional engineering and project management costs and availability of suitably experienced personnel.
- Construction consumables, such as fuel, messing, general consumables and other goods, which are impacted in similar ways to general goods by higher than anticipated inflation.

To partially offset these increasing costs the Company is currently working with Hatch as well as construction contractors with focus on value improvement processes such as:

- Rationalising designs to reduce bulk quantities such as earthworks, concrete, structural steel, piping and electrical cables.
- Investigating options for modularisation from suppliers such that on-site construction effort is reduced, and off-site pre-assembly is maximised.
- Investigating build-own-operate options for additional areas of the Project such as the permanent village, water treatment plants etc.

The Company will carry out further work including tendering of main contracts to assess ongoing impacts. Available information and analysis indicate that costs remain within the accuracy range provided in the Project Update.

As well as monitoring potential increases in capital costs, Arafura continues to review operating cost inputs and their potential impacts on operating cost estimates. Operating costs will continue to be monitored and updates provided.

The Company is finalising the design of the Project as part of the FEED process and continues to refine and develop final capital and operating cost estimates as it moves towards FID. Details of any material financial impact on the Project that differs from the Project Update will be announced to the ASX once an overall assessment of the impact of those factors has been completed, prior to FID.

## Technology Development

A modest flotation test work program was completed during the quarter to investigate the impact of site water, desalination brine and recirculated water on flotation performance, and the impact of diesel fuel additives on froth stability. The test program also revisited bulk vendor tailings dewater testing aimed at decreasing beneficiation plant water consumption.

- Site water was found to improve flotation performance relative to Perth tap water, although increased collector addition was required to realize the improved performance.
- Application of a post pilot optimised reagent scheme included a significant reduction in sodium silicate and the addition of diesel to improve the froth consistency and downstream dewatering of both the concentrate and tailings products.
- Bulk tailings thickener testing was successful at increasing the thickener underflow solids content from 30% w/w solids to greater than 60% w/w solids. This translates to a reduction of around 0.8 GL per annum in raw water consumption by the beneficiation plant under nominal conditions.

The results of this work will be incorporated into the detailed design of the beneficiation plant.

During the quarter, Arafura awarded the Phosphoric Acid Purification vendor package to New Logic Research (NLR) using their vibratory shear enhanced processing (VSEP) technology for phosphoric acid purification, which is likely to offer significant cost benefits over traditional nano-filtration. The key advantage relates to its capacity to operate in the presence of solids and with the formation of solids within the system which allows for removal of ultra-filtration and operation with calcium sulphate saturation greatly reducing the need for dilution and later evaporation.

The initial aspect of the equipment supply agreement includes a program of test work to confirm the configuration and performance of the phosphoric acid purification flow sheet. Testing commenced during the quarter and will continue through the next.

### Project Schedule

Global macro-economic effects, particularly on supply chains and long-lead equipment deliveries, are impacting on the delivery schedule for the Project. This impact has led to the adoption of a plan which incorporated the commencement of procurement for long-lead equipment in advance of commencement of early works construction, as these items have moved onto the critical path.

The Company has been working through the procurement and construction schedule, updating it based on input from equipment vendors around fabrication lead times and level of modularisation and assembly, construction contractors around sequencing and construction norms as well as building in any impacts from the commissioning strategy that has been recently developed. The impact of these macro-economic factors on the project schedule is presented in Figure 1. Key aspects of this updated schedule include:

- Commencement of long-lead procurement in September 2021.
- Adoption of the tendering process for the hydrometallurgical plant as outlined above.
- Commencement of early works construction at the beginning of 2023.
- Parallel construction and commissioning of the various parts of the plant as outlined in the recently developed commissioning strategy.
- Commencement of detailed design for the hydrometallurgical plant and sulphuric acid plants in August 2021.
- Six month early works program to construct the construction water supply and first stage of the construction camp before commencing bulk earthworks for the process plant site and site access road.
- Twenty-eight-month construction schedule from the commencement of early works through to commencement of ore commissioning.
- Six months for pre-production mining mobilisation, pre-strip, and ore mining prior to commencement of ore commissioning.





## Operational Licencing

Draft mining management plans (**MMP**) and associated environmental management plans (**EMPs**) for the Nolans Project were submitted to the Northern Territory Department of Industry, Tourism and Trade (**DITT**) in Q4 2021. Since that initial submission, several Territory government departments have requested minor document amendments as part of the assessment process. These changes have all been completed, and the final document versions will be submitted to DITT in Q3. In addition, four of the EMPs have been submitted to the federal Department of Climate Change and Energy Efficiency (DCCEE) under the Nolans federal EPBC approval and will be assessed and approved in parallel with the DITT mining authorisation. Approval of these documents and the issuance of a mining authorisation is expected in Q3 2022.

The groundwater extraction license (GWEL) application for the Project's production borefield and water supply continues to move through the regulatory process in line with published approval timeframe expectations. Approval is expected in Q3 2022.

## ESG

As a signatory to the United Nations Sustainability Goals (UN SDGs), Arafura submitted its annual Communication of Progress (CoP) documenting Arafura's alignment with the UN SDGs.

During this quarter, Arafura continued to develop renewable power options available for the Nolans Project power station. Renewable energy generation technology is changing rapidly, and Arafura will ensure a transition away from fossil fuels as soon as possible for the project.

## DOMESTIC STAKEHOLDER ENGAGEMENT

Working with the NT government, the Company is reviewing and updating its local and indigenous employment strategies. These strategies are beginning well in advance of construction to ensure these long lead time strategies are well established through construction and into site operations.

Arafura met with the Central Land Council and a local indigenous ranger group to discuss the project, its job potentials and plans for environment management and how the local ranger teams can work with Arafura through the mine development and operations. It was agreed to meet on country to continue these discussions within the next two quarters.

## EXPLORATION

### Nolans

Refinements to the company's exploration database and re-modelling of the central part of the Nolans orebody continued throughout the quarter. This work forms part of readiness for detailed auditing and due diligence, as well as developing a block model that is more mine planning friendly to allow better short-term production planning once mining commences. In addition to this work, a detailed gravity survey of the orebody and surrounding area is about 50% complete.

## MACROECONOMIC DEVELOPMENTS

### Domestic Markets

In May, the Australian Labor Party won government from the incumbent coalition. The incoming government has strong policy alignment with Arafura including a focus on developing the critical minerals industry, local manufacturing and jobs, and supply chain security.

## Global Markets

The quarter saw strong interest in the sector, against increasing concerns and uncertainty from sharply rising interest rates globally and the continuing energy challenges exacerbated by the tensions with Russia and its invasion of Ukraine. The emphasis was firmly on renewable power generation and e-mobility, and the associated critical minerals supply chains needed to facilitate the shift for carbon emissions reduction. The EU, Germany, Belgium, the Netherlands and Denmark are to launch an initiative to increase offshore wind capacity tenfold to 150GW by 2050. From a 15GW capacity today to 150GW in 28 years — it will provide 150 million European households with their annual electricity demand.

April saw the interim Australia-India Cooperation and Trade Agreement being signed to support further growth and investment in Australia's critical minerals and resources sector (and with rare earths specifically mentioned). In May, the

Quad Leaders Tokyo Summit and the World Economic Forum in Davos were held, followed by Biden's launch of the Indo-Pacific Economic Framework for Prosperity (IPEF) in Tokyo, with a dozen initial partners, including South Korea, India, United States and Australia. Within Europe, the EU Commission's REPowerEU plan was released, as well as the North Sea Energy Declaration which aims to accelerate investment in renewable energy-based sources.

The sheer quantities of raw materials needed for renewable energy technologies, like wind turbines, are expected to increase drastically in the coming decades, and the need to diversify international supplies while ensuring ESG standards are met, is a major challenge – one which requires close co-operation in the supply and processing of the critical minerals used in the renewable energy sector.

## OFFTAKE AND PROJECT FUNDING

### Offtake

On 19 May a non-binding MoU for NdPr offtake was signed with South Korean automotive manufacturer Hyundai Motor Company. The MoU is for approximately 1,000 – 1,500 tonnes per annum of NdPr oxide commencing in 2025 for a seven-year term (refer to ASX announcement 19 May 2022). The framework provided by the MoU has enabled the parties to steadily advance the offtake agreement negotiations during the quarter.

Joining Hyundai as a potential foundation offtake customer was General Electric Renewable Energy (GE) with a non-binding MoU signed with Arafura (refer to ASX announcement dated 12 July 2022) during the Sydney Energy Forum. The MoU provides a framework for collaboration in the establishment of a sustainable supply chain for NdPr used in the manufacture of offshore wind turbines. Parties have agreed to negotiation of a long-term sale and purchase agreement for GE to purchase Arafura NdPr, also outlined in the MoU is a potential strategic investment by GE in Arafura.



*Arafura Managing Director, Gavin Lockyer signing the MoU with GE VP & Chief Technology Officer, Danielle Merfeld. In attendance Minister for Trade and Tourism Don Farrell, Minister for Resources and Northern Australia Madeleine King and US Secretary of Energy Jennifer Granholm.*

During the Sydney Energy Forum and prior to the MoU signing with GE it was announced by Minister for Trade and Tourism Don Farrell and Minister for Resources and Northern Australia Madeleine King that Australia had joined the Minerals Security Partnership with United States, Canada, Finland, France, Germany, Japan, the Republic of Korea, Sweden, the United Kingdom and the European Commission. The partnership will seek to develop and secure global supply chains for minerals that are crucial to clean energy technology and the global transition to clean energy.

The non-binding MoU's have secured customer commitment to negotiate long term sales agreements (LTSA) from two of the world's global leaders in their respective industries, providing Arafura both industry and geographic product supply diversification. The remaining offtake parties which Arafura is advancing negotiations with will be in good company amongst these groups. Face to face meetings with several groups in Europe are being arranged in the next quarter with the aim to secure the remaining offtake requirements from this region.

## Project Funding

Advancement of the offtake arrangements with Hyundai Motor Company and General Electric Company have provided considerable momentum with project funding activities. Arafura continues to advance arrangements with other offtake targets with similar industry standing who are also aligned with Arafura's objective of creating an alternative rare earths value chain with direct links from the oxide producer to the end user. The offtake strategy is central to the funding strategy and the alignment with quality groups for long term offtake including Hyundai Motor Company and General Electric underwrites the participation of quality commercial lenders and export credit agencies (ECAs) both here in Australia and the home markets for the offtake partners. Arafura continues to advance offtake agreements to structure terms that are compatible with its debt funding objectives, central to this is ensuring Arafura is engaged with groups who understand that bankable LTSA for NdPr will need to go beyond the customary terms in the standard Master Agreements regularly utilised by OEMs or Tier 1 component makers.

In April, National Australia Bank and Societe Generale were appointed as Mandated Lead Arrangers (MLA) for the purpose of arranging debt financing facilities for the Nolans project (refer ASX Announcement dated 28 April 2022). The MLAs have been engaged to arrange and syndicate a finance facility targeting debt funding in the order of 60% of the estimated total development cost for the Nolans project. Under the terms of the mandate the MLAs will seek to arrange debt finance of approximately US\$510m and is intended to include:

- US\$150m provided by the initial MLAs (on a best-efforts basis),
- Export credit agency finance with a specific focus on untied funding linked to NdPr LTSA. ECA participation via guarantees will mean commercial loans will be on a covered and uncovered basis and will provide increased liquidity for the debt funding, and
- To the extent required further financing through additional MLA bank(s) and/ or via syndication.

In addition to the targeted \$510m financing from commercial lenders, the MLAs will work to structure and harmonise these facilities with potential funding via the letters of support from Export Finance Australia (EFA) and the Northern Australia Infrastructure Facility (NAIF) for senior debt facilities of up to A\$200m and A\$100m respectively for 15- year term facilities (refer ASX Announcement dated 7 May 2021 and 18 June 2021). All financing is conditional on completion of a successful due diligence process, agreement of terms and conditions, entry into binding facility agreements and credit approval.

In May representatives from the MLAs, EFA and NAIF along with key Arafura team members and advisors completed a project financing kick off meeting held in Alice Springs and incorporated a site visit to Nolans. During the quarter the lenders legal counsel and independent market consultants were also appointed. SRK Consulting have been appointed as the lenders' independent technical expert. The SRK preliminary due diligence report which was focussed on potential 'red flag' issues, has been completed and reviewed by the MLAs and other lenders. The lenders have also agreed with SRK an update to the scope of work for the full due diligence review which has commenced and is anticipated to be largely completed during the next quarter.

The MoU with GE (refer ASX Announcement dated 12 July 2022) outlines a potential strategic investment by GE in Arafura to be negotiated in conjunction with the NdPr sale and purchase agreement. Discussion with offtake partners in addition to GE also incorporate the possibility for strategic equity investment in the upstream value chain. Strategic equity investment in the Nolans project is viewed positively by ECAs and lenders and if secured will provide a useful cornerstone to build the required project equity around.

Figure 2: Nolans Project Funding sets out the proposed funding structure and shows the interrelationship between debt sources, ECAs and offtake including strategic equity. Central to the funding strategy is leveraging the link between NdPr and critical materials for energy transition in EVs and renewables.

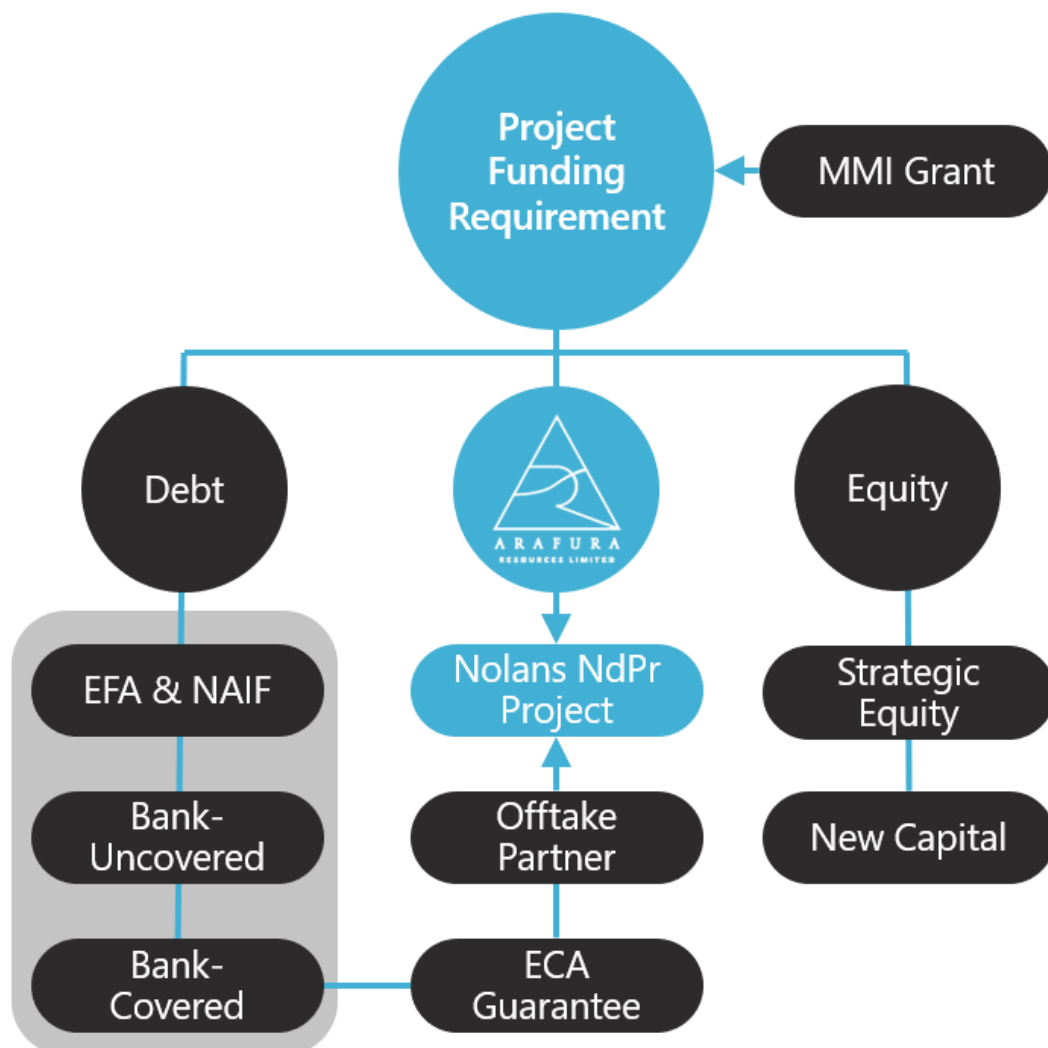


Figure 2: Nolans Project Funding

Arafura is currently in the process of assessing the opportunity to link the Nolans project debt funding under the Green Financing Framework. Green loans are assessed under the Sustainability Linked Loan Principals through the Loan Market Association and the Asia Pacific Loan Market Association eligibility criteria. Green loans cover a range of applications that are targeted at providing environmental benefits including clean transportation, renewable energy/energy efficiency and climate change adaptation. Arafura and its debt advisors are currently assessing the direct link of NdPr offtake with EV and wind turbine producers with the relevant eligibility requirements. Arafura will look to leverage its NdPr oxide to end user business model along with its strong ESG credentials to meet the requirements for a Green Loan. The Green Loan opportunity will enable Arafura to embed its sustainability goals in its financing strategy and will also have flow on benefits for engagement with equity markets and offtakers.

In the backdrop of sustained strong NdPr pricing, the Nolans project economics published in the Nolans Project Update (refer to ASX Announcement dated 11 May 2021) appears very conservative, the long-term NdPr oxide price of US\$87/kg used in the update is considerably lower than the current spot price of \$139/kg. NdPr pricing has been sustained at higher prices for a period of time, which is reflected in positive engagement with lenders and institutional investors.

Arafura has a number of key activities running concurrently including offtake, debt funding, strategic equity investment and ECA engagement in several regions. No formal or binding agreements with these parties have been entered into and negotiations with all groups are incomplete. The Company, at this stage, has no certainty as to the timing and likelihood of successfully concluding binding agreements being entered into. Details of these arrangements will be announced to ASX if (and when) formal agreements have been executed.

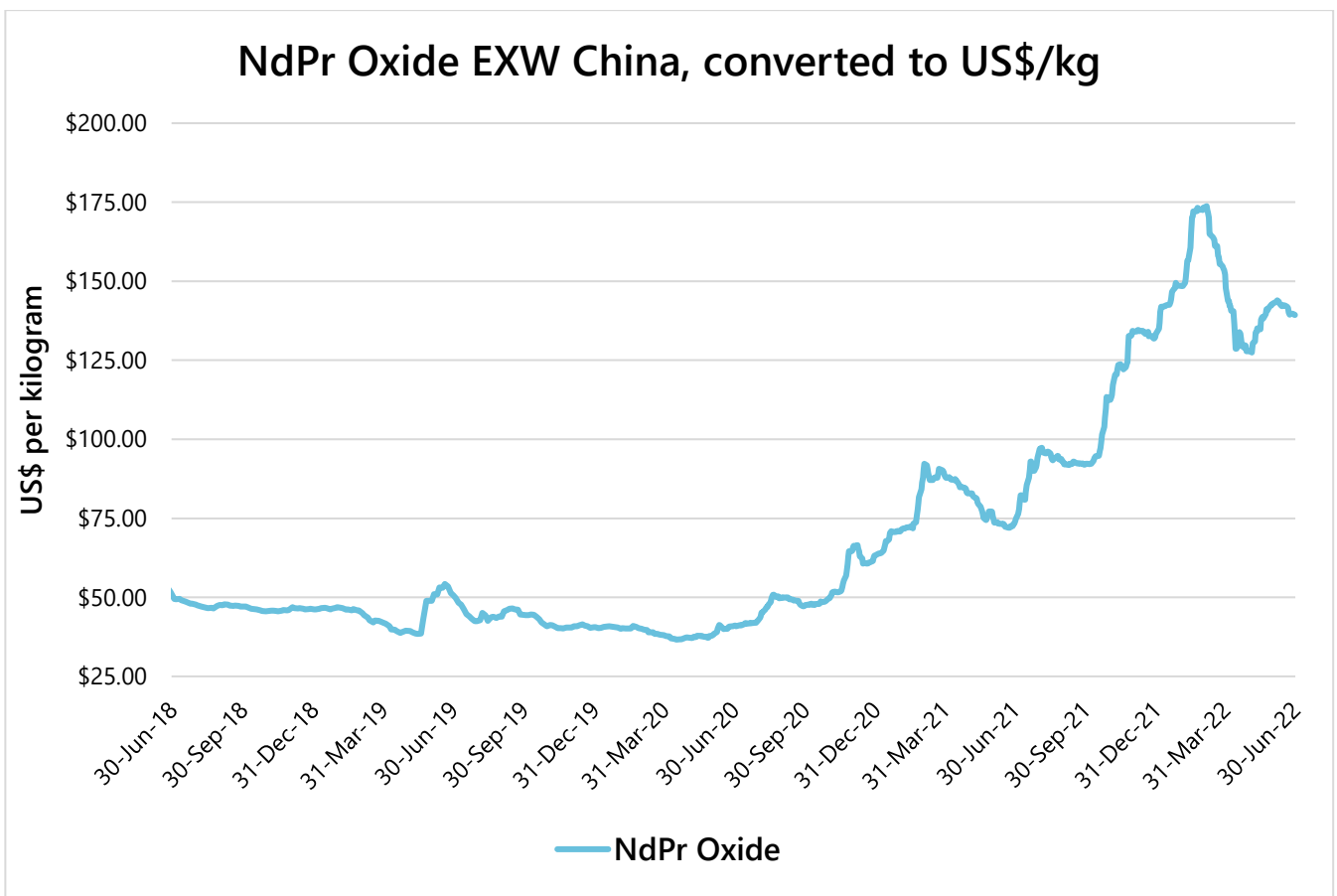


**NdPr Market**

The price of NdPr oxide decreased 9% per cent from US\$152 per kg to end at US\$139 per kg with the spot price gradually trended down during the quarter after a prolonged period of higher prices. The price deterioration during the quarter was mainly due to softer China domestic demand for NdPr and permanent magnets during extended lockdowns in April and May affecting economic and industrial activity, along with restricted transport and logistic services throughout the country.

The demand for NdFeB magnets is expected to improve over the coming quarter with resumption of downstream production, manufacturers restocking and fresh orders to fill in Q3. Chinese magnet production remains stable and exports to Germany, South Korea and the US are at levels of the previous quarter driven by multisector end use applications. The domestic rare earth market remains optimistic about the demand from the renewable sector and supply is tight with lack of new primary and secondary supply sources for NdPr. Separation plants are mostly holding spot inventory coupled with the inability of existing producers to increase their output in the 2H, creates a neodymium-praseodymium (NdPr) oxide shortage.

The strategic reorganization of Chinas rare earth assets and the formation of China Rare Earth Group has created a leading SOE to oversee the management and operations in the southern region and the entity has inherited from China Southern Rare Earth Group up to sixty rare earth deposits in Jiangxi and Sichuan, of which 58 are currently suspended. China Rare Earth Group’s subsidiary Ganzhou Rare Earth is currently undergoing land restoration, whilst 56 ionic clay deposits in Jiangxi said remain in operation according to sources.



**Figure 3: NdPr Oxide Price EXW China inclusive VAT converted to US\$**

## **CORPORATE**

### **Cash Position**

As at 30 June 2022, Arafura had \$24.7 million in cash reserves – a strong financial position that enabled the Company to continue FEED work for the Nolans Project while progressing offtake negotiations and project financing activities aligned to a development timeline targeting FID in the second half of 2022.

During the quarter the Company spent ~\$0.6 million on exploration and evaluation activities, ~\$1.7 million on corporate, administration and business development costs and ~\$8.7 million on project development activities which relates to FEED. Further details are available in the attached Appendix 5B.

Average monthly cash expenditure for the quarter ended 30 June 2022 was \$2.9 million, slightly higher than the previous quarter as a result on ongoing FEED activities.

Payments of \$240,000 reported in Item 6.1 of the attached Appendix 5B relate to salaries, fees and superannuation paid to Directors.

### **COVID-19**

Arafura continues to diligently monitor changes to the status of COVID-19 and all State, Territory and Federal Government advice around social distancing, travel restrictions, contact tracing and vaccination. Staff and contractors are advised of any updates to policies and procedures to ensure alignment with recommendations as Australia opens its borders and international and domestic travel resumes.

### **Tenements**

In accordance with ASX Listing Rule 5.3, please refer to Appendix 1 for a listing of all tenement holdings.

### **Forward Looking Statements**

This report includes forward-looking statements. These statements relate to the Company's expectations, beliefs, intentions or strategies regarding the future. These statements can be identified by the use of words like "will", "progress", "anticipate", "intend", "expect", "may", "seek", "towards", "enable" and similar words or expressions containing same.

The forward-looking statements reflect the Company's views and assumptions with respect to future events as of the date of this announcement and are subject to a variety of unpredictable risks, uncertainties, and other unknowns. Actual and future results and trends could differ materially from those set forth in such statements due to various factors, many of which are beyond our ability to control or predict. Given these uncertainties, no one should place undue reliance on any forward-looking statements attributable to the Company, or any of its affiliates or persons acting on its behalf. The Company does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Neither the Company nor any other person gives any representation, warranty, assurance, nor will guarantee that the occurrence of the events expressed or implied in any forward-looking statement will actually occur. To the maximum extent permitted by law, the Company and each of its advisors, affiliates, related bodies corporate, directors, officers, partners, employees and agents disclaim any responsibility for the accuracy or completeness of any forward-looking statements whether as a result of new information, future events or results or otherwise.

### **Production Targets and Forecast Financial Information**

The information in this report that relates to production targets and forecast financial information is extracted from the Company's ASX announcement dated 11 May 2021 (Nolans Project Update). The production target is based on

12% Proved Reserves, 62% Probable Reserves and 26% inferred resources as reported in the Company's ASX announcement dated 11 May 2021. There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised. Arafura confirms that all material assumptions underpinning the production target and forecast financial information derived from the production target set out in the Company's ASX announcement dated 11 May 2021 (including any assumptions referred to in the Company's ASX announcement dated 11 May 2021 that were sourced from the DFS as set out in the Company's ASX announcement dated 7 February 2019 (Nolans Project Definitive Feasibility Study) or from the Updated Mining Study as set out in the Company's ASX announcement dated 16 March 2020 (Major Increase in Mine Life for the Nolans Project)), continue to apply and have not materially changed.



## APPENDIX 5B

### Mining exploration entity and oil and gas exploration entity quarterly report

<b>Name of entity</b>	
Arafura Resources Ltd	
<b>ABN</b>	<b>Quarter ended ("current quarter")</b>
22 080 933 455	30 June 2022

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (12 months) \$A'000</b>
<b>1.</b>	<b>Cash flows from operating activities</b>		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	-	-
	(b) development	(8,702)	(19,738)
	(c) production	-	-
	(d) staff costs	(837)	(2,867)
	(e) administration and corporate costs	(836)	(4,515)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	27	133
1.5	Interest and other costs of finance paid	(7)	(20)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	14	14
1.8	Other (provide details if material)	-	-
<b>1.9</b>	<b>Net cash from / (used in) operating activities</b>	<b>(10,341)</b>	<b>(26,993)</b>

<b>2.</b>	<b>Cash flows from investing activities</b>	-	-
2.1	Payments to acquire:		
	(a) entities		
	(b) tenements and bonds	-	-
	(c) property, plant and equipment	(52)	(160)
	(d) exploration and evaluation	(623)	(4,137)
	(e) investments	-	-
	(f) other non-current assets	(132)	(132)
2.2	Proceeds from the disposal of:	-	-
	(a) entities		
	(b) tenements	-	-
	(c) property, plant and equipment	20	34
	(d) investments	-	-
	(e) other non-current assets	117	117
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (security deposits)	376	370
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(294)</b>	<b>(3,908)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	1,869	47,191
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(2,158)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (repayment of lease liabilities)	(49)	(239)
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>1,820</b>	<b>44,794</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	33,496	10,788
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(10,341)	(26,993)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(294)	(3,908)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	1,820	44,794
4.5	Effect of movement in exchange rates on cash held	-	-
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>24,681</b>	<b>24,681</b>

<b>5.</b>	<b>Reconciliation of cash and cash equivalents</b>	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
	at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts		
5.1	Bank balances	5,618	1,458
5.2	Call deposits	19,063	32,038
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>24,681</b>	<b>33,496</b>

<b>6.</b>	<b>Payments to related parties of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1	Aggregate amount of payments to related parties and their associates included in item 1	(240)
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

*Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments*

Salaries, fees and superannuation of Directors of the Company.

7.	<b>Financing facilities</b> <i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	<b>Total financing facilities</b>	-	-
7.5	<b>Unused financing facilities available at quarter end</b>		-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		
Not applicable.			

8.	<b>Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1	Net cash from / (used in) operating activities (item 1.9)	(10,341)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(623)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(10,964)
8.4	Cash and cash equivalents at quarter end (item 4.6)	24,681
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	24,681
8.7	<b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	2.3
<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>		
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
	8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
	Answer: Not applicable.	
	8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
	Answer: Not applicable.	
	8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?	
	Answer: Not applicable.	
<i>Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.</i>		

## COMPLIANCE STATEMENT

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- This statement gives a true and fair view of the matters disclosed.

Date: 25/07/2022

Authorised by: The Audit Committee

(Name of body or officer authorising release – see note 4)

## Notes

- (1) This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- (2) If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- (3) Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- (4) If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – e.g., Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- (5) If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.

## APPENDIX A – MINING TENEMENTS HELD AS AT 30 JUNE 2022

Tenement reference	Project	Holder	Nature of interest	Interest at beginning of quarter	Interest at end of quarter	Notes
ML 26659 ML 30702 ML 30703 ML 30704 ML 32411 ML 32412 ML 32413 ML 32414 ML 32415 ML 32416	Nolans, NT	Arafura Nolans Project Pty Ltd	Mineral Lease	100% 100% 100% 100% 100% 100% 100% 100% 100% 100%	100% 100% 100% 100% 100% 100% 100% 100% 100% 100%	
EL 28473 EL 28498 EL 29509 EL 31224 EL 31284 EL 31957	Aileron– Reynolds, NT	Arafura Resources Ltd	Exploration Licence	100% 100% 100% 100% 100% 100%	100% 100% 100% 100% 100% 100%	
EL 29701	Bonya JV, NT	Arafura Resources Ltd	Exploration Licence	60%	60%	Thor Mining Plc 40%, Arafura Resources Limited 60%
EL 32167	Jervois Vanadium, NT	Arafura Resources Ltd	Exploration Licence	60%	60%	Thor Mining Plc 40%, Arafura Resources Limited 60%
ML32722	Nolans, NT	Arafura Nolans Project Pty Ltd	Mineral Lease	100%	100%	Application lodged.
ML33107	Nolans, NT	Arafura Nolans Project Pty Ltd	Mineral Lease	100%	100%	Application lodged.
EMEL 32672 EMEL 32673 EMEL 32674 EMEL 32675 EMEL 32676	Nolans, NT	Arafura Nolans Project Pty Ltd	Extractive Mineral Exploration License	100%	100%	
EMP33078 EMP33079 EMP33080 EMP33081 EMP33082 EMP33083 EMP33084 EMP33085	Nolans, NT	Arafura Nolans Project Pty Ltd	Extractive Exploration Licence	100%	100%	Application lodged.