

## UPDATE ON DELIVERY OF WINGELLINA PROJECT PRE-FEASIBILITY STUDY (“PFS”)

Nico Resources Limited (ACN 649 817 425) (“Nico” or the “Company”) is pleased to present an update on the progress of the Pre-Feasibility Study (PFS) for its 100%-owned, world-class critical minerals project, Wingellina Nickel-Cobalt Project (“Wingellina Project”). The Wingellina Project forms part of the larger and 100% owned Central Musgrave Project (“CMP”) which spans across Western Australia and South Australia adjoining the Surveyor Generals Corner (the junction between Western Australia, the Northern Territory and South Australia).

### KEY HIGHLIGHTS

- Completion and release of PFS is expected before the end of the 2022 calendar year.
- Leading specialist consultants such as Worley amongst other contributors working closely with Nico’s management team to finalise the PFS.
- Overall PFS progress to date suggests that the key physical outcomes are optimal for the production of approximately 40,000tpa of contained nickel and 3,500tpa of contained cobalt for over 40 years based on ore reserves only.
- The majority of Capital and Operating cost projections have been received and are in line with Nico’s expectations.
- Renewable power solutions are currently being assessed for the onsite power supply, which can be a competitive power option that involves a Build-Own-Operate model from independent power producers (IPPs). As a result of these significant benefits that will lower emissions, Nico believes it is best to incorporate these alternatives into the PFS which has delayed the finalisation of the PFS.
- A review of the previously completed metallurgical test work programs illustrated that the significant work previously completed is suitable for the basis of the PFS flow sheet design with Mixed Hydroxide Precipitant being the ideal product for the PFS design.
- Process plant and infrastructure flowsheet design and layouts have been largely completed.
- Mine design has been reviewed, the current mining schedule remains optimized for the current resource. Following an update of the resource model in Q1 2023 an updated production schedule will be delivered to feed into the definitive feasibility study
- PFS is expected to confirm the potential for the Wingellina Project to become a globally significant producer of nickel with cobalt and manganese to feed the growing lithium-ion battery market.
- Further optimisation of the project will be undertaken to include technology advancements within the flowsheet and products
- Drilling to confirm the delineation of high-grade nickel / cobalt pits to provide higher grade feed in the earlier years, along with resource definition drilling for calcretes has also commenced (Refer to ASX NC1 announcement on 13-9-2022)

## **Commenting on the PFS update, Nico Managing Director Rod Corps said:**

*“From the commencement of the study in April 2022, we set an aggressive timetable for the completion of the PFS. The company alongside its consultants have worked tirelessly to complete the relevant work programs and we have made significant progress. Most of the Operating and Capital cost estimates have been received and are in-line with expectations. The process flowsheet and infrastructure, subject to reviewing some additional technological advances, has also been completed. As a result of the exponential advancements in the competitive production of renewable power and the significant benefits that it is likely to provide to the project we believe it is important to now include these benefits into the PFS with the completed PFS now expected to be completed during December.*

*“Importantly, with the expanded detailed understanding of all the key project elements, improved confidence, and supporting data this will allow the company to actively engage with potential strategic partners, offtakers and project financiers – a process that has now commenced. The high level of detail obtained during the current PFS study will also allow the company to potentially improve timelines for the planned bankable feasibility study (BFS).*

*Pleasingly, our initial interactions with various levels of government have also provided encouragement and recognition that our mine development plans are in line with the many government policy initiatives designed to facilitate investment in both new and greener mining development.*

*“The adoption of a low emissions process flowsheet that efficiently delivers high-quality metal products that can be used directly by manufacturers and end-users, in conjunction with targeted high renewables penetration in the project energy mix, reflects the high level of project development credentials to be delivered by the company.*

## **Capital and Operating Cost Projections**

Quotes for major equipment supplies have been received. The feed preparation CAPEX estimation for the processing plant infrastructure is largely completed. An update to the reagent and consumable costs is in progress, with consideration as to where the reagents will be sourced from and the associated freight costs. As is typical, the finalisation of all capital and operating cost estimates are expected to be the last major workstream completed ahead of the finalisation and release of the PFS

## **Metallurgical test work review and MHP production**

Shortly after listing Nico completed an internal review and market analysis of the emerging chemical metal space that is feeding the lithium-ion battery market. The genesis of this top down-market review approach was to understand what products will best serve the evolving demands of the lithium ion battery market. Our research has determined that Mixed Hydroxide Precipitant was the product best suited for this evolving battery market which was already the preferred product of the projects previous flow sheet design.

## **Plant design and site layout**

The layout of major equipment within the processing plant flowsheet is largely along with the infrastructure requirements is largely complete.

## *Process-plant trade-off studies*

A review of the proposed process plant infrastructure has been undertaken by Nico in conjunction with Worley with the intent of highlighting areas for potential optimisation. Due to the advent of the lithium-ion battery industry as a potential offtake market, an opportunity to design a flowsheet to capture additional metals such as Manganese, a product previously considered a penalty in mixed hydroxide precipitant have come to fruition. As such Nico in conjunction with Worley are reviewing the requirement for the Manganese removal circuit and the associated reagent costs. This trade off study is one of several opportunities that has presented itself to the company.

### *Off-Site Infrastructure & Logistics*

A review of all the offsite-infrastructure and logistics has been completed for the 2022 PFS. The geographical location of the project lends itself to the potential of multiple options for logistics routes. Interestingly the Wingellina Project sits almost equidistance from the ports of Adelaide, Darwin and Esperance. For the purpose of the 2022 PFS Nico has settled on the port of Adelaide however an optimisation exercise remains for the definitive feasibility study. The logistics route to market includes road transport along the existing Great Central Road to a central hub proposed for the Impadna rail siting, followed by rail transport to Adelaide.

The capital cost estimate includes an upgrade of the existing 134 km road from the site to the Great Central Road via the Giles-Mulga Park Road. In addition, the Australian Government and the Government of Western Australia have jointly committed to seal the Great Central Road with a target completion date of 2030. The sealing of the Great Central Road will contribute towards a safer, and more cost-effective logistics operation for the Wingellina Project.

### *Water Supply*

The groundwater drilling and subsequent groundwater modelling completed to date demonstrate a sustainable, high quality water supply from local paleochannels of the officer basin yielding 12 GL/a of water, sufficient to supply the Wingellina project for the first 25 years of operation. This was a result of testing the extremities of the water modelling and the Company along with its hydrological consultants believe there is ample water supply for the LOM.

### *Site Power Supply*

As a result of the significant advances in the competitiveness of the renewable energy markets a detailed evaluation of power supply arrangements is progressing with third-party engineering and consulting groups. A completion of trade-off studies is expected shortly, upon which the finalisation of the overall electricity demand-supply parameters can be ascertained. Key elements currently under consideration include the level of penetration for solar PV, wind and large-scale battery storage. The intention remains to source as much of the total power requirements as possible from renewable sources to support our goal of minimising emissions.

Recently completed positive power supply studies in the area by other operators have indicated that there is ample natural resource supply to constitute a sizable off-grid hybrid power supply. NiCo views the imbedded renewable power characteristics of its own operation with the already included thermal co-generation steam capture project characteristic as an advantageous building block to base a renewable hybrid power supply matrix for our proposed operation.

### *Government & Stakeholder Engagement*

In September 2016 after the submission of a final Public Environmental Review in August 2015, EPA approval was obtained to proceed with the implementation of the Wingellina Nickel Project proposal. The approval period was for an initial 5-year term. The company is currently in the process of applying for an additional 5-year extension.

Nico has had initial contact with the Commonwealth government department responsible for the application of "Major Project Status". Broadly speaking these designations provides for the facilitate of the numerous approval processes through the many overlapping branches of government while also ensuring recognition of the potential contribution that the project would make to social and economic development.

It is understood that the completed 2022 PFS will be a key document used to finalise our application for Major Project Status to the MPFA.

In September 2021, the Commonwealth government also created the A\$2 billion Critical Minerals Facility (managed by Export Finance Australia) to facilitate new project development. Nico's funding strategy is to develop a multi-source funding package consisting of government agencies such as Export Credit Agency (ECA).

Nico has obtained agreements with the traditional owners of the Wingellina project. Mining and access agreements as well as financial compensation benchmarks including royalties have been agreed with the relevant land councils and traditional landowners. The Wingellina ILUA sets out the rights and obligations of all parties in relation to the conduct of the Project, being the mining and processing of nickel and cobalt ores from within a designated area, within all the WA Tenement locations

Nico has continued to build on the strong relationships created by Metals X (MLX) with the traditional owners of the Wingellina Project. Strong interaction and sharing of knowledge whilst respecting the cultural diversity of the traditional landowners is key to the process.

The company recognises the importance of understanding what the traditional owners require not only from a monetary perspective but the requirement to facilitate health, education, employment and general wellbeing, whilst operating in harmony with the local community. Nico has engaged an experienced candidate for a role solely focused on stakeholder engagement and continues to foster a co-operative and collaborative approach towards maintaining our existing relationship with our traditional owner partners.

### **High grade pit delineation and mining schedule**

An RC drill programme is currently underway that involves the drilling 167 RC holes for approximately 7,000 metres of drilling on a planned 177 x 100m spaced infill drill holes. The objective of the programme is to confirm the delineation of 17 high grade pits which were derived from the Wingellina resources model in 2017. Two programs have already been undertaken with the more recent program being interrupted by covid. The current program is to confirm the delineation of the remaining 8 high-grade Ni-Co pits within the broader Ni-Co deposit to compliment the previous defined high-grade pits delineated from the 2017-2020 programs. All of the drillholes are located within 5km of the proposed processing plant site. Downhole depths will vary from 12 metres to 102 metres and average about 41 metres.

The definition of these high-grade pits will provide inputs of the production scheduling into the bankable feasibility study which will result in the processing of much higher grade material within the first 10 years which will enhance the cashflows and further improve the economics. It is anticipated the program will be completed in November.

***This announcement has been authorised for release by the Board.***

### **CONTACTS**

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## ABOUT NICO REOSURCES LIMITED

**NICO Resources Limited** is an ASX listed independent Australian nickel company focusing on Australian Nickel projects and is the 100% owner of the Central Musgrave Project (CMP) that comprising the Development ready **Wingellina (WA) Nickel-Cobalt-Scandium project** defined under the Australian Government as an **Australian Critical Minerals project**.

The CMP consists of a package of tenements hosting a **JORC Mineral Resources** in excess of 200 million tonnes, containing 1.95 million tonnes of Nickel and 150 thousand tonnes of Cobalt along with a **Probable Ore Reserve** of 164.8 million tonnes containing 1.56 million tonnes of Nickel and 123,000 tonnes of cobalt.

The project tenure is approximately 1,469km<sup>2</sup> located within Western Australia and South Australia adjoining the Surveyor Generals Corner (the junction between Western Australia, the Northern Territory and South Australia).

Wingellina is **one of the largest nickel resources and top 10 largest nickel reserves in the world**.

The 100% owned Claude Hills deposit (located less than 20km from Wingellina) also hosts a JORC (2004) defined Inferred Resources of 33.3 Mt containing 270 thousand tonnes of nickel and 23 thousand tonnes of cobalt.

The Company is currently updating the Wingellina Phase 1 Feasibility Study (P1FS) which contemplates the production of approximately 40,000 tonnes of Nickel and 3,000 tonnes of Cobalt per annum for an initial 39 years based on current defined ore reserves.

## PREVIOUS DISCLOSURE

The information in this announcement is based on the Nico Resources Limited Prospectus, which is available from the Nico Resources Limited website [www.nicoresources.com.au](http://www.nicoresources.com.au) and the ASX website [www.asx.com.au](http://www.asx.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the Prospectus and that all material assumptions and technical parameters underpinning the Prospectus continue to apply and have not materially changed.