

# ASX Release – PFS Results

22 December 2022



## PFS confirms Wingellina as a Tier 1 project capable of supplying decades of Nickel and Cobalt

Nico Resources Limited (“**Nico**” or the “**Company**”) (ASX: NC1) is pleased to announce the results of the Pre-Feasibility Study (“**PFS**”) for the flagship Wingellina Nickel-Cobalt Project (“**Wingellina**” or the “**Project**”) located in Western Australia (“**WA**”). Once operational, the Tier 1 world-class Project will produce sustainable green nickel and cobalt for the electric vehicle (“**EV**”) and energy storage industries for a minimum of 42 years.

### Highlights

- PFS confirms Wingellina to be a globally significant Tier 1 asset, characterised by its long life (initially 42 years based on current reserves), low cost (1<sup>st</sup> – 2<sup>nd</sup> quartile on global cost curve) and high operating margins (~50% to 60% EBITDA margin).
- Multi-generational Project with the potential to be one of Australia’s largest nickel-cobalt mines with a production of approximately 40,000tpa of contained nickel and 3,000tpa of contained cobalt based on current ore reserves.
- Market leading 95.3% renewable energy (wind turbines, solar PV farm and battery storage) providing majority of the power requirements. Proposal received from leading Independent Power Producer (“**IPP**”), Zenith Energy.

**Table 1: Key Financial Metrics**

|                           | Base Case  | Spot       |
|---------------------------|------------|------------|
| Post-tax NPV <sub>8</sub> | A\$3.34bn  | A\$6.54bn  |
| Post-tax IRR              | 18.02%     | 25.8%      |
| Revenue (LOM)             | \$61.70bn  | A\$81.93bn |
| Free Cash Flow (LOM)      | A\$21.37bn | A\$33.50bn |
| Payback period            | 4.9 years  | 3.5 years  |
| Average EBITDA p.a.       | A\$697m    | A\$1,110m  |

*Base Case: Wood Mackenzie & S&P Market Intelligence blended price forecast (real, 2022\$). Refer table 3 for further information. Spot: US\$30,000/t nickel price as at 9 December 2022.*

- PFS completed by engineering firm, Worley Services Pty Ltd (“**Worley**”) with the capital cost estimates as per AACE Class 4 classification (-20% to +30%).
- Proven and mature High Pressure Acid Leach (“**HPAL**”) processing facility proposed to produce an average of 180,000tpa of Mixed Hydroxide Precipitate (“**MHP**”) to feed the growing battery market.
- Based on the positive PFS results, the Company will move to a Definitive Feasibility Study (“**DFS**”) in 2023.
- Capex of A\$2.39bn plus contingency of A\$0.52bn, results in a total capital cost of A\$2.90bn (US\$1.95bn).

- Capital costs include all on-site and relevant off-site infrastructure.
- Key approvals in place.
  - A land access and development agreement signed with the Ngaanyatjarra Traditional Owners.
  - Environmental Protection Agency (“**EPA**”) approval (application for extension in progress).
  - Secured Life of Mine (LOM) water & calcrete resources.
- ~1,250 construction jobs with ~300 jobs in steady state operations, providing significant public benefits across WA, Northern Territory (“**NT**”) and South Australia (“**SA**”).
- Additional upside not included in PFS includes the likely definition of further high grade resources, potential production of Scandium, High Purity Alumina (HPA), Nickel & Cobalt Sulphates and Pre-cursor Cathode Active Material (pCAM).
- The Wingellina Project forms part of Nico’s larger, 100%-owned Central Musgrave Project which spans across WA and SA adjoining the Surveyor Generals Corner (the triple junction between WA, NT and SA).
- Preliminary Life Cycle Analysis indicates 17.8kg of CO<sub>2</sub> eq. per kg of nickel in MHP when considering 95.3% renewable energy development case.
- Renewable power solution to be provided on a Build Own Operate (“**BOO**”) model.
  - Leading IPP, Zenith Energy has submitted a BOO proposal incorporating a solar PV farm, battery energy storage system (“**BESS**”) and wind turbines.
  - De-risks project with reduced exposure to the external energy market.
  - Commences pathway to net zero scope 1 emissions well before 2050.

**Commenting on the Company’s detailed PFS study, Rod Corps, Managing Director of Nico, said:**

*“We are delighted to release such a robust PFS which confirms Wingellina as a globally significant nickel and cobalt asset, generating A\$60bn – A\$80bn in revenues over the current 42-year reserve.*

*The study outlines a robust top-tier, low-cost, long-life operation producing c.40,000 tonnes of nickel and 3,000 tonnes of cobalt per year for over 40 years based on the current reserve only. The project can deliver excellent cash flows, with an exceptional 3-4 year payback period and a post-tax NPV<sub>8</sub> of A\$3bn (base case) – A\$6bn (spot price).*

*We are also very pleased to incorporate the use of renewable power sourced from wind and solar within the PFS as we move along our pathway to net zero emissions.*

*Wingellina remains Australia’s largest undeveloped nickel-cobalt Reserve of 168.4Mt at 0.93% Ni, 0.07% Co and a global resource of 182.6Mt grading 0.92% Ni, 0.07% Co which provides for an incredible resource to reserve conversion of 92% confirming the quality of the resource.*

*We would like to acknowledge the support we have received from the Ngaanyatjarra lands people and the EPA and other government agencies in securing many of the key regulatory approvals and agreements required to build this operation. The company looks forward to working with the various government organisations and stakeholders to finalise the outstanding ancillary permits and approvals as we undertake and complete the definitive feasibility study.”*

## Competent Person's Statements

### Resources

The information in this report that relates to mineral resources, exploration targets or exploration results is based on information compiled by Mr Jake (Jacob) Russell, who was previously an employee of Metals X, and a "Competent Person" who is a Member of the Australian Institute of Geoscientists (AIG). Mr Russell has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a "Competent Person" as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Russell consents to the inclusion in this announcement of the matters based on his information and in the form and context in which it appears.

### Ore Reserves

The information in this report that relates to ore reserves is based on information compiled by Mr Michael Poepjes, who was a previous employee of Metals X in 2016, a member of the AusIMM at the time and a "Competent Person". Mr Poepjes has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to Qualify as a "Competent Person" as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Poepjes consents to the inclusion in this announcement of the matters based on his information and in the form and context in which it appears.

## PFS Cautionary Statement

The production target and forecast financial information derived from the production target referred to is based on 100% of the material form probable ore reserves. This includes all material modelled for the current mining schedule for Wingellina. There has been no modifying factors applied to the estimation as all of the material included in the study resides in the probable ore reserve category. The material assumptions used in the estimation of the production target and associated forecast financial information are set out in Table 2: Ore Reserve estimation for the Wingellina Project of the "Nico Resources Limited Technical Assessment Report of the Central Musgraves Nickel-Cobalt Project" prepared by CSA Global Mining Industry Consultants as part of the "Nico Resources Replacement Prospectus Initial Public Offer" dated 23 November as at 2021. The mineral resource and ore reserve estimates underpinning the production target were prepared by Competent Persons in accordance with the JORC Code 2012.

## Forward-looking statements:

This announcement contains certain forward-looking statements. Forward-looking statements are statements that are not historical and consist primarily of projections — statements regarding future plans, expectations and developments. Words such as "expects", "intends", "plans", "may", "could", "potential", "should", "anticipates", "likely", and "believes" and words of similar import tend to identify forward-looking statements. All statements other than those of historical facts included in this announcement are forward-looking statements, including, without limitation, statements regarding plans, strategies and objectives, anticipated production and expected costs and projections and estimates of ore reserves and mineral resources. Indications of, and guidance on future earnings, cash flows, costs, financial position and performance are also forward-looking statements. Forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to, exploration, development and operational risks. No independent third party has reviewed the reasonableness of any such statements or assumptions. None of the Company, their related bodies corporate and their respective officers, directors, employees, or advisers represent or warrant that such forward statements will be achieved or will prove to be correct or gives any warranty, express or implied, as to the accuracy, completeness, likelihood of achievement or reasonableness of any forward statement contained in this release. The Company does not undertake any obligation to release publicly any revisions to any forward-looking statement to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be

required under applicable securities laws. Recipients should form their own views as to these matters and any assumptions on which any of the forward statements are based and not place undue reliance on such statements.

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

### **Contacts**

For more information, please visit our website [www.nicoresources.com.au](http://www.nicoresources.com.au) or email [info@nicoresources.com.au](mailto:info@nicoresources.com.au).

Rod Corps  
**Managing Director**

Amanda Burgess  
**Company Secretary**



**WINGELLINA**  
NICKEL/COBALT PROJECT

**PRE-FEASIBILITY  
STUDY REPORT**

**EXECUTIVE  
SUMMARY**

DECEMBER 2022

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WINGELLINA  
NICKEL/COBALT PROJECT

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# EXECUTIVE SUMMARY

Nico is pleased to provide the results of the Wingellina PFS, key highlights include:

- » Development of a large, conventional open-cut mining operation (free-dig) that is planned at a 4.3Mtpa throughput scenario;
- » Long life (42 years) with JORC ore reserves of 168.4Mt at 0.93% Ni, 0.07% Co;
- » Low strip ratio of 1.1:1 (LOM) with the first 10 years being 0.4:1;
- » Low cash cost with Wingellina being situated in the 1st-2nd quartile of the global cost curve (Wood Mackenzie);
- » Steady-state annual production rate of 40Kt of nickel and 3Kt tonnes of cobalt in MHP for the first decade;
- » Proven and mature metallurgy HPAL circuit with no blending strategy or beneficiation plant required;
- » High nickel and cobalt recoveries of 92% and 89% respectively;
- » Low Mg and low acid consumption of less than 300Kg/t;
- » Strong ESG credentials with renewable energy of 95.3% from solar, wind and BESS;
- » Capex of A\$2.39bn plus contingency of A\$0.52bn, results in a total capital cost of A\$2.90bn (US\$1.95bn).

A summary of the key PFS parameters is shown below:

| Production Metrics      | Unit              | LOM                                | First 10 years               |
|-------------------------|-------------------|------------------------------------|------------------------------|
| Life of Mine / period   | years             | 42 years (minimum)                 | 10 years                     |
| Ore Reserve             | million tonnes/ % | 168.4Mt at 0.93% Ni, 0.07% Co      | 3.86Mt at 1.15% Ni, 0.09% Co |
| Mineral Resource        | million tonnes/ % | 182.6Mt grading 0.92% Ni, 0.07% Co | 3.86Mt at 1.15% Ni, 0.09% Co |
| Ore mined and processed | million tonnes    | 165.0Mt                            | 38.6Mt                       |
| Strip Ratio             | Waste:Ore         | 1.10                               | 0.40                         |
| Nickel/Cobalt Recovery  | %                 | 92%/89%                            | 92%/89%                      |
| Nickel production       | tpa               | 35,129                             | 40,501                       |
| Cobalt production       | tpa               | 2,658                              | 3,157                        |
| MHP production          | dmt               | 106,612                            | 122,915                      |

Table 1 Key Production Metrics

The PFS contemplates the mining and processing of approximately 4Mt tonnes of ore per year through a HPAL processing plant to produce approximately 100,000 dry tonnes of MHP per annum containing approximately 40,000t of nickel and 3,000t of cobalt in the first decade of production.

The geological uniqueness of the Wingellina orebody is underpinned by the potential flexibility in final products that are possible for consideration from this hydrometallurgical processing flow sheet.

A summary of the products precipitated from the various campaigns of test work completed on this project include Mixed Sulphides (MSP), MHP and nickel & cobalt sulphates (see Figure 1).



Figure 1 Nickel and Cobalt sulphate precipitated from Wingellina Ore during pilot test work completed in 2018

Although Nico has decided to select the technologically de-risked MHP option as the base case scenario, it should be noted that mixed sulphides were successfully investigated in 2012 and nickel & cobalt sulphates were precipitated in 2017. All these product suites remain development options for the Company which enable maximum flexibility when considering economic partnerships and development models for the Wingellina project.

A financial evaluation has been undertaken using discounted cash flow ('DCF') modelling to calculate key project economics. Key macroeconomics is set out in Table 2 below.

| Macroeconomics<br>(10 year average) | Base Case                                 | Spot                                      |
|-------------------------------------|---|---|
| Nickel price                        | WoodMac/ S&P MI (Blend)<br>US\$21,472/t   | US\$30,000/t                              |
| Cobalt price                        | WoodMac/ S&P MI (Blend)<br>US\$49,686/t   | US\$50,995/t                              |
| Exchange Rate                       | Forward Curve (Bloomberg)<br>AUD:USD 0.67 | Forward Curve (Bloomberg)<br>AUD:USD 0.67 |
| Discount Rate                       | 8% real, post tax                         | 8% real, post tax                         |

Table 2 Key Assumptions

The PFS presents an attractive investment case, with post-tax NPV<sub>8</sub> of A\$3.34bn based on two leading market consultants blended price path. Based on the recent nickel spot price of US\$30,000, the Project NPV<sub>8</sub> increases to A\$6.54bn. The long-life nature of the Wingellina Project provides an annuity style income for over four decades with approximately A\$697m EBITDA per annum under the Base Case and A\$1.1bn per annum under spot price case.

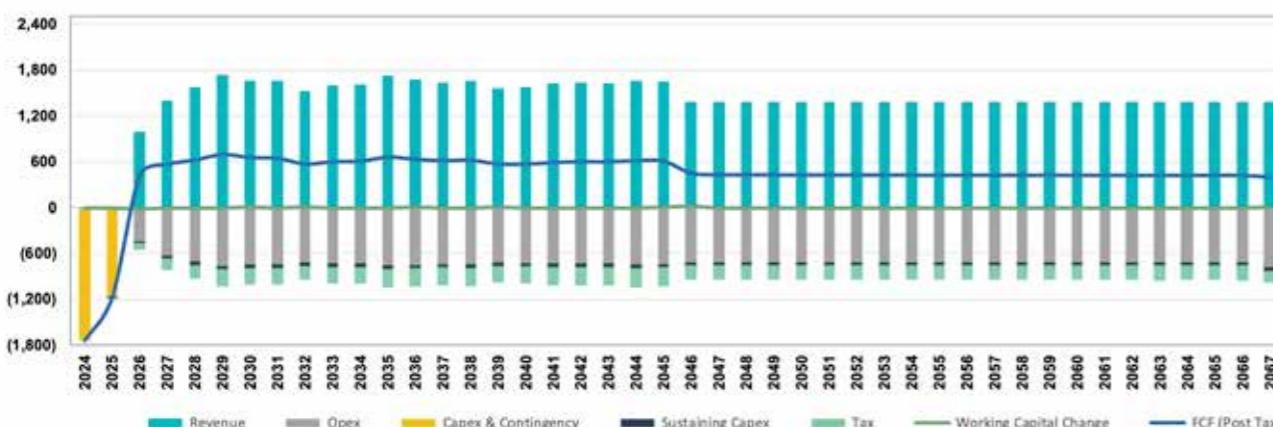


Figure 2 Wingellina Post-Tax FCF (A\$M's)

| Financial Metrics                          | Base Case  | Spot       |
|--|------------|------------|
| <b>Key Metrics</b>                         |            |            |
| Post-tax NPV <sub>8</sub> (real, ungeared) | A\$3.34bn  | A\$6.54bn  |
| Post-tax IRR (real, ungeared)              | 18.02%     | 25.86%     |
| Payback period (from start of production)  | 4.9 years  | 3.5 years  |
| <b>Revenue</b>                             |            |            |
| Nickel revenue (LOM)                       | A\$52.51bn | A\$72.61bn |
| Cobalt revenue (LOM)                       | A\$9.19bn  | A\$9.32bn  |
| Combined revenue (LOM)                     | A\$61.70bn | A\$81.93bn |
| Annual (average)                           | A\$1.47bn  | A\$1.95bn  |
| <b>EBITDA</b>                              |            |            |
| LOM  | A\$29.28bn | A\$46.60bn |
| Annual (average)                           | A\$0.70bn  | A\$1.11bn  |
| EBITDA margin                              | 47.45%     | 56.88%     |
| <b>Free Cash Flow</b>                      |            |            |
| LOM  | A\$21.37bn | A\$33.50bn |
| Annual (average)                           | A\$0.51bn  | A\$0.80bn  |

Table 3 Key Financial Metrics

The capital cost estimates were compiled by Nico and its' lead engineer, to a -20% to +30% level of accuracy as per AACE Class 4 Estimate Classification.

Capital cost of A\$2.39bn plus contingency of A\$0.52bn, results in a total capital cost of A\$2.90bn (US\$1.95bn).

| Area Description                          | AUD Total         | USD Total         |
|---|-------------------|-------------------|
| Processing Plant                          | \$812.98          | \$544.70          |
| Tailings                                  | \$72.78           | \$48.76           |
| Process Packages                          | \$413.98          | \$277.36          |
| Water, Services & Utilities               | \$151.88          | \$101.76          |
| Process Plant Infrastructure              | \$154.32          | \$103.40          |
| General Infrastructure                    | \$139.60          | \$93.54           |
| Construction, Services, Support           | \$86.53           | \$57.98           |
| Off-site water infrastructure             | \$161.95          | \$108.51          |
| Off-site road infrastructure              | \$74.37           | \$49.83           |
| Indirect Costs                            | \$317.98          | \$213.05          |
| <b>Direct &amp; Indirect Capital Cost</b> | <b>\$2,386.38</b> | <b>\$1,598.88</b> |
| Contingency                               | \$518.52          | \$347.41          |
| <b>Total Capital Cost</b>                 | <b>\$2,904.90</b> | <b>\$1,946.28</b> |

Table 4 Capex by Project Component

Many of the non-process infrastructure items identified above result in cost savings for the development of the Wingellina project with a particular focus on the water and calcrete resources. The ability to source these resources locally dramatically reduces the overall economic burden on the project and contributes to substantial operational cost savings over time.

| Area Description (10 year average) | AUD/t           | USD/t          | USD/lb      |
|------------------------------------|-----------------|----------------|-------------|
| Mining                             | 632.4           | 423.7          | 0.19        |
| Process Plant                      | 8,369.7         | 5,607.7        | 2.54        |
| Maintenance                        | 1,594.9         | 1,068.6        | 0.48        |
| Site engineering/ services         | 34.7            | 23.2           | 0.01        |
| Transport                          | 1,115.7         | 747.5          | 0.34        |
| Tailings                           | 18.1            | 12.1           | 0.01        |
| Environmental                      | 49.9            | 33.4           | 0.02        |
| General & administrative (G&A)     | 312.1           | 209.1          | 0.09        |
| Off-site water infrastructure      | 65.2            | 43.7           | 0.02        |
| Off-site road infrastructure       | 24.6            | 16.5           | 0.01        |
| Royalties                          | 1,715.2         | 1,149.2        | 0.52        |
| <b>Total Operating Costs</b>       | <b>13,932.5</b> | <b>9,334.8</b> | <b>4.23</b> |

Table 5 OPEX (\$/t of Nickel produced)

The inclusion of renewable power as the primary energy source coupled with the already planned co-generated steam power system presents Nico with a unique opportunity to design and deliver a project of the highest environmental credentials whilst also delivering the most economically effective design. The project has been designed to incorporate a solar PV farm, battery energy storage system (BESS) and wind turbines. Coupled with the co-generated electricity from the steam byproduct provides a 95.3% zero-carbon power supply from Day 1 of steady-state operations.

This development strategy will reduce Nico's long-term exposure to energy markets whilst also reducing additional logistics costs over the life of the operation resulting in a more robust development option. It also supports the Company's vision and strategy to be a net-zero producer well before the year 2050.

Additional economic upside remains in the Wingellina project that has yet to be incorporated in this 2022 PFS. The quality of the Wingellina orebody is such that it contains economic concentrations of Manganese, Scandium, HPA and the potential to produce pCAM. Testwork was completed between 2012-2014 on the scandium

potential within the orebody proved economic concentration were present. Confirmatory pilot plant test work will be completed early in 2023 to continue this investigatory work. Similarly, the development of the Lithium-ion battery has presented a business case for the manganese concentration within the MHP product to now be monetised. Nico is also investigating the option of producing pCAM directly from the Wingellina MHP with pilot plant test work during 2023. This could further enhance Nico's ability to move towards a more vertically integrated business model whilst developing onshore value-add refining capabilities and IP within Australia.

The Wingellina project also boasts Life of mine calcrete and water supplies, two key project inputs. The ability to leverage local sources of these materials significantly reduces additional cost for sourcing and importing these products. The project is also advantageously located 134km from the Central Desert highway. In January of 2022 the Federal government committed to a A\$1 billion funding package to complete sealing of the highway by 2030. This project has already commenced and Nico Resources will be a major beneficiary of this newly installed sealed highway without the requirement for any additional CAPEX.

Wingellina is situated in the 1st – 2nd quartile on the global cost curve (C1 costs).

Wingellina is expected to be globally competitive due to its large-scale free dig open pit mining, low strip ratio, high nickel and cobalt concentration ore, low sulphur consumption per pound of nickel (compared to other deposits) and low energy costs.

95% renewable power generation from solar, wind and battery storage reduces costs and enhances ESG performance.

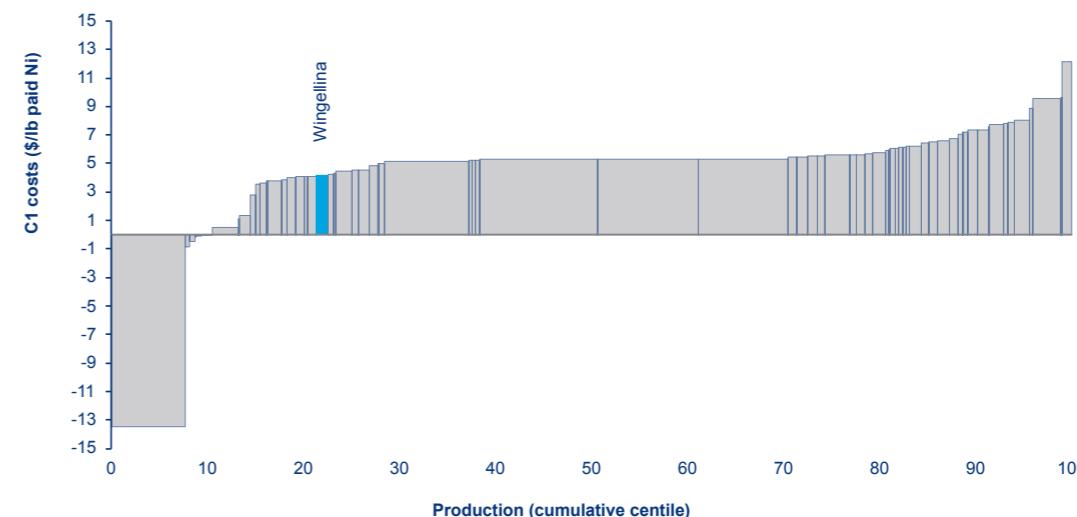


Figure 3 Global Cost Curve, Source: Wood Mackenzie

## NEXT STEPS

- » Definition and scope of the DFS documents;
- » Tender Definitive Feasibility Study;
- » Selection of contractor for execution of the Project;
- » Finalise piloting campaign to confirm the robust project flowsheet design;
- » Design and deliver demonstration plant;
- » Continue advancing ancillary permits outstanding for project development;
- » Progress engagement with government agencies and commercial banks;
- » Progress strategic partner process.



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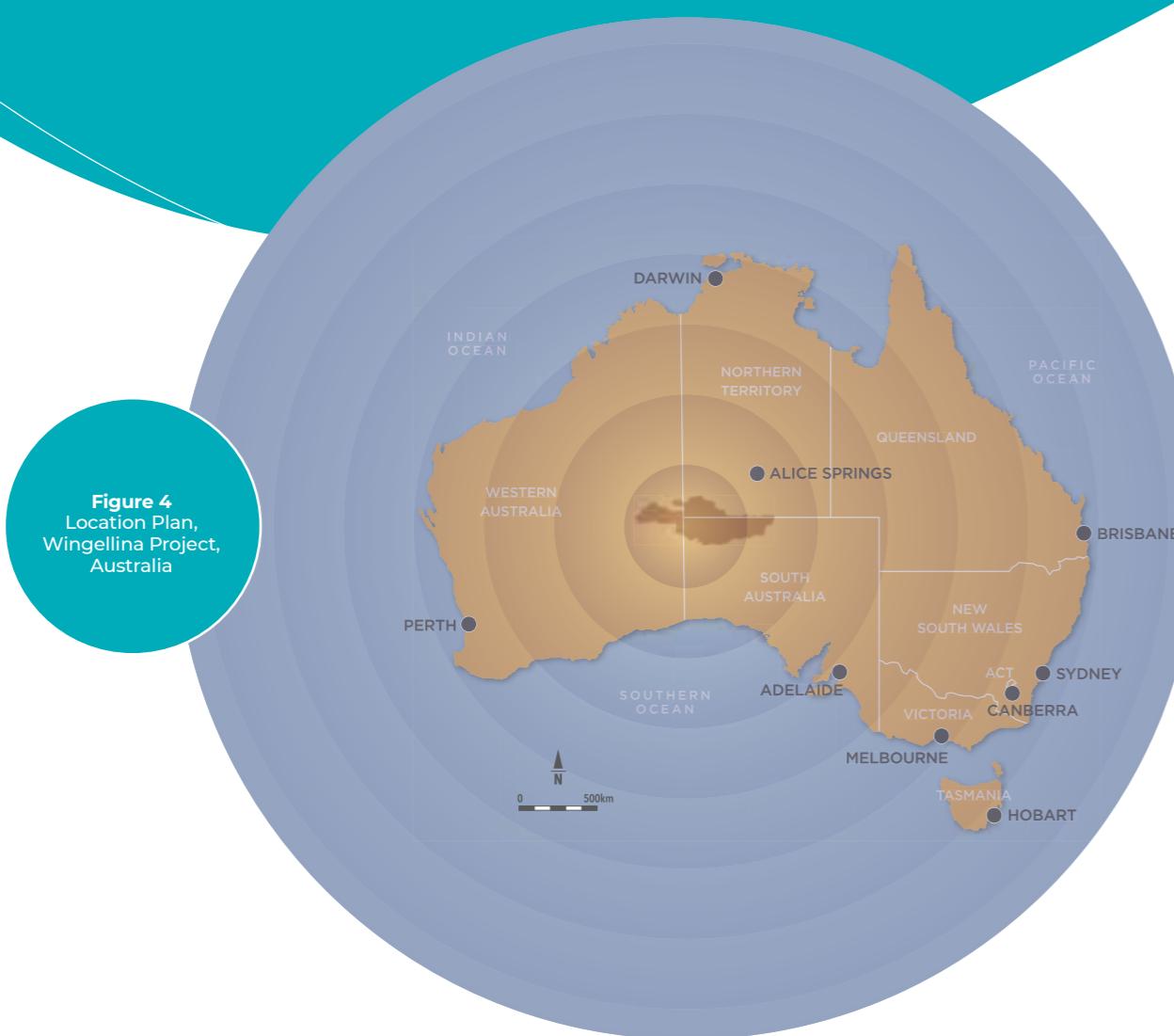
# 1. INTRODUCTION

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# 1. INTRODUCTION

## 1.1 OVERVIEW

The Wingellina Project is located in Western Australia on EL 69/535 within Aboriginal Reserve 17614. Figure 4 shows the project area is adjacent to the Gunbarrel Highway immediately to the southwest of Surveyor Generals' Corner, the junction between Western Australia, Northern Territory and South Australia. The project area is located within the Proterozoic Central Musgrave Block and in particular, oxidised derivatives of ultramafic and mafic rocks of the Giles Complex.



The first deposits of nickeliferous limonite in weathered ultramafic rocks of the Giles complex were noted by South Australian government geologists in the Mt Davies area, in the far northwest of South Australia in 1953. This led to the discovery of nickeliferous limonite at Wingellina by Nickel Mines of Australia Limited and Southwestern Mining Ltd (a wholly owned subsidiary of INCO Ltd) who held the exploration tenure in a joint venture in 1955. INCO initially interpreted the nickeliferous

limonite outcrops as a very large gossan which may reflect an underlying sulphide deposit. Exploration continued sporadically over the following 18 years, mainly between 1955 and 1960, and 1965 and 1970 with the many phases of drilling and geological evaluation concluding that the nickeliferous limonite deposits formed from the oxidation of nickeliferous silicate minerals within the dunite hosts of the Wingellina layered intrusive complex.

In 1971, INCO applied to excise the project area from the planned Aboriginal Reserve and was unsuccessful and the exploration and mining title rights were lost. The project sat dormant from 1971 to 2000 until applications and land access agreements between Acclaim Exploration NL ("Acclaim") and the traditional owners were reached in 2001. A small amount of exploration work was completed by Acclaim from 2001 to 2004.

Metals X Limited ('Metals X') entered the project in March 2005 by entering an agreement with Acclaim to earn an 80% interest in the project by free carrying Acclaim to the completion of a bankable feasibility study. In late February 2006, Metals X acquired all interests in the project area from Acclaim. The project resided in Metals X wholly owned subsidiary company Metals Exploration Pty Ltd (MetEx).

In 2008, Aker Solutions Australia Pty Ltd (Aker) was commissioned by MetEx to complete a Feasibility Study (FS) on the Wingellina Nickel Project (equivalent to the current Pre-Feasibility Study). The Feasibility Study Scope of Works involved the design and estimation of the capital and operating costs for the proposed High Pressure Acid Leach (HPAL) plant and associated site infrastructure (to an AACE Class 4 accuracy of +/-20% +30%) for the Wingellina Nickel Project. The project incorporated a nickel/cobalt limonite mining operation, a process plant using three high pressure acid leaching (HPAL) trains to process limonite ore, and a recovery process to generate a mixed nickel/cobalt hydroxide (MHP) product for re-engagement of various stakeholders and for future development planning (i.e. for strategic partners and investors, and for the commencement of the bankable feasibility).

In 2012, Jacobs E&C Australia Pty Ltd (Jacobs) completed a Scoping Study to examine options for smaller scale operations to reduce the project's capital cost and technical risks. Options for reducing the original three autoclave HPAL trains to a single HPAL train or two HPAL trains were assessed, along with a staged implementation approach, commencing with a single HPAL train, and expanding to two HPAL trains at year six. In addition to reviewing the likely costs to produce

MHP, changing the process to a mixed sulphide product (MSP) was also considered.

In 2021, Nico entered into a binding agreement to purchase Metals Exploration Pty Ltd and all of its assets from Metals X. Subsequently Nico listed on the Australian stock exchange in January 2022 with the Metex portfolio being its primary asset that included the Wingellina nickel deposit and associated infrastructure in Western Australia as well as the Claude Hills project and associated tenements in South Australia. Nico subsequently engaged its lead engineer to update the capital and operating costs for the Project (to an AACE Class 4 classification (-20% to +30%). The objective of the PFS Pricing Update (the Study) was to update the 2008 FS estimates in line with current market conditions. This Study update was also intended to provide Nico with a baseline for the re-engagement of stakeholders and future development planning (i.e. investors and for bankable feasibility).

Nico subsequently requested that an update and repackage the 2008 Aker FS report and 2012 Jacobs Scoping Study, in conjunction with 2022 capital and the operating cost updates (including obtaining quotations for all the major componetry, equipment and reagents) and develop an all-inclusive report reflective of the current 2022 economic environment.

Nico's lead engineer has provided an update to the following sections:

- » Capital Cost Estimate
- » Operating Cost Estimate
- » Project Risk Review
- » DFS Work Plan
- » Gap Analysis & Forward Work Plan

Metals X had undertaken detailed investigations at the Wingellina Project since early 2005. The work included a significant amount of resource definition drilling and evaluation. The Identified Mineral Resource estimate defines an ore body containing nearly 1.8 million tonnes of nickel metal, 139,000 tonnes of cobalt metal and 60.3 million tonnes of Fe. A summary of the Identified Mineral Resource estimate at a 0.5% Ni lower cut-off grade is given in Table 6. In addition, a Reserve for Wingellina has been defined which contains 1.56 million tonnes of nickel and 122 thousand tonnes of cobalt.

| Executive Summary | Introduction | Geology | Mining | Processing and Site Infrastructure | Government Approvals | Capital Cost Estimate 2022 | Operating Cost | Financial | Life-Cycle Analysis | Nickel Market | Further Works | Project Funding | Project Timing | Next Steps |
|-------------------|--------------|---------|--------|------------------------------------|----------------------|----------------------------|----------------|-----------|---------------------|---------------|---------------|-----------------|----------------|------------|
|-------------------|--------------|---------|--------|------------------------------------|----------------------|----------------------------|----------------|-----------|---------------------|---------------|---------------|-----------------|----------------|------------|



## 1. INTRODUCTION

### 1.1 OVERVIEW (CONTINUED)

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| 0.5% Ni cut-off grade<br>Wingellina   | Classification | Tonnes             | Grade        | Metal (t)         |
|---------------------------------------|----------------|--------------------|--------------|-------------------|
| Nickel                                | Measured       | 37,600,000         | 0.98         | 368,000           |
|                                       | Indicated      | 130,900,000        | 0.91         | 1,193,000         |
|                                       | Inferred       | 14,100,000         | 0.87         | 122,000           |
|                                       | <b>Total</b>   | <b>182,600,000</b> | <b>0.92</b>  | <b>1,684,000</b>  |
| Cobalt                                | Measured       | 37,600,000         | 0.075        | 28,000            |
|                                       | Indicated      | 130,900,000        | 0.072        | 94,600            |
|                                       | Inferred       | 14,100,000         | 0.065        | 9,100             |
|                                       | <b>Total</b>   | <b>182,600,000</b> | <b>0.07</b>  | <b>131,700</b>    |
| $\text{Fe}_2\text{O}_3$               | Measured       | 37,600,000         | 45.94        | 17,260,0000       |
|                                       | Indicated      | 130,900,000        | 45.55        | 59,611,000        |
|                                       | Inferred       | 14,100,000         | 41.25        | 5,832,000         |
|                                       | <b>Total</b>   | <b>182,600,000</b> | <b>45.30</b> | <b>82,701,000</b> |
| <b>Claude Hills 2010</b>              |                |                    |              |                   |
| Nickel                                | Measured       | -                  | -            | -                 |
|                                       | Indicated      | -                  | -            | -                 |
|                                       | Inferred       | 33,000,000         | 0.81         | 270,000           |
|                                       | <b>Total</b>   | <b>33,000,000</b>  | <b>0.81</b>  | <b>270,000</b>    |
| Cobalt                                | Measured       | -                  | -            | -                 |
|                                       | Indicated      | -                  | -            | -                 |
|                                       | Inferred       | 33,000,000         | 0.07         | 22,700            |
|                                       | <b>Total</b>   | <b>33,000,000</b>  | <b>0.07</b>  | <b>22,700</b>     |
| <b>Total Central Musgrave Project</b> |                |                    |              |                   |
| <b>Nickel</b>                         | <b>Total</b>   | <b>215,600,000</b> | <b>0.91</b>  | <b>1,954,000</b>  |
| <b>Cobalt</b>                         | <b>Total</b>   | <b>215,600,000</b> | <b>0.07</b>  | <b>154,400</b>    |

1. Mineral Resources are reported inclusive of Mineral Resources modified to produce the Ore Reserve. Figures have been rounded to the appropriate number of significant figures. The 2016 MLX MRE was reported in accordance with the current 2012 edition of the JORC Code. The 2008 Wingellina MRE and 2010 Claude Hills MRE were reported in accordance with the 2004 edition of the JORC Code. Source: Metals X (2017)

| Project    | Project Ore Reserve category | Ore Mt       | Nickel Grade (% Ni) | Nickel (kt Ni) | Cobalt Grade (% Co) | Cobalt (kt Co) |
|------------|------------------------------|--------------|---------------------|----------------|---------------------|----------------|
| Wingellina | Proved                       | -            | -                   | -              | -                   | -              |
|            | Probable                     | 168.4        | 0.93%               | 1,561          | 0.07%               | 122.6          |
|            | <b>Total</b>                 | <b>168.4</b> | <b>0.93%</b>        | <b>1,561</b>   | <b>0.07%</b>        | <b>122.6</b>   |

**Table 6** Wingellina Identified Mineral Resource & Reserve Statement

1. The Ore Reserve is based on the Wingellina Mineral Resource estimate as of 30 June 2016 with applied modifying factors, at a cut-off grade of 0.5% Ni.  
2. Tonnes are reported as million tonnes (Mt) and rounded to nearest 100,000; nickel tonnes are reported as thousand tonnes (kt) and rounded to the nearest 1,000 tonnes; cobalt tonnes are reported as thousand tonnes (kt) and rounded to the nearest 100 tonnes; rounding may result in some slight apparent discrepancies in totals. Source: Metals X (2016).

### PROJECT STRATEGY

The primary objectives for the Wingellina Pre-Feasibility Study were to review and confirm the recommended construction and operating scenario for the project whilst identifying any areas of improvement via technological advancement. The study focus was to delineate the key aspects of the project and define the appropriate equipment, infrastructure, capital and operating cost estimates with an accuracy of maximum variance of  $\pm 20$  +30%.

The following studies have been assessed and updated where required to deliver a holistic and complete Pre-Feasibility Study that reflects the current 2022 operating environment.

- » Geology;
- » Mining;
- » Metallurgical;
- » Tailings Disposal and Storage;
- » Site Infrastructure and Engineering;
- » External Infrastructure and Critical Supply Consumables;
- » Environmental;
- » Financial Modelling.





## 1. INTRODUCTION

### 1.1 KEY CONSULTANTS AND CONTRIBUTORS

The following Key consultants (Table 7) have previously contributed to, or have updated the initial study work that supported the initial 2008 and 2012 studies. This has culminated in a 2022 PFS Update:



Table 7 Key Study Consultants

## 1.2 PROJECT DESCRIPTION & ASSUMPTIONS

The Wingellina Project is a proposed mining and mineral processing operation aimed at the recovery of nickel and cobalt mineralisation from large nickeliferous limonite deposits. The proposed project consists of conventional low strip open-cut mining utilising High Pressure Acid Leaching (HPAL) treatment processing to generate an intermediate mixed nickel-cobalt hydroxide product for sale.

Wingellina is located immediately to the southwest of Surveyor Generals' Corner, the junction between Western Australia, Northern Territory and South Australia, within Aboriginal Reserve 17614.

Access to the site is by road through Western Australia via Warburton using the unsealed Gunbarrel Highway. The project is truncated by the Gun Barrell highway which provided excellent unsealed infrastructure. Due north of the project is the Giles-Mulga Park road which extended 134km North towards an east west intersection with the Great Central Road. This road is currently the subject of a A\$1bn capital investment by the federal government to seal by 2030. Nico will be able to leverage without any additional CAPEX spend. This will ultimately reduce the project OPEX.

Alternative road access from the east is through the Northern Territory with formed dirt roads via Docker River or by the Gunbarrel Highway due west (approx. 450km) from the Great Northern Highway in South Australia. Air access to the site is by daily commercial flights to Uluru or Alice Springs, with connecting charter flights to Wingellina where an unsealed light aircraft strip is operational. The PFS has included CAPEX to upgrade pave the Wingellina Airstrip so as to allow the airfield allowance to take larger aircrafts direct from Australian capital cities. This is in an effort to support the ~350 full-time Fly in Fly out workforce that would be stationed at the mine.

Ownership of the project is governed by an aboriginal reserve leased for 99 years to the Ngaanyatjarra Land Council and on granted Native Title Land which is managed on behalf of the Traditional Owners by the Ngaanyatjarra Council. Nico holds a land access and development agreements to Wingellina through its wholly owned subsidiary, Hinckley Range Pty Ltd.

The nickeliferous limonite deposits of Wingellina have been evaluated over 50 years and in recent years Nico and Metals X have completed ore resource definition drilling to define a large resource of nickel and cobalt limonite ore. At this juncture, approximately 92% of the Identified Mineral Resource is classified as measured and indicated which results in a large mining reserve.

At the planned throughput rate of 4.3Mt per annum, sufficient economic resource exists for a project duration of 42 years. There is also significant potential to increase the resource through the exploration of similar occurrences within the same geological formation. Nico is working to systematically evaluate targets within the geological horizon for further resource exploration activities.

Under the designs completed and assumptions used for this study, the description below gives a general overview of the project.

The ores are planned to be extracted using conventional open pit mining methods, utilising load and haul equipment to freely excavate the material and deliver ore to a run-of-mine ("ROM") pad at a rate of 4.3 million tonnes per annum. It is planned that ore will be stockpiled and in some instances blended for grade as it is fed into the primary crusher using front-end loaders.

The nickeliferous limonite ores are to be excavated primarily without blasting and have an estimated average in-situ bulk density of 1.28 tonnes per cubic metre. Waste-to-ore ratios are very low and the average stripping ratio in the first 10 years at approximately 0.4:1. The life-of-mine stripping ratio is approximately 1.1:1. An allowance for 10% of total volume requiring blasting has been made which adequately accounts for small occurrences of siliceous and calcareous cap-rock and small gabbro intrusive's which exist within the ore system.

The Wingellina orebody contains discrete areas of high-grade nickel and cobalt ore envelopes which have been targeted for early production to enhance cashflows and reduce the project payback period.

Nico recently completed an RC drill programme involving 167 RC holes for 7,904 metres of drilling on infill lines of 60m x 25m drill hole spacing. The objective of the programme was to confirm the delineation of 17 high-grade 'starter pits' which were derived from the Wingellina resources model in 2017. The completion of the 2022 drilling program has now assisted with the delineation of all the 17 high-grade Ni-Co pits. All the drill holes are located within 5km of the proposed processing plant site. Downhole depths vary from 12 metres to 102 metres and average about 41 metres.

Wingellina  
National  
Consultants

| Executive Summary | Introduction | Geology | Mining | Processing and Site Infrastructure | Government Approvals | Capital Cost Estimate 2022 | Operating Cost | Financial | Life-Cycle Analysis | Nickel Market | Further Works | Project Funding | Project Timing | Next Steps |
|-------------------|--------------|---------|--------|------------------------------------|----------------------|----------------------------|----------------|-----------|---------------------|---------------|---------------|-----------------|----------------|------------|
|-------------------|--------------|---------|--------|------------------------------------|----------------------|----------------------------|----------------|-----------|---------------------|---------------|---------------|-----------------|----------------|------------|

## 1. INTRODUCTION

### 1.2 PROJECT DESCRIPTION & ASSUMPTIONS (CONTINUED)

Due to the 2022 end-of-year completion of the program, this additional data has not been considered in this current PFS but will result in a new resource/reserve calculation to be completed in 2023. The updated results and subsequent mine optimisation model will serve as key inputs for the Definitive Feasibility Study ("DFS") scheduled to commence in 2023. The increased high-grade tonnage from this drill program should result in accretive project valuation.

The processing plant is planned to be located approximately 500m east of and central to the overall strike of the ore body.

ROM ores are planned to be crushed, ground to 100% passing 100 µm and then subjected to high pressure acid leaching (HPAL). The process plant design incorporates three parallel autoclave trains. Following HPAL the discharge slurry is neutralised in two stages using locally sourced calcrete to remove impurities. The first stage neutralisation precipitate is washed and neutralised to pH 7.5 using slaked lime and discharged to tailings while the second stage neutralisation precipitate is recycled to the HPAL discharge where it is re-leached. A nickel-cobalt hydroxide is then precipitated in two stages from the purified solution, the first stage is the saleable product produced at the mine which is precipitated at pH 5.5 to 6.5 using magnesia. The second stage of hydroxide precipitation is a scavenger precipitate produced using hydrated lime at pH 6.5 to 7.5 and is recycled to the autoclave discharge for re-leaching.

The tailings storage facility is located approximately 0.5km to the northeast of the processing plant at the closest point. The tailings storage facility is a central discharge, with thickened tailings deposition. Approximately 200m<sup>3</sup>/h of water is recovered in the tailings thickener and recycled into the calcrete and lime preparation circuits. Recycle water is not used in the autoclaves as the high magnesium mineral content is likely to accelerate scaling.

Acid for the leaching process is planned to be generated in a sulphur-burning plant at the site with approximately 390,000 tonnes per annum of elemental sulphur being the main reagent transported to the site. The elemental Sulphur is

expected to be imported from through Darwin and hauled by Rail approximately 1,590 km to the Impadna siding (which is the siding closest to the Lasseter Highway) in the Northern Territory. At the Impadna siding, the sulphur is transferred to road haulage and hauled to the site via a combination of the Lasseter Highway and the great central highway. The total road haulage requirement is approximately 748km.

The raw water requirement for the processing plant is approximately 1200 m<sup>3</sup>/hour and is planned to be sourced from a borefield approximately 100km to the southwest of the processing plant. The water quality is good at between 1000 and 2000 ppm of dissolved solids. The borefield will source water from the Langkarta sandstone which forms part of the extensive Officer Basin. The majority of the raw water requirement is a direct feed to the process plant, however, a water treatment plant is to be installed at the processing plant to meet the design requirements in various sections of the plant. Although technical assessments using existing data indicate a viable mine water supply, individual pump tests on bores and additional boreholes for pump testing are required. An alternative water source also exists to the North of the project from the Cobb Embayment, a sedimentary structure within the Canning Basin which has also been tested and assessed as being able to provide sufficient water for the process design.

Power for the operation will be supplied from a unique multisource solution including:

- » 22.4MW of co-generated steam energy captured as a byproduct from the onsite acid plant
- » 27.6MW of Hybrid Renewable power consisting of solar PV farm, battery energy storage system (BESS) and wind turbines resulting in a market-leading 95.3% Renewable Energy penetration from the commencement of operations.

This power solution will be market-leading in technological innovation, economic advantage, and environmental standards. This development strategy also highlights Nico's commitment to achieving net zero production well in advance of 2050 whilst supplying the lithium-ion battery market with the highest quality nickel, cobalt and manganese products with market-leading ESG credentials.

Locally sourced calcrete is the primary source of neutralisation material in the process. Sources of high-quality calcrete located within 30km of the processing plant have been outlined, tested and drilled.

Export of the final product, a mixed nickel and cobalt hydroxide (MHP) is by the same transport routes as the inbound reagent products and is expected to be backloaded where applicable.

All employees are planned to be employed on a site-based contract, working on a two-week on, one week off, fly in fly out roster arrangement. Employees are provided with air transport to and from the site and are housed in an accommodation facility at the site during work time. The accommodation and entire project area are to be operated as an alcohol-free environment as per the requirements of the NGY Lands. Extensive recreation facilities and healthy living alternatives are to be offered as a substitute for alcohol consumption at the mine.

All operations are planned to be undertaken with the highest cognisance for the health and safety of internal and external stakeholders, the minimisation of environmental impact, and the protection and respect for aboriginal heritage and cultural values. The project plan includes the maximisation of employment, training and participation of local indigenous people.

- » Site layout design has also been completed for the project which is presented below, 'Figure 5 Wingellina site layout'. The site infrastructure layout was developed with a view to:
- » Keep all major site infrastructure such as processing plant, accommodation facilities and general buildings within E69/535 where areas of Heritage importance are well understood;
- » Eliminating or minimising as far as possible the impacts on aboriginal Heritage and Archaeological sites;
- » Identifying a plant site location with solid founding material for heavy items;
- » Minimising flood risk to major equipment or buildings;
- » Locating the processing plant at a central part of the deposit.

The resultant site layout is shown in Figure 5. The Traditional Owners have had direct involvement in the selection of the sites and cultural or heritage issues are not expected to arise. The sites selected are dependent on the completion of proposed sterilisation drilling programs and geotechnical programs included in the plan for the DFS phase of the study.

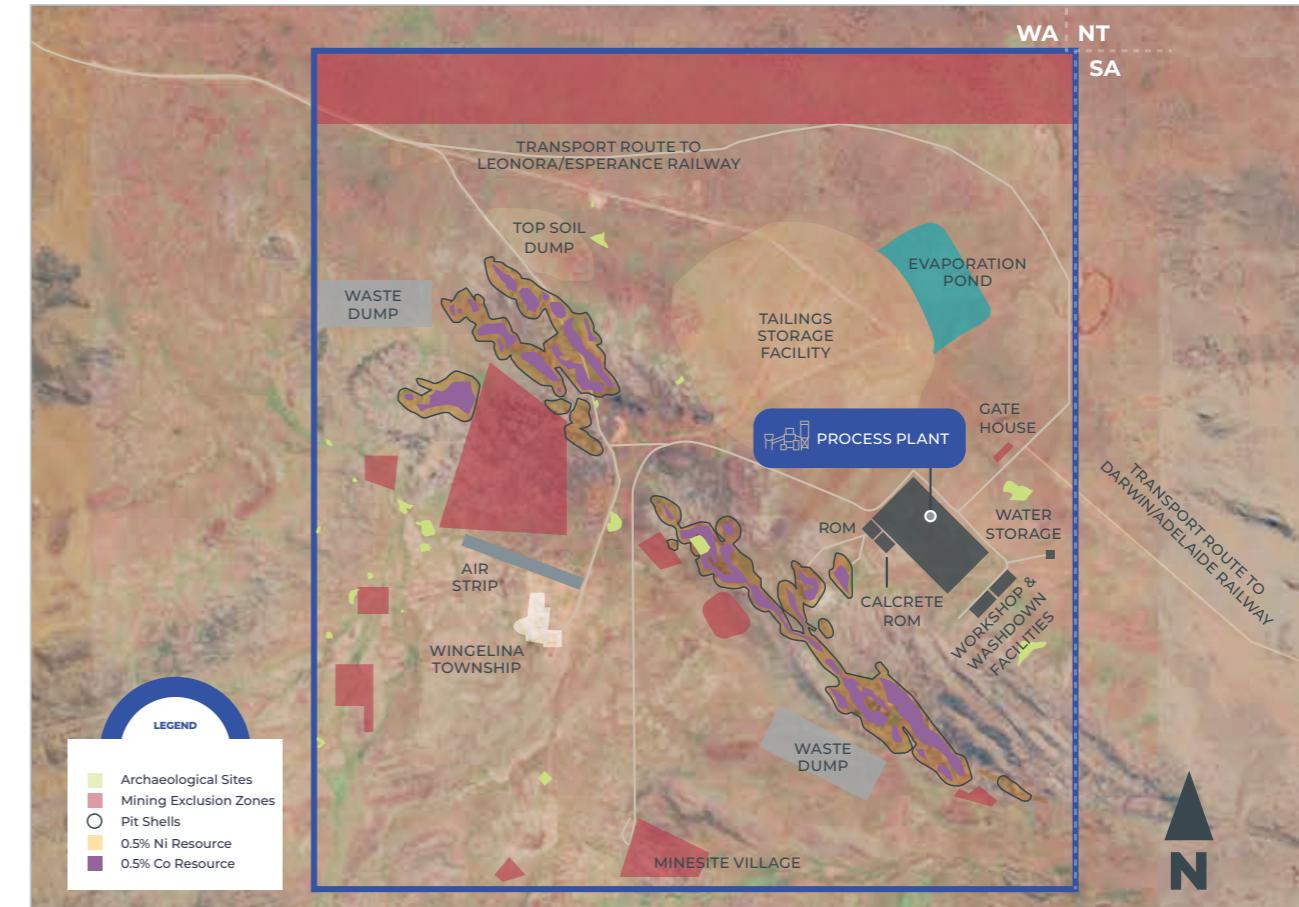


Figure 5 Wingellina site layout

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## 2. GEOLOGY





## 2. GEOLOGY

The Wingellina nickeliferous limonite deposits occur in deeply weathered ultramafic members of the Hinckley Range Gabbro, a component of the Giles Complex, which has intruded gneisses of the Musgrave Block (Daniels, 1974). The sequence is folded about a WNW-trending anticlinal axis, with basement gneiss occupying its core. The north limb dips to the north, the south limb (the Wingellina Hills) dips to the SW, and the axis plunges gently towards the WNW. The northern limb is truncated by the Mann Fault, which strikes along the northern boundary of E69/535.

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Layering in the intrusions was caused by crystal fractionation and settling within individual melts of multiple magma injections. This resulted in the formation of a series of individual ultramafic units overlain by thin pyroxenites and mafic to leucocratic gabbro (see Figure 6). Detailed core logging of primary rocks has shown that the rhythmic layering of the differentiated mafic-ultramafic sequence is present on a centimetre to 10m scale, and compositional variation in the parent rock will influence the composition of the weathered product. The basal ultramafic unit on the NE contact with the basement gneisses is up to 600m thick but does not appear to have been deeply lateralised and contains no nickel mineralisation.

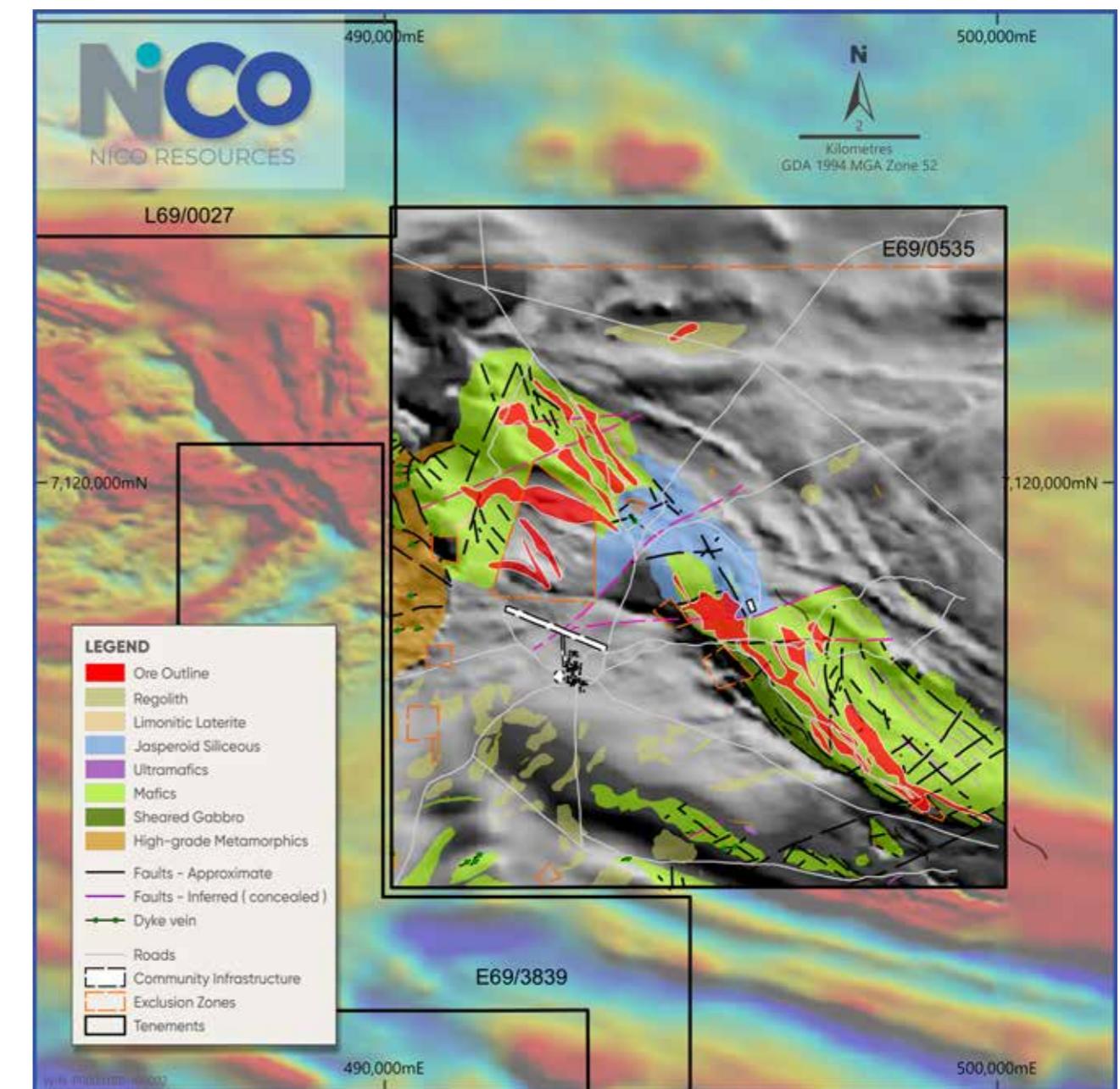


Figure 6 Geological Map of the Wingellina Ore body including the community infrastructure and exclusion zones

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## 3. MINING

# 3. MINING

The Identified Mineral Resource estimate at 0.5% Ni cut-off was used as the basis for all mining studies.

Whittle 4D mining optimisation simulations for the resource model were used as a fundamental tool to establish a staged open pit mining scenario which enabled a diminishing grade mining schedule to be devised which provides faster capital payback and higher discounted cash flow. The overall mining strategy is to mine several staged open pit mines using conventional methods. The scheduling philosophy is to optimise the schedule by extracting the highest head grade material and lowest strip ratio first.

Mining methodology is simple using conventional load and haul equipment (excavators and trucks). The constraint on equipment selection is volume related as the overall in-situ bulk density of ore is low. Ore averages 1.28 tonnes per cubic metre. Apart from small areas of siliceous and calcareous cap-rock and a very small volume of narrow but harder bands of gabbro which transect the ore, the vast bulk of the mining is freely excavatable. A conservative assumption that 10% of in-pit material may require blasting has been applied in the mining cost calculation.

Detailed mine design has been undertaken for the first 20 years of operation, and scheduling of the pits has indicated that the deposit is amenable to a diminishing-grade mining strategy as can be seen by the grade distribution in the oblique deposit view in Figure 7. The mining schedule indicates that the average grades to be achieved over the life of the mine are:

|               |                       |
|---------------|-----------------------|
| Years 1 – 2   | 1.33% Ni and 0.12% Co |
| Years 1 – 5   | 1.17% Ni and 0.09% Co |
| Years 6 – 10  | 1.09% Ni and 0.09% Co |
| Years 11 – 20 | 1.05% Ni and 0.08% Co |
| Years 21 – 39 | 0.87% Ni and 0.07% Co |

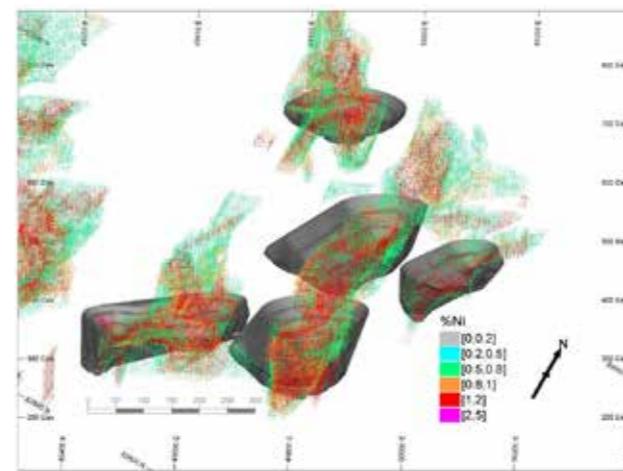


Figure 7 Oblique view of Mining Pits 3, 4, 8, 14, 15 highlighting higher-grade resources within the Wingellina orebody.

The stripping ratio for the first 10 years of operation is 0.4:1, facilitating the limitation of the size of surface waste dumps, and minimising overall operating cost. Consequently, a higher overall strip ratio is required in the remaining years of the project, with the final average strip ratio estimated at 1.1:1. It is expected that in-pit dumping of waste will be able to be employed later in the mine's life when full sections of the ore body have been mined out.

In 2017 Metals X undertook a review of the cobalt inventory of the Wingellina deposit to investigate higher-grade nickel cobalt domains that could be targeted as a high-grade start-up option. This work resulted in the definition of 15 potential high-grade nickel-cobalt open pits as potential starter pits (refer ASX: MLX announcement 17 October 2017). Six of these pits were successfully infill-drilled during 2017-18 and a further drilling program was completed on two additional potential starter pits in 2019-2020, successfully confirming the high-grade nickel-cobalt domains.

During Q4 2022 Nico completed a 167 RC hole program for approximately 7,904 metres of drilling on 60 x 25m spaced infill lines. This drilling completed the previous high-grade nickel cobalt delineation drilling that commenced in 2017. The results will provide production scheduling inputs into the Definitive Feasibility Study and are likely to further enhance the economics of the project. Geological logging confirmed the targeted high-grade lithologies were intersected as planned by the program. This additional drilling work has not been captured in the current PFS report and exists as future upside potential to be included in the DFS commencing in 2023. This can be evidenced in Figure 8 below highlighting areas of high-grade mineralisation that currently exist outside of the defined reserve and therefore mine plan.

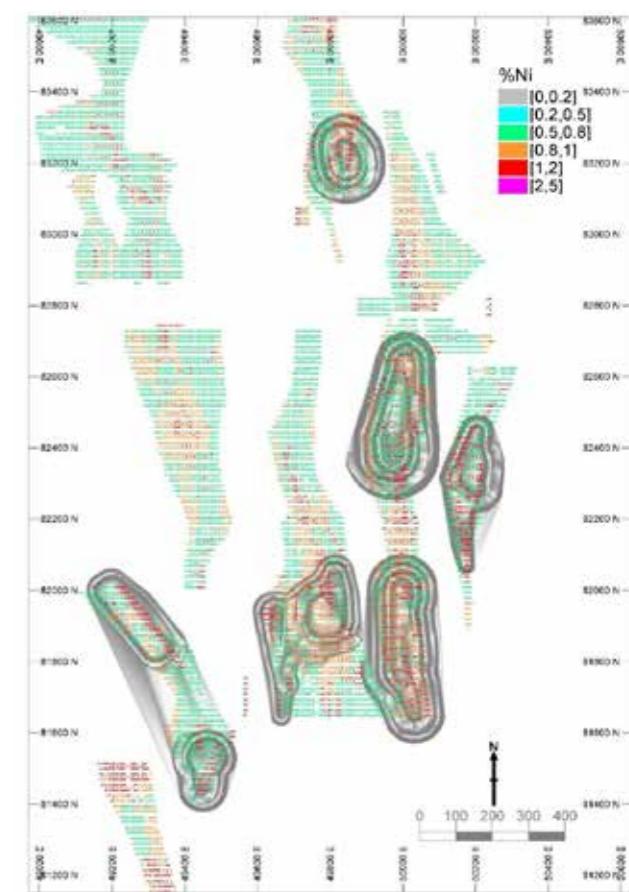


Figure 8 High-grade material existing outside of the current mine schedule.

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## 4. PROCESSING AND SITE INFRASTRUCTURE

|         |                                    |    |
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| 4.1.5   | Management and Mitigation Measures |    |



## 4. PROCESSING AND SITE INFRASTRUCTURE

The primary site infrastructure requirement will be a 4.3 Million tonne per annum processing plant and associated buildings. The ore processing route is High Pressure Acid Leach (HPAL) followed by metal precipitation to a mixed nickel–cobalt hydroxide product (MHP). Key aspects of the processing plant are given in Table 8.

| Area                         | Item                           | Design Value |
|------------------------------|--------------------------------|--------------|
| ROM Ore                      | Feed Tonnage                   | 4.34 Mdt/y   |
|                              | Feed Solids Density            | 43 to 46 %   |
|                              | Autoclave Configuration        | 3 Units      |
|                              | Autoclave Residence Time       | 80 minutes   |
| High Pressure Acid Leaching: | Temperature                    | 255°C        |
|                              | Nickel Extraction              | 95.2 %       |
|                              | Cobalt Extraction              | 94.2 %       |
|                              | Acid Consumption               | 0.27 t/t ore |
|                              | Terminal Acid Concentration    | 42 g/L       |
|                              | Target pH                      | 2.0 to 2.5   |
| Primary Neutralisation       | No. of stages                  | 7            |
|                              | Underflow Solids, CCD 1 to 4   | 37 %         |
|                              | Underflow Solids, CCD 5 to 7   | 38 %         |
| CCD                          | Target pH                      | 4.5 to 5.0   |
|                              | Target pH                      | 5.5 to 6.5   |
| MHP Stage 1:                 | Residual Nickel in solution    | 270 mg/L     |
|                              | Residual Cobalt in solution    | 30 mg/L      |
|                              | Target pH                      | 6.5 to 7.5   |
| MHP Stage 2                  | Residual Nickel in solution    | 12 mg/L      |
|                              | Residual Cobalt in solution    | 7 mg/L       |
|                              | Target pH                      | 7.5 to 8.5   |
| Manganese Removal            | Residual Manganese in solution | <5 mg/L      |

Table 8 Process design criteria

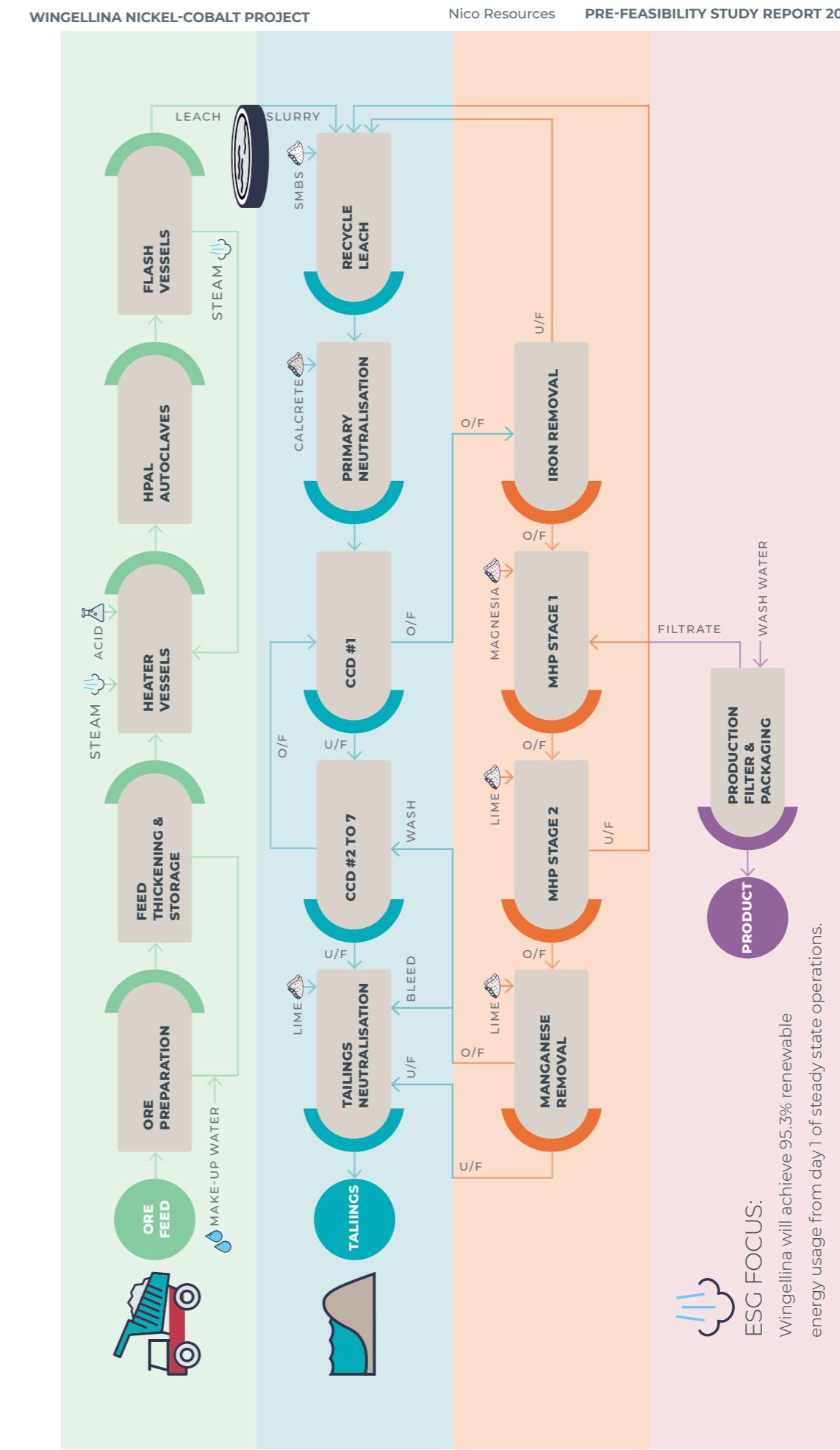


Figure 9 Wingellina Process Block Flow Diagram



## 4. PROCESSING & SITE INFRASTRUCTURE

(CONTINUED)

As described in Figure 9 - Wingellina Process Block Flow Diagram, three High Pressure Acid Leach autoclaves are processing Nickel and cobalt-enriched ore. Solids are washed and separated from the pregnant liquors through seven Counter Current Decanters. Slurry and pregnant liquor get their pH neutralized in five different steps (primary neutralization, Iron Removal, MHP stage 1 and 2, and manganese removal) to separate and package Mixed Hydroxide Precipitate (concentrated and purified nickel-cobalt solids) in bulk bags.

HPAL is a hydrometallurgical process used for the leaching of oxide nickel and cobalt ore types that requires specialized knowledge and experience. In recent years this processing technology has been delivered across a handful of successfully commissioned operations such as the Coral bay and Taganito HPAL projects operated by Sumitomo Metal Mining, Moa Bay HPAL project operated by Sherritt and Ramu HPAL operated by Metallurgical Corporation of China ("MCC").

Many of the key elements for rapid and efficient HPAL commissioning & ramp-up have been worked out through decades of trial and error. Nico has extensively studied each of the HPAL projects globally to ascertain the key learnings whilst hiring critical management individuals personally associated with the construction & ramp-up of these operations. Nico recognises its ability to align with human resources who have personal in-depth knowledge of the commissioning & ramp-up stage will contribute to de-risking the project delivery strategy. To ensure enough resource allocation has been provided for efficient ramp-up, 2% of the total project cost has been budgeted for training, troubleshooting, and maintaining high refinery throughput.

### 4.1 TAILINGS

The tailings facility is located adjacent to the processing plant.

The facility is designed to include:

- » Lower environmental and geotechnical risk;
- » Higher water re-use and recovery ability;
- » Lower capital and net present cost.

The tailings facility has been designed for an initial life of 20 years, however, changes to the discharge array and other parameters will enable the capacity of the facility to be expanded to enable capacity for up to 30 years. Expansion of the footprint of the facility would also be possible, allowing a further life of mine extension of the facility.

#### 4.1.1 WATER SUPPLY

Two major water sources have been identified which based on technical evaluation and the previous drilling, show the significant capability to provide all water requirements for the project. The two alternatives are the Cobb Depression (part of the Canning Basin) to the North and the Officer Basin to the South.

Previous drilling in both areas shows a favourable setting for the intersection of vast quantities of water, and the indicative water quality is good.

The project's PER approval granted by the Environmental Protection Authority in 2016 included provisions for the construction and operation of a bore field located in the Officer Basin, see Figure 10. The proposed bore layout consists of 27 production bores each producing 1.26 MLD giving a total capacity of 34.0 MLD. This provides 25% standby capacity for the expected supply capacity of 27 MLD. The locations of the bores are shown in Figure 10.

The assumed average bore pump duties were 52.5 m3/hr (1.26 MLD) at 125 m head. This is based on a PWL of 75 m btoc and borehead delivery pressure of 50 m head. A suitable pump model is Grundfos 60-14 with a 26 kW motor. It is assumed the pump is set to 90 m btoc, fitted with shroud and provided with 100DN borehead.

A conceptual borefield has been developed to generate a cost estimate for this feasibility study. The borefield will be required to deliver approximately 1,200 m3/h to the raw water storage area at the processing plant. Additional drilling and pump flow testing is planned as part of the Definitive Feasibility Study.

During the 2017-18 Field exploration season Metals X, completed water exploratory holes into the nearby Mann Fault Paleovalley to define a water source proximal to the Wingellina development site. The Company had success in locating good-quality water in two holes. In 2022 Nico followed up this work with additional water source definition holes. Nico remains encouraged by the results to deliver a water source ample enough for the construction period of the operation. This would delay the CAPEX cost of developing the Officer basin water bore field potentially until year 1 of operations resulting in optimised balance sheet management through the construction phase.

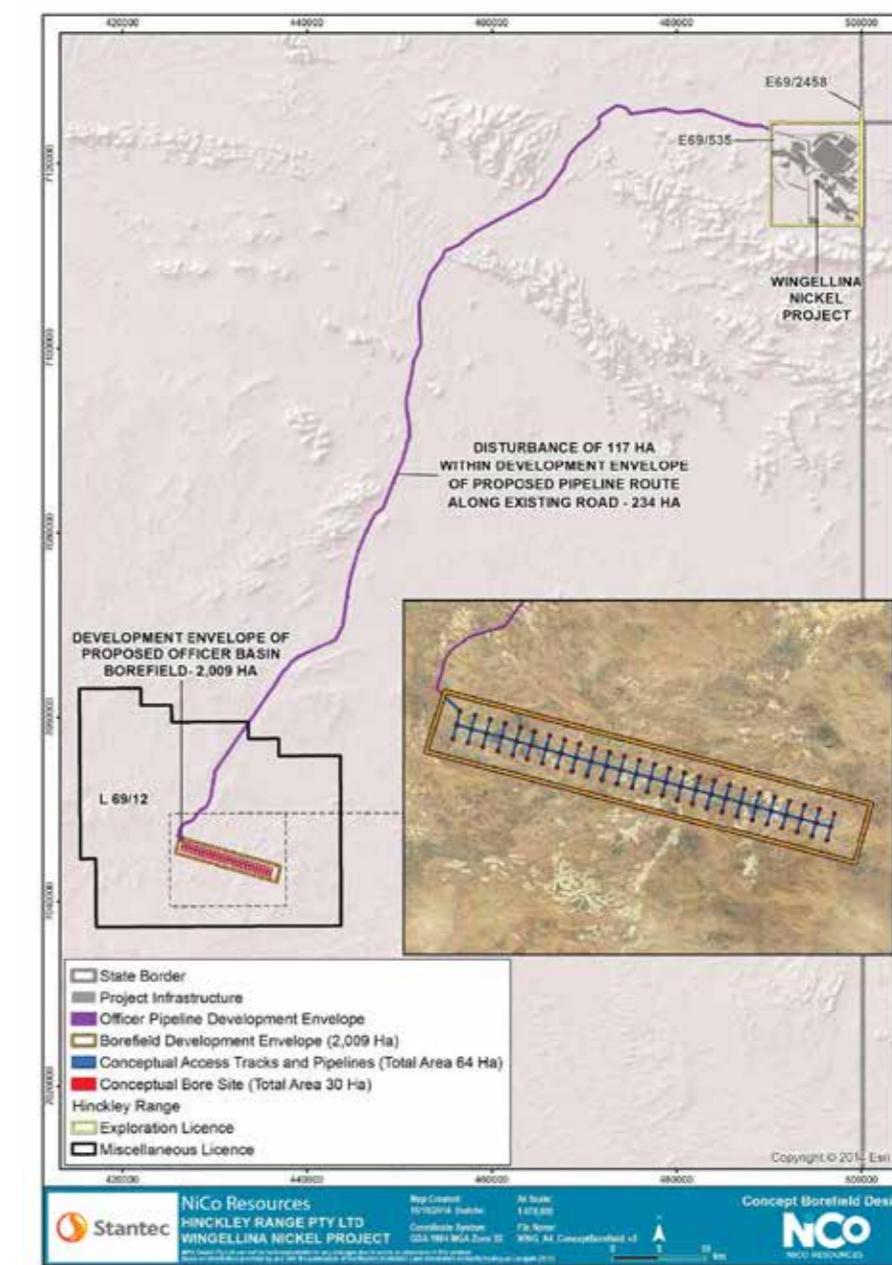


Figure 10 Officer Basin borefield design layout

## 4.1.2 SITE ACCESS, LOGISTICS & INFRASTRUCTURE

Various transport mediums and potential routes for project logistics have been investigated.

It has been concluded that a combination of ship, rail and road transport provides the best alternative for the project. The studies have demonstrated that the use of the Central Australian Railway to haul sulphur from Adelaide to the Impadna siding is the most economical way to support the operation. At the Impadna siding, sulphur is to be transferred to road haulage, and freight is carted along the existing (and upgraded) Lasseter Highway to the Giles-Mulga Park road turn-off. Nico Resources will then upgrade and maintain the Giles-Mulga Park Road (134km) as part of its capital and operational cost exposure. The total road haulage distance is 748 kilometres.

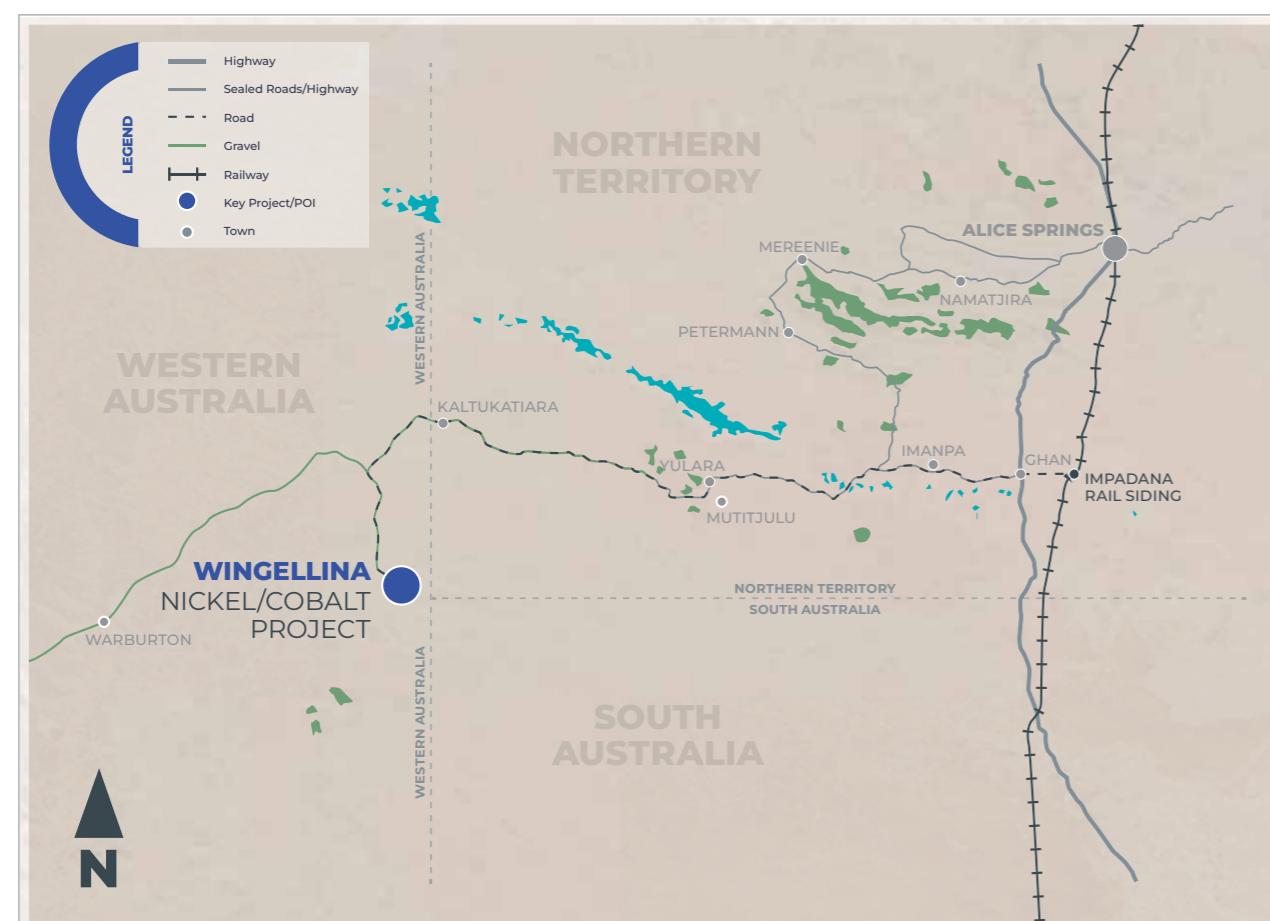


Figure 11 Nico Haulage route from the mine site to Impadna rail siting

Approximately 180,000 wet tonnes (130,000 dry tonnes) of mixed hydroxide product from the mine is exported via the same haulage route described above.

## 4.1.3 STAKEHOLDER ENGAGEMENT

As part of Nico's continuous community engagement strategy, through the use of our 23-man facility, we continue to provide the local lands with access to accommodation and meal services at our Wingellina exploration camp. Nico maintains this service as an option for the general public and service providers in the Ngaanyatjarrpa and Anangu Pitjantjatjara Yankunytjatjara lands due to the remoteness of the region. We look to provide a safe and secure accommodation option for all community members that may require it.

The Company also maintains a strong relationship with the local community as we continue to work collaboratively towards the development of the Wingellina Project. During the September '22 quarter, the Nico field team hosted the Wingellina community school on a field excursion trip to observe our active drilling program at the Wingellina deposit as evidenced by Figure 12 below. The trip was an opportunity to show the kids of the Wingellina community the activities that are associated with an exploration drilling program, it was also a great opportunity for the kids to ask questions. Nico would like to extend its thanks to the Kennedy Drilling team for participating in the field excursion.

In July 2010, Hinckley Range, a subsidiary company of Nico, signed a landmark mining agreement with the Traditional Owners and the granted Native Title holders of the Project. The agreement is the first to be successfully negotiated on the Ngaanyatjarrpa lands and the Aboriginal Reserve. The agreement provides consent for the grant of a mining lease and subsequent mining operations. Hinckley Range has cultivated a very strong relationship with the Traditional Owners, which is evidenced by successfully negotiating the agreement.



Figure 12 Wingellina Community School trip attendees to the Nico Resources field drilling program

## 4.1.4 ABORIGINAL HERITAGE

### 4.1.4.1 ASSESSMENT APPROACH

The heritage values of the Project area were determined through a series of archaeological and ethnographic surveys undertaken between 2001 and 2007:

- » Ngaanyatjarra Council (2001) Ethnographic survey of E69/535;
- » Ngaanyatjarra Council (2006) a series of Work Program Clearances on E69/535;
- » Artefaxion (2008) Archaeological survey of E69/535;

These surveys were undertaken in accordance with EPA Guidance Statement

No. 41 Assessment of Aboriginal Heritage (EPA, 2004).

## 4.1.5 MANAGEMENT AND MITIGATION MEASURES

The protection and management of aboriginal heritage in relation to the Project is specifically addressed in the mining agreement between Nico's subsidiary, Hinckley Range and the Traditional Owners and granted Native Title holders of the Wingellina Project area through their representative bodies; the Yarnangu Ngaanyatjarraku Parna Aboriginal Corporation, the Ngaanyatjarra Land Council (Aboriginal Corporation), and the Ngaanyatjarra Council (Aboriginal Corporation).

This agreement commits Hinckley Range to the following measures, as a minimum:

- » Establishment of Aboriginal Heritage exclusion zones;
- » Development of a cultural heritage management plan;
- » Establishment of a panel of Heritage Monitors;
- » Continued support for an Aboriginal Liaison officer;
- » Cultural awareness training of Company Personnel.

All project construction and operations activities will be subject to a Cultural Heritage Management Plan, with the objective of ensuring that historical and cultural associations are not adversely affected by the Project.

Nico believes it's continuous engagement with traditional owners coupled with rigorous work completed to date in the successfully delivery of a mining agreement and Cultural Heritage Management Plan provides a solid platform to continue the development of this project in conjunction with our traditional owners and all our stakeholders. The Company remains encouraged by the continued level of support for project and the opportunities for community development that will come with it.

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## 5. GOVERNMENT APPROVALS

In September 2016 after the submission of a final Public Environmental Review in August 2015, the EPA awarded Hinkley Range Pty Ltd (Hinkley Range) a subsidiary of Nico approval via Ministerial Statement 1034. The approval period was for an initial 5- year term. The Company has already logged its application for a conditional extension of term, applying for an additional 5 years to be granted. The Company remains in continuous dialogue with the EPA and its Environmental consultant, Stantec who collectively see the application as a low risk for extension.

Nico through its subsidiary Hinckley Range also retains its traditional owner access agreement. This agreement outlines the framework within which a mining operation can be developed at the Wingellina orebody. The local community remain a strong proponent of project development and the Company maintains a strong and active working relationship with its community and local stakeholders.

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## 6. CAPITAL COST ESTIMATE 2022

# 6. CAPITAL COST ESTIMATE 2022

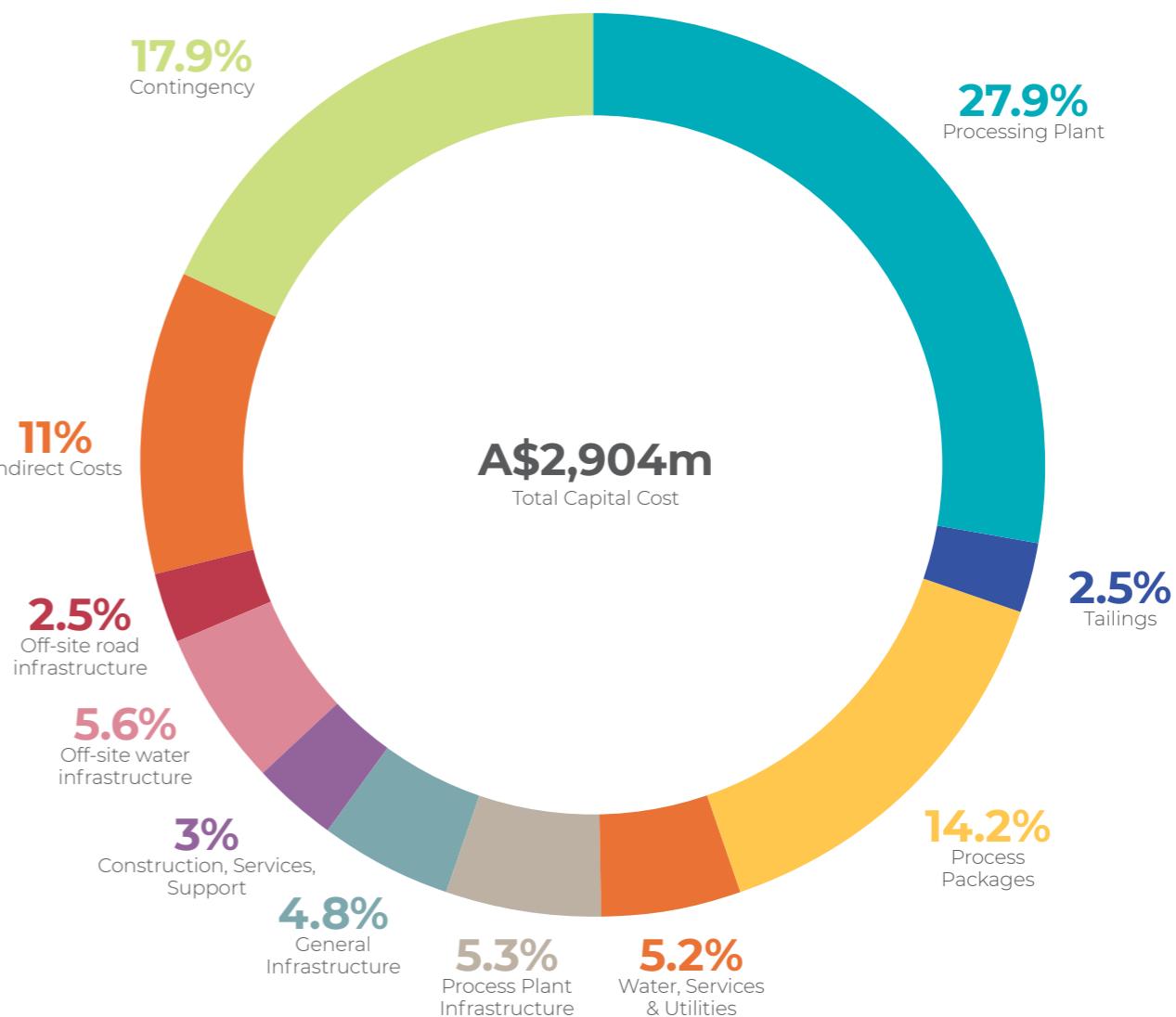
The capital cost estimates were compiled by Nico and its lead engineer, to a -20% to +30% level of accuracy as per AACE Class 4 Estimate Classification. Table 9 below shows the Wingellina capital cost breakdown by area.

Direct capital costs total A\$2.07bn (US\$1.39bn). Including indirect costs and growth and contingency allowance of A\$0.84bn (US\$0.56bn), the total capital cost estimate results to A\$2.90bn (US\$1.95bn).

| Area Description (M's)                    | AUD Total         | USD Total         |
|---|-------------------|-------------------|
| Processing Plant                          | \$812.98          | \$544.70          |
| Tailings                                  | \$72.78           | \$48.76           |
| Process Packages                          | \$413.98          | \$277.36          |
| Water, Services & Utilities               | \$151.88          | \$101.76          |
| Process Plant Infrastructure              | \$154.32          | \$103.40          |
| General Infrastructure                    | \$139.60          | \$93.54           |
| Construction, Services, Support           | \$86.53           | \$57.98           |
| Off-site water infrastructure             | \$161.95          | \$108.51          |
| Off-site road infrastructure              | \$74.37           | \$49.83           |
| Indirect Costs                            | \$317.98          | \$213.05          |
| <b>Direct &amp; Indirect Capital Cost</b> | <b>\$2,386.38</b> | <b>\$1,598.88</b> |
| Contingency                               | \$518.52          | \$347.41          |
| <b>Total Capital Cost</b>                 | <b>\$2,904.90</b> | <b>\$1,946.28</b> |

Table 9 Capex by Project Component

Many of the non-process infrastructure items identified above result in cost savings for the development of the Wingellina project with a particular focus on the water and calcrete resources. The ability to source these resources locally dramatically reduces the overall economic burden on the project and contributes to substantial operational cost savings over time.



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## 7. OPERATING COSTS



# 7. OPERATING COSTS

The operating cost estimate and model was developed by Nico's lead engineer (AACE Class 4 classification (-20% to +30%) and Nico, with inputs and quotes provided from various sources and suppliers

As shown by the global cost curve in Figure 13, Wingellina is a competitive project internationally.

Wingellina is situated in the 1st – 2nd quartile on the global cost curve (C1 costs).

Wingellina is expected to be globally competitive due to its large-scale free dig open pit mining, low strip ratio, high nickel and cobalt concentration ore, low sulphur consumption per pound of nickel (compared to other deposits) and low energy costs.

95% renewable power generation from solar, wind and battery storage reduces costs and enhances ESG performance.

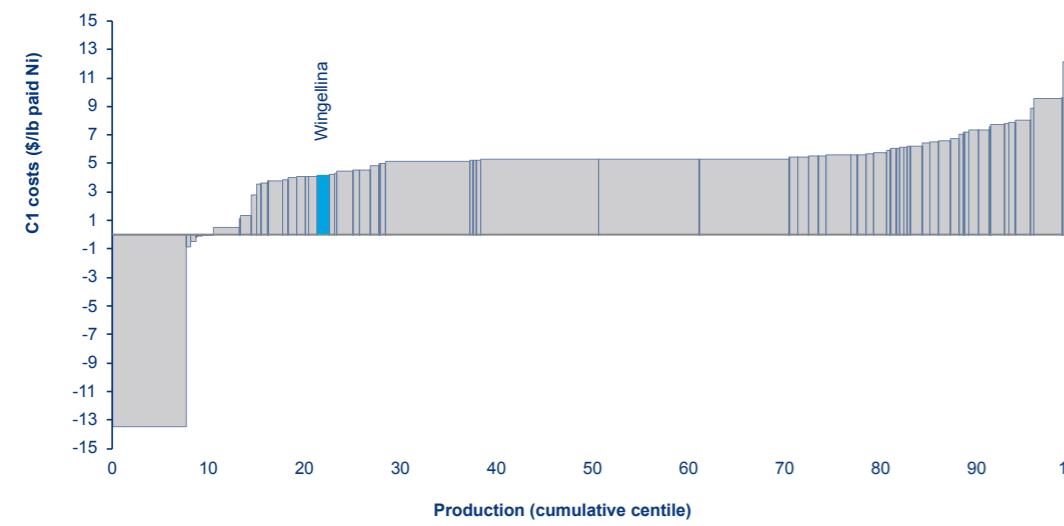
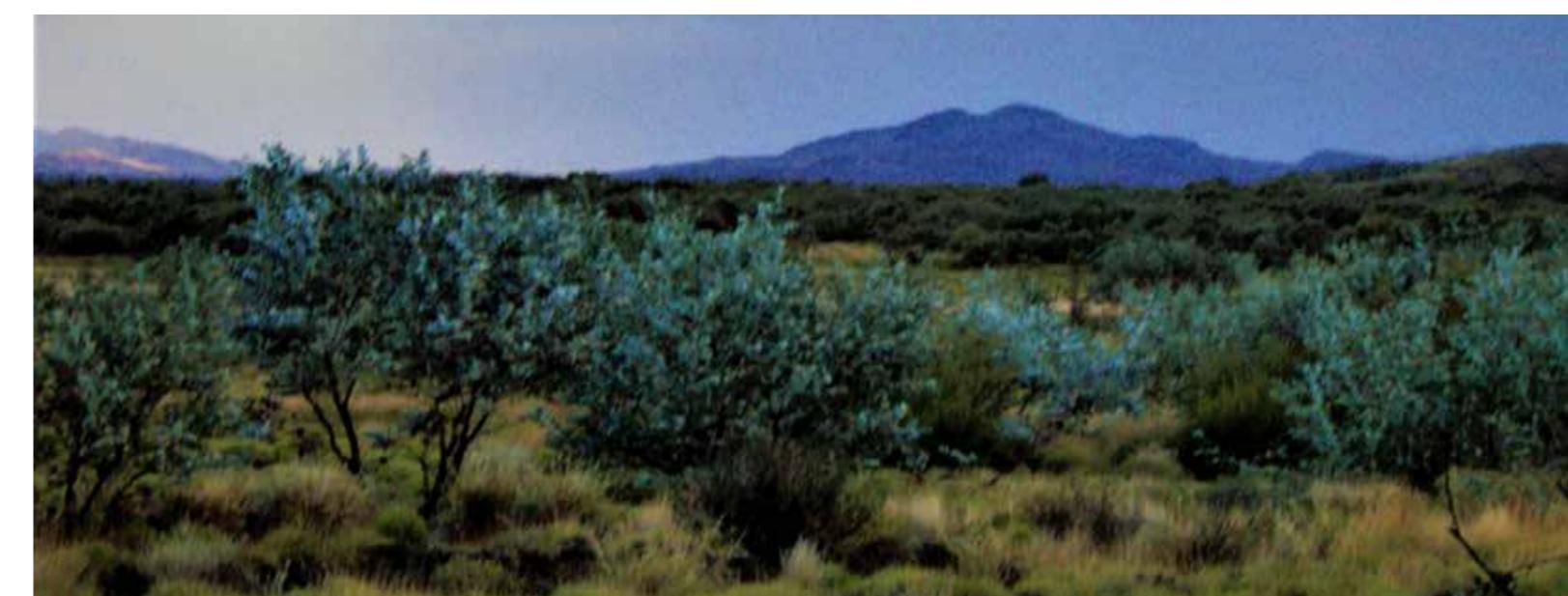


Figure 13 Global Cost Curve

Table 10 set out below provides a split of the operating cost components on a per tonne basis.

| Area Description (10 year average) | AUD/t           | USD/t          | USD/lb      |
|------------------------------------|-----------------|----------------|-------------|
| Mining                             | 632.4           | 423.7          | 0.19        |
| Process Plant                      | 8,369.7         | 5,607.7        | 2.54        |
| Maintenance                        | 1,594.9         | 1,068.6        | 0.48        |
| Site engineering/ services         | 34.7            | 23.2           | 0.01        |
| Transport                          | 1,115.7         | 747.5          | 0.34        |
| Tailings                           | 18.1            | 12.1           | 0.01        |
| Environmental                      | 49.9            | 33.4           | 0.02        |
| General & administrative (G&A)     | 312.1           | 209.1          | 0.09        |
| Off-site water infrastructure      | 65.2            | 43.7           | 0.02        |
| Off-site road infrastructure       | 24.6            | 16.5           | 0.01        |
| Royalties                          | 1,715.2         | 1,149.2        | 0.52        |
| <b>Total Operating Costs</b>       | <b>13,932.5</b> | <b>9,334.8</b> | <b>4.23</b> |

Table 10 OPEX



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## 8. FINANCIAL

### Production Schedule

| Operations Year | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | Remaining 32 years | Total   |
|-----------------|------|------|------|------|------|------|------|------|------|------|--------------------|---------|
| Kt              | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |                    |         |
| <b>Nickel</b>   | 26.0 | 36.5 | 40.4 | 46.6 | 40.4 | 39.9 | 37.8 | 39.7 | 39.6 | 42.8 | 1,085.7            | 1,475.4 |
| <b>Cobalt</b>   | 2.6  | 3.1  | 3.9  | 2.8  | 3.7  | 3.6  | 2.6  | 2.8  | 3.0  | 3.0  | 80.5               | 111.6   |

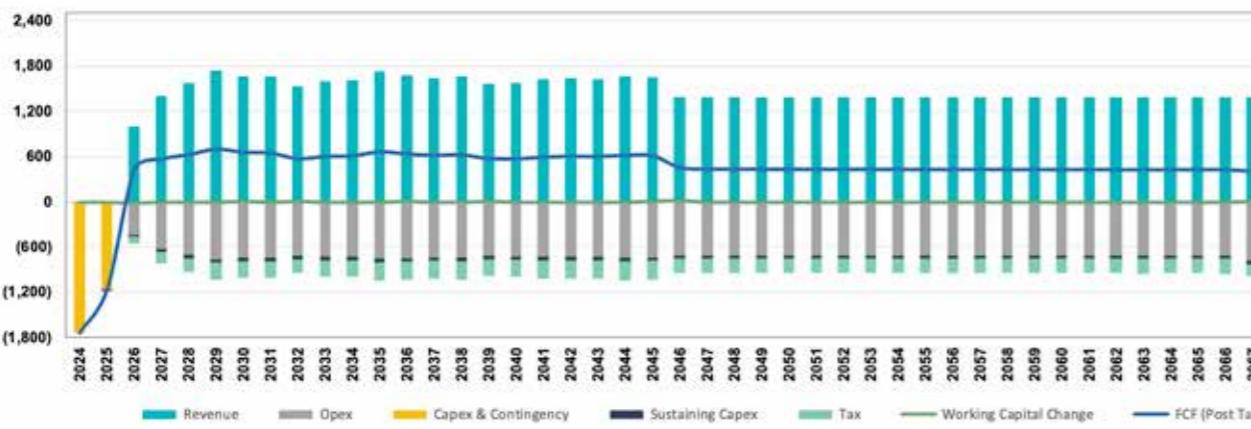


Figure 14 Wingellina Post-Tax FCF (A\$M's)

|  | Base Case                                 | Spot                                      |
|--|---|---|
| <b>Assumptions</b>                         |   |   |
| Nickel price                               | WoodMac/S&P MI (Blend)<br>US\$21,472/t    | US\$30,000/t                              |
| Cobalt price                               | WoodMac/S&P MI (Blend)<br>US\$49,686/t    | US\$50,995/t                              |
| Exchange Rate                              | Forward Curve (Bloomberg)<br>AUD:USD 0.67 | Forward Curve (Bloomberg)<br>AUD:USD 0.67 |
| Discount Rate                              | 8% real, post tax                         | 8% real, post tax                         |
| <b>Financial Metrics</b>                   |   |   |
| Post-tax NPV <sub>8</sub> (real, ungeared) | A\$3.34bn                                 | A\$6.54bn                                 |
| Post-tax IRR (real, ungeared)              | 18.02%                                    | 25.86%                                    |
| Payback period (from start of production)  | 4.9 years                                 | 3.5 years                                 |
| <b>Revenue</b>                             |   |   |
| Nickel revenue (LOM)                       | A\$52.51bn                                | A\$72.61bn                                |
| Cobalt revenue (LOM)                       | A\$9.19bn                                 | A\$9.32bn                                 |
| Combined revenue (LOM)                     | A\$61.70bn                                | A\$81.93bn                                |
| Annual (average)                           | A\$1.47bn                                 | A\$1.95bn                                 |
| <b>EBITDA</b>                              |   |   |
| LOM  | A\$29.28bn                                | A\$47.89bn                                |
| Annual (average)                           | A\$0.70bn                                 | A\$1.14bn                                 |
| EBITDA margin                              | 47.45%                                    | 58.45%                                    |
| <b>Free Cash Flow</b>                      |   |   |
| LOM  | A\$21.37bn                                | A\$34.39bn                                |
| Annual (average)                           | A\$0.51bn                                 | A\$0.82bn                                 |

Table 11 Key Financial Metrics

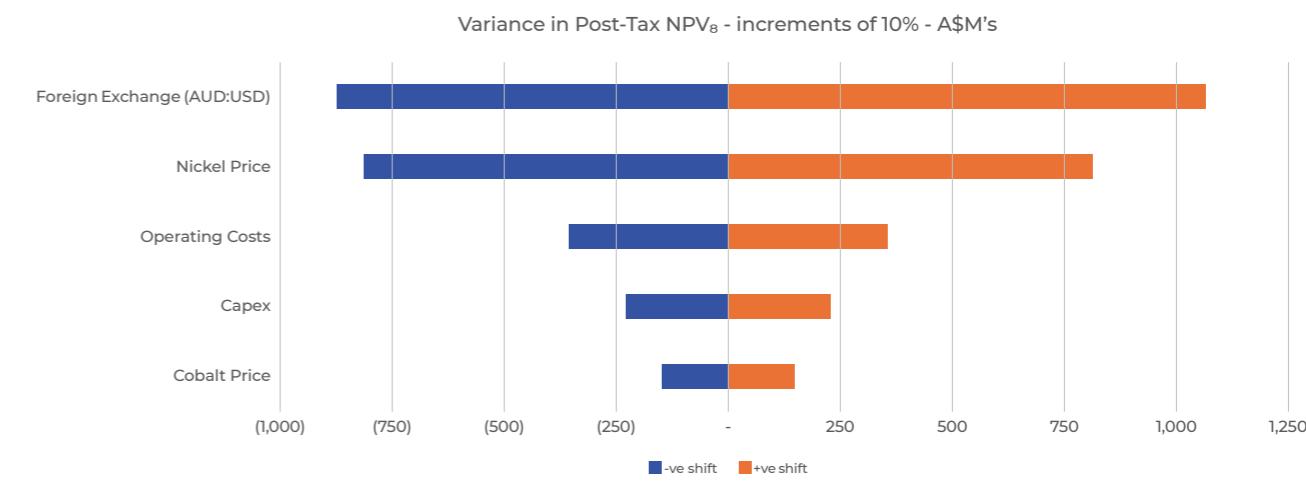


Figure 15 Sensitivity Analysis

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## 9. LIFE-CYCLE ANALYSIS



# 9. LIFE-CYCLE ANALYSIS

During Q3 of 2022, Nico commissioned Minviro a tier 1 environmental impact consultant to complete a Life Cycle Analysis (LCA) on the Wingellina Project. The Company commissioned Minviro to complete the LCA to assist its strategic planning and help drive decision-making. With Australian legislation in place to drive a commitment to net zero by 2050 coupled with Wingellina's world-class ore reserves containing a minimum of 42 years of production life, Nico recognised an opportunity to future-proof its business model by designing a project that drives towards net zero ahead of 2050.

The goal of this streamlined LCA is to determine the major project and process parameters contributing to the climate change impact of the production of nickel metal containing MHP from limonite and saprolite ore at Wingellina, WA. This report will compare the impact of changing the processing input electricity from natural gas to a renewable source. This LCA is a cradle-to-gate study, meaning the product life cycle impact is being assessed from the point of extracting nickeliferous limonite deposits (cradle) to the end-gate (MHP transported to Port Darwin). The ore is prepared and processed into nickel-cobalt mixed hydroxide precipitate (MHP) using crushing, grinding, high-pressure acid leach and precipitation. This MHP is then transported from the mine site at the triple-point of the Western Australia, Northern Territory and South Australia borders to the Port of Darwin.

## RESULTS — CLIMATE CHANGE

The total climate change impact is 24.4 kg CO<sub>2</sub> eq. per kg nickel in MHP in the base case. Contribution analysis is shown in Figure 16.

- » The direct emissions from calcrete as part of the neutralisation reaction are the largest contributor. The use of calcrete directly contributes 11.7 kg CO<sub>2</sub> eq. per kg nickel in MHP (≈48%). The neutralisation reaction is expressed as:
- »  $\text{CaCO}_3 + \text{H}_2\text{SO}_4 + \text{H}_2\text{O} + \text{CaSO}_4 + \text{H}_2\text{O} + \text{CO}_2$
- 1.41 tonnes of calcrete are required per tonne of sulfuric acid. Minviro notes that this usage may decrease as further process studies are completed and confidence increases. Further reports should conduct sensitivity analysis on the consumption of calcrete.
- » Electricity generation from the combustion of locally sourced natural gas is the second largest contributor, contributing 7.0 kg CO<sub>2</sub> eq. per kg nickel in MHP.
- Together, the total embodied and direct emissions of calcrete and electricity generation contribute 77% of the total climate change impact in the base case.

$\text{CaCO}_3 + \text{H}_2\text{SO}_4 + \text{H}_2\text{O} + \text{CaSO}_4 + \text{H}_2\text{O} + \text{CO}_2$

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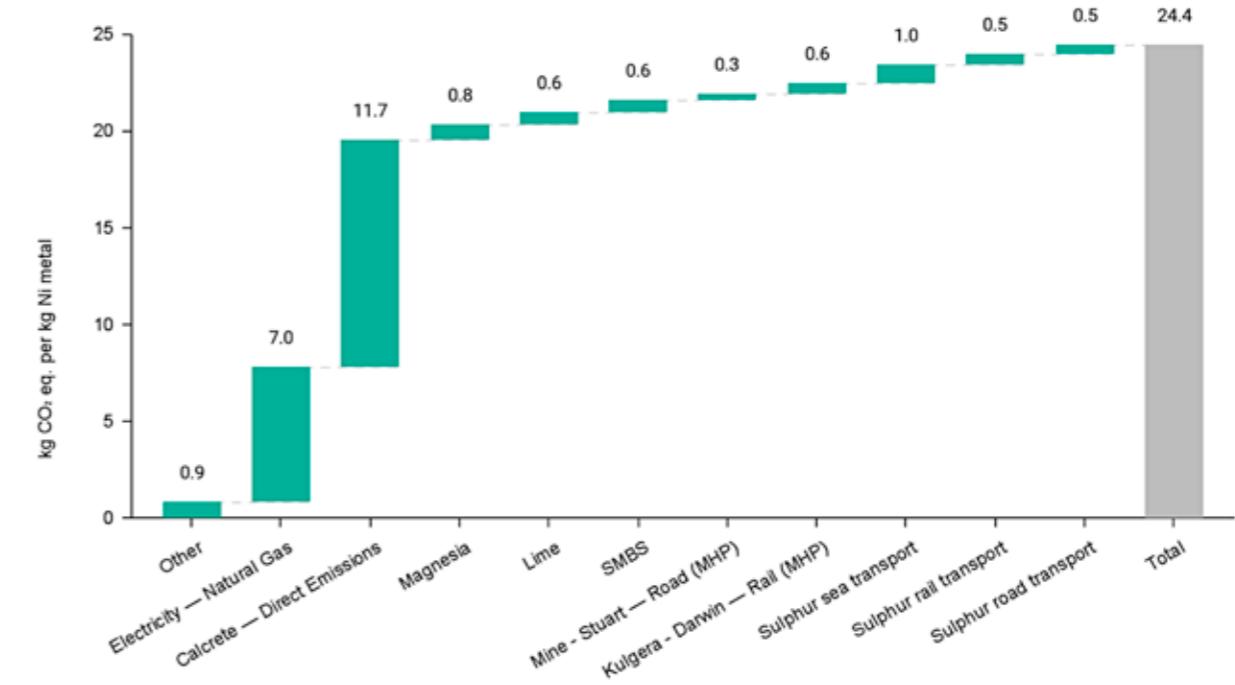


Figure 16 Base Case - Climate Change Contribution Analysis

The total climate change impact is 17.8 kg CO<sub>2</sub> eq. per kg nickel in MHP in the renewable case. The change (a reduction of 6.6 kg CO<sub>2</sub> eq. per kg nickel in MHP) in climate change impact is due to the change in electricity source. The contribution analysis is shown in Figure 17.

- » Electricity generation from solar PV contributes 0.1 kg CO<sub>2</sub> eq. per kg nickel in MHP. This contribution comes from the consumption and processing of water as part of the PV system.
- Electricity generation from onshore wind contributes 0.1 kg CO<sub>2</sub> eq. per kg nickel in MHP. This contribution comes from the maintenance of the wind farm
- The diesel generators used contribute 0.2 kg CO<sub>2</sub> eq. per kg nickel in MHP — due to the combustion of diesel to generate electricity

Calcrete is the most significant contributor (66%) as the embodied and direct emissions from the use of calcrete have not changed. In this case, the impacts of transport and embodied impacts of reagents are relatively more significant. Transport, which burns fossil fuels, accounts for 2.8 kg CO<sub>2</sub> eq. per kg nickel in MHP. Magnesia, lime and sodium metabisulfite (SMBS), the most significant reagents from a climate change point of view, contribute 2.1 kg CO<sub>2</sub> eq. per kg nickel in MHP.



## 9. LIFE-CYCLE ANALYSIS

(CONTINUED)

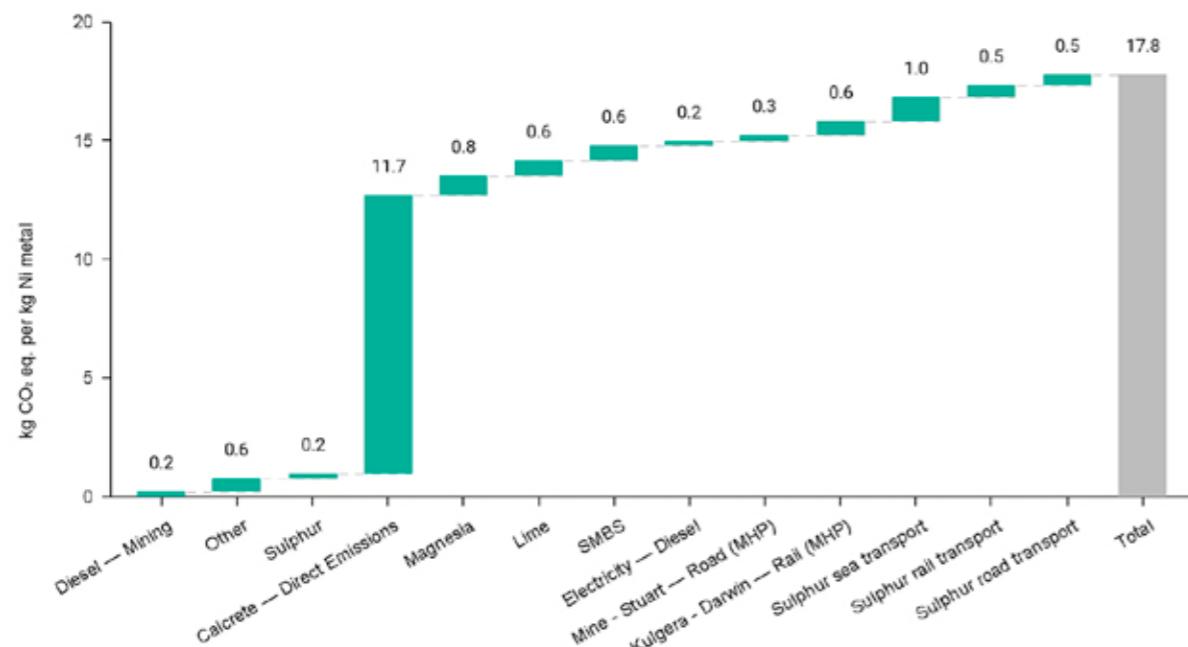


Figure 17 Renewable Electricity Case - Climate Change contribution Analysis

Nico commissioned Minviro to complete a streamlined LCA to assess the climate change impact of their Wingellina mine and HPAL project. Using a renewable electricity source combined with data from the 2022 PFS, the climate change impact of 1 kg of nickel in MHP has been quantified. The results of the study showed that the climate change impact is 17.8kg CO<sub>2</sub> eq. per kg nickel in MHP when a renewable electricity source is used, 66% of this is due to the use of calcrete in the neutralisation of sulfuric acid as part of mineral processing. The change in the source of electricity from natural gas to a majority renewable electricity mix reduces the climate change impact by 6.6 kg CO<sub>2</sub> eq. per kg nickel in MHP.

The consideration and addition of renewable energy have seen Nico greatly reduce the second largest CO<sub>2</sub> eq contributor in the project value chain. Nico has also identified that the emissions resulting from the calcrete neutralisation require significant work to be reduced.

The study results have already led to a review of the current test work being completed on the recent 2022 Lewis Calcrete drilling program with some key areas for improvement already recognised. The Company believes that the use of a finer grind size coupled with a greater geochemical understanding of the overall calcrete resources will greatly improve the neutralisation properties of the Lewis Calcrete resulting in a net reduction in the CO<sub>2</sub> eq emissions per kg of Ni Metal.



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## 10. NICKEL MARKET



# 10. NICKEL MARKET

As 2022 closes, nickel emerged as the clear winner among base metals, exceeding US\$30,000/t in early December, albeit down circa 40% from a record high in March, but up from ~US\$21,000 at the start of the year.

The nickel-in-battery story remains compelling and will certainly consume a lot of nickel in one form or another in the near to mid term. Global nickel sulphate production will increase by 30% in 2023. Payables on MHP are increasing as global pCAM production rose by 20% this year and is forecast to grow by 16% in 2023. pCAM growth has mostly occurred in China where pCAM output has increased steadily all year with annual growth of around 36%. On that basis, forecasts for nickel consumption in pCAM's for EV/ESS are set to rise to 590kt in 2023.

Batteries continue to support growth in global nickel demand as the ongoing strength of the battery segment is compensating for struggling stainless markets in Asia, Europe and the US. Sustained strength and growth in battery raw materials demand combined with a rebound in stainless markets should set up nickel to perform well through this decade.

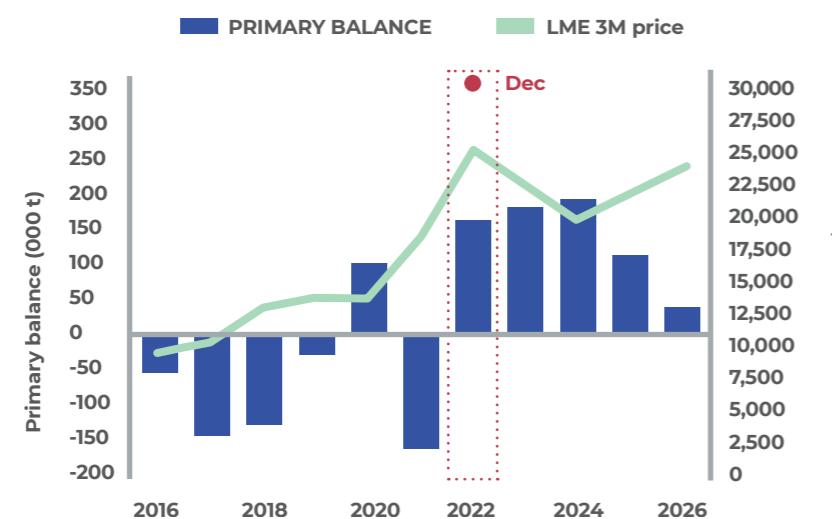


Figure 18 Nickel Price Forecasts  
Source: S&P MI and Nico analysis

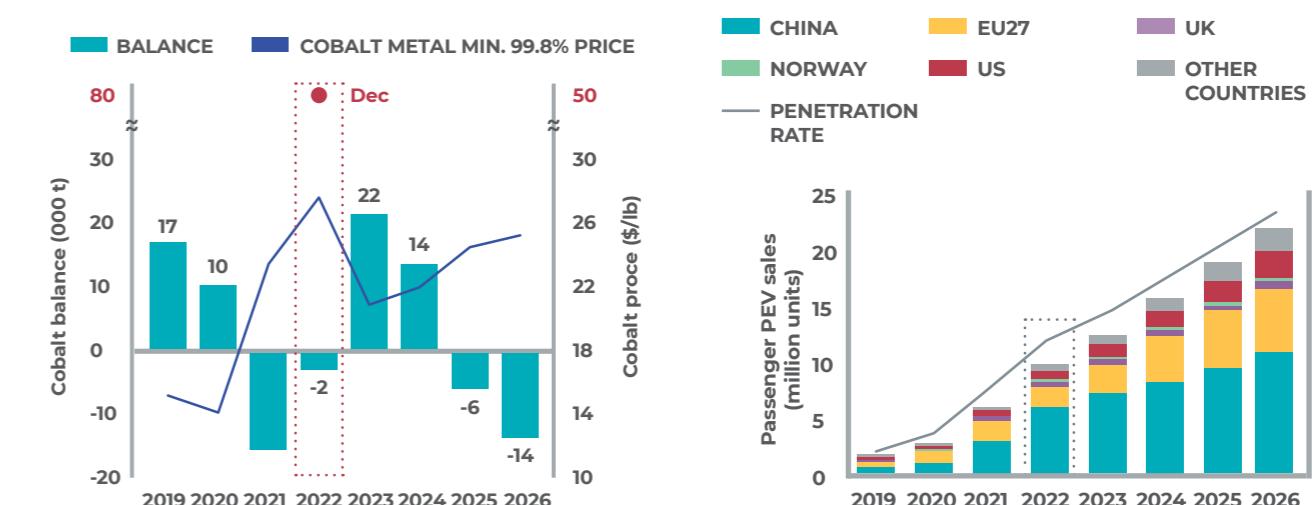


Figure 19 Cobalt price forecast.  
Source: S&P MI and Nico analysis

## NICKEL BATTERY CHEMISTRY



NCA

Nickel-cobalt-aluminium, developed by Panasonic Holdings Corp., was commercialised for use in long-range Tesla vehicles. The chemistry offers high energy density, fast-charging properties and a longer life span compared with NMC chemistries. More battery players, including Samsung SDI Co. Ltd., are introducing NCA cathodes.



NMC

Nickel-manganese-cobalt is the most popular cathode chemistry used in PEVs today. The NMC designation followed by a series of three numbers, which represents the respective proportions of the constituent metals in the cathode (e.g. 811 is eight parts nickel to one part manganese to one part cobalt). Other popular combinations include 111, 532 and 622.



NMCA

Nickel-manganese-cobalt-aluminium is a newer cathode type with 90% nickel content and reduced cobalt content to deliver higher drive range at lower cost, and with added aluminium to improve stability and life cycle.

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## 11. FURTHER WORKS

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# 11. FURTHER WORKS

## 11.1.0 CALCRETE

The study assumes the use of a locally sourced calcrete deposit, the Lewis Calcrete. The presence of calcrete deposits in the broader area is a major advantage for the project, as neutralisation of the HPAL slurries would otherwise require the transport of limestone to the site at a significant cost.



High-quality calcrete has been located approximately 25km northwest of Wingellina. Samples of the material have been tested with the neutralising capacity of the calcrete calculated at being between 1.2 and 1.4 tonnes per tonne of sulphuric acid. Revision of this test work has concluded that the neutralising capacity of the calcrete material could be enhanced with further comminution to sub 75µm. Nico has already arranged a piloting campaign to optimise the calcrete neutralisation properties by testing additional crush and screen fractionations to reduce the total amount of required material for neutralisation ultimately resulting in a lower overall OPEX cost per tonne of nickel equivalent metal produced.

Initial drill testing of the Lewis Calcrete deposit in 2014 comprised 89 shallow reconnaissance 100 metre spaced RC holes along a 9km access track with 579 samples submitted for analysis. Test work confirmed good quality calcrete with CaO+MgO+LOI exceeding 70% within 68 of the

holes drilled. The calcrete is calcium-rich, with MgO rarely exceeding 2%. The base of the calcrete profile was found to occur at a depth of about 6 metres below the surface. Resource definition drilling commenced in late 2020 with the planned program being 50% complete before being postponed due to COVID restrictions. Nico has now completed the Resource program in 2022. A subsequent calcrete resource model will be completed to confirm LOM resources are available for neutralisation for the Wingellina Project.

## 11.1.1 INFRASTRUCTURE ROUTES

This study has contemplated a broad number of infrastructure solutions for the Wingellina project, including a review of potential infrastructure routes and modes of transport. While the optimal infrastructure modes may be a point of discussion beyond this feasibility study (given expected price increases for diesel fuel), it is unlikely that the optimal infrastructure routes will change significantly.

## 11.1.2 MANGANESE IN PRODUCT

Metallurgical test work and mass balances completed by Aker Solutions indicate that the manganese grade will be around 4.5% in the MHP product. Previously this material would have resulted in financial penalties in the final product. With the evolution of the Lithium-ion battery market manganese has now become a desired co-product in the MHP mix. An opportunity exists to increase Wingellina's value by further processing MHP via a hydrometallurgical flowsheet to create sulphates or Pre-cursor Cathode Active Material (pCAM), for use in the battery value chain. Nico will be undertaking an additional study

program in 2023, which includes technical study work as well as a commercial investigation for potential partnership opportunities to vertically integrate further downstream in the battery supply chain. A study outline and updated timeline for this project is expected in 2023.

## 11.2 KEY CONSIDERATIONS FOR DEFINITIVE FEASIBILITY STUDY

The successful completion of the 2022 PFS confirms that a viable and significant project can be developed at Wingellina. Several key workstreams to be undertaken early in the DFS are outlined below

### 11.2.1 ROAD ACCESS

A key requirement for the optimal operations plan is the use of the Lasseter Highway and the upgrade of the Giles-Mulga Park Road. Approval for planned infrastructure routes will need to be established before proceeding with detailed design.

Now that preferred transport routes have been defined by this study, the priority for off-site infrastructure is to obtain approval for the route corridors defined in the study. Major project infrastructure remote to the site is primarily located in the Northern Territory and West Australia with an application for approval of the routes to be initiated with both Governments.

### 11.2.2 APPROVALS

Proceed with lodging all outstanding project approval documents. This combined with historical environmental data collected from the Wingellina area over the last 15 years will provide a sufficient data available to lodge the approvals documents and commence all outstanding formal approvals processes.

### 11.2.3 VALUE IMPROVEMENT REVIEW

pCAM refining of the Mixed Hydroxide Precipitant needs to be completed alongside the DFS. It is likely that this project workstream is completed on its own schedule and is decoupled from the delivery of the DFS.

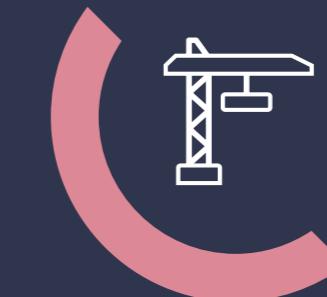
A trade-off study to identify the value addition of construction and operation of a downstream refinery for Nico Resources will need to be completed. In conjunction with this review, scaling up of demonstration scale continuous batch test work will be required to complete a pre-qualification assessment with potential customers in the battery value chain.

### 11.2.4 SULPHUR SUPPLY

Sulphur consumption is a major operating cost for the project and prices are currently at historical highs. Nico will review available sulphur sources to complete project de-risking by securing long-term supply agreements with the ability to set a ceiling rate for acid prices. The sulphur price base case has been estimated at A\$455/tonne for the current 2022 PFS.



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## 12. PROJECT FUNDING

## FUNDING OPTIONS – PROJECT DEBT AND EQUITY

There is significant and growing liquidity in global capital markets for battery minerals projects, green loans and sustainable finance. With nickel and cobalt being critical minerals used in the EV and battery storage industries, and renewable power being proposed (wind, solar and BESS), Wingellina is well-positioned to obtain financing from multiple financiers, domestic and international.

The Wingellina project is Australia's single largest undeveloped nickel and cobalt resource and continues to be recognised globally by its inclusion in the Australian Critical Minerals Prospectus list. This is a globally significant document realised annually by the Australian Trade and Investment Commission ('Austrade'). Through this Project endorsement, the Company has been invited to participate in multiple critical minerals trade delegation trips to various key global consumption markets around the world including South Korea, the United Kingdom and Europe.

## CRITICAL MINERALS – AUSTRALIAN GOVERNMENT

Governments globally are investing in funding critical minerals projects.

In 2021, the Australian Government established the A\$2bn Critical Minerals Facility, which is managed by the Australian Export Credit Agency ('ECA'), Export Finance Australia ('EFA'). Projects that are aligned with the Australian Government's Critical Minerals Strategy can seek funding through this facility.

branches such as subordinated debt (royalty, streaming, mining fund debt).

- » Examples of notable PFF transactions in the Australian market include BCI Minerals Ltd's Mardie Salt and Potash ~A\$1bn funding package from NAIF, EFA, Commercial Banks and AustralianSuper and Roy Hill's US\$7.2bn PFF involving United States, Korean and Japanese ECAs and commercial banks.
- » Globally, there are various examples of multiple billion dollar project financings, including for nickel and cobalt projects.

**STRATEGIC PARTNERS (JOINT VENTURES, OFFTAKE, EQUITY, DEVELOPMENT FINANCING)**

- » EFA in 2022 also signed a MOU with the Japan Bank for International Cooperation ("JBIC").
- » Nico is in discussions with strategic parties from both Japan and South Korea, and engagement with ECAs from both countries will be undertaken collaboratively with JV parties accordingly.
- » ECA support can also be obtained based on procurement of major equipment supply and contractor packages from the relevant ECA host countries, subject to eligible content and OECD guidelines.

## STRATEGIC PARTNERS (JOINT VENTURES, OFFTAKE, EQUITY, DEVELOPMENT, FINANCING SUPPORT)

- » Nico is actively engaged with potential strategic partners, who can provide offtake, project equity and sponsor support.
- » Strategic partners include OEMs, battery manufacturers and trading houses spanning Japan, South Korea, Europe and the United States.
- » Current discussions include nickel and cobalt offtake agreements, development (EPC), project equity and financing support, including offtake prepayment.
- » Nico will consider all feasible funding structures for the equity component including raising equity into the Project.
- » Direct investment into the Project by strategic partners will reduce Nico's interest in the Project and its direct funding requirement.
- » Strategic partners' involvement to date includes metallurgical testwork and site visits.

## OVERSEAS DEVELOPMENT BANKS AND EXPORT CREDIT AGENCIES

- » The strategic partner process will be linked to the project financing process, government funding and support.
- » Majority of mega projects are financed through DFIs and ECAs.
- » DFIs and ECAs from strategic partner countries will be engaged to participate in the multi-source funding package.

- » There has been increased collaboration between Australia's official ECA, EFA and ECAs abroad.
- » Recently, EFA strengthened its ties with South Korea's ECA, Korea Trade Insurance Corporation ('K-Sure') and signed a signed a Memorandum of Understanding ('MOU') to strengthen their capacity to work together and undertake joint financings, and enhance cooperation in sectors such as critical minerals, low emission technologies and regional infrastructure.
- » EFA in 2022 also signed a MOU with the Japan Bank for International Cooperation ("JBIC").
- » Nico is in discussions with strategic parties from both Japan and South Korea, and engagement with ECAs from both countries will be undertaken collaboratively with JV parties accordingly.
- » ECA support can also be obtained based on procurement of major equipment supply and contractor packages from the relevant ECA host countries, subject to eligible content and OECD guidelines.

## DUE DILIGENCE AND ESG

In preparation for project finance due diligence that will commence in parallel to the DFS, Nico is aligning its environmental & social studies, procedures and plan to align to World Bank guidelines, Equator Principles, International Finance Corporation's (IFC) performance standards and the Organisation for Economic Co-operation and Development (OECD) Common Approaches. In view of these high standards noting climate change risk assessment requirements as part of raising project finance from ECAs and Equator Principles Financial Institutions ('EPFI'), Nico is developing and shaping its project design to meet global finance standards with respect to ESG. Government agencies and EPFIs have a track record in providing greenfield project finance for large scale nickel and cobalt projects globally.

## BOARD AND MANAGEMENT EXPERIENCE

The Nico board and management team have extensive experience in mining and project finance. Refer to the Company's website and ASX announcement dated 6 October 2022 for summary CVs including Nico's CFO, Teck Lim's extensive experience in mining project funding.

For the reasons outlined above, Nico and its directors consider that there is reasonable basis to expect that funding will be available to Nico for the capital expenditure requirements of the Project.

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## 13. PROJECT TIMING



# 13. PROJECT TIMING

The capital cost estimate for the PFS has been developed assuming an Engineering, Procurement, Construction Management (EPCM) delivery model however different execution models will be investigated in future studies. The execution strategy to deliver the Project to operational status will continue to evolve through the DFS as differing execution methods that best match the various phases of the development will be implemented. The Company has highlighted an indicative timeline based on the results from the PFS with the key project deliverables outlined in Figure 21.

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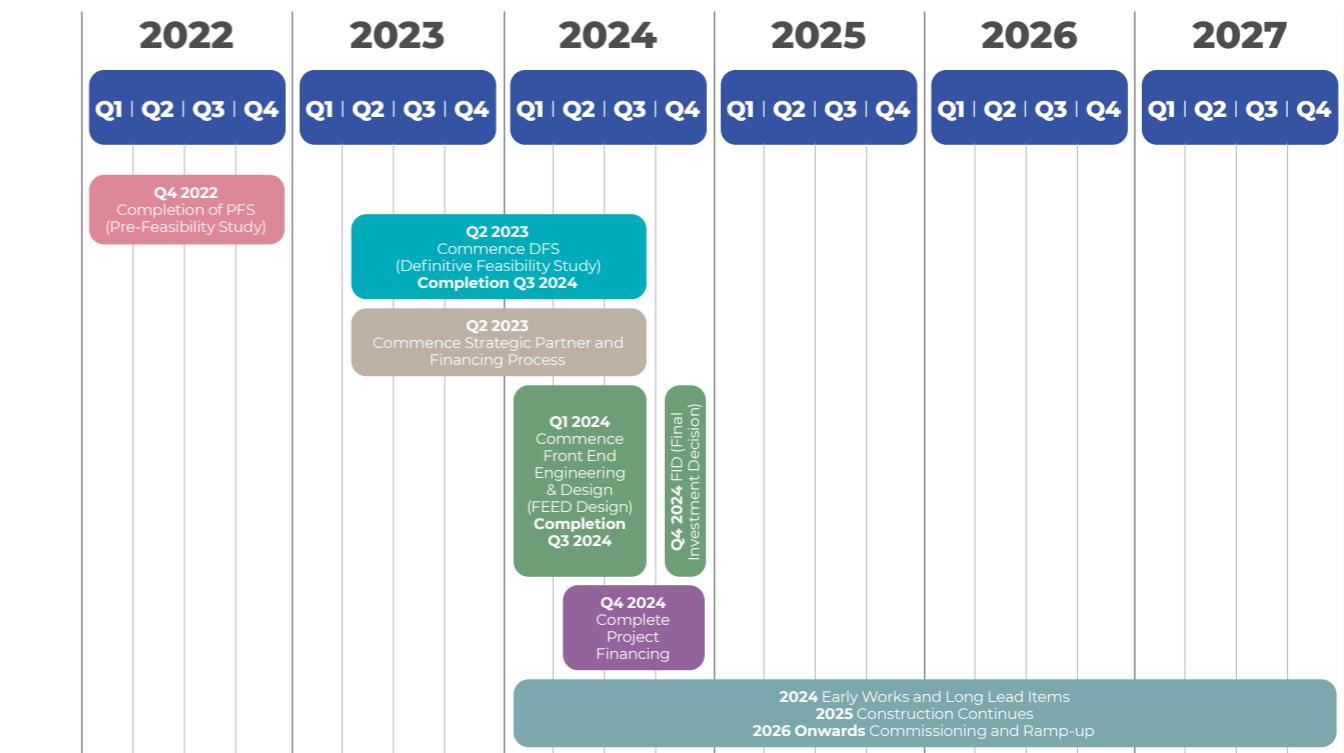


Figure 21 Indicative Timeline

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## 14. NEXT STEPS

The Project team will immediately progress with the following next steps:

- » Definition and scope of the DFS documents;
- » Tender Definitive Feasibility Study;
- » Selection of engineering contractor for execution of the Project;
- » Finalise semi-batch test work piloting campaign to confirm robust project flowsheet design;
- » Design and deliver demonstration plant continuous batch test work campaign;
- » Continue advancing ancillary permits outstanding for project development;
- » Progress engagement with government agencies and commercial banks;
- » Progress strategic partner process.



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## JORC TABLE 1

### Section 1: Sampling Techniques and Data

*(Criteria in this section apply to all succeeding sections)*

| Criteria   | Commentary  |
|--|---|
| <b>Sampling techniques, drilling techniques, and drill sample recovery</b> | <p><b>Diamond drilling</b><br/> A small portion of the data used in resource calculations at the Central Musgrave Project (CMP) has been gathered from diamond core. This core is geologically logged before sampling.</p> <p><b>Reverse circulation percussion (RC) drilling</b><br/> RC drilling has been utilised extensively at the CMP.<br/> Drill cuttings are extracted from the RC return via cyclone. The underflow from each interval is transferred via a bucket to a four-tiered riffle splitter, delivering approximately 3 kg of the recovered material into calico bags for analysis. The residual material is retained on the ground near the hole. Composite samples are obtained from the residue material for initial analysis, with the split samples remaining with the individual residual piles until required for re-split analysis or eventual disposal.</p> <p><b>Historical</b><br/> A variety of drilling methods were employed by INCO, including churn drilling (102 holes) DDH (19 holes) RAB drilling (2,643 holes), vacuum (77 holes), and Becker drilling (102 holes).<br/> Sample recovery from early drilling by INCO is not known. Sample recovery from RC drilling carried out from RC drilling after 2001 was generally very good, except where the drillhole encountered strong water flow from the hole.<br/> All geology input is logged and validated by the relevant area geologists, incorporated into this is an assessment of sample recovery. No defined relationship exists between sample recovery and grade. Nor has sample bias due to preferential loss or gain of fine or coarse material been noted.</p> |
| <b>Logging</b>   | Diamond core is logged geologically and geotechnically.<br>RC hole chips are logged geologically.<br>Logging is quantitative in nature.<br>All holes are logged completely.   |
| <b>Sub-sampling techniques and sample preparation</b>                      | A sample of each 5 ft of drilling from INCO drilling was quartered and forwarded for assay, either to AMDEL in Adelaide, or to INCO's in-house laboratory at Blackstone.<br>Samples of RC drilling taken before 2006 were composited on a 3 m or 4 m basis, and the composite was assayed. A 1 m riffle split sample was also taken for each metre drilled and was submitted for analysis if the composite assayed >0.4% Ni.<br>Sub-sampling for the 2006 and later RC drilling was riffle split for each 2 m sample drilled.<br>Chips/core chips undergo total preparation.<br>Quality assurance/quality control (QAQC) is currently ensured during the sub-sampling stages process via the use of the systems of an independent NATA/ISO accredited laboratory contractor. A portion of the historical informing data has been processed by in-house laboratories.<br>The sample size is considered appropriate for the grain size of the material being sampled.<br>The un-sampled half of the diamond core is retained for check sampling if required.<br>For RC chips regular field duplicates are collected and analysed for significant variance to primary results.   |
| <b>Quality of assay data and laboratory tests</b>                          | Samples of INCO's drilling were dried and assayed by atomic absorption spectrometry (AAS) either at AMDEL in Adelaide, or at INCO's in-house laboratory at Blackstone. The digest method was not specified. Samples were assayed for nickel, cobalt, and iron. Analytical quality control was maintained by the insertion of standard samples and re-analysis of duplicates at separate laboratories at a frequency of two check analyses for every 20 samples.<br>Composite samples of RC drilling completed in 2001 were submitted to AMDEL, dried and pulverised, and assayed for Ni, Co, Ag, As, Bi, Cu, Cr, Fe, Mg, Mn, Pb, S, Sb, Ti, V, Zr, Ca and Al by HF-multi-acid digest/inductively coupled plasma-optical emission spectroscopy (ICP-OES). The 1 m riffle-splits for any composite sample assaying >0.4% Ni were retrieved, and re-assayed using the same method.   |

| Criteria   | Commentary   |
|--|--|
|  | <p>Composite samples from 2002 to 2004 were assayed for Al, Ca, Cr, Fe, Mg, Mn, Ni, Si, Ti by borate fusion ICP-OES, and for Ag, As, Bi, Co, Cu, Ni, Pb, S, Sb, V, Zr by HF-multi-acid digest/ICP-OES.</p> <p>During 2005, 2 m composite riffle split (or spear-sampled for wet samples) samples were sent to SGS Laboratories in Perth. Each 2 m composite sample was dried and pulverised to a nominal 90% passing 75 microns and analysed for: As, Bi, Co, Cu, Ni, Pb, S and Zn by ICP-OES. Samples returning &gt;0.4% Ni were re-assayed for Ni, Co, Al<sub>2</sub>O<sub>3</sub>, CaO, K<sub>2</sub>O, Fe<sub>2</sub>O<sub>3</sub>, MgO, MnO, Na<sub>2</sub>O, SiO<sub>2</sub>, V<sub>2</sub>O<sub>5</sub>, TiO<sub>2</sub>, Cr, SO<sub>3</sub>, Cu, Zn by fused disc XRF.</p> <p>After 2005, 2 m composite riffle split (or spear-sampled) samples were sent to SGS Laboratories in Perth. Each sample was pulverised to nominal 90% passing 75 µm for analysis for assay for Ni, Co, Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, TiO<sub>2</sub>, Fe<sub>2</sub>O<sub>3</sub>, MnO, CaO, K<sub>2</sub>O, MgO, SO<sub>3</sub>, Na<sub>2</sub>O, V<sub>2</sub>O<sub>5</sub>, Cr, Cu and Zn by fused disc XRF.</p> <p>Duplicate samples were taken by spearing the sample pile on the ground approximately every 20 samples, and an in-house standard was inserted into the sample run every alternate 20 samples.</p> <p>No significant QAQC issues have arisen in recent drilling results.</p> <p>These assay methodologies are appropriate for the resource in question.</p> |
| <b>Verification of sampling and assaying</b>                   | <p>Anomalous intervals, as well as random intervals, are routinely checked assayed as part of the internal QAQC process.</p> <p>Virtual twinned holes have been drilled in several instances across all sites with no significant issues highlighted.</p> <p>Primary data is loaded into the drillhole database system and then archived for reference.</p> <p>All data used in the calculation of resources and reserves are compiled in databases that are overseen and validated by senior geologists.</p> <p>No primary assays data is modified in any way.</p>  |
| <b>Location of data points</b>                                 | <p>All hole collar locations for RC holes drilled after 2000 were surveyed using a Real-Time Kinematic global positioning system (GPS). This measured X, Y and Z to sub-centimetre accuracy in terms of the MGA 94, Zone 52 metric grid.</p> <p>Hole collars for almost all INCO drillholes were relocated and surveyed using the TREK GPS. Several INCO collars could not be located, and their MGA positions are estimated from their drilled location on the original INCO Imperial local grid.</p> <p>Topographic control is generated from a combination of remote sensing methods and ground-based surveys. This methodology is adequate for the resource in question.</p>   |
| <b>Data spacing and distribution</b>                           | <p>Drillhole spacing at CMP is generally on a 120 m x 50 m spacing. This has been infilled to 60 m x 50 m and 30 m x 25 m spacing in some areas. The data spacing is sufficient for both the estimation procedure and resource classification applied.</p> <p>Compositing of drill assay data to 2 m was used in the estimate.</p>   |
| <b>Orientation of data in relation to geological structure</b> | <p>Drilling intersections are nominally designed to be sub-normal to the orebody.</p> <p>It is not considered that drilling orientation has introduced an appreciable sampling bias.</p>   |
| <b>Sample security</b>   | <p>Samples are delivered to a third party transport service, who in turn relay them to the independent laboratory contractor. Samples are stored securely until they leave site.</p>   |
| <b>Audits or reviews</b>                                       | <p>Site generated resources and reserves and the parent geological data is routinely reviewed by the Metals X Limited (Metals X) Corporate technical team.</p>   |

## Section 2: Reporting of Exploration Results

*(Criteria listed in the preceding section also apply to this section)*

| Criteria                                       | Commentary  |
|--|---|
| <b>Mineral tenement and land tenure status</b> | <p>The CMP comprises five granted exploration leases and one granted miscellaneous lease.</p> <p>Native title interests are recorded against the CMP tenements.</p> <p>The CMP tenements are held by Austral Nickel Pty Ltd (South Australia) and Hinckley Range Pty Ltd (Western Australia). Metals X has 100% ownership of both companies.</p> <p>One third party royalty agreement applies to the tenements at CMP, over and above the state government royalty.</p> |

| Criteria  | Commentary  |
|---|---|
|   | <p>Hinckley Range Pty Ltd and Austral Nickel Pty Ltd operate in accordance with all environmental conditions set down as conditions for grant of the leases.</p> <p>There are no known issues regarding the security of tenure.</p> <p>There are no known impediments to continued operation.</p>   |
| <b>Exploration done by other parties</b>                                | <p>The CMP area has an exploration history that extends back to the 1960s, with significant contributors being INCO, Acclaim Exploration Ltd (Acclaim) and Metex Nickel (now Metals X).</p> <p>On balance, Metals X work has generally confirmed the veracity of historical exploration data.</p>   |
| <b>Geology</b>  | <p>The Musgrave Block is an east-west trending, structurally bounded mid-Proterozoic terrane some 130,000 km<sup>2</sup> in area, straddling the common borders of Western Australia, South Australia, and the Northern Territory.</p> <p>Deep weathering of olivine-rich ultramafic units has resulted in the concentration of nickel mineralisation. The olivines in the ultramafic units have background values of about 0.15% Ni to 0.3% Ni. The almost complete removal of magnesium oxide and SiO<sub>2</sub> to groundwaters during the weathering of olivines in the ultramafic units resulted in extreme volume reductions and consequent significant upgrading of other rock-forming oxides (Fe<sub>2</sub>O<sub>3</sub>, Al<sub>2</sub>O<sub>3</sub>) and metal element concentrations in the weathered profile.</p> |
| <b>Drillhole Information</b>  | No drillhole information is being presented as Exploration Results.   |
| <b>Data aggregation methods</b>   | No drillhole information is being presented as Exploration Results, a Mineral Resource estimate has been completed.   |
| <b>Relationship between mineralisation widths and intercept lengths</b> | No drillhole information is being presented as Exploration Results, a Mineral Resource estimate has been completed.   |
| <b>Diagrams</b>   | No drillhole information is being presented as Exploration Results.   |
| <b>Balanced reporting</b>   | No drillhole information is being presented as Exploration Results, a Mineral Resource estimate has been completed.   |
| <b>Other substantive exploration data</b>                               | No drillhole information is being presented as Exploration Results.   |
| <b>Further work</b>   | No drillhole information is being presented as Exploration Results.   |

### Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section)

| Criteria                         | Commentary  |
|----------------------------------|---|
| <b>Database integrity</b>        | <p>Drillhole data is stored in a MaxGeo DataShed system based on the Sequel Server platform which is currently considered “industry standard”.</p> <p>As new data is acquired it passes through a validation approval system designed to pick up any significant errors before the information is loaded into the master database. The information is uploaded by a series of Sequel routines and is performed as required. The database contains diamond drilling (including geotechnical and specific gravity data), and some associated metadata. By its nature, this database is large in size and therefore exports from the main database are undertaken (with or without the application of spatial and various other filters) to create a database of workable size, preserve a snapshot of the database at the time of orebody modelling and interpretation and preserve the integrity of the master database.</p> |
| <b>Site visits</b>               | <p>The site is manned continually by Senior Geological personnel.</p> <p>The Competent Person has undertaken site visits in the recent past.</p>  |
| <b>Geological interpretation</b> | Confidence in the geological model used to constrain the Wingellina estimate is high, with the genetic model for lateritic nickel development well understood. Logged geology has been used to drive the mineralisation interpretation, with the base of laterite defined with drillholes, or its level on a given section interpreted from surrounding drill sections. Continuity of the interpretation across and along the Wingellina deposit is for the most part good, with  |

| Criteria                                    | Commentary  |
|---|---|
|   | <p>intersections of hard rock in drillholes, and well-mapped outcropping basement the primary causes of breaks within the mineralised horizon.</p> <p>No alternative interpretations are currently considered viable.</p> <p>Geological interpretation of the deposit was carried out using a systematic approach to ensure that the resultant estimated Mineral Resource figure was both sufficiently constrained, and representative of the expected subsurface conditions. In all aspects of resource estimation, the factual and interpreted geology was used to guide the development of the interpretation.</p> <p>The protolithology is the dominant control on grade continuity at the CMP. Structural controls which influence the depth of weathering are secondary controls on grade distribution.</p>   |
| <b>Dimensions</b>                           | <p>Individual deposit scales vary across the CMP.</p> <p>The Wingellina deposits have a strike length of &gt;9 km, a lateral extent of up to 2.5 km and a depth of up to 200 m.</p>   |
| <b>Estimation and modelling techniques</b>  | <p>All modelling and estimation work undertaken was carried out in three dimensions via Micromine or Surpac Vision.</p> <p>After validating the drillhole data to be used in the estimation, interpretation of the orebody is undertaken in sectional and/or plan view to create the outline strings which form the basis of the three-dimensional (3D) orebody wireframe. Wireframing is then carried out using a combination of automated stitching algorithms and manual triangulation to create an accurate 3D representation of the subsurface mineralised body.</p> <p>Drillhole intersections within the mineralised body are defined, these intersections are then used to flag the appropriate sections of the drillhole database tables for compositing purposes. Drillholes are subsequently composited to allow for grade estimation. In all aspects of resource estimation the factual and interpreted geology was used to guide the development of the interpretation.</p> <p>Once the sample data has been composited, a statistical analysis (using Snowden Supervisor v8.5) is undertaken to assist with determining estimation search parameters, top cuts, etc. Variographic analysis of individual domains is undertaken to assist with determining appropriate search parameters. Which are then incorporated with observed geological and geometrical features to determine the most appropriate search parameters.</p> <p>An empty block model is then created for the area of interest. This model contains attributes set at background values for the various elements of interest as well as density, and various estimation parameters that are subsequently used to assist in resource categorisation. The block sizes used in the model will vary depending on orebody geometry, minimum mining units, estimation parameters and levels of informing data available.</p> <p>Grade estimation is then undertaken, with the ordinary kriging estimation method considered as standard, although in some circumstances where sample populations are small, or domains are unable to be accurately defined, inverse distance weighting estimation techniques may be used. Both by-product and deleterious elements are estimated at the time of primary grade estimation if required. It is assumed that by-products correlate well with nickel. There are no assumptions made about the recovery of by-products.</p> <p>The resource is then depleted for mining voids and subsequently classified in line with JORC guidelines utilising a combination of various estimation derived parameters and geological/mining knowledge.</p> <p>This approach has proven to be applicable to Metals X's nickel assets.</p> <p>Estimation results are routinely validated against primary input data, previous estimates, and mining output.</p> |
| <b>Moisture</b>                             | Tonnage estimates are dry tonnes.   |
| <b>Cut-off parameters</b>                   | <p>The resource reporting cut-off grade is 0.5% Ni.</p> <p>The reporting cut-off used was based on MLX's current interpretation of commodity markets, and to allow peer group comparison.</p>   |
| <b>Mining factors or assumptions</b>        | Not considered for Mineral Resources. Applied during the Reserve generation process.  |
| <b>Metallurgical factors or assumptions</b> | Not considered for Mineral Resources. Applied during the Reserve generation process.  |

| Criteria   | Commentary   |
|--|--|
| <b>Environmental factors or assumptions</b>        | MLX stated that they operated in accordance with all environmental conditions set down as conditions for grant of the respective leases.   |
| <b>Bulk density</b>                                | Sampling of HQ diamond drill core was used to determine the dry density of laterite ore. The average measured dry density is 1.23 t/m <sup>3</sup> for limonite ore and 1.40 t/m <sup>3</sup> saprolite ore. A total of 281 triple-tube HQ core samples were collected immediately from the core barrel and measured for bulk density on site. The core length was measured for diameter and length (square-cut ends), dried for 24 hours in a gas oven at 120°C, and weighed. Density was calculated by dividing the weight (kg) of the dry sample by the volume of the core piece. |
| <b>Classification</b>                              | Resources are classified in line with JORC guidelines utilising a combination of various estimation derived parameters, the input data and geological/mining knowledge. This approach considers all relevant factors and reflects the Competent Person's view of the deposit.  |
| <b>Audits or reviews</b>                           | Resource estimates are peer-reviewed by the site technical team as well as Metals X's Corporate technical team.  |
| <b>Discussion of relative accuracy/ confidence</b> | All currently reported resource estimates are considered robust, and representative on both a global and local scale.  |

## Section 4: Estimation and Reporting of Ore Reserves

*(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section)*

| Criteria  | Commentary   |
|---|--|
| <b>Mineral Resource estimate for conversion to Ore Reserves</b> | At all projects, all resources that have been converted to reserve are classified as either an Indicated or Measured Resource. Indicated Resources are only upgraded to Probable Reserves after adding appropriate modifying factors. Some Measured Resource may be classified as Proven Reserves and some may be classified as Probable Reserves based on whether it is capitally or fully developed.   |
| <b>Site visits</b>  | Irregular site visits have been undertaken. The reserve has remained consistent since the 2008 Feasibility Study was completed.  |
| <b>Study status</b>   | A Feasibility Study utilising a combination of internal and external expertise has been undertaken to allow the conversion of Mineral Resources to Ore Reserves.   |
| <b>Cut-off parameters</b>                                       | The cut-off grade used for inclusion in the CMP Reserve was determined through the Feasibility Study process. Cobalt co-product revenue is considered by the Feasibility Study.  |
| <b>Mining factors or assumptions</b>                            | Whittle 4D was used to formulate optimal pit shell, with subsequent designs being undertaken in Surpac. Mining studies indicate most material will be free digging, but an allowance has been made to blast some material. The material outcrops and has an overall strip ratio of 1.1:1. Due to the shallow nature and expected ground conditions, slope angles are low. Geotechnical data has been obtained through logging. The Mineral Resource was used to formulate the Ore Reserves. Due to the bulk nature of the deposit, limited dilution factors have been used, combined with high recovery factors. |
| <b>Metallurgical factors or assumptions</b>                     | Based on this preliminary assessment, the Wingellina deposit may be processed by a pressure acid leach flowsheet. Pressure acid leach is a proven nickel extraction method both in Australia and globally. Extensive testwork including at pilot plant scale has been conducted on CMP material over the period 1965 to 2013. Alternate processing options are actively being tested.  |
| <b>Environmental</b>  | Waste dumps were considered during the Feasibility Study. A draft Public Environmental Notice has been completed and will be published.  |

| Criteria  | Commentary  |
|---|---|
| <b>Infrastructure</b>                             | Limited infrastructure is currently present. All required infrastructure was considered in the Feasibility Study.<br>Infrastructure is considered standard for a remote site setup.   |
| <b>Costs</b>                                      | The Feasibility Study was completed in 2008 using both independent and internal cost estimates. These costs were updated in 2012.<br>Both government and private royalties are payable. All royalties were considered as part of the Feasibility Study.   |
| <b>Revenue factors</b>                            | The Feasibility Study progressed utilising assumptions regarding foreign exchange rates and commodity prices presented below. These prices have been set by corporate management and are considered a realistic forecast of expected commodity prices and exchange rates over the initial period of projected operation at Wingellina. <ul style="list-style-type: none"><li>• Ni = US\$20,000/t</li><li>• Co = US\$45,000/t</li><li>• Exchange rate (A\$:US\$) US\$0.85.</li></ul> Head grades have been defined via Whittle optimisation and subsequent scheduling.   |
| <b>Market assessment</b>                          | Detailed economic studies of the nickel market and future price estimates are considered by Metals X and applied in the estimation of revenue, cut-off grade analysis and future mine planning decisions.<br>There remains strong demand and no apparent risk to the long-term demand for the nickel generated from the CMP.  |
| <b>Economic</b>                                   | For the CMP, which is yet to be funded, an 8% real discount rate is applied to net present value analysis.<br>Sensitivity analysis of key financial and physical parameters is applied to future development project considerations and mine.   |
| <b>Social</b>                                     | The CMP is yet to start and will require environmental and other regulatory permitting.   |
| <b>Other</b>                                      | A Native Title agreement has been reached.  |
| <b>Classification</b>                             | The basis for classification of the resource into different categories is made on a subjective basis. Measured Resources have a high-level of confidence and are generally defined in three dimensions. Indicated resources have a slightly lower level of confidence but contain substantial drilling and are well defined from a mining perspective. Inferred Resources always contain significant geological evidence of existence and are drilled, but not to the same density. There is no classification of any resource that is not drilled or defined by substantial physical sampling works.<br>Some Measured Resources have been classified as Proven and some are defined as Probable Reserves based on subjective internal judgements.<br>The result appropriately reflects the Competent Person's view of the deposit. |
| <b>Audits or reviews</b>                          | Site generated reserves and the parent data and economic evaluation data is routinely reviewed by the Metals X Corporate technical team. Resources and Reserves have in the past been subjected to external expert reviews, which have ratified them with no issues. There is no regular external consultant review process in place.   |
| <b>Discussion of relative accuracy/confidence</b> | All currently reported reserve calculations are considered representative on a global scale.<br>Only material considered as part of the Feasibility Study has been included as part of the reserve statement.<br>Limited modifying factors have been applied due to the massive nature of the deposit and the closeness to the surface.   |