A globally significant source of nickel-cobalt and scandium in Western Australia

Ardea Resources

For personal use only

Noosa Mining & Exploration Investor Conference

15 July 2021, 9.00am AEST

Ardea Resources Limited – Corporate Presentation

A Responsible, Sustainable and Ethical Source of Nickel and Critical Minerals from the Kalgoorlie Nickel Project, Western Australia

Disclaimer

For personal use only

Important notice

This presentation contains general information only and is, or is based upon, information which has been released to ASX or is contained in the Ardea Resources Limited (Ardea or the Company) prospectus dated 9 November 2016 (including supplementary prospectuses dated 18 November 2016 and 6 January 2017), the Goongarrie Nickel Cobalt Project Pre-Feasibility Study (dated 28 March 2018) the Goongarrie Expansion Study (24 July 2018), Goongarrie Pilot Plant trial produces battery grade crystals (31 October 2018), Goongarrie Nickel Cobalt Project Update (8 April 2019), Ardea Annual Report 2019 (24 October 2019), Ardea Quarterly Operations Report, for the quarter ended 31 March 2020 (9 April 2020), Maiden Resource for Big Four Gold Project, WA (14 May 2020), Quarterly Activities Report - June 2020 (23 July 2020), Significant gold in first RC drilling at Aphrodite North (13 August 2020), Gold Exploration Update (20 August 2020), and Ardea BTZ gold exploration success at Lady Charlotte (24 August 2020), Successful A$3.5M Capital Raising to support Gold Work Programs, SPP to follow (18 September 2020), Nickel Sulphide Targets within the Ardea Tenement Portfolio including KNP (30 September 2020), Quarterly Activities Report - September 2020 (27 October 2020), "Lily Albany" gold discovery confirmed by RC drilling at Aphrodite North (29 October 2020), High-grade, shallow gold discovery at Zeus (9 November 2020), Quarterly Activities Report - December 2020 (21 January 2021), GNCP High Grade Resource - 60 million tonnes at 1.0% nickel (15 February 2021), Quarterly Activities Report - March 2021 (21 April 2021), Basal contact nickel sulphide intersected at Ardea's Emu Lake (27 April 2021), CSIRO/Ardea research at Goongarrie BTZ – insights for nickel sulphide and gold targets (27 May 2021), Kalgoorlie Nickel Project – Feasibility Study Underway (31 May 2021), Semi-massive nickel sulphide intercept at Emu Lake (10 June 2021), Highway Nickel Deposit - Mineral Resource Estimate (16 June 2021), BTZ gold update – multiple gold intercepts adjoining the nickel-cobalt deposits (22 June 2021), Successful A$5.7M Capital Raising to Fund Kalgoorlie Nickel Project Feasibility Work (28 June 2021) Nickel Sulphide Exploration Update – Emu Lake (13 July 2021).

This presentation is not an invitation, offer or recommendation (express or implied) to subscribe for, or apply for the purchase of, or to take any other action in respect of securities of any entity described herein and is not a prospectus, product disclosure statement or disclosure document for the purposes of the Corporations Act 2001 (Cth) and has not been lodged with ASIC. None of Ardea Resources Limited (Ardea or the Company) or its representatives are providing or offering investment advice or services by making this presentation.

Neither Ardea nor its representatives make any representation, warranty or guarantee of any kind, express or implied, as to the accuracy, completeness or reasonableness of the information contained herein or any other written or oral communication transmitted or made available to any person receiving this presentation. To the maximum extent permitted by law, Ardea and representatives expressly disclaim any and all liability based on or arising from, in whole or in part, such information, or any errors or omissions.

This presentation contains forward-looking statements regarding the Company's resources, intentions and future business. These statements reflect current information, expectations, intentions and strategies regarding the future, and are subject to certain risks and uncertainties. Should one or more of these risks or uncertainties materialise, or should any of the underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this presentation. Investors are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date they are made. Other than where required by law, the Company is under no obligation to revise any forward looking statement to reflect events or circumstances after the date of this presentation or to reflect the occurrence of unanticipated events.

The Goongarrie Project has completed the Pre-Feasibility Study phase and has commenced programs that are part of the Definitive Feasibility Study. Though reasonable care has been taken to ensure that the facts are accurate and/or that the opinions expressed are fair and reasonable, no reliance can be placed for any purpose whatsoever on the information contained in this document or on its completeness. Actual results and developments of projects and the market development may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors. A key conclusion of the Pre-Feasibility Study and Expansion Study, which is based on forward looking statements, is that the Goongarrie Project is considered to have positive economic potential.

No stock exchange, regulation services provider, securities commission or other regulatory authority has approved or disapproved the information contained in this news release.

Ardea Resources Corporate Overview

For personal use only

Board and Key Personnel

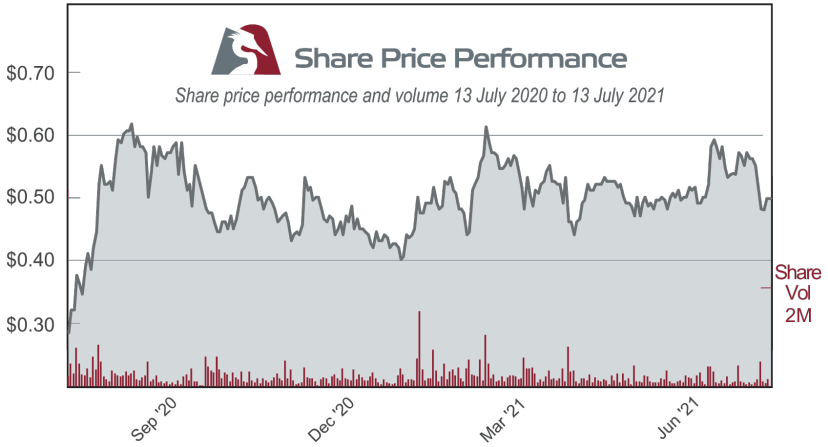
Mathew Longworth	Non-Executive Chair
Andrew Penkethman	Managing Director & CEO
Ian Buchhorn	Executive Director
Sam Middlemas	Company Secretary & CFO
Dr Matt Painter	General Manager Exploration
Alex Mukherji	Manager Land Access & Compliance
Mike Miller	General Manager – Technical Services

Listed on ASX (ARL)

Shares on Issue	138,034,219
Performance Rights (ARFAJ)	4,236,000
Share Price	$0.50
52 week high / low	$0.63 / $0.23
Cash (as at 5 July 2021)	$11 million
Market Capitalisation	$69 million
Board and Management	~10% equity
Top 40 Shareholders	~60% equity

Kalgoorlie Nickel Project – Goongarrie Hub

- ✓ **Globally significant Nickel, Cobalt and Scandium resource and other Critical Minerals**
- ✓ **Essential for green and sustainable technologies**
- ✓ **Located in Australia's premier mining jurisdiction, Kalgoorlie Western Australia**



Experienced Board and Key Personnel

For personal use only

✓ **Balanced financial and corporate experience, strong technical expertise in exploration, discovery, project development, metallurgical optimisation, compliance and operational management**

Mathew Longworth Non-Executive Chair

33 years experience across exploration, project evaluation/development, operations and corporate management. Invaluable experience on the key Ardea exploration and development projects, being the KNP nickel-cobalt-scandium deposits and Bardoc Tectonic Zone gold.

Andrew Penkethman Managing Director, CEO

Resources sector executive with over 25 years' experience, including project evaluation, exploration, discovery, resource development, feasibility study management, permitting, stake holder engagement, mine development and operations management.
ASX, TSX and AIM experience.

Ian Buchhorn Executive Director

Mineral Economist and Geologist with over 40 years' experience. Lived and worked in the Eastern Goldfields for >20 years undertaking exploration, project evaluation and development. Operated as Registered Mine Manager in the Kalgoorlie Goldfields.

Sam Middlemas Company Secretary & CFO

Chartered Accountant (CA) with more than 30 years' experience providing financial and corporate secretarial services.

Alex Mukherji Manager Land Access & Compliance

Extensive geological and environmental compliance reporting. Drafting and negotiating access and commercial agreements. Assessing business development opportunities. Corporate representation with stake holders, including State and Commonwealth agencies.

Mike Miller General Manager - Technical Services

Process Engineer with over 25 years' experience in hydrometallurgical operations with a primary focus on nickel-cobalt production. Extensive study management experience with leading engineering firms.

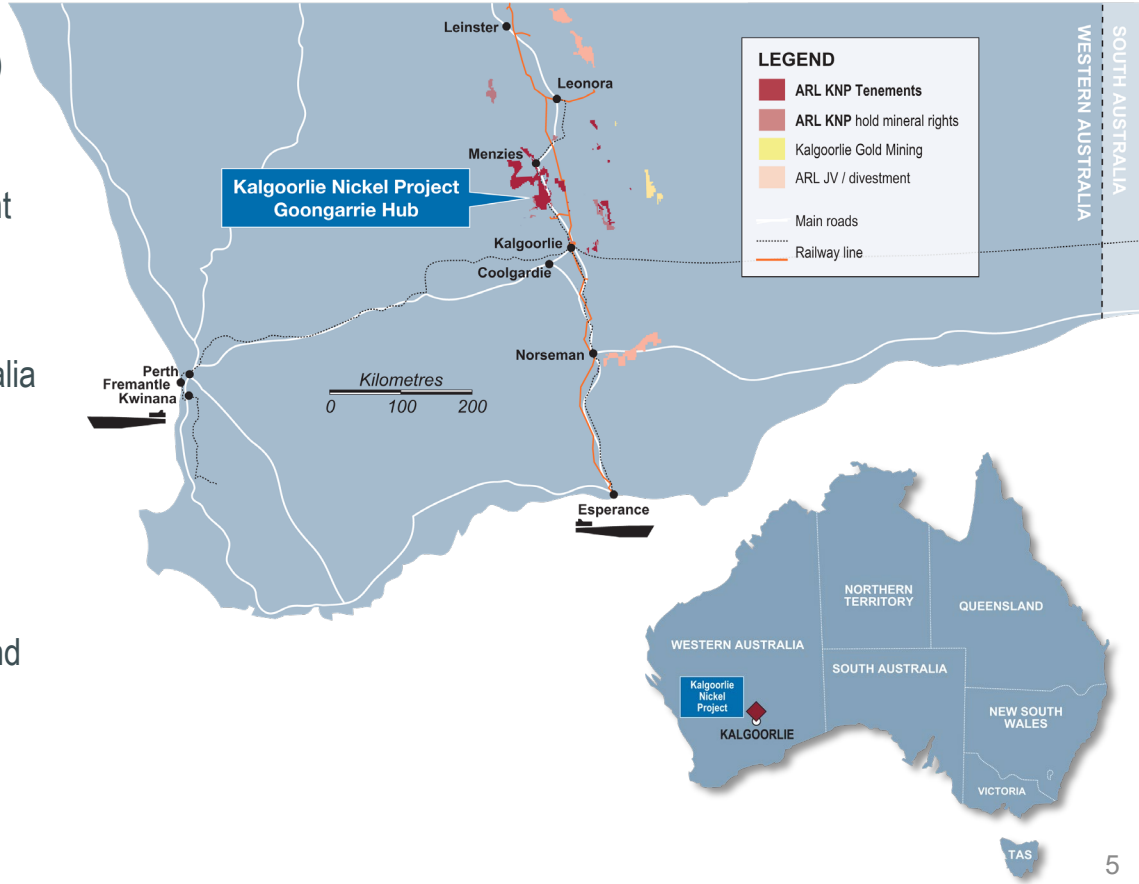
Dr Matt Painter
General Manager – Exploration

Geologist with over 25 years in the resources sector including managerial, corporate, and on-ground experience across a broad range of commodities. He has worked globally on gold mining, development and exploration projects and is a gold specialist.

Prime Location and Jurisdiction

For personal use only

- All Ardea Projects located in Western Australia (WA)
- >4,000km^2 ground position in Eastern Goldfields
- WA is the premier global destination for development of minerals operations
- City of Kalgoorlie-Boulder is the prime resource development and operating destination within Australia
  - ✓ Very strong mining support from Local Government and Community
  - ✓ Multitude of world-class mining operations serviced from the City
  - ✓ Ardea maintains a local operations office and active stake holder engagement

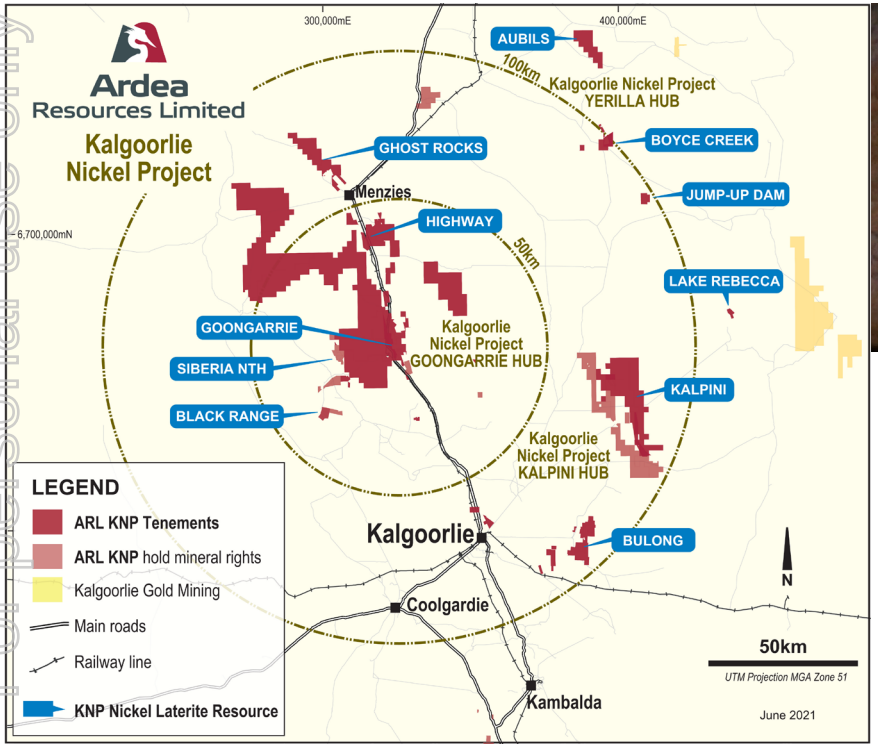


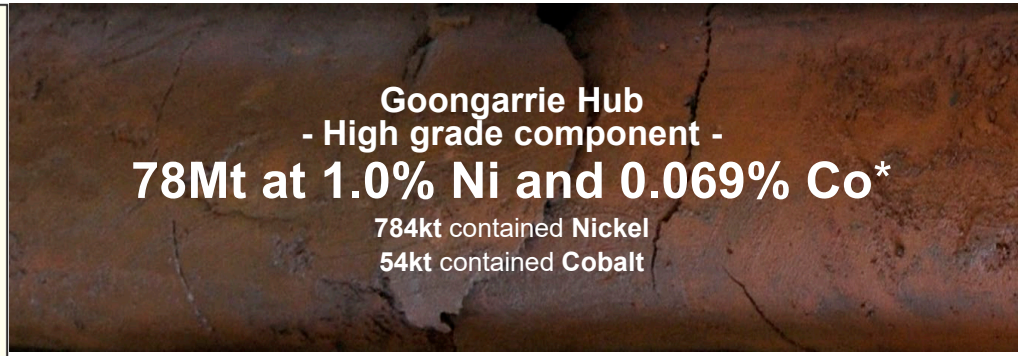
Kalgoorlie Nickel Project (KNP)

For personal use only

Kalgoorlie Nickel Project

✓ Globally significant nickel & cobalt Mineral Resource
✓ Sustainable & ethical supply of nickel & Critical Minerals for low carbon future





- The Kalgoorlie Nickel project (**KNP**) scope has been expanded from Goongarrie alone to now include high grade goethite satellite pits at Highway and Siberia North **(Goongarrie Hub)**
- Feasibility Study (**FS**) work streams accelerated for the DFS
- The FS is evaluating the potential revenue contributions from mineralised neutraliser, scandium and other Critical Minerals, including Rare Earth Elements (REE) throughout the KNP
- Direct infrastructure links to Kwinana Battery Hub

✓ KNP Mineral Resource 5.9Mt contained nickel and 384kt contained cobalt*
✓ 3.39kt scandium, from just Goongarrie deposits
✓ Pipeline of other Critical Minerals

* See Appendix for resource breakdown and ASX releases 15 February and 16 June 2021.

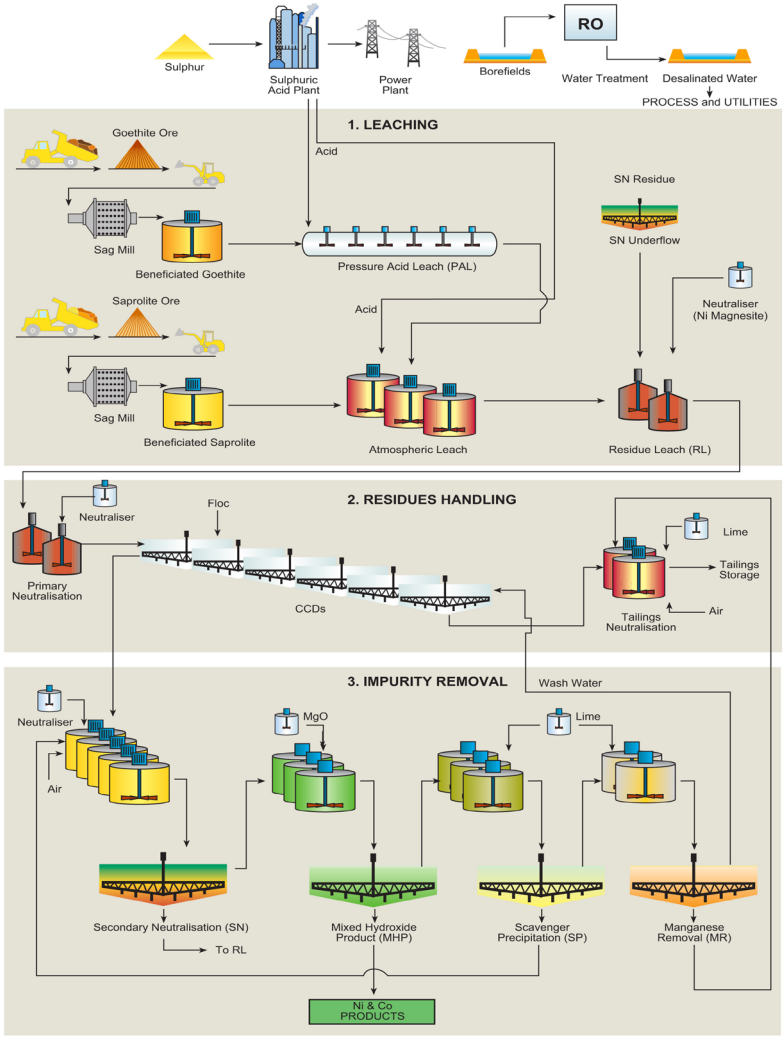
For personal use only

Kalgoorlie Nickel Project

- ✓ **Goongarrie Hub - Premium goethite ore type (less abrasive, lower maintenance)**
- ✓ **End product specification will cater to our customer needs**
- ✓ **Ni:Co:Mn ratio well suited to NCM811 battery technology**

Process Metallurgy

- ✓ Flow sheet uses all “off-the-shelf”, well understood & proven HPAL tech
- ✓ No unproven, risky technologies
- ✓ Good ore grade + slurry density = Lower Capex & Opex
- ✓ HPAL Ni & Co Extraction = Efficient, low energy intensity
- ✓ Atmospheric leach = Stable operation, utilise saprolite ores
- ✓ Water Chemistry = Scale control & better uptime
- ✓ Water Options = Using pit drainage + borefield resource
- ✓ MHP = Known technology & good market acceptance
- ✓ PCAM = Down stream value add (under assessment through FBICRC)



For personal use only

Ardea's Kalgoorlie Nickel Project

Why HPAL

- ✓ Scale and dependability to track and trace a reliable and consistent source of nickel and cobalt without risk of geo-political, environmental / climate disruption or ESG uncertainty
- ✓ Sulphide ores are not the solution in scale and certainty for the Western EV supply chain
- ✓ Sulphide nickel ores are a declining resource and are less amenable to chemical grade nickel and cobalt production
- ✓ Ardea's KNP hosts one of the largest nickel-cobalt resources in the world in the premier operating jurisdiction
- ✓ Ferronickel and Nickel Pig Iron routes are energy and carbon intensive and less amenable to chemical grade nickel and cobalt production
- ✓ Processing options such as DNi are still under development and essentially unproven
- ✓ HPAL chemistry is well known and HPAL engineering has been applied successfully

Quality Project Partners

Feasibility Study

- ✓ Gap Analysis Study Underway - Wood, international engineering consulting group
- ✓ Goongarrie Hub Hydrogeology Underway – Rockwater
- ✓ Goongarrie Hub metallurgical drilling to commence July 2021 – DDH1
- ✓ Metallurgical Testwork - TBD

Other Work Streams

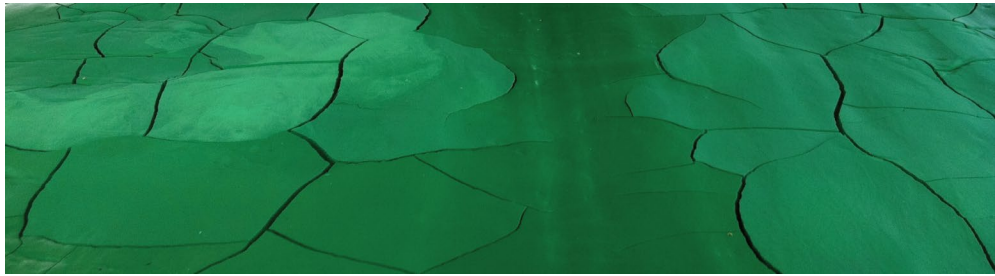
- ✓ Future Battery Industry Co-operative Research Centre (FBICRC)
- ✓ CSIRO
  - ✓ Completed CSIRO/Ardea research at Goongarrie BTZ – insights for nickel sulphide and gold targets
  - ✓ Nickel Sulphide and other studies being assessed

✓ **The right concept and quality team assembled to ensure success**

For personal use only

KNP Superior HPAL Intensity

- ✓ Good ore grade + good slurry density = Lower capex & opex $$
- ✓ Atmospheric leach = stable operation, utilizes saprolite resource
- ✓ MHP Product = known technology & good market acceptance



Operating data from Australian HPAL Producers

Performance Driver	Ardea	Bulong	Cawse	Murrin	RNO^	Metric	Ardea Rank	Comment
Atmospheric Leach	Yes	No	No	No	Yes	-	#1	Stable operation and full resource utilisation
HPAL Feed Density	42-44%	31%	35%	38%	42%	% Solids	#1	The higher the better = Maximises plant throughput
Residence Time	45-60	75	105	90	60	minutes	#1	The lower the better = Maximises plant throughput
Slurry Grade Ni	4.82	2.89	3.07	3.87	7.39	Ni kg/m3	#2	The higher the better = Increased revenue stream
Slurry Grade Co	0.88	0.23	0.24	0.34	0.31	Co kg/m3	#1	The higher the better = Strategic Co-Product credits

Data Sources
Ardea – Goongarrie Hub testwork results from PFS and Expansion Study, ASX release 28 March 2018 & Goongarrie Expansion Study, 24 July 2018.
Bulong, Cawse, Murrin - ALTA 1999, An Engineering Comparison of the Three Treatment Flowsheets In WA Nickel Laterite Projects.
RNO – ALTA 2001, Observations from the RNO Pilot Plant at Lakefield Research, 2000 AD.

^RNO figures based on design numbers on upgraded beneficiated ore from the Halleys Deposit which has since been mined out.
Ardea data is based on non-beneficiated material (with always an option to beneficiate selected KNP geo-met types, notably at Highway).

For personal use only

Ardea Resources Activity Timeline

- ✓ **Ardea is a Company with a clear strategy that meets objectives**
- ✓ **The right balance of experienced Board and Key Management working with quality service providers**
- ✓ **Strong reporting and communication to regulators and stakeholders**

2017

Q1

- Ardea lists on ASX with **Kalgoorlie Nickel Project** (KNP)

2018

Q2

- KNP Pre-Feasibility Study

Q3

- 2.25Mtpa Expansion study
- Pilot plant work

Q4

- Pilot plant – on-spec nickel & cobalt sulphate produced

2019

Q2-3

- Andrew Penkethman appointed CEO
- Focus on WA and flagship KNP
- Exploration accelerated for nickel sulphide (NiS), Critical Minerals and gold

Q4

- Godolphin Spin-out of NSW Tenure with in-specie share distribution to Ardea shareholders

2020

Q1-4

- NiS, Critical Minerals and gold within KNP add value (**discovery success**)
- Goongarrie high grade Ni mineralisation understood
- WA tenement rationalisation
  - Mt Zephyr/Darlot East RED JV;
  - Mulga Plum Option Agreement –MCT

2021

Q1-2

- Joined FBICRC
- KNP Goongarrie Hub Ni-Co resource update, incl maiden Sc component
- WA tenement rationalisation continues via divestment and JV
- Emu Lake NiS **discovery**
- Highway Ni-Co resource update
- **$5.7M raised** to accelerate KNP FS work

Current

- KNP Feasibility
  - Hydrogeology drilling to support grant of 3.5Glpa water extraction licence
  - Metallurgical drilling
  - Mineralised neutraliser & Critical Mineral testwork
  - Gap Analysis Study
  - FBICRC study projects
- Nickel Sulphide & Critical Mineral Exploration
- Kalgoorlie Gold Mining Spin-out

For personal use only

ESG Credentials Environmental Social and Governance

For personal use only

- ESG considerations are at the forefront of the way in which Ardea does business and assesses societal impact
- All project designs and work practices are predicated on ensuring the Company minimises green-house gas emission to ensure responsible sourcing of nickel and Critical Mineral supply, through sustainable and ethical production
- Ardea is a member of the Future Battery Industry Co-operative Research Centre (FBICRC) concerned with responsible sourcing of materials, through mechanisms such as:
  - ✓ mandatory reporting of CO_2 footprints for all batteries sold
  - ✓ traceability is also being implemented with raw materials used in batteries to ensure sustainable sourcing

- Ardea enjoys strong support from the communities in which we operate, primarily the City of Kalgoorlie-Boulder and the Shire of Menzies
- Ardea has a Native Title Agreement in place for development of KNP
- Ardea has initiated an education fund to assist children in the communities within which it operates
- The Ardea team comprises over 31% female participation, all in key management roles, and the Company is a strong advocate for gender equality and fair representation for all community groups

Optimum Location - sustainable & ethical mineral supply

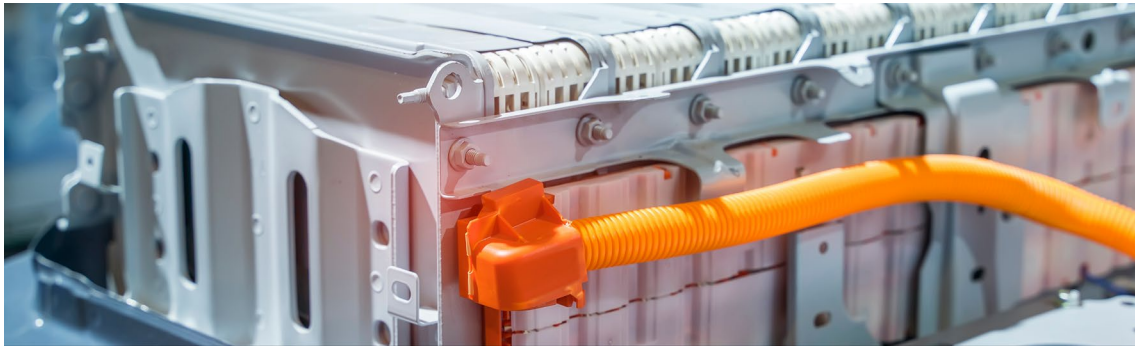
For personal use only

- Large contiguous KNP land holding allows unimpeded site planning to minimise ultimate site footprint
- Open Mediterranean woodland highly amenable to low-impact development and rehabilitation
- Arid environment, facilitates well managed tailings disposal
  - ✓ Rehabilitation procedures well established over last four decades in Kalgoorlie open pit gold sector
  - ✓ No ocean submarine tailings disposal
  - ✓ No valley-fill tailings dams
  - ✓ No active seismicity issues
- No conflicting land use demands
  - ✓ KNP purely a mining jurisdiction
  - ✓ No competing food production activity (as in Eastern Australia laterite districts)
- Low carbon future
  - ✓ KNP HPAL plant steam, heating and power generated through burning elemental sulphur for sulphuric acid feedstock
  - ✓ KNP HPAL neutraliser includes nickel enriched non-carbonate options
  - ✓ Waste landform regeneration facilitates significant agroforestry throughout the KNP

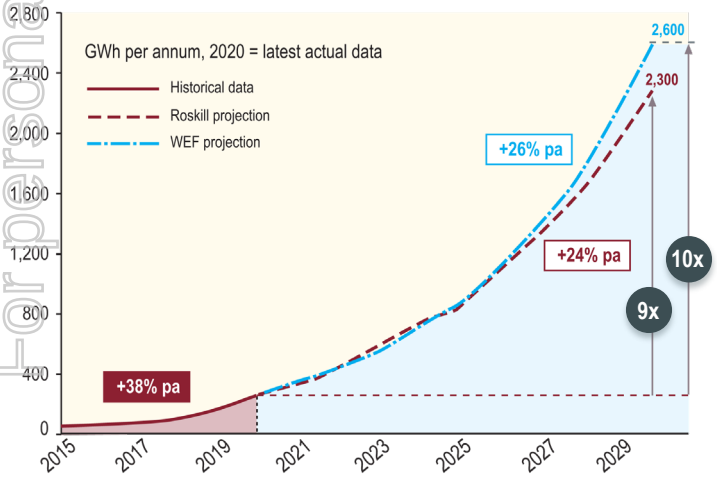
Nickel and the Inevitable Rise in Demand

For personal use only

- ✓ **Demand for batteries is forecast to accelerate over the next decade as energy storage becomes critical to the transformation of energy systems**
- ✓ **KNP poised to supply nickel and cobalt to meet the inevitable and growing rise in demand**



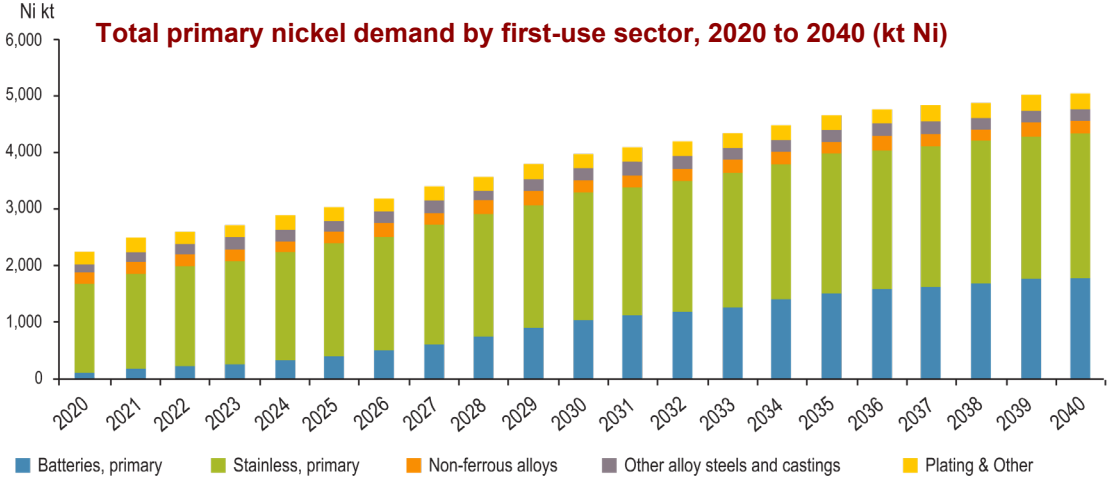
Global battery demand projected to 2030 (GWh pa)



Source: Accenture report commissioned by the Future Battery Industries CRC, 2021

Notes: IRENA's high scenario forecast used for ESS in Roskill projection. Growth rates in exhibit are compounding annual growth rates.
Source: World Economic Forum (2019) A vision for a Sustainable Battery Value Chain in 2030; Roskill (2020) Lithium-ion Batteries: Outlook to 2029, 4th Edition; International Renewable Energy Agency (2017) Electricity storage and renewables: Costs and markets to 2030; International Energy Agency (2021) Global EV Data Explorer; Jager-Waldau (2019)Snapshot of Photovoltaics-February 2019; Accenture analysis.

Total primary nickel demand by first-use sector, 2020 to 2040 (kt Ni)



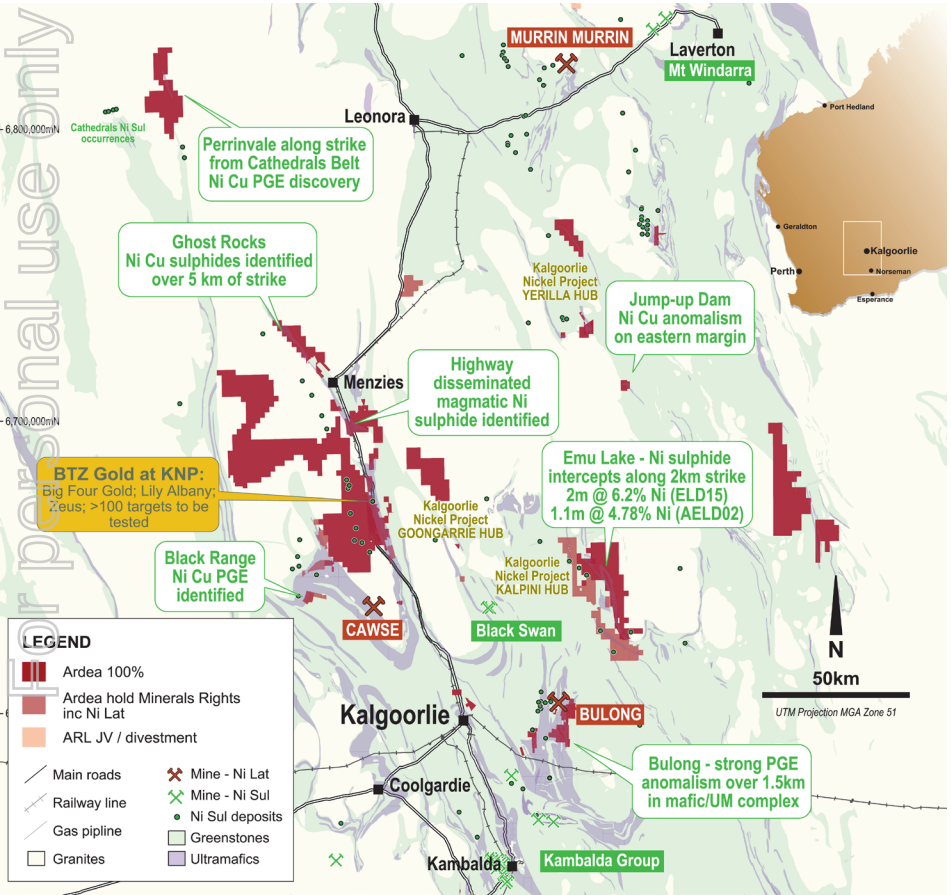
Source: Roskill, 2020

Nickel Sulphide and **Gold**

For personal use only

Exploration Upside

✓ **Ardea's Kalgoorlie Nickel Project tenure is highly prospective for nickel sulphide, Critical Minerals and gold**



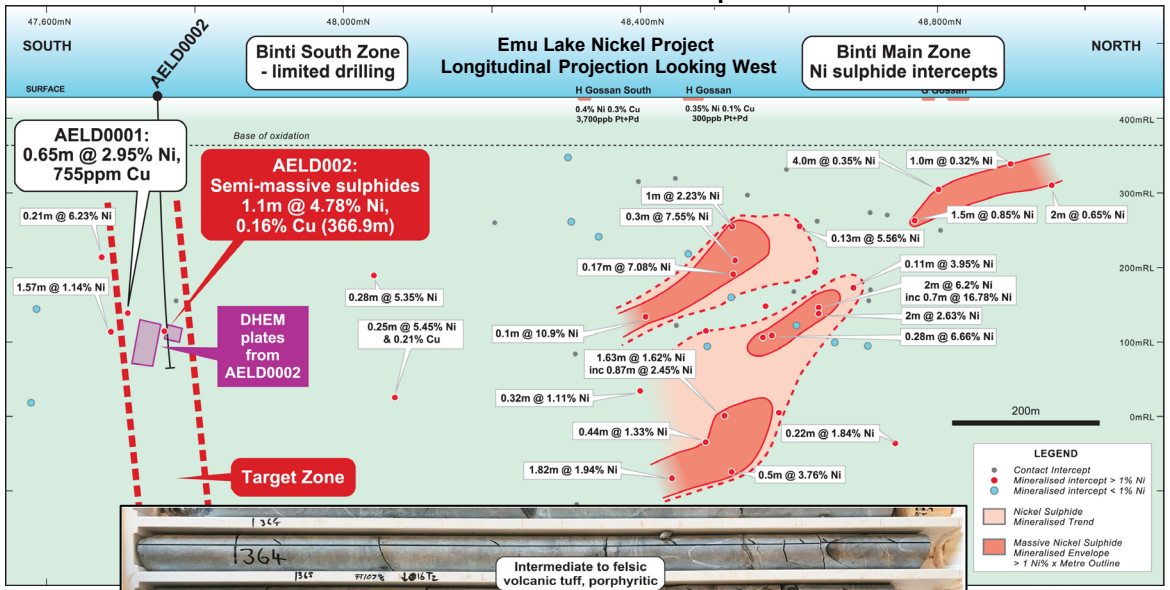
- Ardea's strategic KNP tenure is one of the largest land holdings :
  - ✓ In the Eastern Goldfields of Western Australia
  - ✓ Over ultramafic stratigraphy in Australia
- Multiple compelling nickel sulphide, Critical Mineral and gold targets defined
- Exploration programs current

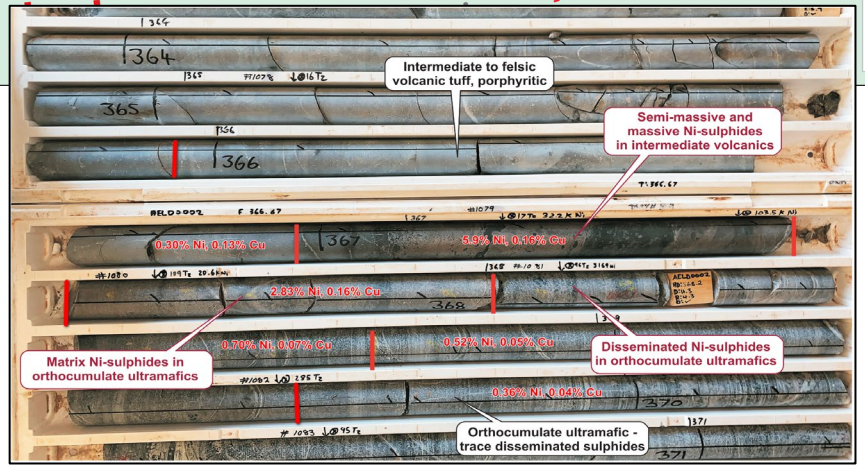
For personal use only

Emu Lake Project Nickel Sulphide

- ✓ Ardea control 20km of prospective stratigraphy
- ✓ Recent discovery and new targets open-up new search space

- 70km north-east of Kalgoorlie on a granted mining lease
- Drilling of the strong DHEM conductor has intersected a 4.8m zone of basal contact nickel sulphide*
- AELD0002, intersected 1.1m of visible semi-massive and matrix style nickel sulphide
  - ✓ **1.1m @ 4.78% Ni, 0.16% Cu, 0.47g/t Pt, 0.20g/t Pd** from 366.9m within a broader zone of;
  - ✓ **4.8m @ 1.44% Ni and 0.09% Cu 0.20g/t Pt, 0.09g/t Pd** from 365.9m
- This represents a new mineralised basal-contact position with 20km of strike available for exploration
- Strong geophysical response generated up and down plunge confirms potential for a Silver Swan / Kambalda-style nickel sulphide channel within 150m of surface*
- Drill follow up ready





* Refer Ardea ASX releases 10 June and 13 July 2021.

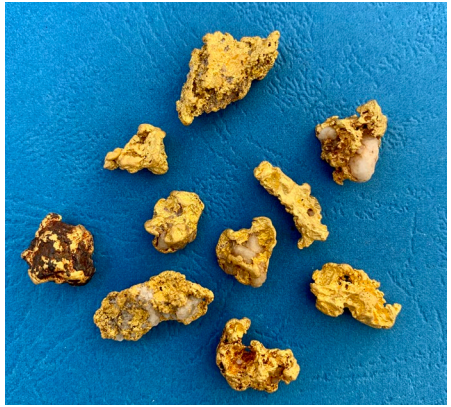
For personal use only

For personal use only

Gold Spin-Out

✓ Allows total focus on Kalgoorlie Nickel Project
✓ ARL shareholders benefit through in-specie share distribution, at nil cost

Kalgoorlie Gold Mining



- Spin-out of non core projects and gold-rights into Kalgoorlie Gold Mining (**KalGold**), so that Ardea can focus on flag-ship battery minerals KNP
- Quality portfolio of Eastern Goldfields tenure with multiple compelling targets ready for drilling
- EGM and shareholder support required
- Planned in-specie share distribution, at nil cost
- Target listing on ASX December Quarter 2021

Investment Summary

For personal use only

Ardea's **KNP** offers **unrivalled nickel, cobalt and scandium scale optionality** (**5.9Mt of nickel and 384kt of cobalt***)

Globally significant nickel-cobalt-scandium resource in an **infrastructure-rich and stable jurisdiction,** provides ability to produce **sustainable** and **ethical** minerals from multiple processing hubs for the rapidly expanding Critical Minerals/LIB sector, with feasibility programs current

100% off-take is available. Company strongly leveraged to increasing nickel and cobalt demand

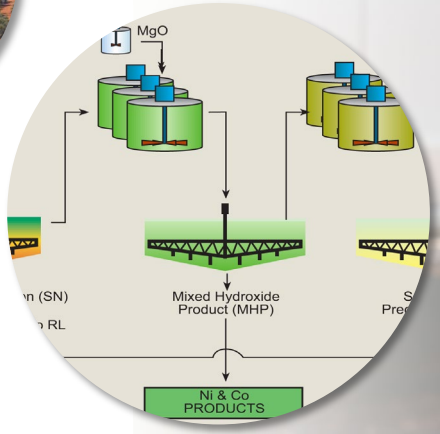
Highly prospective landholding in the **Eastern Goldfields** of **Western Australia – confirmed with recent Ardea nickel sulphide and gold discoveries**

WA based Team with **track record** of exploration, development and production **success**

Well funded to maintain momentum - Upcoming news flow to include **feasibility study updates**, **nickel sulphide and Critical Mineral exploration and KalGold gold spin-out**

* See Appendix for resource breakdown and ASX release 16 June 2021

For further information please visit:
ardearesources.com.au
or contact:
Andrew Penkethman,
Managing Director & CEO
P: +61 8 6244 5136
E: ardea@ardearesources.com.au



For personal use only

A globally significant source of nickel-cobalt and scandium in Western Australia

For further information regarding Ardea, please visit www.ardearesources.com.au

APPENDICES

For personal use only

Ardea's KNP - Why

- ✓ Ardea's Kalgoorlie Nickel Project (KNP)
- ✓ Taking lessons from the experience of others (good & bad)

Kalgoorlie Nickel Project	
Resource ✔	Large strategic resource in best operating jurisdiction, good Ni:Co ratio, potential for upgrade, good rheology. Other by-product options available
HPAL ✔	Efficient nickel and cobalt extraction with low energy intensity
Atmospheric Leach ✔	Efficient resource utilisation Stabilizes production rates Captures acid plant energy credits
MHP Production ✔	Established process route with strong market demand for chemical grade nickel and cobalt production. Evaluating PCAM production following the MHP circuit.

Project	Issues Experienced
Anaconda (Murrin Murrin)	• Integration of mine & process begins before piloting • Allow for catchup capacity at Ore Preparation • Piloting should demonstrate process viability – including Ore Prep • Multistage centrifugal acid pumps are reliable in HPAL service • Heaters can be small but use top-entry high pressure flash vessels • Select materials of construction appropriately & size CCD circuit correctly • Ensure that process reagents don't become a bottleneck
Bulong	• Longer term piloting is needed for process step-outs • HPAL feed slurry density is critical to productivity • Oversized, brick-lined heaters are unnecessary • Titanium Grade 17 is effective in saline HPAL service • Design for decoupling of the leach and refining circuits • Ensure security of supply for critical reagents e.g. acid • "Fast Track" process development should be avoided
Cawse	• Ensure the mining resource can support longer term operations • Have positive control over thickener feed slurry dilution • Scaling rates in horizontal claves are acceptable • Use recessed batten strip designs for HPAL vessels • Install sand ports in HPAL compartment walls • Bottom entry Load Pressure flash vessels are OK • Avoid rubber lined and duplex materials for wetted HPAL service
Ravensthorpe	• Allow for catch up capacity at Ore Preparation • Critically review plant layout & its capital implications • Preheat the HPAL slurry feed • Size the feed thickeners correctly. Allow for high yield stress slurry • Use developments in autoclave agitator design • Flash vessels - design on basis of the Souders-Brown relationship • Keep the acid plant running consistently • Control the HPAL feed water chemistry

For personal use only

A High-Quality Nickel and Cobalt Project

For personal use only

Outstanding results delivered from PFS* and Expansion Studies:

	1.0Mtpa	1.5Mtpa	2.25Mtpa
Status	PFS	PFS	**ES**
No. Trains	1	1	**1**
Pre Tax NPV_8	US$ 1.13 billion	US$ 1.52 billion	**US$ 2.4 billion**
Pre Tax IRR	29 %	29 %	**31%**
CAPEX	US$ 472 million	US$ 588 million	**US$918 million**
C1 cash cost	US$ 0.42 / lb	US$ 0.45 / lb	**US$ (0.34) / lb**
Payback	5.3 years	5.6 years	**5.1 years**
Cobalt sulphate	5,500tpa	6,900tpa	**10,000tpa**
Nickel sulphate	41,500tpa	55,300tpa	**81,000tpa**

- ✓ PFS of 1Mtpa and 1.5Mtpa base case over a 25-year mine life completed
- ✓ Expansion study of 2.25Mtpa with a 25-year mine life completed
- ✓ 94.5% nickel and 95.5% cobalt recovery – life of mine
- ✓ Pre-cobalt credit C1 costs in line with current worldwide operators
- ✓ High Pressure Acid Leach (HPAL) 5th generation plant is a proven design, successfully operated in other laterite projects globally
- ✓ 2.25Mtpa case based on only 26% of Goongarrie Resource
- ✓ Scandium by-product credit not factored in, so offers additional up-side

The information shown on this slide has been previously released on the ASX platform by Ardea in ASX releases, *Goongarrie Nickel Cobalt Project, PFS study, 28 March 2018 & +Goongarrie Expansion Study, 24 July 2018. All the material assumptions underpinning the forecast financial information derived from a production target, in the initial public report referred to in rule 5.17 continue to apply and have not materially changed.

KNP Resource Breakdown

Kalgoorlie Nickel Project nickel-cobalt JORC Code (2012) Mineral Resource Estimate

Camp	Prospect	Resource Category	Size (Mt)	Ni (%)	Co (%)	Contained Metal Ni (kt)	Contained Metal Co (kt)
KNP TOTAL		Measured	22	0.94	0.079	207	17
		Indicated	357	0.72	0.047	2,584	168
		Inferred	452	0.68	0.044	3,088	199
	GRAND TOTAL	***Combined***	***830***	***0.71***	***0.046***	***5,879***	***384***

Note: 0.5% nickel cutoff grade used to report resources. Note figures are rounded to reflect degree of certainty and may not tally.
The information shown on this slide has been previously released on the ASX platform by Ardea in ASX release 16 June 2021.

In accordance with the Australian Securities Exchange Limited Listing Rules Appendix 5A:

The information in this report that relates to KNP Exploration Results is based on information originally compiled by previous full time employees of Heron Resources Limited and or Vale Inco. The Exploration Results and data collection processes have been reviewed, verified and re-interpreted by Mr Ian Buchhorn who is a Member of the Australasian Institute of Mining and Metallurgy and currently an executive director of Ardea Resources Limited. Mr Buchhorn has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the exploration activities 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 Buchhorn consents to the inclusion in this report of the matters based on his information in the form and context that it appears.

The information in this report that relates to Mineral Resources for the Goongarrie Hill, Goongarrie South, Big Four, Scotia Dam and Highway nickel-cobalt deposits that comprise the Goongarrie Hub is based on information compiled by Mr James Ridley who is a Member of the Australasian Institute of Mining and Metallurgy, a full time employee of Ardea Resources and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 Ridley consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

For personal use only

Goongarrie Hub Mineral Resources using a 0.8% Ni cut-off grade

Summary of Mineral Resource Estimate from the Goongarrie Hub, based on a 0.8% Ni cut-off grade, comprising resources at Goongarrie Hill, Goongarrie South, Highway, Big Four, Scotia Dam and Highway (ASX release 16 June 2021).

Deposit	Resource Category	Tonnes (Mt)	Ni %	Co %	Contained Metal Ni (kt)	Contained Metal Co (kt)
Goongarrie Hill	Indicated	5.3	0.92	0.050	49	2.6
	Inferred	1.9	0.92	0.034	17	0.6
	Subtotal	7.2	0.92	0.046	66	3.3
Goongarrie South	Measured	11.0	1.13	0.106	125	11.6
	Indicated	21.1	0.99	0.071	208	15.0
	Inferred	1.2	0.92	0.043	11	0.5
	Subtotal	33.3	1.03	0.081	344	27.1
Big Four	Indicated	12.1	0.97	0.068	118	8.3
	Inferred	2.7	0.94	0.062	25	1.7
	Subtotal	14.7	0.97	0.067	143	9.9
Scotia Dam	Indicated	2.9	0.98	0.108	29	3.2
	Inferred	1.4	1.02	0.057	14	0.8
	Subtotal	4.3	0.99	0.091	43	4.0
Highway	Indicated	15.1	1.01	0.053	152	8.0
	Inferred	3.7	0.98	0.053	36	2.0
	Subtotal	18.8	1.00	0.053	188	10.0
Combined Deposits	Measured	11.0	1.13	0.106	125	11.6
	Indicated	56.5	0.98	0.066	556	37.1
	Inferred	10.8	0.95	0.051	103	5.6
	Grand Total	**78.3**	**1.00**	**0.069**	**784**	**54.3**

Note figures are rounded to reflect degree of certainty and may not tally.

For personal use only

Goongarrie Deposits Mineral Resources including Sc, using a 0.5% Ni cut-off grade

Summary of Mineral Resource Estimate from the Goongarrie deposits based on a 0.5% Ni cut-off grade (ASX release 15 February 2021).

Deposit	Resource Category	Tonnes (Mt)	Ni %	Co %	Contained Metal Ni (kt)	Contained Metal Co (kt)	Sc Resources Mt	Sc Resources Sc ppm
Goongarrie Hill	Indicated	40	0.65	0.037	260	14.7	10.5	16
	Inferred	29	0.60	0.025	178	7.3	2.0	16
	Subtotal	69	0.63	0.032	438	21.9	12.5	16
Goongarrie South	Measured	18	0.94	0.085	172	15.4	18.2	40
	Indicated	82	0.71	0.049	587	40.2	53.1	23
	Inferred	10	0.64	0.033	61	3.1	5.5	24
	Subtotal	110	0.75	0.053	820	58.7	76.8	27
Big Four	Indicated	49	0.71	0.047	345	22.9	31.9	24
	Inferred	14	0.68	0.043	95	6.1	2.9	24
	Subtotal	63	0.70	0.046	440	28.9	34.8	24
Scotia Dam	Indicated	12	0.71	0.065	82	7.4	11.2	25
	Inferred	5	0.72	0.043	37	2.2	0.6	22
	Subtotal	17	0.72	0.058	118	9.6	11.7	25
GNCP Total	Measured	18	0.94	0.085	172	15.4	18.2	40
	Indicated	182	0.70	0.047	1,274	85.1	106.6	23
	Inferred	58	0.64	0.032	371	18.6	11.0	23
	Grand Total	**259**	**0.70**	**0.046**	**1,817**	**119.2**	**135.8**	**25**

Note figures are rounded to reflect degree of certainty and may not tally.

For personal use only