**ASX & Media Release** 

17 July 2023

**ASX Symbol** 

ARL

## **Ardea Resources Limited**

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#### **Directors**

Mat Longworth

Non-Executive Chair

Andrew Penkethman Managing Director & CEO

lan Buchhorn
Executive Director

Maree Arnason
Non-Executive Director

# **Executive Management**

Sam Middlemas Company Secretary

Rebecca Moylan
Chief Financial Officer

Matt Read Project Director

Alex Mukherji General Manager Land Access & Compliance

Mike Miller General Manager Technical Services

Matthew McCarthy
General Manager Exploration

## **Issued Capital**

Fully Paid Ordinary Shares 171,894,772

Performance Rights 6,690,000

*Options* 4,000,000

ABN 30 614 289 342

# Kalgoorlie Nickel Project Goongarrie Hub Tenement Consolidation

# **Highlights**

- Ardea acquires key tenement areas for the Kalgoorlie Nickel Project Goongarrie Hub through a tenement swap with adjoining gold development company Brightstar Resources
- The transaction allows Ardea to divest non-core gold exploration tenements within the northern sector of the Goongarrie Hub and acquire key tenements for both strategic infrastructure and potential resource growth for the Goongarrie Hub nickel-cobalt project development
- This transaction has been concluded without any direct cash payment or equity issue in order to maintain Ardea's tight capital structure, debt free status and funds on hand, being a "win-win" for both parties
- The tenement consolidation follows on from the successful Pre-Feasibility Study and MOU with the Japanese Consortium recently announced by the Company <sup>1</sup> and is another step forward in advancing the Goongarrie Hub toward development and production

Ardea Resources Limited (ASX: ARL) (**Ardea** or the **Company**) is pleased to announce that the Company has executed a binding term sheet with Brightstar Resources Limited (ASX: BTR) (**Brightstar**) for a tenement swap of exploration tenure from the Kalgoorlie Nickel Project (**KNP**) Goongarrie Hub and Brightstar's Menzies and Goongarrie Gold Projects.

This transaction will allow Ardea to acquire tenure that borders key production mining leases at Goongarrie and Highway and will provide significant synergies through improving access to the Goldfields Highway, rail line and provide additional land area for important project development infrastructure.

# Managing Director and CEO Andrew Penkethman noted:

"Ardea and Brightstar have worked together to deliver a positive outcome for both companies. The key benefits of this transaction for Ardea are the extra land area around key Goongarrie and Highway production mining leases. This will enable the optimum detailed mine design for the upcoming Definitive Feasibility Study and will include increased direct access to the Goldfields Highway and rail line, and shorter haul road distances from satellite pits to the Goongarrie plant site. Of particular importance, the extra land area allows the extension of the width and depth of open pit mine designs to facilitate safer and more productive ore movement. Also, waste rock landforms can be better designed with final site rehabilitation optimised."

<sup>&</sup>lt;sup>1</sup> ASX releases 5 July 2023



# **Key Points**

The transaction will allow Ardea to swap a series of non-core tenements at Ghost Rocks and Highway located in the northern section of the KNP – Goongarrie Hub to Brightstar. In return, Ardea will acquire tenure that borders key production mining leases at Goongarrie and Highway (Table 1, 2 and Figure 1). This acquired tenure will provide significant synergies in being able to provide direct access to the Goldfields Highway, rail line and provide additional land area for important infrastructure such as haul roads, ore lay down areas, clay ore "aging" prior to processing and waste rock landforms.

The acquisition of tenement E29/984 at Highway is especially important as the current optimised open pit mine design currently extends to the mining lease boundary, so Ardea believe that there is an opportunity to increase the size of the nickel-cobalt laterite resource and Ore Reserve, through potentially extending the existing Highway deposit northwards. Acquiring this tenement will also allow Ardea to design more cost effective staged open pits that maximise resource utilisation. This is especially important as Highway is the main source of Mineralised Neutraliser (see ASX releases 15 June, 30 June and 5 July 2023).

The magnesian clay fines associated with the Mineralised Neutraliser are the dominant Goongarrie Hub Atmospheric Leach feed (averaging 0.3Mtpa, ASX release 5 July 2023). This clay ore material type at other Eastern Goldfields nickel laterite operations has been demonstrated to have significant processing benefits if "aged" for several months as paddock dumps exposing the clay ore to the weather. Such dumps require large surface areas.

Regarding tenement E29/981, at Ghost Rocks (Figure 1), Brightstar will receive gold and lithium rights only, with Ardea retaining all other mineral rights and a 2.0% net smelter return royalty payable on any lithium extracted and sold on E29/981.

Table 1: Ardea Resources Limited transferred tenements to Brightstar Resources Limited.

Tenement	Registered holder/ applicant (% interest)	Date of Grant	Date of Expiry	Interest being acquired
P29/2651	Kalgoorlie Nickel Pty Ltd	26/04/2022	25/04/2026	All rights.
P29/2650	Kalgoorlie Nickel Pty Ltd	26/04/2022	25/04/2026	All rights.
P29/2649	Kalgoorlie Nickel Pty Ltd	26/04/2022	25/04/2026	All rights.
P29/2538	Kalgoorlie Nickel Pty Ltd	25/02/2020	24/02/2024	All rights.
P29/2539	Kalgoorlie Nickel Pty Ltd	25/02/2020	24/02/2024	All rights.
P29/2511	Kalgoorlie Nickel Pty Ltd	03/07/2019	02/07/2023	All rights.
P29/2512	Kalgoorlie Nickel Pty Ltd	03/07/2019	02/07/2023	All rights.
P29/2513	Kalgoorlie Nickel Pty Ltd	03/07/2019	02/07/2023	All rights.
P29/2514	Kalgoorlie Nickel Pty Ltd	03/07/2019	02/07/2023	All rights.
P29/2515	Kalgoorlie Nickel Pty Ltd	03/07/2019	02/07/2023	All rights.
E29/981	Kalgoorlie Nickel Pty Ltd	26/04/2017	25/04/2027	Gold Rights and Lithium Rights only.



Table 2: Brightstar Resources Limited transferred tenements to Ardea Resources Limited.

Tenement	Registered holder/ applicant (% interest)	Date of Grant	Date of Expiry	Interest being acquired
P29/2532	Goongarrie Operational and Mining Pty Ltd	30/07/2020	29/07/2024	All rights.
P29/2530	Goongarrie Operational and Mining Pty Ltd	30/07/2020	29/07/2024	All rights.
P29/2467	Goongarrie Operational and Mining Pty Ltd	21/09/2020	20/09/2024	All rights other than the Gold Rights which are retained by Goongarrie.
P29/2468	Goongarrie Operational and Mining Pty Ltd	21/09/2020	20/09/2024	All rights other than the Gold Rights which are retained by Goongarrie.
P29/2380	Goongarrie Operational and Mining Pty Ltd	05/02/2019	04/02/2027	All rights other than the Gold Rights which are retained by Goongarrie.
E29/984	Menzies Operational and Mining Pty Ltd	24/02/2017	23/02/2027	All rights.
E29/1062	Goongarrie Operational and Mining Pty Ltd	13/03/2020	13/03/2025	Infrastructure Tenement Rights only.

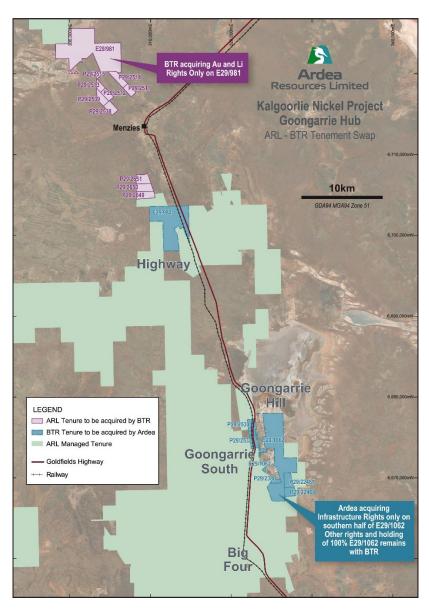


Figure 1: Map of the tenement swap between Ardea and Brightstar Resources.



This announcement is authorised for release by the Board of Ardea Resources Limited.

For further information regarding Ardea, please visit https://ardearesources.com.au/ or contact:

## **Andrew Penkethman**

Managing Director and Chief Executive Officer Tel +61 8 6244 5136

# **About Ardea Resources**

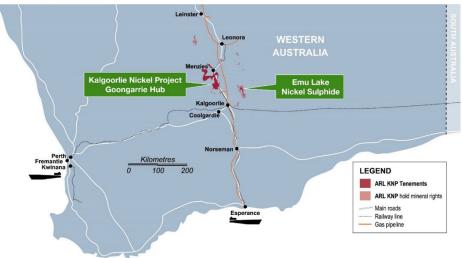
Ardea Resources Limited (ASX:ARL) is an ASX-listed nickel resources company, with a large portfolio of 100%-controlled West Australian-based projects, focussed on:

- Development of the Kalgoorlie Nickel Project (KNP) and its sub-set the Goongarrie Hub, a globally significant series of nickel-cobalt and Critical Mineral deposits which host the largest nickel-cobalt resource in the developed world at 854Mt at 0.71% Ni and 0.045% Co for 6.1Mt of contained nickel and 386kt of contained cobalt (Ardea ASX release 30 June 2023), located in a jurisdiction with exemplary Environmental Social and Governance (ESG) credentials, notably environment.
- Advanced-stage exploration at compelling nickel sulphide targets, such as Emu Lake, and Critical Minerals
  targets including scandium and Rare Earth Elements throughout the KNP Eastern Goldfields world-class
  nickel-gold province, with all exploration targets aimed at complementing the KNP nickel development
  strategy.

Ardea's KNP development with its 6.1 million tonnes of contained nickel is the foundation of the Company, with the nickel sulphide exploration, such as Emu Lake, as an evolving contribution to Ardea's building of a green, forward-facing integrated nickel company.

Put simply, in the Lithium-Ion Battery sector, the Electric Vehicle and Energy Storage System battery customers demand an ESG-compliant, sustainable, and ethical supply chain for nickel and other inputs. In the wet tropics, with their signature HPAL submarine tailings disposal and rain forest habitat destruction, an acceptable ESG regime is problematic. In contrast, the world-class semi-arid, temperate KNP Great Western Woodlands with its benign environmental setting is likely the single greatest asset of the KNP.

The KNP is located in a well-established mining jurisdiction with absolute geopolitical acceptance and none of the land-use and societal conflicts that commonly characterise nickel laterite proposals elsewhere. All KNP Goongarrie Hub production tenure is on granted Mining Leases with Native Title Agreement in place.



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## CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

This news release contains forward-looking statements and forward-looking information within the meaning of applicable Australian securities laws, which are based on expectations, estimates and projections as of the date of this news release.

This forward-looking information includes, or may be based upon, without limitation, estimates, forecasts and statements as to management's expectations with respect to, among other things, the timing and amount of funding required to execute the Company's exploration, development and business plans, capital and exploration expenditures, the effect on the Company of any changes to existing legislation or policy, government regulation of mining operations, the length of time required to obtain permits, certifications and approvals, the success of exploration, development and mining activities, the geology of the Company's properties, environmental risks, the availability of labour, the focus of the Company in the future, demand and market outlook for precious metals and the prices thereof, progress in development of mineral properties, the Company's ability to raise funding privately or on a public market in the future, the Company's future growth, results of operations, performance, and business prospects and opportunities. Wherever possible, words such as "anticipate", "believe", "expect", "intend", "may" and similar expressions have been used to identify such forward-looking information. Forward-looking information is based on the opinions and estimates of management at the date the information is given, and on information available to management at such time

Forward-looking information involves significant risks, uncertainties, assumptions, and other factors that could cause actual results, performance, or achievements to differ materially from the results discussed or implied in the forward-looking information. These factors, including, but not limited to, the ability to create and spin-out a gold focussed Company, fluctuations in currency markets, fluctuations in commodity prices, the ability of the Company to access sufficient capital on favourable terms or at all, changes in national and local government legislation, taxation, controls, regulations, political or economic developments in Australia or other countries in which the Company does business or may carry on business in the future, operational or technical difficulties in connection with exploration or development activities, employee relations, the speculative nature of mineral exploration and development, obtaining necessary licenses and permits, diminishing quantities and grades of mineral reserves, contests over title to properties, especially title to undeveloped properties, the inherent risks involved in the exploration and development of mineral properties, the uncertainties involved in interpreting drill results and other geological data, environmental hazards, industrial accidents, unusual or unexpected formations, pressures, cave-ins and flooding, limitations of insurance coverage and the possibility of project cost overruns or unanticipated costs and expenses, and should be considered carefully. Many of these uncertainties and contingencies can affect the Company's actual results and could cause actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of, the Company. Prospective investors should not place undue reliance on any forward-looking information.

Although the forward-looking information contained in this news release is based upon what management believes, or believed at the time, to be reasonable assumptions, the Company cannot assure prospective purchasers that actual results will be consistent with such forward-looking information, as there may be other factors that cause results not to be as anticipated, estimated or intended, and neither the Company nor any other person assumes responsibility for the accuracy and completeness of any such forward-looking information. The Company does not undertake, and assumes no obligation, to update or revise any such forward-looking statements or forward-looking information contained herein to reflect new events or circumstances, except as may be required by law.

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

## Competent Persons statement

The Resource Estimation, exploration and industry benchmarking summaries are based on information reviewed or compiled by Mr. Ian Buchhorn, and Mr Andrew Penkethman. Mr Buchhorn is a Member of the Australasian Institute of Mining and Metallurgy and Mr Penkethman is a Fellow of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Both Mr Buchhorn and Mr Penkethman are full-time employees of Ardea Resources Limited and have sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are 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 Buchhorn and Mr Penkethman have reviewed this press release and consent to the inclusion in this report of the information in the form and context in which it appears. Mr Buchhorn and Mr Penkethman own Ardea shares.

Ardea wishes to clarify that its current Kalgoorlie Nickel Project (KNP) Mineral Resource Estimate (MRE) following JORC Code (2012) guidelines is:

Camp	Prospect	Resource	Size	Ni	Со	Containe	ed Metal
		Category	(Mt)	(%)		Ni (kt)	Co (kt)
KNP TOTAL		Measured	22	0.94	0.079	207	17
		Indicated	361	0.73	0.047	2,622	169
		Inferred	471	0.70	0.043	3,272	200
	GRAND TOTAL	Combined	854	0.71	0.045	6,101	386

Note: 0.5% nickel cutoff grade used to report resources. Minor discrepancies may occur due to rounding of appropriate significant figures.

The Mineral Resource Estimate information shown in this ASX release has been previously released on the ASX platform by Ardea in ASX release 30 June 2023, in accordance with Listing Rule 5.8.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcement noted above and that all material assumptions and technical parameters underpinning the Mineral Resource Estimate in the previous market announcement continue to apply and have not materially changed.