Ardea Resources Limited

ASX & Media Release
28 January 2025

ASX Symbol
ARL

Ardea Resources Limited
Suite 2 / 45 Ord St
West Perth WA 6005

PO Box 1433
West Perth WA 6872

Telephone
+61 8 6244 5136

Email
ardea@ardearesources.com.au

Website
www.ardearesources.com.au

Directors
Mat Longworth
Non-Executive Chair

Andrew Penkethman
Managing Director & CEO

Ian Buchhorn
Executive Director

Michael Rodriguez
Executive Director

Maree Arnason
Non-Executive Director

Executive Management
Sam Middlemas
Company Secretary

Rebecca Moylan
Chief Financial Officer

Alex Mukherji
General Manager Land Access

Issued Capital

Fully Paid Ordinary Shares
199,682,915

Performance Rights
3,513,400

Options
3,000,000

ABN 30 614 289 342

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QUARTERLY OPERATIONS REPORT

For the Quarter ended 31 December 2024

Ardea Resources Limited (ASX:ARL) (**Ardea** or the **Company**) is pleased to provide the following report on its activities during the December 2024 Quarter.

DECEMBER 2024 QUARTER HIGHLIGHTS

- As of 31 December 2024, the Company is in a strong financial position with $13.2M cash on hand and no debt.
- Sumitomo Metal Mining (**SMM**), and Mitsubishi Corporation (**MC**) (the **Consortium**) are fully funding the Kalgoorlie Nickel Project – Goongarrie Hub (**KNP – Goongarrie Hub**) Definitive Feasibility Study (**DFS**), up to A$98.5M[1]. The DFS, is managed by Kalgoorlie Nickel Pty Ltd (**KNPL**), and study management has been the Company focus during the Quarter.
- Ardea's priority is to work with the Consortium to develop the Goongarrie Hub, within Ardea's globally significant broader KNP (Figure 4).
- With $78.8M remaining to be expended by the Consortium in DFS funding, the Company is well positioned to complete all planned work programs.
- Appointment of Michael Rodriguez to the Board as an Executive Director. Mr Rodiguez has extensive hydrometallurgical, project development and operations experience and will work with the Team on the KNP Goongarrie Hub DFS to deliver optimum outcomes through value engineering.

Kalgoorlie Nickel Project – Goongarrie Hub

Significant progress has been made in advancing the **KNP – Goongarrie Hub DFS**, including:

- **Bench-Scale Metallurgical Testing:** Focused on leaching tests. This work includes assessing ore reduced autoclave residence time to validate the increased annual throughput from 3.5Mtpa (PFS) to 4Mtpa (DFS).
- **Hydrogeology & Geotechnical:** Campaigns initiated to define water sources and characterise geology; designs for bore field power and water transport underway.
- **Process Plant Development:** Significant DFS progress on design, equipment specifications, risk reviews, and H_2S plant package study.
- **Non-Process Infrastructure:** Village location, designs and layouts advanced, with building foundation geotechnical drilling quotes prepared.
- **Environment & Rehabilitation:** Expanded baseline surveys neared completion to align with updated environmental standards; approvals processes streamlined.
- **Geology & Resource Workflows:** Drilling programs advanced this quarter, with 16,182m of RC infill drilling and 790m of Diamond Drilling completed. Logging, sampling, assaying and modelling in progress.
- **Approvals & Engagement:** ESG consultant(s) shortlisted; water pipeline studies and regulatory applications underway; active collaboration with Traditional Owners and other stakeholders.

[1] ASX release 30 August 2024 - KNP Goongarrie Hub Joint Venture Transaction Completion with Japanese Consortium

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Strategic Partners

The execution of the Shareholder Agreement on 30 August 2024 with the Consortium, marked the conclusion of the Strategic Partner process and the start of the Joint Venture to develop the KNP Goongarrie Hub.

Under the Agreement, KNPL will manage the DFS process, with the Consortium fully funding the in-progress DFS up to a budget of approximately A$98.5M. Ardea and the Consortium are each providing technical and commercial input to the DFS. At the conclusion of the DFS spend, the Consortium will have subscribed to a 35% ownership in KNPL and retain the right to increase its ownership in KNPL to 50% upon a positive Financial Investment Decision (**FID**) by the Consortium.

Ardea's collaboration with the Consortium is focused on the KNP – Goongarrie Hub being developed to realise its full potential as a long life (>40 years), low-cost source of Critical Minerals that meets the high ESG standards expected by society, from the premier resources operating jurisdiction, the Eastern Goldfields of Western Australia (**WA**) (ASX releases 26 April 2024, 14 August 2024 and 30 August 2024).

During the Quarter, Ardea Managing Director and CEO, Andrew Penkethman and KNPL Project Director, Matthew Read and their teams continued to welcome the Consortium to their West Perth offices for DFS technical meetings and to further the collaboration between Ardea, KNPL, Sumitomo Metal Mining, and Mitsubishi Corporation.

Ardea and the Consortium are continuing to discuss the optimum funding strategy post completion of the DFS. This is a priority workstream for 2025. Both Sumitomo Metal Mining and Mitsubishi Corporation have enviable track records of success with strong links to potential debt and equity providers to assist in debt financing optimisation. Ardea will continue working with the Consortium to determine the optimum funding strategy for the KNP – Goongarrie Hub.

Figure 1: During the Quarter, the Ardea Team hosted the Consortium for meetings and also on-site visits to the KNP – Goongarrie Hub. Aerial image of work activities underway at the KNP – Goongarrie Hub, including water pump-testing "turkey nest" drill site rehabilitation on the left-hand side of the image.

Nickel and Cobalt Sector Commentary

Nickel was added to the Australian Critical Minerals list in February 2024, highlighting its key role in the global energy transition. Australia's nickel production is essential for renewable energy technologies and electric vehicle (**EV**) manufacturing, positioning the country as a key supplier of nickel which meets the highest ESG standards.

The Indonesian Government has recently flagged deep cuts to nickel mine quotas to restrict oversupply to the nickel market, reported as potentially removing more than one third of nickel supply (Bloomberg 9 January 2025), hastening the transition from surplus to deficit. However, other factors such as weakness in China's property market, perceived weakness in electric vehicle demand, along with the Donald Trump election win and associated trade war fears, have continued to affect nickel (and other base metal) sentiment.

The London Metal Exchange (**LME**) three-month nickel price rose to US$16,765 per tonne in October 2024, but dipped to US$15,113 per tonne by end of December 2024. Cobalt metal prices remained depressed during the quarter, trading around US$25,000 per tonne.

The Indonesian quota reductions, along with the loss of production from a number of Australian nickel producers, including BHP, who placed their Western Australian nickel operations into care and maintenance last quarter, have yet to impact the LME nickel surplus. LME Nickel stock levels continued to rise, ending the 2024 year on 164,904 tonnes (westmetall.com). However, the continued reductions to global nickel production will reduce the surplus.

Battery nickel demand recorded strong growth of 27% year-on-year in 2024 (Benchmark 14 November 2024). Benchmark forecasts nickel demand to continue to grow, driven by the projected expanding EV market and battery energy storage systems (**ESS**) (Figure 3). EV sales for 2024 grew month on month for an annual total of 17M EVs sold, which represented 25% growth on 2023 EV sales (Rho Motion, 14 January 2025). As well as the traditional steel market, growing industries demand for data centres and technology like AI will also contribute to demand (Peak Asset Management 6 January 2025). Fastmarkets 2024-2027 forecast showing reducing surplus, with supply gap increasing progressively from 2028, with forecast nickel prices correspondingly rising (Figure 2).

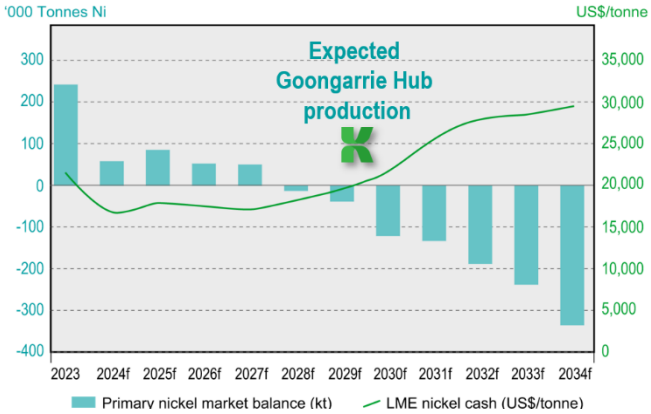

Figure 2: Nickel Market Balance and Price Forecast. after Fastmarkets long term forecasts 2024.

While much of the battery industry narrative in recent years has centred around the rise of LFP technology in China, nickel-based chemistries such as NCM are expected to retain a significant share of the battery market.

High-nickel cathode batteries, critical for lithium-ion technology, offer nearly double the energy density of other chemistries with the majority of lithium-ion battery producers that Ardea has engaged with, opting for nickel cathode chemistries containing ≥90% nickel. While short-term oversupply is depressing current prices, the long-term outlook indicates that higher prices will be needed to meet projected battery demand to power the growing EV/ESS market.

With Ardea's KNP hosting one of the largest nickel-cobalt resources in the developed World, 854Mt at 0.71% Ni and 0.045% Co for **6.1Mt of contained nickel and 386kt of contained cobalt** (ASX release 30 June 2023), Ardea is in a prime position to provide essential supplies of nickel and cobalt, along with other Critical Minerals such as scandium, which meet the high ESG standards expected from modern society. The current downturn in the Australian nickel sector is considered by Ardea as an opportune time to be completing the DFS and ultimately develop the Goongarrie Hub, as the Company is experiencing increased access to appropriately skilled and experienced personnel and service providers. In this environment there is increased opportunity to contain costs and maximise project value engineering.

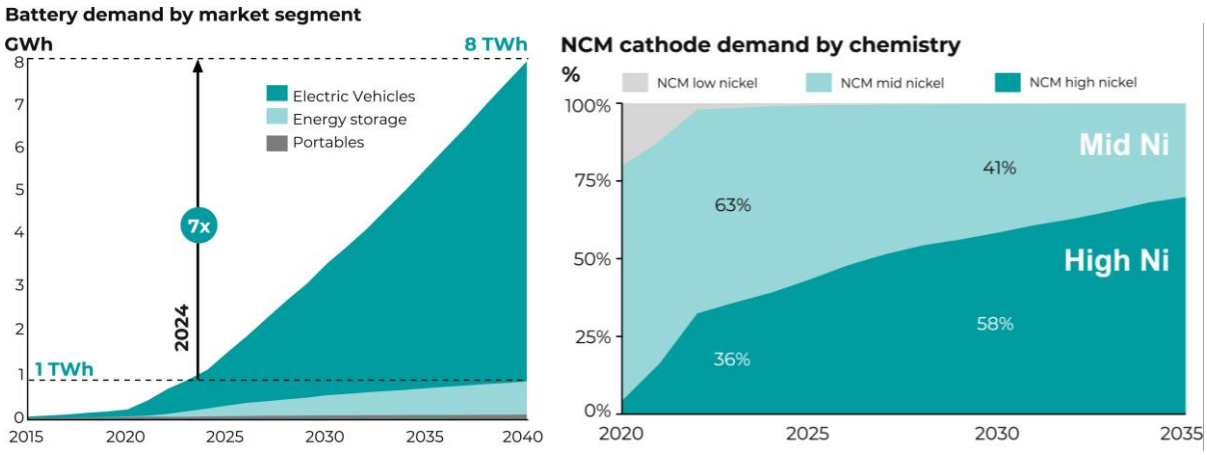

Figure 3: Battery demand to grow 7-fold by 2040, while high-nickel cathodes to push up nickel demand over the long term. Graphs after: © Benchmark Mineral Intelligence, October 2024; Used with permission.

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Health and Safety

Health and safety remain of utmost importance to the Company.

- There were no Lost Time Injuries (LTI) during the December 2024 Quarter.
- Further assessments and identification of safety requirements onsite and in remote areas have been actioned or planned to ensure a safe work environment for all staff and contractors.
- Measures taken to minimise use of the Goldfields Highway (being a significant identified safety risk), notably drilling contractors are using field camps proximal to their individual drilling location.
- Safety inspections have increased to accommodate increasing contractor numbers with ongoing mobilisations.
- Training and Inductions and systematic update of Safety Manuals are ongoing.
- Environmental inspections have been completed, documented and actioned.

Environmental, Social and (Corporate) Governance

Environmental, Social and (Corporate) Governance (**ESG**) considerations are at the forefront for Ardea and KNPL.

ESG activities continued throughout the December 2024 Quarter. These included:

- The preferred ESG consultant(s) were shortlisted. Award forecast is expected to be completed in early 2025.
- Several environmental baseline studies were finalised during Q4 2024.
- The progression of planning and scoping water pipeline route baseline studies in Q4 2024, with the initial study being the LIDAR remote sensing survey planned for early 2025.
- Advancing the application for Lead Agency Status with JTSI (Department of Jobs, Tourism, Science and Innovation, a department of the WA Government), with a 2025 submission required.
- Early-stage engagement with environmental modellers (air/noise/water) to ensure that the project design optimises environmental outcomes.
- Ongoing Community and Stakeholder engagement, as well as participation in regular industry events and engagement sessions with Government Regulators.
- Attendance at the Navigators Luncheon with Hon. Reece Whitby (Minister for Energy, Environment and Climate Action).
- Engagement and collaboration with Native Title claimant groups is progressing. KNPL is committed to respectfully participating in on-Country knowledge-sharing and listening sessions, fostering meaningful dialogue and learning from Traditional Owners.

Grass roots support was strong throughout the Quarter, with continued engagement with the local communities within which Ardea and KNPL operate. Initiatives included:

- Supporting a Kalgoorlie cultural special event in October 2024.
- Sponsoring the Rotary Club of Boulder's Annual Auction. Kalgoorlie and Perth staff attended this annual fund raiser, with all proceeds supporting local families.
- Sponsorship for an Indigenous teenager to participate in the 2024 Junior AFL Tour Fiji in December 2024. Donation to Iron Mine Contracting's fundraising initiative in December 2024, with all proceeds going towards Perth Inner City Youth Service.
- Construction began during the December 2024 school holidays to complete the Menzies Community School's Play for All Project, a Sensory Playground. Through its long-standing Eastern Goldfields Education Grant Program, Ardea is a proud sponsor of this initiative, aimed at providing an inclusive and stimulating learning and play environments for all students.

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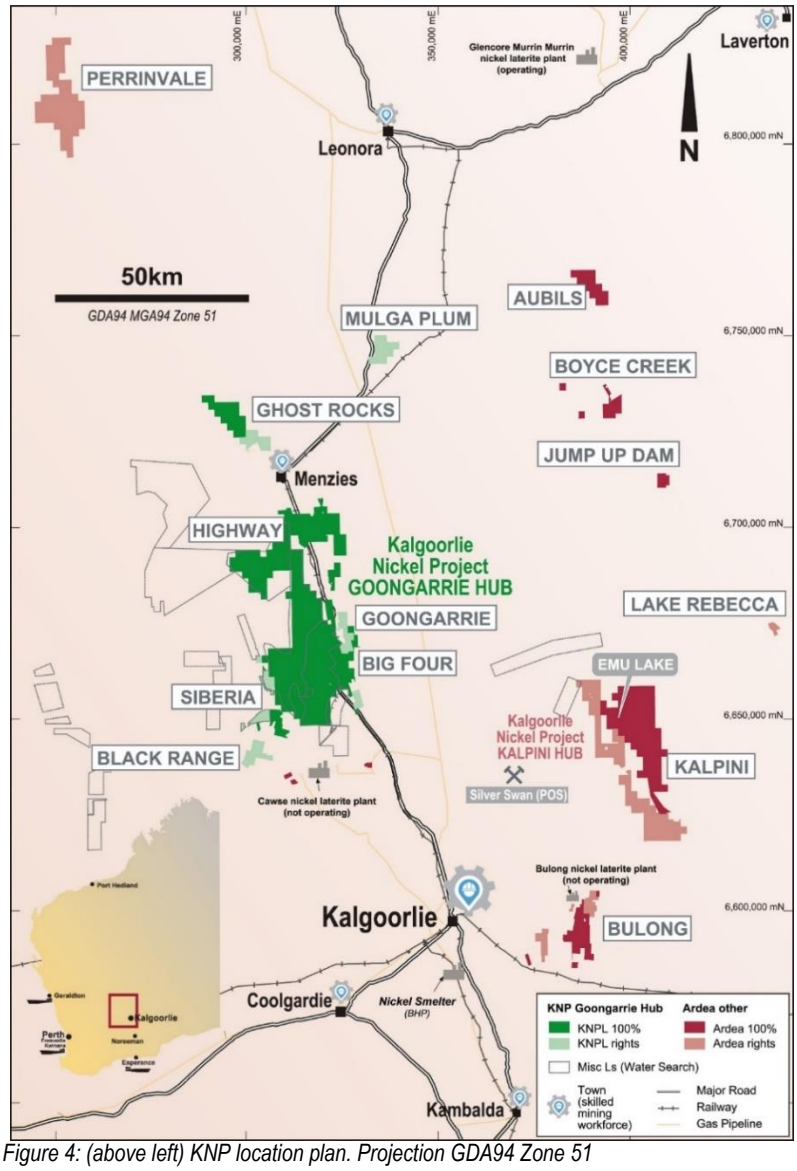
1. KALGOORLIE NICKEL PROJECT - GOONGARRIE HUB

The Goongarrie Hub is located 70km northwest of the mining centre the City of Kalgoorlie-Boulder and is the premium ore feed within the broader KNP (Figure 4). Resources from the Goongarrie, Highway and Siberia North nickel-cobalt laterite deposits are planned to be the base load feed for a 4Mtpa processing operation located at Goongarrie South.

The mineral resources at Goongarrie are dominantly the premium goethite style and extend continuously over 25km of strike and at Highway, 30km to the north, over a further strike length of 10km (Figure 4). All key **Goongarrie Hub** mineral resources are located on granted mining leases and are managed by KNPL, where the Consortium are earning a 35% share by fully funding the KNP Goongarrie Hub DFS up to $98.5M.

Ardea has retained 100% of all non-Goongarrie Hub KNP tenements, being the Kalpini Hub (Kalpini, Bulong nickel projects and at Yerilla the Jump Up Dam, Boyce Creek and Aubils nickel projects (Figure 4).

The KNP Goongarrie Hub has ready access to high-quality infrastructure with the Goldfields Highway, rail line, fibre optic cable and power infrastructure passing through the project area (Figure 4 and 5). The Goldfields Gas Transmission pipeline is located some 30km to the east and there are two port options, these being Esperance and Kwinana, that are well serviced by the KNP road and rail network.



Significantly, the Project is located on the rail connection to the developing battery hub at the Port of Kwinana industrial area immediately south of Perth, as well as east to Port Augusta and developing low-carbon energy hubs on the eastern Australia seaboard.

Ardea is actively engaged with Federal and State agencies and statutory authorities who aim to unlock Australia's vast potential as a major supplier of the Critical Minerals needed to decarbonise the global economy. The KNP meets the objectives of the Federal Government's Critical Minerals Strategy. The project will create a resilient and sustainable Critical Minerals supply chain, to the benefit of the nation, the state, the region and communities in which the Company operates. The Project aligns with the Future Made in Australia Community Benefit Principals.

Figure 4: (above left) KNP location plan. Projection GDA94 Zone 51

Figure 5: (above right) Aerial image at Ardea's Goongarrie Hub at Goongarrie South looking south towards Kalgoorlie-Boulder showing road and rail infrastructure within the granted mining leases upon which the resources are located.

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Ardea's focus remains development of the KNP – Goongarrie Hub, which is managed by Ardea's wholly-owned subsidiary KNPL who are completing the Goongarrie Hub DFS. During the December 2024 Quarter, the focus has been progressing the study deliverables, including:

- The recruitment of KNPL team members – now numbering 40.
- Continue to award the major work stream packages.
- Bench-scale metallurgical testing focused on leaching tests. This work includes assessing ore autoclave residence time and tailings properties.
- Highly regarded engineering consultant, Ausenco, advanced work on trade-off studies, design criteria and process flow diagrams and commenced work on Piping & Instrumental Diagrams (**P&IDs**), equipment lists and plant layout.
- The hydrogeological and geotechnical field work campaigns are advancing to completion.
- The water supply options trade-off study commenced.
- Infill resource definition RC drilling work progressed to 37,842m drilled of the planned total of 48,800m.
- Diamond drilling commenced for QAQC validation of RC drilling, Bulk Density confirmation and bench-scale metallurgy composites.
- Design of non-process buildings and onsite accommodation village commenced.

Processing Research and Development

The Ardea FY2025 Research & Development (**R&D**) is based upon geo-metallurgical research to optimise plant feed to a multi-option plant. The requisite metallurgical experiments are in train, to then optimise plant performance, product range and hence revenue streams from the KNP and its Goongarrie Hub. This is fundamental to delivering the KNP as a world-competitive Critical Minerals project.

Global Patent Application – Mineralised Neutraliser

Ardea lodged patent applications in Australia (AU2022903389) on 11 November 2022, and with the World Intellectual Property Office (WIPO) on 13 June 2023: PCT/AU2023/050520 relating to the use of Mineralised Neutraliser (**MN**) in the unique Ardea process.

Current R&D using litho-geochemistry has identified a significant MN contribution from high in the regolith profile in what is now termed Relic Saprock (usually within 20m of surface). This new concept is being tested in current RC drilling and to date results from Big Four are particularly encouraging.

Following the Mineralised Neutraliser research concept, a comparable study is current for comminution enhancement.

Scandium and Rare Earth Elements

CSIRO-Ardea continued conceptual nickel sulphide and hydrothermal alteration target concepts at the Highway Nickel Prospect pursuant to an Exploration Incentive Scheme (**EIS**) jointly State government/Ardea funded diamond core hole ("Nickel Sulphide Prospectivity Confirmed and the Lithium-Caesium-Rubidium bearing intrusives in the Highway EIS drillhole." ASX release 15 December 2023). Based on the EIS research, DFS drilling at Highway will include a multi-element assay suite to quantify the potential Sc-REE-Lithium-Caesium-Tantalum (**LCT**) potential, as well as better define the Mineralised Neutraliser role in the staged neutralisation of the autoclave Pregnant Liquor Solution (**PLS**).

Future Battery Industries – Cooperative Research Centre (FBICRC)

Ardea continues to support the FBICRC developments and have monitored progress over the Quarter. No specific requests for material or intellectual support were received during the period.

Australian Research Council

Ardea continues to support the Australian Research Council's (**ARC**) Industrial Transformation Training Centre in Critical Minerals.

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Bench-scale Metallurgy

Bench scale metallurgical testing for the DFS commenced in July 2024 and continued through the Quarter. Initial testing is focused on leaching tests for the goethite High Pressure Acid Leach (**HPAL**) feed (and higher magnesium bearing ore, including MN as part of the Atmospheric Leach (**AL**) feed and neutralisation). This work includes assessing ore autoclave residence time reduction from 70 minutes to 60 minutes to validate the increased annual throughput from 3.5Mtpa (PFS) to 4Mtpa (DFS).

Testwork for the ore preparation circuit has been scoped and is to be conducted by an accredited Perth-based laboratory. The testwork is mainly intended to generate the leach feed samples for the downstream testing.

The leaching testwork commenced, downstream rheology and waste characterisation testwork is being scoped and prepared for quotation.

Flowsheet Research and Development

Historic beneficiation bench scale testwork, including from the Vale Inco Pre-Feasibility Study in 2008, continues to be modelled to identify additional opportunities.

This knowledge is being used to ratify the “beneficiation rules” (especially cut-off grades and criteria for selecting processing options for a given ore block within the Ore Reserve block model). This will improve the accuracy of the mine model and improve the overall resource utility.

An initial ore preparation circuit of three trains has been modelled. Two trains are for goethite grind or goethite-silica beneficiable HPAL ore feeds. The third train will process magnesian AL ore feed and MN on a campaign basis.

Geology

Work carried out during the Quarter has focussed on Reverse Circulation (**RC**) Infill resource definition drilling, and Diamond core (**DD**) Resource/Geomet drilling (Figures 6 and 7).

The RC infill drilling program has been designed to upgrade nickel-cobalt laterite resources to the Measured category for the first 5-year mining areas. This work stream was advanced during the Quarter, with 246 RC holes drilled for 16,182m completed at the Goongarrie South, Big Four, Highway and Siberia North deposits. At the end of the Quarter, 37,842m of the planned infill RC drilling total of 48,800m had been completed.

The Infill resource definition RC drilling has intersected expected widths of nickel laterite mineralisation (ore-hosting regolith termed Clay Upper, Clay Lower and Saprock). Initial geochemical assay results are promising, showing previously untested MN at depth below the primary mineralisation in a number of areas. This material will be assessed during Mineral Resource Estimate (**MRE**) modelling work streams on completion of drill program and when full assay results are returned.

Figure 6: Infill resource definition RC drilling underway at the Goongarrie Hub.

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Fourteen DD holes for 790 metres were drilled at the Big Four, Scotia Dam and Goongarrie South deposits.

The DD drillholes twinned recently drilled RC holes to provide data for Quality Assurance / Quality Control (**QAQC**) analysis. Manual density measurements were collected from the DD core, and downhole wireline geophysical surveys were carried out by a specialist contractor on selected DD holes to collect density and moisture data. This additional data will be used to support the DFS MRE updates.

Figure 7: Top left: Goongarrie Hub Driller Camp; Top right: Sampling of RC drilling for assay submission; Bottom: Diamond core drilling underway.

Resource Workflows

Work on the DFS MRE commenced in late December 2024, with SRK consultants engaged to complete the resource block models for the Goongarrie Hill and Siberia North deposits, using existing pre-DFS datasets. These two models are expected to be completed by early March 2025 to allow for commencement of preliminary work on the mine models and mining schedules.

Resource block models for the Big Four/Scotia Dam, Goongarrie South, and Highway deposits will commence once full assay results are returned and detailed interpretation has been completed.

The KNP global MRE (using a 0.5% Ni cut-off grade) stands at **854Mt at 0.71% Ni and 0.045% Co for 6.1Mt of contained nickel and 386kt of contained cobalt** (Table 1) (ASX release 30 June 2023). All the resources are constrained within optimised pit shells using appropriate nickel and cobalt prices, mining and processing costs and pit slope parameters to determine the material that could potentially be economically mined in the future. The Mineral Resource has been estimated and reported in accordance with the guidelines of the 2012 edition of the Australian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves, the JORC Code (2012). The Mineral Resource Estimate for the Goongarrie Hub in Table 1 is inclusive of the Ore Reserve shown in Table 2.

Table 1 - KNP nickel and cobalt MRE based on a greater than 0.5% Ni cut-off grade. Minor discrepancies may occur due to rounding of appropriate significant figures. Legend: LUC – Local Uniform Conditioning; UC – Uniform Conditioning; OK – Ordinary Kriging.

Camp	Prospect	Resource Category	Size (Mt)	Ni (%)	Co (%)	Contained Metal Ni (kt)	Contained Metal Co (kt)	Estimation Details Method	Estimation Details Source	Estimation Details Year
Goongarrie	Goongarrie South	Measured	18	0.94	0.085	171	15	LUC	Ardea	2021
		Indicated	82	0.71	0.049	584	40	LUC	Ardea	2021
		Inferred	10	0.64	0.033	61	3	LUC	Ardea	2021
	Highway	Indicated	71	0.69	0.038	487	27	LUC	Ardea	2023
		Inferred	21	0.67	0.040	141	8	LUC	Ardea	2023
	Ghost Rocks	Inferred	47	0.66	0.042	312	20	OK	Snowden	2004
	Goongarrie Hill	Indicated	40	0.65	0.037	259	15	LUC	Ardea	2021
		Inferred	29	0.60	0.025	176	7	LUC	Ardea	2021
	Big Four	Indicated	49	0.71	0.047	346	23	LUC	Ardea	2021
		Inferred	14	0.68	0.043	96	6	LUC	Ardea	2021
	Scotia Dam	Indicated	12	0.71	0.065	82	7	LUC	Ardea	2021
		Inferred	5	0.72	0.043	37	2	LUC	Ardea	2021
	Goongarrie Subtotal	Measured	18	0.94	0.085	171	15			
		Indicated	253	0.69	0.044	1,758	112			
		Inferred	127	0.65	0.037	823	47			
		Combined	***398***	***0.69***	***0.044***	***2,753***	***175***			
Siberia	Siberia South	Inferred	81	0.65	0.033	525	27	OK	Snowden	2004
	Siberia North	Indicated	14	0.72	0.042	102	6	Ni(UC) Co(OK)	Snowden	2009
		Inferred	72	0.74	0.034	534	25	Ni(UC) Co(OK)	Snowden	2009
	Black Range	Indicated	9	0.67	0.090	62	8	OK	HGMC	2017
		Inferred	10	0.69	0.100	68	10	OK	HGMC	2017
	Siberia Subtotal	Indicated	24	0.70	0.061	165	14			
		Inferred	163	0.69	0.038	1,127	61			
		Combined	***186***	***0.69***	***0.040***	***1,292***	***75***			
KNP - Goongarrie Hub	**TOTAL**	Measured	18	0.94	0.085	171	15			
		Indicated	277	0.70	0.046	1,923	127			
		Inferred	289	0.67	0.037	1,951	108			
		Combined	***584***	***0.69***	***0.043***	***4,044***	***250***			
Bulong	Taurus	Inferred	14	0.84	0.051	119	7	OK	Snowden	2007
	Bulong East	Indicated	16	1.06	0.055	169	9	OK	Snowden	2004
		Inferred	24	0.79	0.053	190	13	OK	Snowden	2004
	Bulong Subtotal	Indicated	16	1.06	0.055	169	9			
		Inferred	38	0.81	0.052	309	20			
		Combined	***54***	***0.88***	***0.053***	***477***	***29***			
Hampton	Kalpini	Inferred	75	0.73	0.044	550	33	OK	Snowden	2004
	Hampton Subtotal	Inferred	75	0.73	0.044	550	33			
KNP Kalpini Hub	**TOTAL**	Indicated	16	1.06	0.055	169	9			
		Inferred	114	0.76	0.047	859	53			
		Combined	***130***	***0.79***	***0.048***	***1,028***	***62***			
Yerilla	Jump Up Dam	Measured	4	0.94	0.048	36	2	OK	Snowden	2008
		Indicated	42	0.78	0.043	324	18	OK	Snowden	2008
		Inferred	18	0.63	0.034	116	6	OK	Snowden	2008
	Boyce Creek	Indicated	27	0.77	0.058	206	16	OK	Snowden	2009
	Aubils	Inferred	49	0.70	0.066	346	33	OK	Heron	2008
KNP Yerilla Hub	**TOTAL**	Measured	4	0.94	0.048	36	2			
		Indicated	68	0.78	0.049	531	33			
		Inferred	68	0.68	0.057	462	39			
		Combined	***140***	***0.73***	***0.053***	***1,028***	***74***			
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***			

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Ore Reserve

The 2023 PFS (ASX release 5 July 2023) defined an Ore Reserve of **194.1Mt at 0.70% Ni and 0.05% Co** for 1.36Mt contained nickel and 99kt contained cobalt (Table 2). Other Goongarrie Hub deposits (Ghost Rocks, Siberia South and Black Range) have not been included in the current Ore Reserve and provide potential to significantly extend the mine life.

Table 2 - KNP - Goongarrie Hub Ore Reserve Summary consisting of ore above 0.5% Ni as the feed stock for the processing facility, and ore as Mineralised Neutraliser above 0.5% Ni equivalent (Nieq) and Loss on Ignition (LOI) above 25%.

	Ore >= 0.5% Ni					Ore > 0.5% NiEq and LOI > 25%					Total Ore				
Deposit	**Mt**	**Ni %**	**Co %**	**Ni kt**	**Co kt**	**Mt**	**Ni %**	**Co %**	**Ni kt**	**Co kt**	**Mt**	**Ni %**	**Co %**	**Ni kt**	**Co kt**
Proven															
Goongarrie South	16.7	0.96	0.09	160	15	0.05	0.43	0.03	0.20	0.01	16.7	0.96	0.09	160	15
Sub-total	**16.7**	**0.96**	**0.09**	**160**	**15**	**0.05**	**0.43**	**0.03**	**0.20**	**0.01**	**16.7**	**0.96**	**0.09**	**160**	**15**
Probable															
Big Four/Scotia Dam	34.9	0.76	0.07	265	23	0.8	0.38	0.04	3	0	35.7	0.75	0.06	268	23
Goongarrie South	33.6	0.79	0.07	265	23	1.8	0.40	0.03	7	1	35.4	0.77	0.07	272	24
Goongarrie Hill	15.8	0.70	0.04	110	7	0.1	0.44	0.02	0	0	15.9	0.70	0.04	111	7
Highway	54.0	0.70	0.04	380	22	27.2	0.39	0.01	106	4	81.2	0.60	0.03	486	26
Siberia North	9.2	0.74	0.05	68	4	-	-	-	-	-	9.2	0.74	0.05	68	4
Sub-total	**147.4**	**0.74**	**0.05**	**1,087**	**79**	**29.9**	**0.39**	**0.02**	**117**	**5**	**177.4**	**0.68**	**0.05**	**1,204**	**84**
PROVEN AND PROBABLE TOTAL															
Big Four/Scotia Dam	34.9	0.76	0.07	265	23	0.8	0.38	0.04	3	0	35.7	0.75	0.06	268	23
Goongarrie South	50.2	0.85	0.08	425	38	1.9	0.40	0.03	7	1	52.1	0.83	0.07	432	39
Goongarrie Hill	15.8	0.70	0.04	110	7	0.1	0.44	0.02	0	0	15.9	0.70	0.04	111	7
Highway	54.0	0.70	0.04	380	22	27.2	0.39	0.01	106	4	81.2	0.60	0.03	486	26
Siberia North	9.2	0.74	0.05	68	4	-	-	-	-	-	9.2	0.74	0.05	68	4
TOTAL	**164.1**	**0.76**	**0.06**	**1,247**	**94**	**30.0**	**0.39**	**0.02**	**117**	**5**	**194.1**	**0.70**	**0.05**	**1,365**	**99**

Notes:

1. *The Ore Reserve is reported in accordance with JORC Code (2012). The Ore Reserve information shown in this ASX release has been previously released on the ASX platform by Ardea in ASX release 5 July 2023, in accordance with Listing Rule 5.9.*
2. *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 Ore Reserve in the previous market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcement.*
3. *Ore reserves are reported at a cut-off of 0.5% Ni for primary feed stock to the processing facility, plus Mineralised Neutraliser as ore at a cut-off of 0.5% NiEq and LOI above 25%.*
4. *NiEq defined using Ni + 2.32 x Co.*
5. *The Ore Reserve was evaluated using a base price of US$22,000/t for Ni and US$51,000/t for Co at 85% payable for a Mixed Hydroxide Precipitate (MHP) product, and an exchange rate 0.69 USD/AUD. In view of forward metal price projections averaging US$25,000/t Ni.*
6. *Ore Reserves account for mining dilution and mining ore loss.*
7. *Ore Reserves are reported on a Dry Tonnage Basis.*
8. *Proven Ore Reserves are based on Measured Mineral Resources only and Probable Ore Reserves are based on Indicated Mineral Resources only.*
9. *The sum of individual amounts may not equal due to rounding.*
10. *This Ore Reserve estimate is for a subset of the KNP - Goongarrie Hub deposits being Goongarrie South, Big Four / Scotia Dam, Goongarrie Hill, Highway and Siberia North.*

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Hydrogeology & Geotechnical

All nickel-cobalt-scandium mineral resources at Goongarrie are located on granted mining leases. As such, Ardea/KNPL have first rights to any ground water underlying these areas. Past work by Ardea has defined multiple water sources outside the mine area, with water for project development to be sourced from multiple borefields.

Progress during the Quarter included:

- The mining area hydrogeological campaign commenced with palaeochannel characterisation, monitoring wells, fractured rock characterisation and test pumping pilot wells being drilled. The campaign is expected to extend into Q2 2025.
- The process water supply hydrogeological campaign identified potential drilling targets for water supply bore holes.
- Design work on bore field power supply options and water transports options commenced.
- The geotechnical DD campaign commenced at the project in Q4 2024. Samples from this program have been sent offsite for processing.

Figure 8: Hydrogeological well drilling is underway at the project

Figure 9: Diamond drilling is underway at the project

Process Plant

Progress during the Quarter included:

- The Progression of the DFS design.
- The commencement of the P&IDs.
- 3D modelling and process plant layout commenced, sited on granted Mining Leases adjoining the main pits.
- Mechanical and Electrical equipment and load list were issued for study purposes.
- DFS level study of H_2S plant package was awarded to an industry-leading engineering consultancy.
- Equipment specifications and Request For Quotes continued.
- Logistics, reagent supply and rail options studies were completed.
- The Integrated Risk Review advanced to the next iteration.
- Completed the engagement of the final tranche of personnel for the KNPL DFS Owner's Team.
- Progressed the award of the second level contracts for the DFS.

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Non-Process Infrastructure

Progress during the Quarter included:

- Village building floor plans and elevations commenced.
- Village layout progressed.
- Quotations for the production bore drilling were received and are now ready for award.

Environment and Rehabilitation

All project development is aimed at including systematic and rapid rehabilitation concurrent with operations.

Due to the expanded development footprint of the Goongarrie Hub, as defined in the 2023 PFS (ASX release 5 July 2023), baseline surveys completed in 2018 have been extended and include further surveys to incorporate the latest environmental standards and guidelines.

During the December 2024 Quarter, KNPL's environmental consultant reviewed draft reports and commenced finalisation of reports and data from the following expanded baseline surveys: Flora and Vegetation; Terrestrial Fauna; Short Range Endemic Fauna; Targeted Conservation Significant Butterfly and Subterranean Fauna.

Completion of remaining non-seasonal dependent baseline studies will allow further assessment of the need for the Project to be formally assessed under the State Environmental Protection Act (**EP Act**) and the Commonwealth Environment Protection and Biodiversity Conservation Act (**EPBC Act**). If it can be shown that environmental impacts are low and/or can be adequately managed by other regulatory agencies using other mechanisms, the Environmental Protection Authority (**EPA**) may make an assessment on the referral that the Project is not to be formally assessed.

Similarly, if the EPA believes impacts on some factors are not significant and can be adequately managed by other regulatory agencies using other mechanisms, the number of Key Factors to be assessed by the EPA under the Part IV process would be reduced.

Mine rehabilitation methodology is facilitated through four decades of WA open pit gold mine operations, and the KNP footprint is minimised using mining voids for tailings and mullock disposal. Mining voids will be progressively rehabilitated during operations and returned to their pre-mining state, by dressing the back filled open pit voids with stockpiled topsoil (Figure 10) and then revegetating. It is intended that Indigenous contractors ideally based in Menzies be involved in revegetation. Rehabilitated sites, if unaffected by operations mine dust, would be suited as future solar array locations for site renewable energy balance.

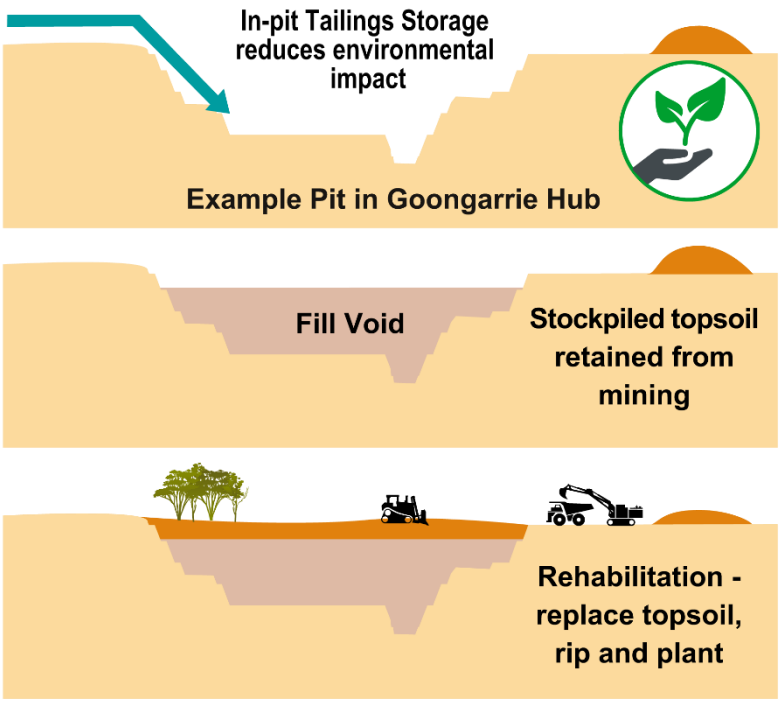

Figure 10: - left: Planned Goongarrie Hub in-pit tails disposal and rehabilitation strategy.

Right- Showing scarification of disturbed areas, during rehabilitation of Goongarrie South drill sites.

In terms of ESG compliance for hydrometallurgical metal processing, the KNP's benign and manageable environmental footprint contrasts strongly with "wet tropical laterite" projects. The tropical laterites require submarine tailings disposal or valley tailings storage with consequent substantial environmental risk. Tailings disposal in these environments tends to be further complicated by high rainfall and the fact that most tropical laterite deposits are in seismically active regions. Additionally, wet tropical laterite production areas commonly involve non-restorable rain forest habitat destruction.

It is doubtful whether wet tropical laterite hydrometallurgical battery metal sources can comply with the ESG standards required by the Japanese, South Korean, European and north American EV sectors.

Similarly, with more than 3,000mm of annual rainfall in the wet tropical nickel laterites, it is an immense challenge for long-term tailings stabilisation. The KNP semi-arid climate with robust environmental setting is likely just as important as the premium goethite, high nickel grade and excellent ore rheology for its economic attractiveness.

Approvals

- The preferred ESG consultant(s) were shortlisted with award forecast for early 2025.
- Review and feedback to the environmental baseline study consultants continued to enable finalisation of a number of these studies.
- Planning and scoping water pipeline route baseline studies progressed in Q4 2024, with the initial study being the LIDAR survey planned for early 2025.
- KNPL are commencing early engagement with environmental modellers (air/noise/water) to ensure design optimises environmental outcomes.
- Engagement and collaboration with Native Title claimant groups are progressing. Ardea and KNPL are committed to meaningful engagement with First Nations groups.

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2. KALGOORLIE NICKEL PROJECT – KALPINI HUB

With the Goongarrie Hub now sole-funded by the Consortium to DFS completion at a budget of $98.5 million, Ardea is undertaking initial Nickel Laterite scoping level feasibility reviews and Nickel Sulphide target generation for the Kalpini Hub (Kalpini and Bulong Nickel Projects, Emu Lake nickel sulphide) and Yerilla projects (Aubils, Boyce Creek and Jump Up Dam Nickel Projects) and shown in Figure 12. These "non-Goongarrie Hub" projects are collectively termed the "Kalpini Hub".

Kalpini Nickel Project

Ardea's Kalpini Nickel Project is located 70km northeast of the City of Kalgoorlie-Boulder and covers 121km^2 of contiguous unencumbered granted tenure 100%-owned by Ardea (Figure 11 and 12). Regionally there are two distinct Kalpini ultramafic units each with 20-25km strike within Ardea tenure (Figure 11):

- The Kalpini Eastern Komatiite Belt hosts the Wellington East and Acra North nickel laterite deposits containing 75Mt at 0.73% nickel and 0.04% cobalt, for 549.7kt nickel and 32.6kt cobalt (Ardea ASX release 30 June 2023). The ultramafics are typical of the Walter Williams Formation style consisting of a thick 200-600m sheet with olivine orthocumulate upper and lower contacts and core olivine meso-adcumulate (Dunitic Sheet Flows-Layered Lava Lakes). The flow core weathers to nickel laterite. Based on current Ardea research, the lower orthocumulate basal contact is considered prospective for nickel sulphide.
- The Kalpini Western Komatiite Belt hosts the Emu Lake Binti Binti nickel sulphide mineralisation. There are at least two fertile nickel sulphide ultramafic flows at Emu Lake. The volcanics are characterised by a bi-modal co-magmatic suite, with each cycle having a footwall dacite volcanic overlain by ultramafic volcanic flows. The ultramafics are orthocumulate flows typically 10-40m thick, with massive, matrix, blebby and disseminated nickel sulphides identified in the Western Ultramafic (**WU**) and Central Ultramafic (**CU**).

Nickel Laterite Studies

The Kalpini Nickel Project includes Nickel Laterite mineralisation associated with significant Rare Earth Element (**REE**) and Scandium credits (Figure 11).

At the Wellington East Prospect, re-sampling historic drill pulps by Ardea during 2020 to 2022 identified significant Rare Earth Element and Rare Metal (**RM**) grades within the historic nickel-cobalt laterite mineralisation (ASX Release 14 March 2022), including:

- WERC0371: 12m at 1.70% nickel, 0.151% cobalt, 28g/t scandium from 20m with;
  - **0.244%** Total Rare Earth Oxide (**TREO**) includes neodymium (Nd), praseodymium (Pr), lanthanum (La), cerium (Ce)
  - **1.320%** Total Rare Metal Oxide (**TRMO**) includes titanium (Ti), yttrium (Y), zircon (Zr), niobium (Nb), hafnium (Hf), tantalum (Ta) and tungsten (W)
- VKPRC0112: 4m at 1.66% nickel, 0.102% cobalt, 40g/t scandium from 29m with;
  - **0.1297% TREO**
  - **0.7193% TRMO**

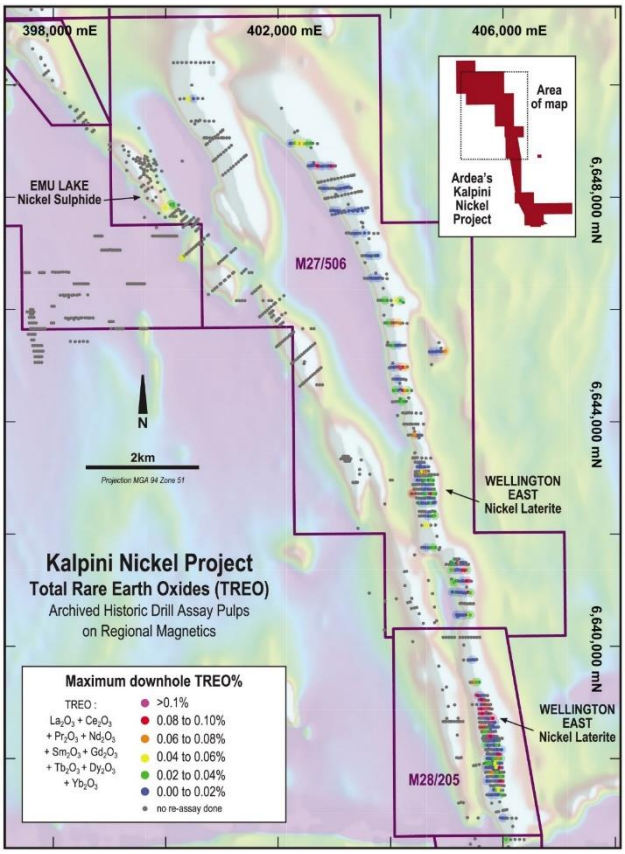

Figure 11: Northern Kalpini Nickel Project, aeromagnetic image showing historic drillholes as black dots, and if available % Total Rare Earth Oxide (TREO) assays, color-coded as per the map legend.

The Kalpini REE mineralisation occurs within the Regolith Cycle 1 Enrichment Zone of the main Nickel Laterite. In contrast, scandium is more enriched within younger Regolith Cycle 2 Laterite Duricrust overlying the Nickel Laterite.

Ardea scandium intercepts (ASX Release 22 June 2017) include:

- AKR0015, **20m at 102g/t scandium** from 38m AKR0017, **6m at 463g/t scandium** from 28m.

Geo-metallurgy

A systematic review of historic geo-metallurgical data is ongoing, aimed at progressing the Kalpini Hub Material Types and plant feed destinations to be compatible with the models now used in the Goongarrie Hub DFS. The Kalpini research confirms the Goongarrie three regolith cycle model, from pedogenic surface to bedrock:

- Regolith Cycle 3, quartz sand with carbonate cement, <0.1% Ni.
- Regolith Cycle 2, haematite-dominant duricrust and mottled clay, <0.3% Ni.
- Regolith Cycle 1, goethite-dominant mineralised host, >0.5% Ni, the upper contact with Cycle 2 includes a Relic leached horizon with Void-fill clay (termed "RV" in geomet) that significantly includes MN that is invariably recovered in pit designs.

Nickel Sulphide Exploration

Ardea's extensive and strategic land holding in the Eastern Goldfields of WA comprises >3,480km^2 of tenements and in addition to the globally significant nickel-cobalt-scandium KNP resources, is highly prospective for nickel sulphides and other Critical Minerals notably REE (Figure 12).

Nickel sulphide also has potential value for a nickel laterite operation, in that it is a potential addition to any goethite autoclave feed for exothermic heating (optimise steam use), Eh reduction to control hexavalent chromium and adding nickel and sulphur units to the autoclave reaction vessel, and typically improving overall nickel recoveries.

An additional benefit is that metal concentrations considered deleterious to conventional nickel sulphide flotation concentrator processing do not affect the HPAL process, opening the possibility of mineral extraction from nickel sulphide deposits that may otherwise be overlooked.

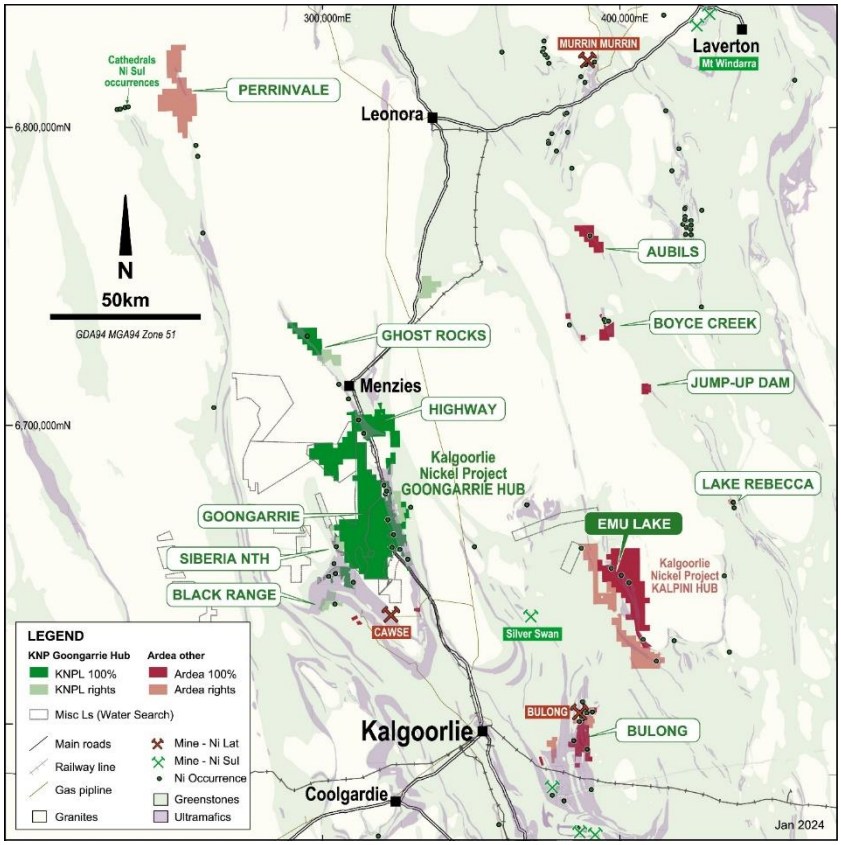

Figure 12: Ardea tenement plan highlighting the location of the Kalpini Hub, Emu Lake Nickel Sulphide Camp and nickel mines and deposits in the region. Projection MGA 94 Zone 51.

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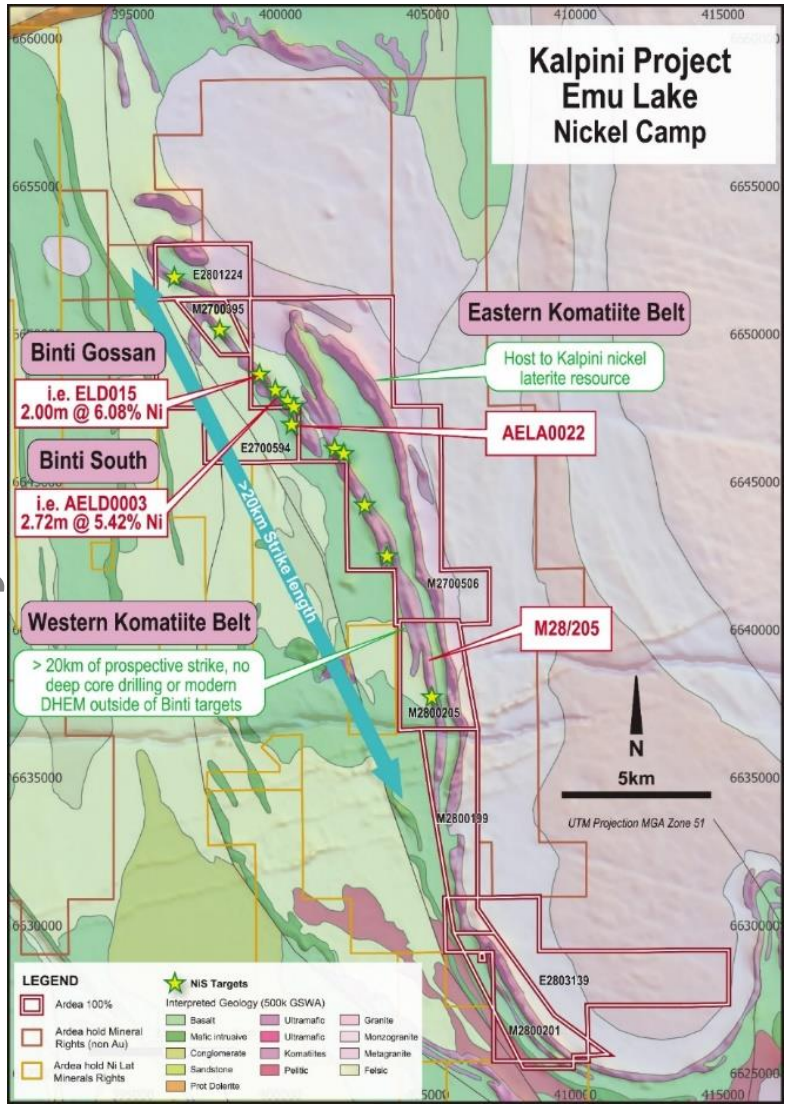

The massive nickel-copper-PGE sulphides discovered at the Binti Prospect in the Kalpini Project (i.e. AELD0003: 2.72m at 5.42% Ni and 0.85% Cu from 391.04m – ASX release 14 January 2022) occur in the Kurnalpi Terrane. Ardea holds over 20km strike of the prospective Western Ultramafic sequence that is largely unexplored and highly prospective for primary magmatic nickel sulphide mineralisation (Figure 13).

The plan for the Kalpini Hub is to postpone proposed nickel sulphide drill exploration activities until after KNPL priority DFS workstreams have settled in. Low cost/low impact work such as field mapping and geo-metallurgical interpretation continued during the Quarter.

An executive search for a project manager for designed Scoping Studies has been completed with commencement expected in 2025.

Figure 13: The Kalpini Project showing interpreted geology and Komatiite Belts. The historic nickel laterite resources are located on the Eastern Komatiite Belt, with the Western Belt highly prospective for nickel sulphide (NiS) mineralisation (Ardea ASX release 14 January 2022). Tenements are shown, with NiS targets (stars) (Ardea ASX release 2 May 2023). Projection MGA 94 Zone 51.

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Critical Mineral Exploration

Highway Nickel Project

An application for EIS Round 29 was successfully submitted for three diamond holes on Highway tenement M29/214, following up from the successful Round 26 EIS drillhole which defined fertile horizons of an LCT intrusive system (ASX release 15 December 2023). The Round 29 Submission was successful with an offer up to a maximum of $180,000 for the three drillholes testing the Highway LCT system and Walter Williams Formation komatiite basal contact nickel sulphide potential.

Detailed drillhole planning has been completed and assay results from the current Goongarrie Hub infill RC drilling are awaited for final drill collar confirmation.

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3. CORPORATE

Strategy

Ardea's sole priority is KNP nickel-cobalt laterite project development, commencing with the KNP – Goongarrie Hub, to produce Critical Minerals for the LIB supply chain to further advance the World transition to a low carbon future.

The starter KNP development project is the Goongarrie Hub to capitalise on the premium goethite ore type, infrastructure-rich location in collaboration with the Consortium. Opportunistic but complementary exploration plays for Critical Minerals (including nickel sulphide) will also be pursued, such as the Ardea nickel sulphide discoveries at Emu Lake, and LCT hydrothermal alteration and pegmatite discoveries at Highway and Ghost Rocks.

Finance

The Company's cash position was $13M at Quarter end. Additionally, with the execution of the binding Shareholders' Agreement (ASX release 30 August 2024) which completed Ardea's Strategic Partner transaction, the Consortium is fully funding the DFS costs up to the agreed budget of A$98.5M. With the balance of available funds, at the end of the Quarter, of $78.8M, the Company is well positioned.

Issued capital at 31 December 2024 was 199,682,915 Shares, with 3,513,400 Performance Rights and 3,000,000 Options.

Summary of Expenditures for the Quarter

During the Quarter, the Company incurred a total net expenditure from operating activities of $13.7M. This expenditure included $10.9M expended on exploration and evaluation activities, including feasibility studies, $423k on staff costs and $2.3M on administrative and corporate costs related primarily to concluding Ardea's Strategic Partner process, with the balance on minor items.

Included in these costs were payments made to Directors of the entity and their associates. These payments were Directors Salaries, tax on prior period staff Bonuses, Superannuation payments, and Consulting fees of $258k and rental for the Company's West Kalgoorlie operations office of $25k for the Quarter. All payments were made on an arm's length basis.

During the Quarter, the Company received $298k in interest and $11M from the Consortium for budgeted DFS funding. As of 31 December 2024, the remaining balance for Consortium DFS funding stands at $78.8M.

Further details on Quarterly expenditures are included in the Appendix 5B – Quarterly Cashflow Report attached to this Quarterly Report.

Investor Relations and Stakeholder Engagement

During the Quarter, management continued discussions with multiple Federal and State stakeholders and attended several industry events, including:

- Relationship building opportunities with Hon. David Michael MLA Minister for Mines and Petroleum: Managing Director and CEO Andrew Penkethman attended a Boardroom Lunch and the Australian Japan Business Council WA Networking event, both held in October 2024.
- Andrew Penkethman attended the International Mining and Resources Conference and Expo (IMARC) Sydney in October 2024 including multiple meetings with stakeholders.
- Ardea Resources was the major sponsor of the Australian Nickel Conference Lunch on 9 October 2024. Andrew Penkethman delivered a presentation and participated in a panel discussion at the new format event.
- Executives participated in an Austrade hosted Critical Minerals Market Briefing on India in December 2024.
- Continued participation in Future Batteries Industries CRC meetings.
- Multiple investor update meetings.
- Meetings and events with various industry stakeholders.

Managing Director and CEO Andrew Penkethman presented at the Australian Nickel Conference Lunch on 9 October 2024

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4. LOOKING FORWARD

During the March 2025 Quarter, Ardea will focus upon the following programs.

Kalgoorlie Nickel Project – Goongarrie Hub DFS

Ardea will continue to work with all stakeholders, including the Consortium, industry groups and Federal, State and Local Governments to ensure project development is predicated on the highest industry standards, notably ESG.

Kalgoorlie Nickel Project – Goongarrie Hub DFS

- Progress DFS process testwork and process design updates.
- Undertake the next iteration of an integrated risk review.
- Progress the infill resource definition drilling program.
- Progress mine geotechnical and mine hydrogeological field investigations.
- Progress bore water supply pumping and piping design.
- Progress village and NPI buildings and other NPI design.
- Mineral Resource Updates
    - Continue work on geology domain interpretations for DFS resource estimates, to be finalised after the infill resource definition drilling program is completed.
    - Optimise the mine schedules, as predicated by the resource update.
    - Continue the DFS DD program which will be used for bench-scale metallurgy testwork, adding density and moisture data to the DFS resource model updates, and provide additional twin-hole datasets for QAQC review.
    - Continue with resource block models for the Goongarrie Hill and Siberia North deposits, with Big Four/Scotia Dam, Goongarrie South, and Highway deposits block model work to commence once full assays results from infill drilling are returned.

Strategic Partner Relationship

- Continue working collaboratively with the Consortium toward completion of the DFS.

Stakeholder Engagement

- Community consultation with our First Nations groups, the City of Kalgoorlie Boulder, Shire of Menzies, Southern Ports Esperance and all other stakeholders.
- Continue engagement with groups such as the Australian Commonwealth Government, Austrade, Department of Foreign Affairs and Trade, Critical Minerals Office, Export Finance Australia, Major Projects Facilitation Agency, WA State Government agencies, and for R&D the FBICRC and CSIRO.

Related Value Creation Opportunities

In discussion with the Consortium, opportunities for value-creation within related Goongarrie Hub mineral commodities are being reviewed. The first initiative is the EIS drilling at Highway, targeting LCT Critical Minerals and Nickel Sulphide.

At the Goongarrie South nickel project, the long-documented gold occurrences separated from the Nickel Laterite in the eastern Mining Lease tenure are subject to monetisation studies that concomitantly benefit the larger Nickel Laterite development objectives.

The specific geography and planned infrastructure development at Goongarrie provides opportunities for renewable energy which substantially benefits the nickel project. Of particular interest is Concentrated Solar Thermal (**CST**), to supplement site Acid Plant energy generation.

Investor Relations

Regular engagement with Shareholders and investors will continue in person and through Ardea's website, LinkedIn, and Twitter (X) accounts.

Stakeholders are welcome to subscribe for Ardea updates: click here

Ardea will be participating in the RIU Explorers Conference, being held in February 2025 in Fremantle Western Australia.

For its first time, Ardea will attend the Resource Connect Asia Tribeca Future Facing Commodities Conference in Singapore in April 2025, where Andrew Penkethman will be presenting along with attending shareholder and stakeholder meetings.

Other activities planned include Shareholder and other stakeholder roadshows on the east coast of Australia.

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

For further information regarding Ardea, please visit the Company website or contact:

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

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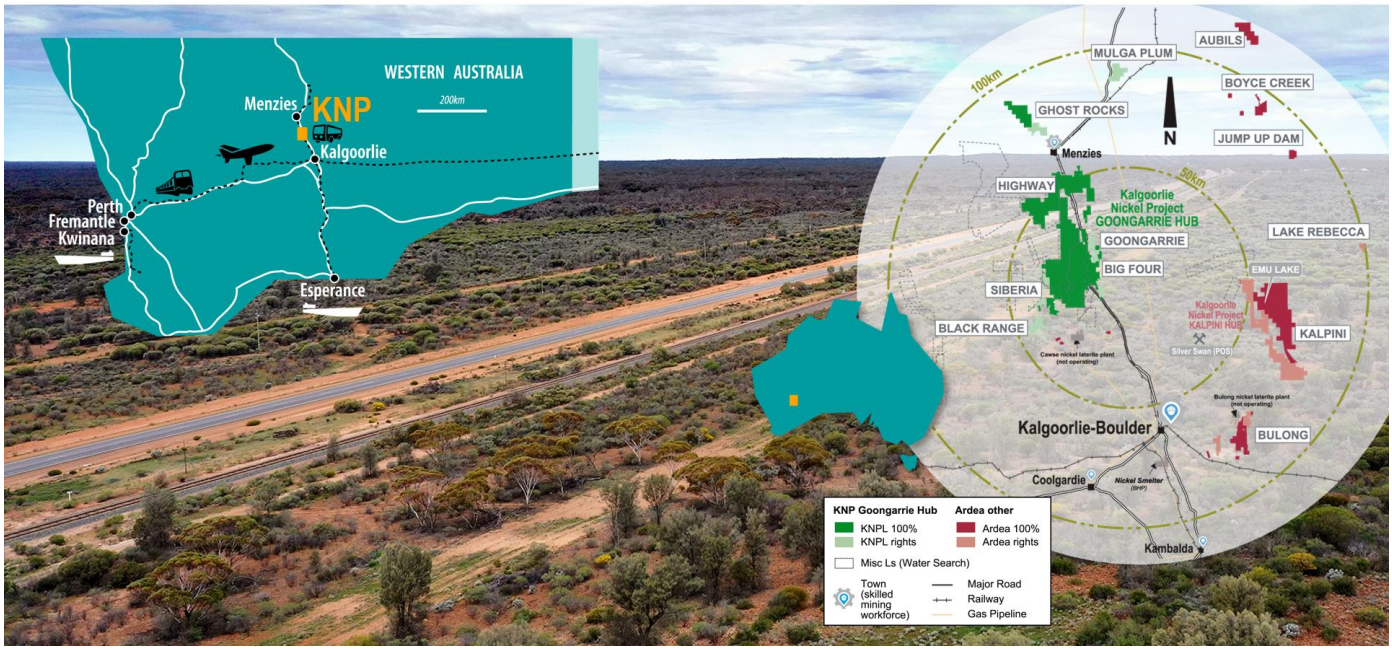
About Ardea Resources

Ardea Resources (ASX:ARL) is an ASX-listed Critical Minerals development company in joint venture with Sumitomo Metal Mining and Mitsubishi Corporation to develop the KNP Goongarrie Hub and to realise its full potential as a long life (>40 years), low cost source of nickel-cobalt that meets the high ESG standards expected by society, from the premier resources operating jurisdiction, the Eastern Goldfields of Western Australia.

- The Kalgoorlie Nickel Project (**KNP**) and its sub-set the Goongarrie Hub, are globally significant nickel-cobalt and Critical Mineral deposits which host the largest nickel-cobalt resource in Australia and one of the largest in the developed World at **854Mt at 0.71% nickel and 0.045% cobalt for 6.1Mt of contained nickel and 386kt of contained cobalt**. The Goongarrie Hub has 584Mt for 4.0Mt of contained nickel (Consortium right to earn 50%) and Kalpini Hub has 270Mt for 2.1Mt of contained nickel (Ardea 100% unencumbered interest) (Ardea ASX release 30 June 2023), located in a jurisdiction with exemplary Environmental Social and Governance (**ESG**) credentials.
- The KNP Goongarrie Hub DFS is in progress and due for completion in late H2, 2025.
- Scoping Study initial programs commenced for the KNP Kalpini Hub nickel resources.
- Advanced-stage exploration at compelling nickel sulphide targets, such as Kalpini, and Critical Minerals targets including scandium and Rare Earth Elements throughout the KNP Eastern Goldfields world-class nickel-gold province, with all exploration targets complementing the KNP nickel development strategy.



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Ardea

Australian Federal Government - Major Project Status

KALGOORLIE NICKEL

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COMPLIANCE STATEMENT (JORC CODE (2012))

A competent person's statement for the purposes of Listing Rule 5.22 has previously been announced by the Company for:

1. *Kalpini drill results highlight cobalt-nickel mineralisation, and scandium discovery, 22 June 2017.*
2. *Emu Lake Nickel Sulphide Discovery confirmed with 2.72m at 5.42% Ni, 14 January 2022.*
3. *High-grade Nickel-Cobalt Confirmed at Kalpini with Scandium and Rare Earth Elements, 14 March 2022.*
4. *Kalgoorlie Nickel Project Recognition on All Tiers of Australian Government, 21 March 2022.*
5. *Nickel sulphide anomalism from aircore drilling at Kalpini Project, 2 May 2023.*
6. *Mineralised Neutraliser Global Patent Lodged, 15 June 2023.*
7. *Kalgoorlie Nickel Project Mineral Resource Estimate Exceeds 6 Million Tonne Contained Nickel, 30 June 2023.*
8. *KNP - Goongarrie Hub Ore Reserve and Feasibility Study Defines +40 Year Operation with Strong Financial Metrics, 5 July 2023.*
9. *Nickel Sulphide Prospectivity Confirmed and Lithium-Caesium-Rubidium bearing intrusives in Highway EIS drillhole, 15 December 2023.*
10. *Ardea, Sumitomo Metal Mining (SMM) and Mitsubishi Corporation (MC) to form a Joint Venture to develop the Kalgoorlie Nickel Project (KNP) – Goongarrie Hub, 26 April 2024.*
11. *Kalgoorlie Nickel Project - Goongarrie Hub DFS Drilling Underway, 4 July 2024.*
12. *Kalgoorlie Nickel Project – Goongarrie Hub DFS Underway, 8 July 2024.*
13. *KNP – Goongarrie Hub Joint Venture FIRB Approval Received, 14 August 2024.*
14. *KNP – Goongarrie Hub Joint Venture Transaction Completion with Japanese Consortium, 30 August 2024*
15. *Annual Report 2024, 13 September 2024.*
16. *Appendix 4G - Corporate Governance Statement, 13 September 2024.*
17. *Ardea strengthens Board with Appointment of Michael Rodriguez as Executive Director, 19 December 2024.*
18. *Kalgoorlie Nickel Project – Goongarrie Hub DFS Progress Update, 17 January 2025.*

Competent Persons Statement

Resource Estimation, Exploration Results, and Industry Benchmarking

The Resource Estimation, Exploration Results 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 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.

The Company confirms that it is not aware of any new information or data that materially affects information included in previous announcements, and all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

Ardea wishes to clarify that its current KNP MRE following JORC Code (2012) guidelines is:

Camp	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	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 Mineral Resource Estimate in the above table is inclusive of the Ore Reserve shown in table two of this release.

The Ore Reserve information shown in this ASX release has been previously released on the ASX platform by Ardea in ASX release 5 July 2023, in accordance with Listing Rule 5.9.The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcements noted above and that all material assumptions and technical parameters underpinning the Mineral Resource Estimate and Ore Reserve in the previous market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcements.

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ASX CHAPTER 5 COMPLIANCE AND PFS CAUTIONARY STATEMENT

The Company has concluded that it has a reasonable basis for providing the forward-looking statements and forecast financial information included in this announcement. The detailed reasons for that conclusion are outlined throughout this announcement and all material assumptions, including the JORC modifying factors, upon which the forecast financial information is based are disclosed in this announcement. This announcement has been prepared in accordance with the JORC Code (2012) and the ASX Listing Rules.

The actual results could differ materially from a conclusion, forecast or projection in the forward-looking information. Certain material factors were applied in drawing a conclusion or making a forecast or projection as reflected in the forward-looking information.

The KNP - Goongarrie Hub Project is at the PFS phase and although reasonable care has been taken to make sure 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 scandium 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 PFS, which are based on forward looking statements, is that the Goongarrie Hub is considered to have positive economic potential.

The Mineral Resource used for the PFS was classified under JORC Code (2012) Guidelines and announced by the Company on 30 June 2023. The cut-off grades adapted for the PFS and reported in Table 2 are the basis of the production target assumed for the PFS.

The Company believes it has a reasonable basis to expect to be able to fund and further develop the KNP - Goongarrie Hub. However, there is no certainty that the Company can raise funding when required.

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 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 programs, 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, 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 release.

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Ardea Resources Limited

ABN	Quarter ended ("current quarter")
30 614 289 342	31 December 2024

Consolidated statement of cash flows		Current quarter $A'000	Year to date (6 months) $A'000
1.	**Cash flows from operating activities**		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(603)	(1,238)
	(b) feasibility Studies	(10,368)	(15,014)
	(c) production	-	-
	(d) staff costs	(423)	(1,568)
	(e) administration and corporate costs	(2,288)	(3,019)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	298	429
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid/received	(390)	(298)
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material) –	34	38
1.9	**Net cash from / (used in) operating activities**	**(13,740)**	**(20,670)**
2.	**Cash flows from investing activities**		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(69)	(132)
	(d) exploration & evaluation	-	-
	(e) investments	-	-
	(f) other non-current assets	-	-

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Consolidated statement of cash flows		Current quarter $A'000	Year to date (6 months) $A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	299
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	**Net cash from / (used in) investing activities**	**(69)**	**167**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (Consortium funding 100% of the Definitive Feasibility Study (DFS) costs)	11,086	18,938
3.10	**Net cash from / (used in) financing activities**	**11,086**	**18,938**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**	(2,723)	(1,565)
4.1	Cash and cash equivalents at beginning of period	16,007	14,849
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(13,740)	(20,670)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(69)	167
4.4	Net cash from / (used in) financing activities (item 3.10 above)	11,086	18,938

Consolidated statement of cash flows		Current quarter $A'000	Year to date (6 months) $A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	**Cash and cash equivalents at end of period**	**13,284**	**13,284**

5.	**Reconciliation of cash and cash equivalents** at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	**Current quarter $A'000**	**Previous quarter $A'000**
5.1	Bank balances	4,777	7,732
5.2	Call deposits	8,507	8,275
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**13,284**	**16,007**

6.	**Payments to related parties of the entity and their associates**	**Current quarter $A'000**
6.1	Aggregate amount of payments to related parties and their associates included in item 1	284
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

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

Salaries, Directors fees and Consulting fees paid to Directors - $259k

Payments for Kalgoorlie Office to a Director related entity for the quarter - $25k

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7.	**Financing facilities** *Note: the term "facility' includes all forms of financing arrangements available to the entity.* *Add notes as necessary for an understanding of the sources of finance available to the entity.*	**Total facility amount at quarter end $A'000**	**Amount drawn at quarter end $A'000**
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (funding support arrangement)	98,500	19,633
7.4	**Total financing facilities**	98,500	19,633
7.5	**Unused financing facilities available at quarter end**		78,867

7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.

Ardea has entered into a Cooperation Agreement and Shareholders's Agreement with a Japanese consortium to form a joint venture to develop the Kalgoorlie Nickel Project - Goongarrie Hub (Ardea ASX announcements: 26 April 2024 and 2 September 2024).

The Consortium will fund 100% of the DFS costs up to the agreed budget of approximately A$98.5 million. At the conclusion of the DFS spend, the Consortium will have subscribed to a 35% ownership in KNPL and retain the right to increase its ownership in KNPL to 50% upon a positive Final Investment Decision (FID) decision by the Consortium to build, commission and operate a plus 30,000tpa multi-decade nickel operation.

On 26 April 2024, Ardea, Ardea's subsidiary Kalgoorlie Nickel Pty Ltd (KNPL) and Sumitomo Metal Mining Co. Ltd (SMM) agreed funding support arrangements to facilitate the progression of the early DFS works while the conditions precedent to the Cooperation Agreement are being satisfied. Under the funding support arrangements, the parties have agreed a contribution plan under which SMM will advance up to A$12,000,000 in funding to KNPL, as and when funds are required to facilitate agreed early DFS works. This funding support agreement has ceased upon the signing of the Shareholders's Agreement – with the Consortium funding 100% of the DFS costs up to the agreed budget of approximately A$98.5 million.

8.	**Estimated cash available for future operating activities**	**$A'000**
8.1	Net cash from / (used in) operating activities (item 1.9)	(13,740)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(13,740)
8.4	Cash and cash equivalents at quarter end (item 4.6)	13,284
8.5	Unused finance facilities available at quarter end (item 7.5)	78,867
8.6	Total available funding (item 8.4 + item 8.5)	92,151
8.7	**Estimated quarters of funding available (item 8.6 divided by item 8.3)**	6.71

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: N/A

8.8.2	Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?
Answer: N/A	
8.8.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?
Answer: N/A	

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

Compliance Statement

1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.

2 This statement gives a true and fair view of the matters disclosed.

Date: 28 January 2025

Authorised by: Ardea Board of Directors

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.

2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.

3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".

5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.

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Tenement Schedule

Ardea Resources Limited Tenement Schedule (WA) as at 31 December 2024

Tenement	Location	Ardea Interest (%)	Status	Note	Tenement	Location	Ardea Interest (%)	Status	Note
Goongarrie Hub									
E24/196	Goongarrie	100	Live	16	M24/731	Goongarrie	100	Live	3,16
E24/209	Goongarrie	100	Live	16	M24/732	Goongarrie	100	Live	3,16
E24/211	Goongarrie	100	Live	16	M24/744	Goongarrie	100	Live	16
E29/934	Goongarrie	100	Live	16	M24/778	Goongarrie	100	Live	3,16
E29/1028	Goongarrie	100	Live	16	M29/167	Goongarrie	100	Live	16
E29/1038	Goongarrie	100	Live	16	M29/202	Goongarrie	100	Live	16
E29/1039	Goongarrie	100	Live	16	M29/272	Goongarrie	100	Live	16
E29/1045	Goongarrie	100	Live	16	M29/278	Goongarrie	100	Live	16
E29/1048	Goongarrie	100	Live	16	M29/423	Goongarrie	100	Live	16
L24/239	Goongarrie	100	Live	16	M29/426	Goongarrie	100	Live	16
L29/134	Goongarrie	100	Live	16	P24/5260	Goongarrie	100	Live	16
L29/135	Goongarrie	100	Live	16	P24/5328	Goongarrie	100	Live	16
L30/67	Goongarrie	100	Live	16	P24/5329	Goongarrie	100	Live	16
L30/68	Goongarrie	100	Live	16					
L16/141	Goongarrie	100	Live	16	P24/5169	Goongarrie-Windanya	100	Live	16
L30/85	Goongarrie	100	Live	16	P24/5480	Goongarrie-Windanya	100	Live	16
P29/2646	Highway North	100	Live	16	M24/919	Goongarrie-Scotia	100 Ni rights	Live	6
P29/2647	Highway North	100	Live	16	M24/959	Goongarrie-Scotia	100 Ni rights	Live	6
P29/2648	Highway North	100	Live	16	M24/541	Goongarrie	100	Live	16
P24/5528	Goongarrie	100	Live	16	P29/2559	Highway North	100	Live	16
E29/1082	Goongarrie	100	Live	16	P29/2560	Highway North	100	Live	16
E29/1089	Goongarrie	100	Live	16	P29/2501	Highway - Moriarty	100	Live	16
P29/2561	Highway North	100	Live	16	P29/2562	Highway North	100	Live	16
E29/941	Ghost Rocks	100	Live	16	E29/981	Ghost Rocks	100 non Li - Au rights	Live	15,16
M29/214	Highway	100	Live	16	L16/143	Goongarrie – Credo West	100	Live	16
L16/144	Goongarrie – Credo West	100	Live	16	E29/1083	Goongarrie	100	Live	16
L16/145	Goongarrie – Credo West	100	Live	16	L16/147	Goongarrie – Credo West	100	Live	16
L16/146	Goongarrie – Credo West	100	Live	16	L16/148	Goongarrie – Credo West	100	Live	16
L24/252	Goongarrie	100	Live	16	L30/95	Goongarrie – Credo West	100	Live	16
E29/984	Highway North	100	Live	15,16	M29/424	Goongarrie	100	Live	16
P29/2530	Goongarrie	100	Live	15,16	M29/445	Highway North	100	Live	15,16
P29/2532	Goongarrie	100	Live	15,16	E29/1062	Goongarrie	100	Live	15,16
P29/2467	Goongarrie	100	Live	15,16	L24/253	Goongarrie	100	Live	16
P29/2468	Goongarrie	100	Live	15,16	L24/254	Goongarrie	100	Live	16
P29/2380	Goongarrie	100	Live	15,16	L24/255	Goongarrie	100	Live	16
P24/5799	Goongarrie	100	Pending						

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Tenement	Location	Ardea Interest (%)	Status	Note	Tenement	Location	Ardea Interest (%)	Status	Note
Goongarrie Hub Expansion Siberia									
E24/203	Siberia North	100 non Au-Ag rights	Live	16	P24/5235	Siberia North	100	Live	16
E29/889	Siberia North	100	Live	16	P24/5236	Siberia North	100	Live	16
M24/634	Siberia North	100 non Au-Ag rights	Live	1,4,16	P29/2484	Siberia North	100	Live	16
M24/660	Siberia North	100 non Au-Ag rights	Live	4,16	P29/2485	Siberia North	100	Live	16
M24/663	Siberia North	100 non Au-Ag rights	Live	4,16	P24/5416	Siberia North	100	Live	16
M24/664	Siberia North	100 non Au-Ag rights	Live	4,16	P24/5417	Siberia North	100	Live	16
M24/665	Siberia North	90 non Au-Ag rights	Live	2,4,16	P24/5418	Siberia North	100	Live	16
M24/683	Siberia North	100 non Au-Ag rights	Live	4,16	P24/5566	Siberia North	100	Live	16
M24/686	Siberia North	100 non Au-Ag rights	Live	4,16	P24/5567	Siberia North	100	Live	16
M24/772	Siberia North	100 non Au-Ag rights	Live	4,16	L24/248	Siberia North	100	Live	16
M24/797	Siberia North	100 non Au-Ag rights	Live	4,16	L24/249	Siberia North	100	Live	16
M24/915	Siberia North	100 non Au-Ag rights	Live	4,16	L24/250	Siberia North	100	Live	16
M24/916	Siberia North	100 non Au-Ag rights	Live	4,16	L24/251	Siberia North	100	Live	16
M24/1002	Siberia North	100 non Au-Ag rights	Pending	4,16	P24/5599	Siberia North	100	Live	16
P24/5618	Siberia South	100	Live	16	P24/5623	Siberia South	100	Live	16
P24/5619	Siberia South	100	Live	16	P24/5624	Siberia South	100	Live	16
P24/5620	Siberia South	100	Live	16	P24/5625	Siberia South	100	Live	16
P24/5621	Siberia South	100	Live	16	L29/181	Siberia North	100	Live	16
P24/5622	Siberia South	100	Live	16	L29/183	Siberia North	100	Live	16
Goongarrie Hub Expansion Black Range									
M24/757	Black Range	100 non Au-Ag rights	Live	4,16	M24/973	Black Range	100 non Au-Ag rights	Pending	4,16
P24/4395	Black Range	100 non Au-Ag rights	Live	4,16	P24/4396	Black Range	100 non Au-Ag rights	Live	4,16
P24/4400	Black Range	100 non Au-Ag rights	Live	4,16	P24/4401	Black Range	100 non Au-Ag rights	Live	4,16
P24/4402	Black Range	100 non Au-Ag rights	Live	4,16	P24/4403	Black Range	100 non Au-Ag rights	Live	4,16
P24/5593	Black Range	100% non Au rights	Live	14,16	P24/5594	Black Range	100% non Au rights	Live	14,16
P24/5595	Black Range	100% non Au rights	Live	14,16	P24/5596	Black Range	100% non Au rights	Live	14,16

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Kalpini Hub

Tenement	Location	Ardea Interest (%)	Status	Note	Tenement	Location	Ardea Interest (%)	Status	Note
E27/524	Kalpini	100 non Au rights	Live	9	P25/2454	Kalpini-Bulong	100	Live	
E27/606	Kalpini	100	Live		P25/2455	Kalpini-Bulong	100	Live	
E27/607	Kalpini	100	Live		P25/2456	Kalpini-Bulong	100	Live	
E28/1224	Kalpini	100	Live		P25/2457	Kalpini-Bulong	100	Live	
E28/2978	Kalpini	100	Live		P25/2458	Kalpini-Bulong	100	Live	
M27/395	Kalpini	100	Live		P25/2459	Kalpini-Bulong	100	Live	
M27/506	Kalpini	100	Live		P25/2460	Kalpini-Bulong	100	Live	
M27/512	Kalpini	100	Pending		P25/2461	Kalpini-Bulong	100	Live	
M28/199	Kalpini	100	Live		P25/2482	Kalpini-Bulong	100	Live	
M28/201	Kalpini	100	Live		P25/2483	Kalpini-Bulong	100 non Au rights	Live	14
M28/205	Kalpini	100	Live		P25/2484	Kalpini-Bulong	100 non Au rights	Live	14
E27/278	Kalpini-Acra	100 Ni Lat Ore	Live	5	P25/2559	Kalpini-Bulong	100 non Au rights	Live	14
E27/438	Kalpini-Acra	100 Ni Lat Ore	Live	5	P25/2560	Kalpini-Bulong	100 non Au rights	Live	14
E27/520	Kalpini-Acra	100 Ni Lat Ore	Live	5	P25/2561	Kalpini-Bulong	100 non Au rights	Live	14
E27/579	Kalpini-Acra	100 Ni Lat Ore	Live	5	P25/2609	Kalpini-Bulong	100	Live	
E28/2483	Kalpini-Acra	100 Ni Lat Ore	Live	5	P25/2613	Kalpini-Bulong	100	Live	
E25/578	Kalpini-Bulong	100 non Au rights	Live	14	P25/2614	Kalpini-Bulong	100	Live	
M25/59	Kalpini-Bulong	100 non Au rights	Live	14	P25/2615	Kalpini-Bulong	100	Live	
M25/134	Kalpini-Bulong	100	Live		P25/2650	Kalpini-Bulong	100 non Au rights	Live	14
M25/145	Kalpini-Bulong	100	Live		P25/2305	Kalpini-Bulong	100 non Au rights	Live	13,14
M25/151	Kalpini-Bulong	100 non Au rights	Live	14	M31/488	Kalpini-Lake Rebecca	100 non Au rights	Pending	14
M25/161	Kalpini-Bulong	100	Live		P31/2038	Kalpini-Lake Rebecca	100 non Au rights	Live	14
M25/171	Kalpini-Bulong	100 non Au rights	Live	14	P31/2039	Kalpini-Lake Rebecca	100 non Au rights	Live	14
M25/187	Kalpini-Bulong	100	Live		P31/2040	Kalpini-Lake Rebecca	100 non Au rights	Live	14
M25/209	Kalpini-Bulong	100	Live		P25/2306	Kalpini-Bulong	100 non Au rights	Live	13,14
E27/646	Kalpini	100	Live		M25/19	Kalpini-Bulong	100 non Au rights	Live	13,14
P25/2295	Kalpini-Bulong	100 non Au rights	Live	14	P25/2307	Kalpini-Bulong	100 non Au rights	Live	13,14
P25/2296	Kalpini-Bulong	100 non Au rights	Live	13,14	P25/2408	Kalpini-Bulong	100 non Au rights	Live	13,14
P25/2743	Kalpini-Bulong	100	Pending		P25/2409	Kalpini-Bulong	100 non Au rights	Live	13,14
E25/657	Kalpini-Bulong	100	Pending		L27/102	Kalpini	100	Live	
P25/2837	Kalpini-Bulong	100	Pending		L31/88	Kalpini	100	Live	
M25/377	Kalpini-Bulong	100 non Au rights	Pending	14	E28/3308	Kalpini	100	Pending	
P25/2768	Kalpini-Bulong	100	Pending		E28/3309	Kalpini	100	Live	
P25/2769	Kalpini-Bulong	100	Live		P25/2770	Kalpini-Bulong	100	Pending	
P25/2778	Kalpini-Bulong	100	Live		P25/2771	Kalpini-Bulong	100	Pending	
P25/2779	Kalpini-Bulong	100	Live		P25/2773	Kalpini-Bulong	100	Pending	
P25/2838	Kalpini-Bulong	100	Pending		P25/2839	Kalpini-Bulong	100	Pending	
P25/2766	Kalpini-Bulong	100	Live		P26/4543	Kalpini-Bulong	100	Live	
P25/2764	Kalpini-Bulong	100	Pending		P25/2767	Kalpini-Bulong	100	Pending	
E27/647	Kalpini	100	Live		P25/2765	Kalpnin-Bulong	100	Live	
P26/4542	Kalpini-Bulong	100	Live						

Kalpini Hub - Yerilla

E39/1954	Kalpini-Yerilla-Aubils	100	Live	M39/1147	Kalpini-Yerilla-Aubils	100	Pending
E31/1092	Kalpini-Yerilla-Boyce Creek	100	Live	E31/1169	Kalpini-Yerilla-Boyce Creek	100	Live
E31/1208	Kalpini-Yerilla-Boyce Creek	100	Live	E31/1213	Kalpini-Yerilla-Boyce Creek	100	Live
M31/483	Kalpini-Yerilla-Boyce Creek	100	Live	M31/493	Kalpini-Yerilla-Boyce Creek	100	Pending
M31/475	Kalpini-Yerilla-Jump Up	100	Live	M31/477	Kalpini-Yerilla-Jump Up Dam	100	Live
M31/479	Kalpini-Yerilla-Jump Up	100	Live				

Tenement	Location	Ardea Interest (%)	Status	Note	Tenement	Location	Ardea Interest (%)	Status	Note
WA Regional									
M15/1101	WA Regional	Pre-emp Ni-Co Lat	Live	7	M15/1263	WA Regional	Pre-emp Ni-Co Lat	Live	7
M15/1264	WA Regional	Pre-emp Ni-Co Lat	Live	7	M15/1323	WA Regional	Pre-emp Ni-Co Lat	Live	7
M15/1338	WA Regional	Pre-emp Ni-Co Lat	Live	7	M27/510	WA Regional	100 Ni Lat Ore	Live	8
M27/272	Kanowna East	Non-Au Rights	Live	10					
E40/350	Kookynie	Non-Au Rights	Live	11	E40/357	Kookynie	Non-Au Rights	Live	11
E29/1006	Perrinvale	100 non Au rights	Live	14	E29/1078	Perrinvale	100 non Au rights	Live	14
E37/1271	Mt Zephyr	20	Live	12	E39/1706	Mt Zephyr	20	Live	12
E39/1854	Mt Zephyr	20	Live	12	E39/2520	Mt Zephyr	100	Pending	

Notes:

1. Britannia Gold Ltd retains precious metal rights.
2. Impress Ventures Ltd has a 10% equity free-carried interest to a decision to mine.
3. Norton Gold Fields Limited retains certain Au claw-back rights and royalty receivable.
4. Ora Banda Mining Ltd holds Au-Ag rights while Ardea retains all non Au-Ag rights.
5. Acra – Held by Essential Metals Limited, wholly owned subsidiary of Develop Global. Ardea retains rights to Ni laterite ore.
6. Black Mountain Gold Limited all rights with exception of Ardea retaining Ni rights.
7. Ramelius Resources Limited assignee (Maximus Resources Ltd) all rights, Ardea pre-emptive right to Ni-Co laterite.
8. Paddington Gold Pty Ltd all mineral rights (except nickel sulphide) while Ardea retains rights to nickel laterite ore.
9. By Sale Agreement between Northern Star (Carosue Dam) Pty Ltd and Kalnorth Gold Mines Ltd, Northern Star (Carosue Dam) Pty Ltd now owns Au rights while Ardea retains non-Au rights.
10. Northern Star (Kanowna) Limited holds Au rights. Ardea retains non-Au rights.
11. The Option to purchase the tenements was transferred to Metalicity Limited on 21 November 2020. Ardea retains non Au rights.
12. The Mt Zephyr/Darlot East tenements were farmed out to Red 5 Limited on 18 November 2020 whereby Red 5 Limited earned 80% equity interest. Red 5 Limited merged with Silver Lake Resources Limited in late 2024 and the combined entity is known as Vault Minerals Limited. Ardea is free carried to Decision to Mine.
13. Purchase of tenements by Binding Terms Sheet and Alluvial Rights Agreements dated 4 June 2021 between the Seller Steven Lionel Kean and Ardea Resources Limited. Ardea retains non Au rights.
14. By way of the Demerger Implementation Deed executed between Ardea Resources Limited, Kalgoorlie Gold Mining Limited, Yerilla Nickel Pty Ltd, Kalgoorlie Nickel Pty Ltd and Ardea Exploration Pty Ltd dated 9 September 2021, certain tenements have been transferred to Kalgoorlie Gold Mining Limited. For certain other tenements, Ardea Resources Limited or its subsidiaries will continue to hold and retain non-gold rights while Kalgoorlie Gold Mining Limited retains gold rights only.
15. Tenement Swap Agreement between Brightstar Resources Limited subsidiaries, Goongarrie Operational and Mining Pty Ltd and Menzies Operational and Mining Pty Ltd, and Ardea Resources Limited subsidiary, Kalgoorlie Nickel Pty Ltd dated 15 July 2023. E29/1062 Infrastructure Rights only. E29/981, Brightstar has lithium and gold rights.
16. The Japanese Consortium may acquire 50% equity of KNPL from the tenement holder by completing the Goongarrie Hub DFS and making a positive FID, refer to ASX announcements 26 April 2024 and 30 August 2024.

Interests in Mining Tenements and Petroleum Tenements Acquired or Increased during the December Quarter 2024

Nil

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