

Investor Webinar Presentation

ASX & Media Release

14 July 2020

ASX Symbol

ARL

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Technical Executive Director

Executive Management

Sam Middlemas
Company Secretary & CFO

Matt Painter
General Manager Exploration

Issued Capital

Fully Paid Ordinary Shares
117,300,435

*Directors/Employee
Performance Rights*
4,276,000

ABN 30 614 289 342

Ardea Resources Limited (ASX: ARL, Ardea or the Company) is pleased to announce its participation in the Noosa Mining Virtual webinar to be held on Wednesday 15 July 10.40am AEST / 8.40am AWST.

Managing Director and Chief Executive Officer Andrew Penkethman will provide an update on the company's significant gold exploration programs with deep RC drilling having recently commenced at Aphrodite North. Additionally, developments underway within the broader Kalgoorlie Nickel Project (KNP) and its Goongarrie Nickel Cobalt Project (GNCP), 70 kilometres north of the City of Kalgoorlie-Boulder in Western Australia, will also be discussed.

This free webinar can be viewed live via Zoom. Noosa Virtual will feature online investment updates from the executives from over 60 promising resources companies across three days and is designed to give investors choice to view all or as many presentations as they wish.

To access further details on the event and to register, please copy and paste the following link into your internet browser:

<https://www.noosaminingvirtual.com.au/>

A recorded copy of the webinar will be made available following the event. A copy of the investor presentation to be delivered during the webinar is attached.

Authorised for lodgement by Andrew Penkethman, Managing Director and Chief Executive Officer.

**For further information regarding Ardea, please visit:
www.ardearesources.com.au or contact**

Ardea Resources

Andrew Penkethman

**Managing Director and Chief Executive Officer,
Ardea Resources Limited**

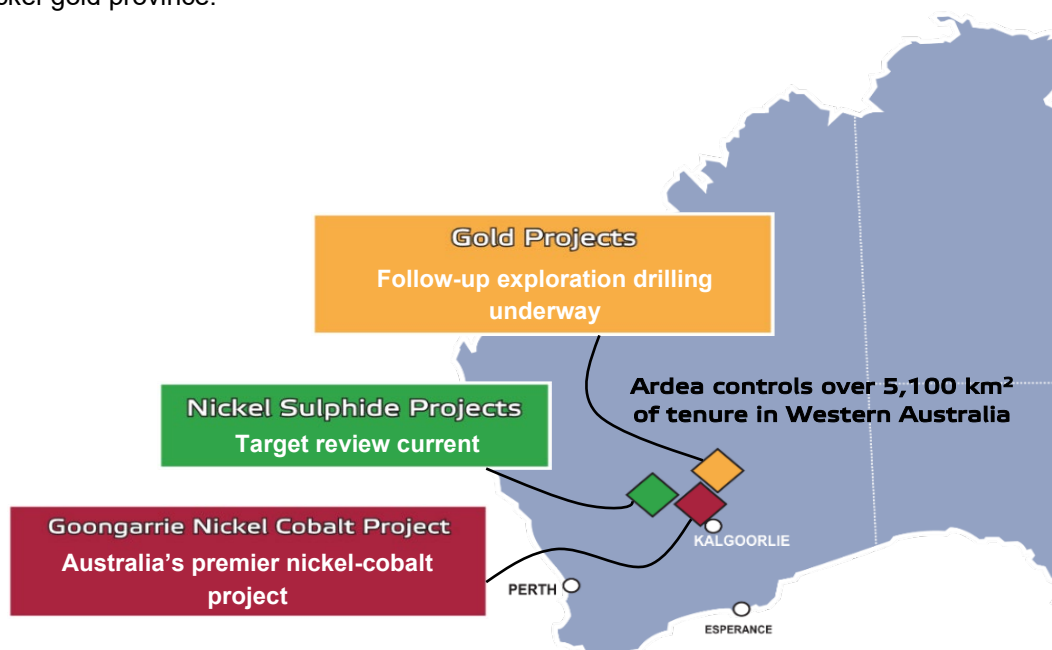
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About Ardea Resources

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

- Development of the Goongarrie Nickel Cobalt Project, which is part of the Kalgoorlie Nickel Project, a globally significant series of nickel-cobalt deposits which host the largest nickel-cobalt resource in the developed world, coincidentally located as a cover sequence overlying fertile orogenic gold targets; and
- Advanced-stage exploration at WA nickel sulphide and gold targets within the Eastern Goldfields world-class nickel-gold province.



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

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Ardea Resources Limited

DEVELOPING

the Kalgoorlie Nickel Project
starting with Goongarrie Nickel-Cobalt

EXPLORING

for Gold and Nickel Sulphides
within the Kalgoorlie Nickel Project

**Noosa Mining Virtual Conference,
15 July 2020**

Presented by Andrew Penkethman



The faceted multi-coloured jewels represent the rich heart of WA and its diverse character in terms of landscape, minerals, and where Ardea projects are focused

Disclaimer



Important notice

This presentation contains general information only and is, or is based upon, information which has been released to ASX or is contained in the Ardea Resources Limited (Ardea or the Company) prospectus dated 9 November 2016 (including supplementary prospectuses dated 18 November 2016 and 6 January 2017), the Goongarrie Nickel Cobalt Project Pre-Feasibility Study (dated 28 March 2018) the Goongarrie Expansion Study (24 July 2018), Goongarrie Pilot Plant trial produces battery grade crystals (31 October 2018), Goongarrie Nickel Cobalt Project Update (8 April 2019), Drilling at Gale identifies large scale gold system (11 April 2019), Ardea Quarterly Operations Report, for the quarter ended 31 March 2019 (30 April 2019), Ardea Quarterly Operations Report, for the quarter ended 30 June 2019 (22 July 2019), Nickel sulphide exploration commences at Perrinvale Project (24 July 2019), Ardea Annual Report 2019 (24 October 2019), Ardea Quarterly Operations Report, for the quarter ended 30 September 2019 (31 October 2019), Mulga Plum Exploration Update (25 November 2019), Ardea Quarterly Operations Report, for the quarter ended 31 December 2019 (17 January 2020) Ardea Quarterly Operations Report, for the quarter ended 31 March 2020 (9 April 2020), Significant gold exploration results from new target at Goongarrie South (25 June 2020) and Follow-up RC drilling commences at the Aphrodite North gold target (10 July 2020).

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

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

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

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





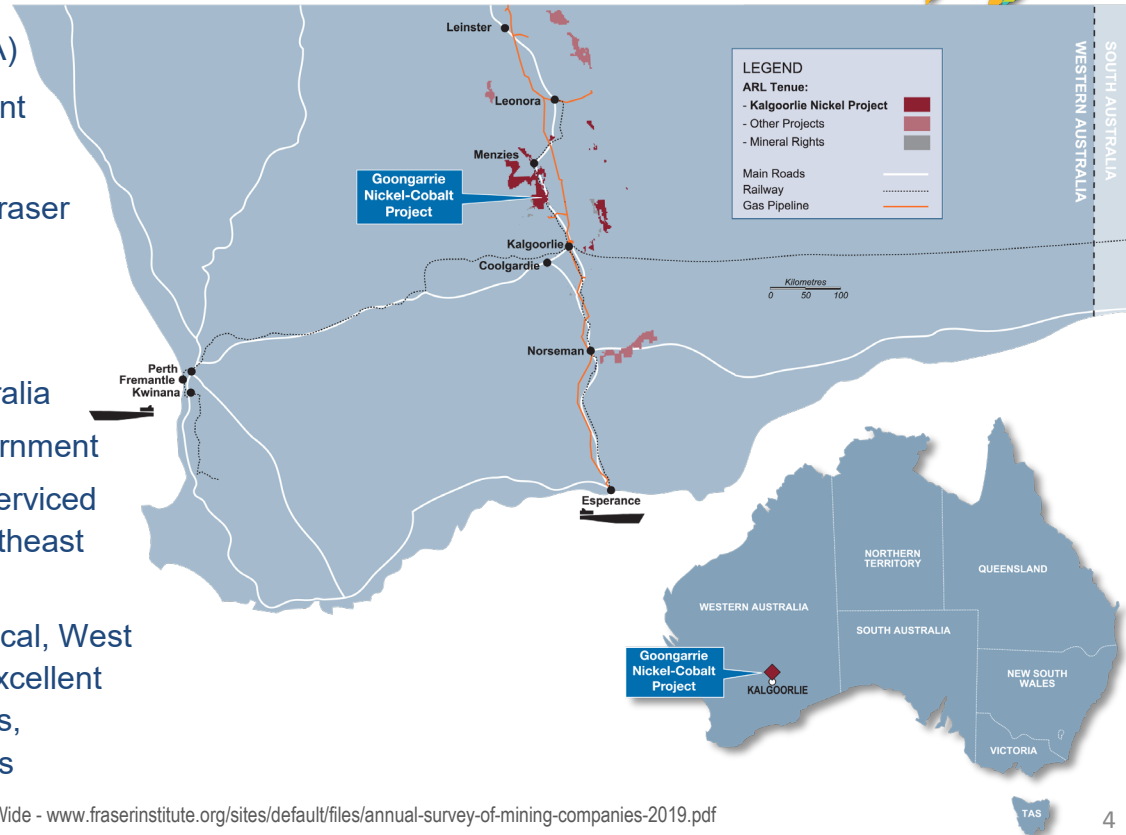
- ❑ Ardea is a **Western Australia (WA) focused developer and explorer** with a clear strategy to become an **integrated, ethical feedstock supplier to the Lithium Ion Battery (LIB) sector** and to make **gold and nickel sulphide discoveries**
- ❑ The **Kalgoorlie Nickel Project (KNP)** is the **Developed World's premier nickel-cobalt project with 773 million tonnes at 0.7% nickel and 0.05% cobalt (5.5Mt Ni, 0.4Mt Co)¹**, with **scandium and rare earth credit potential**
 - **Globally significant mineral resource** on granted **mining leases** adjoining infrastructure with Native Title agreement in place
 - Pre-Feasibility Study completed in 2018 on Goongarrie Nickel Cobalt Project (GNCP) within the larger KNP, **Pre Tax NPV₈ US\$2.4 billion²**
- ❑ Ardea has a **strategic, highly prospective, (>5,100km²) landholding** in the Eastern Goldfields of WA with active exploration programs for **gold and nickel sulphide deposits**
 - RC drilling in progress on the **Aphrodite North gold target**
 - **Pipeline of quality exploration targets** defined with field work underway and further work planned

1. See Appendix for resource breakdown and PFS outcomes (at February 2018 metal prices). 2. Per Goongarrie Expansion Study ASX release, 24 July 2018. All the material assumptions underpinning the forecast financial information derived from a production target, in the initial public report referred to in rule 5.17 continue to apply and have not materially changed.

Optimum Jurisdiction – Western Australia



- ❑ All Ardea Projects located in Western Australia (WA)
- ❑ WA is the premier global destination for development of minerals operations
- ❑ WA is the top ranking operating jurisdiction in the Fraser Institute's Annual Survey of Mining Companies - Investment Attractiveness Index*
- ❑ City of Kalgoorlie-Boulder is the prime resource development and operating destination within Australia
 - Very strong mining support from Local Government
 - Multitude of world-class mining operations serviced from the City, including the Super Pit on southeast city boundary
 - Ardea manages all field programs from its local, West Kalgoorlie operations office and maintains excellent working relationships with local stake holders, including Prospectors, drillers and assay labs



*The Fraser Institute is a Canadian Think Tank ranked in the top 15 World Wide - www.fraserinstitute.org/sites/default/files/annual-survey-of-mining-companies-2019.pdf



Optimum Resource Scale and Location

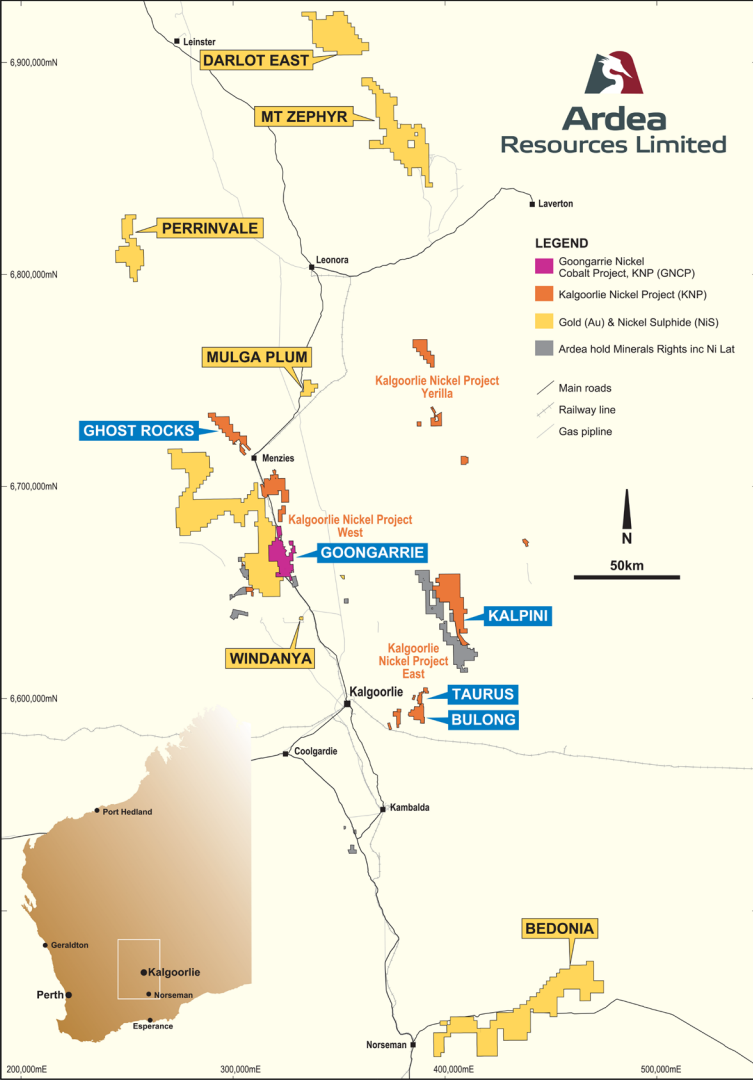


- ❑ Assumption is a world-leading LIB investor will require a minimum annual output of 40,000tpa nickel metal in product
- ❑ With 5.5Mt contained nickel*, easily accommodated within the KNP, starting with the GNCP
 - >100 year potential supply of resource within KNP
 - Other undeveloped Australian nickel laterite projects unable to supply even 20 years at 40ktpa
- ❑ KNP well suited for NMC 811 LIB (Ni:Co = 8:1)
 - GNCP resource* grade 0.71% Ni and 0.06% Co (Ni:Co = 11.8:1)
 - Resource updates based on high grade mine strategy (>1% nickel) in progress and to include maiden scandium and rare earth component, in addition to nickel-cobalt



Aerial image of Ardea's GNCP showing from left to right, rail, road and power infrastructure within the project.

* See Appendix for resource breakdown.



Exploration Upside

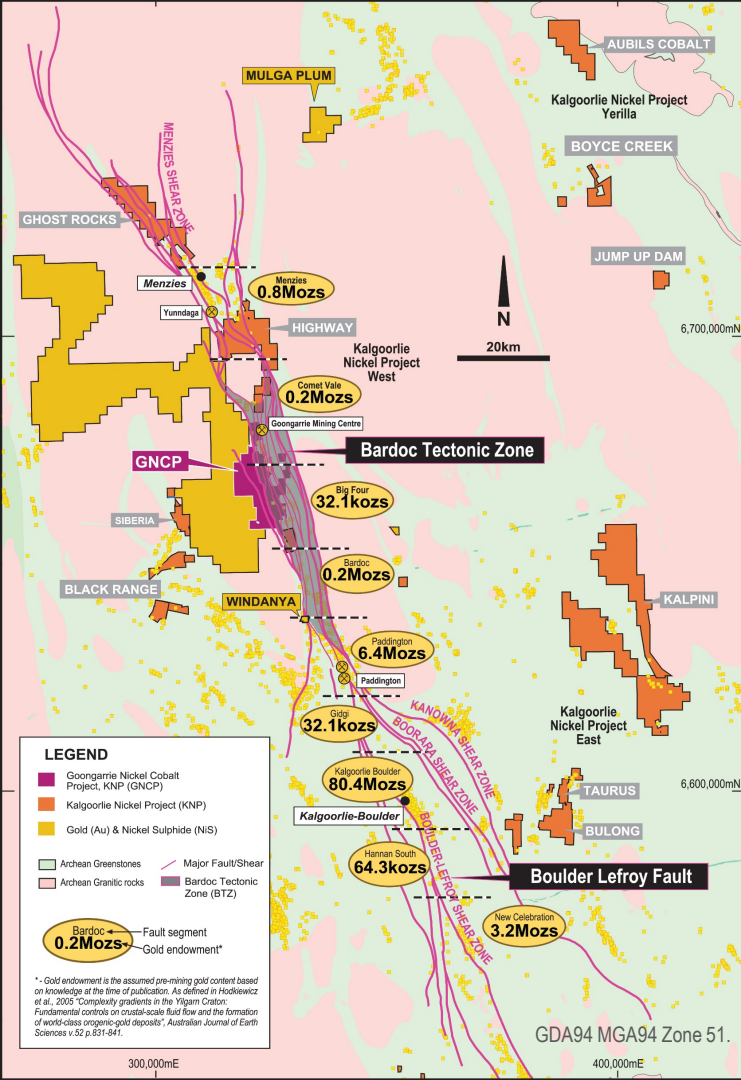


- ❑ >5,100km² of 100% controlled tenure in one of Australia's premier gold and nickel sulphide provinces
- ❑ Extensive tenure position provides multiple strategic options
- ❑ Priority focus on flagship KNP and GNCP tenements with globally significant nickel-cobalt resources and outstanding gold and nickel sulphide exploration potential
- ❑ Active work programs:
 - Gold exploration with major focus within and adjacent to KNP. Sites drilled where no gold, once sterilised, become GNCP infrastructure sites
 - Currently RC drilling Aphrodite North target and will then drill Grafter
 - Undertaking metallurgical testwork on Big Four Gold composite samples
 - Gold target definition and follow-up at Windanya
 - Gold target definition and follow-up at Bulong
 - Nickel sulphide targets being defined, with a priority on Emu Lake at Kalpini, historic drill results such as 2m @ 6.2% nickel in historic core drilling confirms nickel sulphide endowment and prospectivity*
- ❑ Multiple work streams in progress to maintain strong investor news flow with gold and nickel sulphide exploration success, providing potential to monetise discoveries and provide cash flow ahead of KNP development

Ardea projects location plan. Projection - GDA94 MGA94 Zone 51.

*Heron Resources Limited ASX release 26 November 2013. ELD015, 2m at 6.2% Ni, 1.78% Cu, and 2.17g/t PGEs.

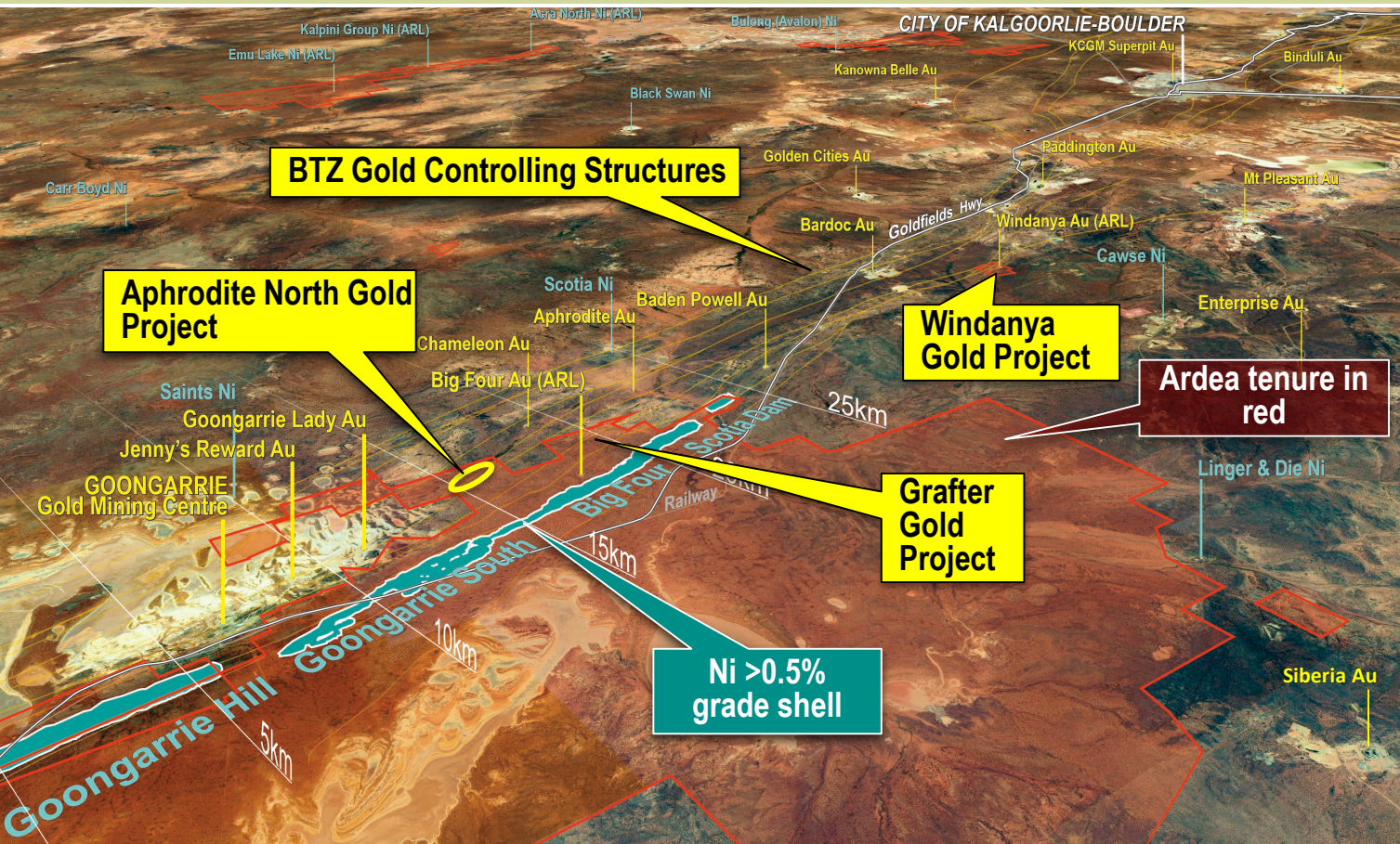
Gold Exploration Strategy



- ❑ Nickel laterite by definition will be localised upon crustal-scale Tectonic Zones (TZ), which structures control geological events from initial olivine komatiite rift volcanism, epiclastic sedimentation, Layered Mafic Complex emplacement, late stage diorite intrusion and finally through to the late stage crustal convective cells responsible for orogenic gold deposition
- ❑ The TZs are exceptional greenfields gold targets. The Bardoc Tectonic Zone (BTZ) is the northern strike continuation of the Boulder Lefroy TZ, which hosts Kalgoorlie-Boulder (>80Moz gold), New Celebration (3.2Moz) and St Ives (6.5Moz) gold camps
- ❑ Despite the obvious gold pedigree of Ardea's tenure, during the last 23 years it has been solely developed as a nickel-cobalt laterite project, with ownership and control successively by Heron Resources and then Vale Inco (PFS 2009). **There has been no gold exploration**
- ❑ With Ardea's acquisition of the project in 2017, for the first time in two decades, systematic gold evaluation commenced, through Ardea's gold and multi-element pathfinder assay suite and detailed geophysical data interpretation to help "see" through the cover lake sediments and blanket laterite
- ❑ In terms of developing a gold exploration model, Ardea's approach has highlighted the presence of intense deformation, iron-rich dolerite and late stage diorite intrusives within the GNCP, all the key elements for significant gold mineralisation within Kalgoorlie-Boulder's Eastern Goldfields gold province

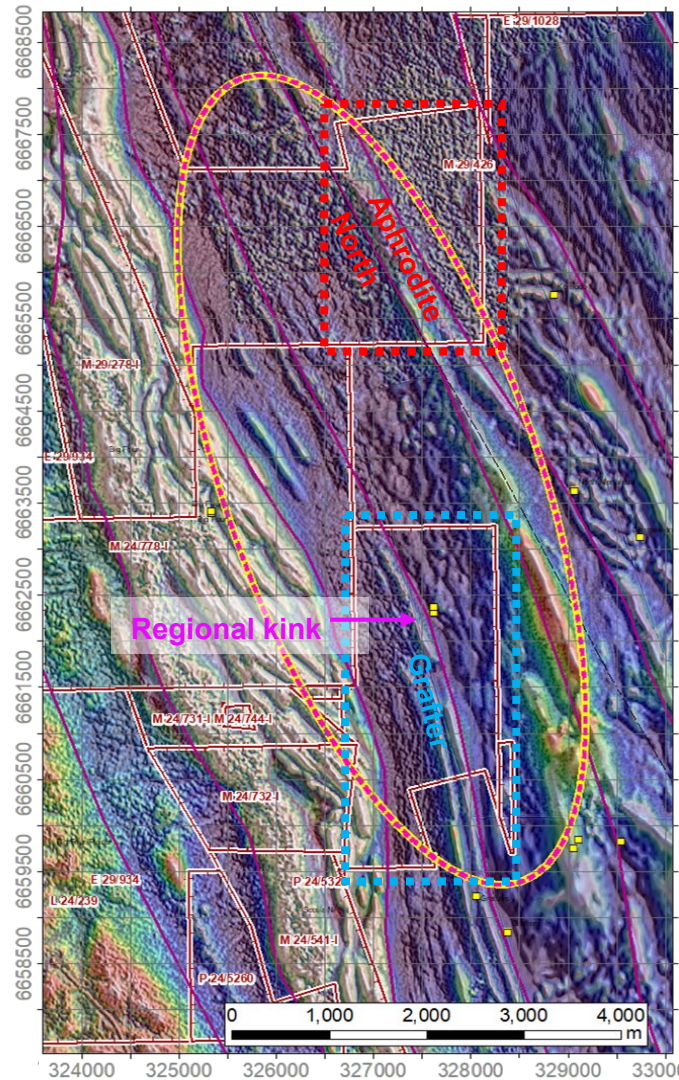
Kalgoorlie Nickel Project – Nickel, Cobalt and Gold

(looking south – with GNCP in the foreground. Note the scale and location)



- ❑ Multiple **gold** and **nickel** occurrences around Ardea tenements
- ❑ >100 gold targets defined under cover
- ❑ Targets ranked and being systematically explored
- ❑ Early success at Big Four Gold deposit, 178kt @ 2.7g/t Au* provides proof of concept on Ardea tenure

Gold Exploration at GNCP



- ❑ Ardea's gold targeting program has identified a regional-scale gold target area measuring around 9 x 3 km within GNCP tenure (pink and yellow dashed line)
- ❑ It has strong geological parallels with the Menzies gold camp to the north and the Paddington gold camp to the south. These gold camps each comprise tens to hundreds of historic (and some active) gold mines and workings within a defined area of predominantly outcrop and subcrop
- ❑ By contrast, outcrop at the GNCP is almost totally absent, reflects pervasive and intense alteration, excellent setting for orogenic gold
- ❑ These areas each mark a portion of the BTZ that has been the focus of an intense gold-bearing fluid flux parental to the gold deposits
- ❑ Detailed geological interpretation of all available data, including limited surface and drill hole geochemistry, ground truthing and geophysical datasets has defined a number of target areas
- ❑ The immediate priority is on follow-up RC drilling programs at **Aphrodite North** and **Gafter**

GNCP location plan, showing Ardea tenements and highlighting the location of the Aphrodite North (red dashed box) and Gafter (blue dashed box) prospects, on magnetic data. The larger area circled with a dashed purple and yellow line represents the Goongarie South area covering 9 x 3 km. Ardea believes this entire area highly prospective for hosting gold mineralisation concealed by surface cover. GDA94 MGA94 Zone 51.

Aphrodite North Gold Target



Evolving gold discovery under lake cover

- ❑ Gold anomalism ($>0.1\text{g/t Au}$) defined over 2.4km by first ever drilling under surface and lake clay cover*
- ❑ Top Left – Air Core (AC) samples from hole, AGSA0013, 43-44m, 1m at 2.46g/t Au and 120-127m, 7m at 2.48g/t Au ,[^] within target dolerite protolith
- ❑ Top Right – Aerial view of RC follow-up drilling underneath AC hole, AGSA0013.
- ❑ Final AC assay results received Wed night 8/7, RC drilling 7am Fri, 10/7
- ❑ Bottom Left – Geologists field office (back of the ute) and discussing alteration observed in the RC chips
- ❑ Bottom Right – RC drilling in progress

Aphrodite North First RC Hole Drill Chips

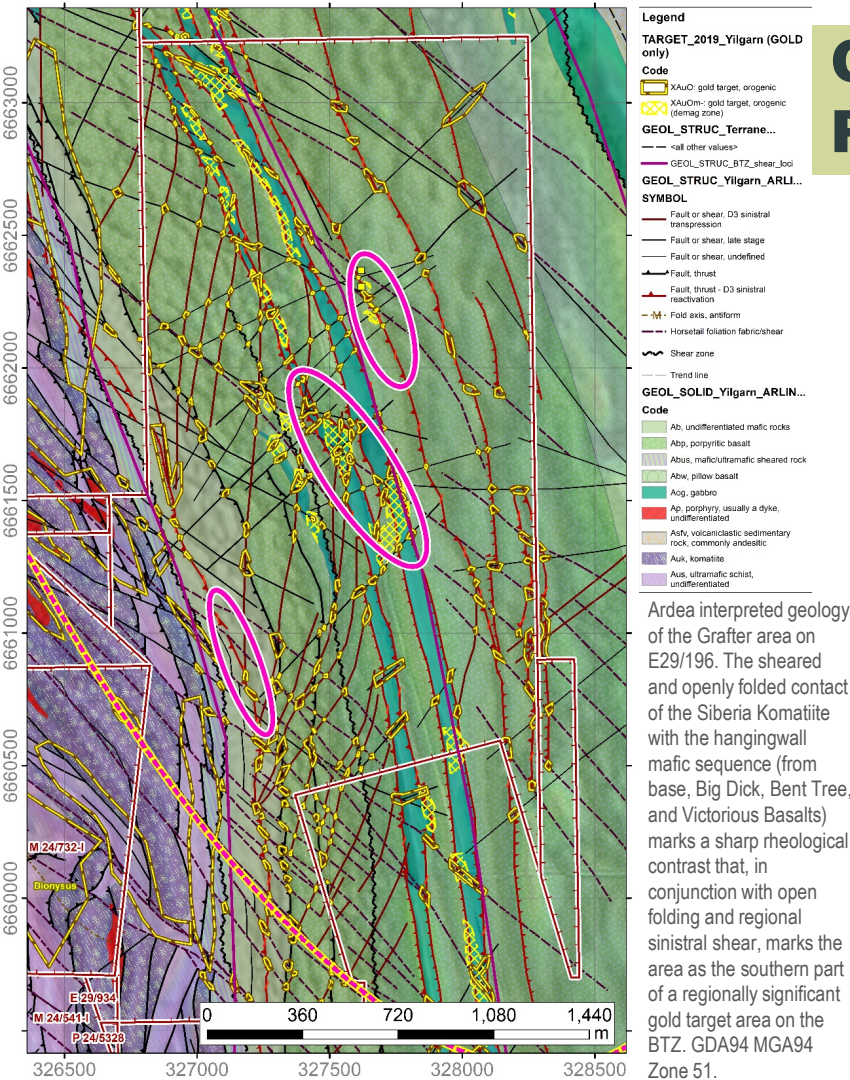


RC Chips From AANR0001

- ☐ Target dolerite host rock confirmed under ~30m of lake sediments
- ☐ Multiple zones of quartz veining
- ☐ Potassic alteration - sericite, biotite, quartz, carbonate and pyrite increasing with depth
- ☐ Samples to be submitted for assay to determine gold grades
- ☐ Logged geology very encouraging



Gold Exploration Project Pipeline - Grafter



- ❑ Located at south-eastern end of GNCP
- ❑ Underexplored area ~3.7 x 1.5km, previously held by prospectors
- ❑ Deformed mafic hangingwall sequence prone to gold mineralisation
- ❑ Numerous rock chip and drill anomalies
- ❑ Minor historic workings only (likely due to ~80% transported and laterite cover hiding the prospective basement rocks)
- ❑ Several laterally extensive trends, including the Brighton-Grafters Trend that hosts numerous gold mines, including: Brighton, New Boddington mines (to the north) and Rob Roy, Eureka, Windanya mines (to the south)
- ❑ Through-going BTZ-generation shears locally disrupted
- ❑ First-pass exploration program required to fully define gold distributions in laterite and fresh rock
- ❑ Three initial areas to be RC drill tested with a staged program to explore several target styles over different parts of the stratigraphy
- ❑ Ardea is the first Company to apply a modern exploration approach

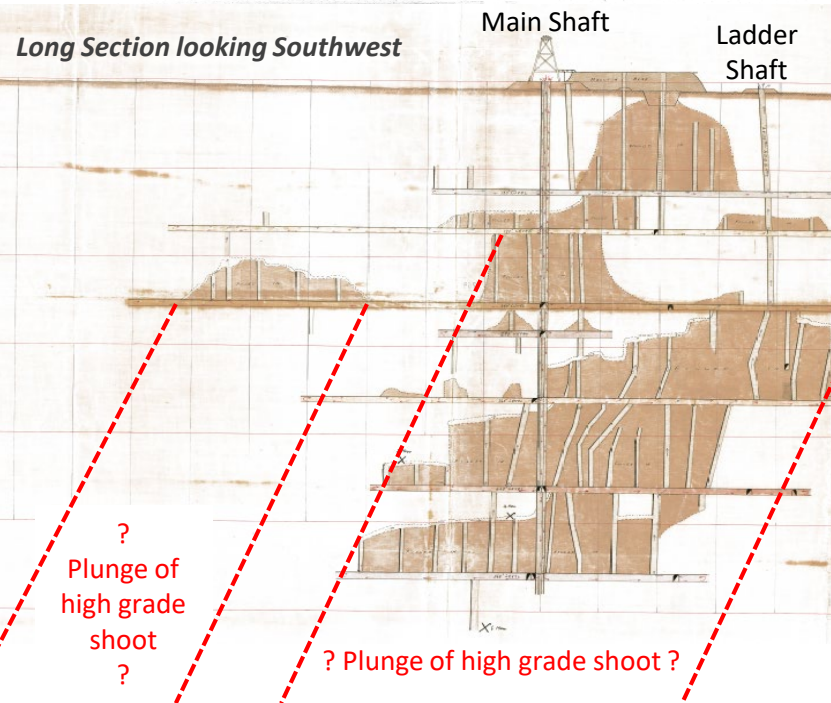
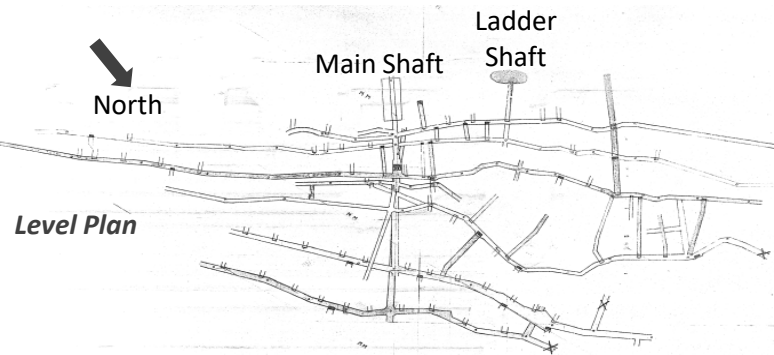
Gold Exploration Project Pipeline - Windanya



Sheeted, steeply dipping quartz veins in carbonate altered rock from outcrop at southern end of tenement



- ❑ Located 50km northwest of Kalgoorlie-Boulder
- ❑ Historic mining area (1897 and 1906), centred around the largest mine in the area, **Half Mile Reef**
- ❑ Geology - deformed ultramafic to mafic sequence prone to gold mineralisation
- ❑ Major historic workings, with Half Mile Reef the largest
- ❑ Through-going BTZ-generation shears locally disrupted
- ❑ Past exploration, but no prior full data consolidation, including a 3D model of historic workings
- ❑ Previous holders completed mainly shallow drilling
- ❑ They did not model the historic workings and determine the controls on gold mineralisation, to optimally target down plunge extensions and structural repeats
- ❑ Held by prospectors over recent years, with Ardea the first Company to apply a modern exploration approach



Windanya Gold

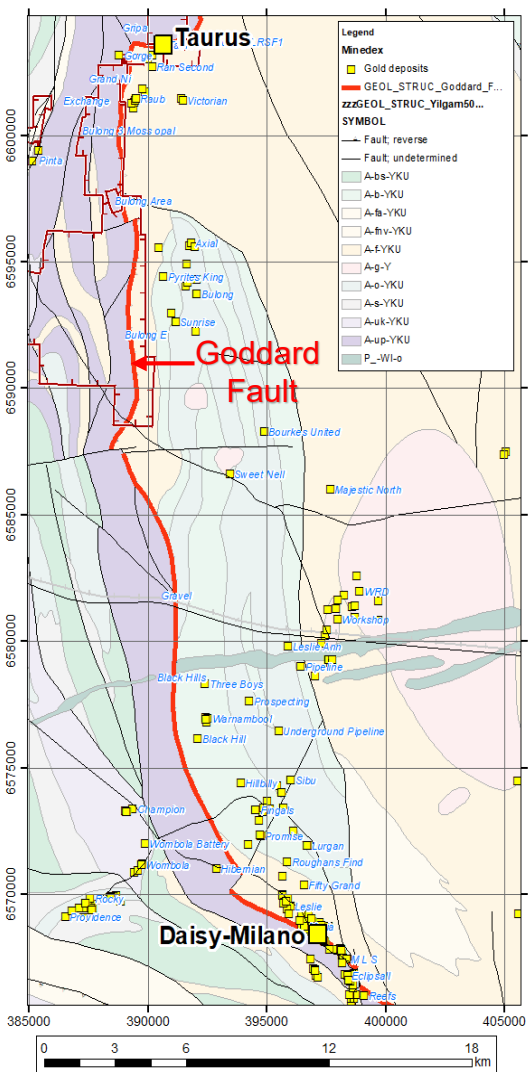


- ❑ Records sourced for the Half Mile Reef* indicate that between 1897 and 1906, 23,480 tonnes of ore were mined from an underground operation, producing 12,993 ounces of gold. This indicates a recovered gold grade of 17.2 g/t
- ❑ Historic plans and a long section indicate a substantial underground operation for this era
- ❑ 600 foot or 183m deep shaft with stoping to a depth of at least 170m
- ❑ Level development and discontinuous stoping >700 foot or 213m
- ❑ Extent of tribute mining after 1906 unknown, so workings may be more extensive
- ❑ Compilation and interpretation of historic data ongoing
- ❑ Priority on registering plans and long section, digitising and orientating relative to MGA in 3D
- ❑ Can then verify effectiveness of legacy exploration and target high grade mineralisation/structural repeats down plunge
- ❑ Potential for additional parallel gold mineralised structures to be discovered and other targets as well

*Data sources Department of Mines, Industry Regulation and Safety and Trove (online library database).

Gold Exploration Project Pipeline

- Bulong



- ❑ Located approximately 30km east of the City of Kalgoorlie-Boulder
- ❑ The regionally significant crustal scale gold controlling structure, the Goddard Fault, trends north-south and passes through Ardea's Bulong tenure (shown in red in the adjacent plan)
- ❑ This structure represents a northern splay of the regionally significant Mount Monger Fault, which hosts gold mineralisation to the south, with the best known operating mine in the area at Daisy Milano
- ❑ Historically, the focus on the Bulong tenements has been on laterite hosted nickel-cobalt mineralisation, with limited historical gold exploration completed by Ardea
- ❑ Detailed mapping and sampling program around the historic Taurus underlay shaft and multiple workings in the area has helped refine the controls on gold mineralisation
- ❑ Ardea continues to work with Kalgoorlie-Boulder prospectors who have been recovering alluvial eluvial and primary gold in the area which is assisting with target generation and furthering the understanding of the controls on gold mineralisation
- ❑ In addition to the significant nickel-cobalt resources hosted at Bulong (54.1Mt @ 0.88% Ni and 0.05% Co, for 476.1kt Ni and 28.8kt Co – Ardea 2019 Annual Report), **36 exploration targets have been defined**. These are predominantly gold, but also include PGE's and base metals (nickel, copper, lead and zinc)

Investment Summary



KNP with “starter” GNCP offers unrivalled nickel and cobalt scale optionality, **5.5Mt of nickel and 405kt of cobalt** held by a well-funded junior with \$10M cash



Globally significant mineral nickel-cobalt resource in an **infrastructure-rich and stable jurisdiction**, provides ability to increase production from multiple processing hubs for the rapidly expanding Critical Minerals/LIB sector



Strategic Partner process current, **100% off-take is available**, with Company leveraged to increasing nickel and cobalt demand from the rapidly growing Electric Vehicle and Static Storage Battery markets



Extensive (>5,100km²), **highly prospective landholding** in the Eastern Goldfields of WA



Active exploration programs for gold and nickel sulphides with a **strong pipeline of targets**



Next Quarter news flow to include ongoing gold exploration, metallurgical testwork results from Big Four Gold, KNP and GNCP resource updates and nickel sulphide exploration



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APPENDICES



The faceted multi-coloured jewels represent the rich heart of WA and its diverse character in terms of landscape, minerals, and where Ardea projects are focused

Corporate Snapshot



Board and Executive Management Team

Katina Law <i>Non-Executive Chair</i>	Actively involved in the mining industry for over 25 years in corporate and site based roles across several continents, including senior positions at Newmont Mining and LionOre. Non-Executive Chair of Yandal Resources Ltd.
Andrew Penkethman <i>Managing Director, Chief Executive Officer</i>	Resources sector executive with over 25 years' experience, including mine management, project evaluation, early stage & near mine exploration, resource development, feasibility study management, permitting, stake holder engagement & mine development across open pit and underground operations. ASX, TSX & AIM equity market experience.
Ian Buchhorn <i>Executive Director</i>	Mineral Economist and Geologist with over 35 years experience, operated as Registered Mine Manager in the Kalgoorlie Goldfields region.
Sam Middlemas <i>Company Secretary and Chief Financial Officer</i>	Chartered Accountant (CA) with more than 30 years experience providing financial and corporate secretarial services.
Dr Matt Painter <i>General Manager – Exploration</i>	Geologist with over 25 years professional experience including managerial, corporate, and on-ground experience across a broad range of commodities including nickel, cobalt, manganese, copper, gold and zinc-lead-silver.

Capital Structure, as at 13 July 2020

Shares on Issue	117,300,435
Share Price (13 July 2020)	\$0.32
52 week high / low	\$0.80 / \$0.17
Cash (as at 30 June 2020)	\$10 million
Market Capitalisation (13 July 2020)	\$37.5 million
Staff performance rights	4.276 million

Major Shareholders

Ian Buchhorn and associates	10.7%
Brian O'Shannassy and associates	7.9%
Citicorp Nominees	9.6%
Other Institutional holdings	6.5%
Top 20 shareholders	66%



Ardea has a quality Western Australian project portfolio and the team to make their projects succeed.

A High Quality Nickel and Cobalt Project



Outstanding results delivered from PFS* and Expansion Studies completed in 2018:

	1.0Mtpa	1.5Mtpa	2.25Mtpa
<i>Status</i>	PFS	PFS	ES
<i>No. Trains</i>	1	1	1
<i>Pre Tax NPV₈</i>	US\$ 1.13 billion	US\$ 1.52 billion	US\$ 2.4 billion
<i>Pre Tax IRR</i>	29 %	29 %	31%
<i>CAPEX</i>	US\$ 472 million	US\$ 588 million	US\$918 million
<i>C1 cash cost</i>	US\$ 0.42 / lb	US\$ 0.45 / lb	US\$ (0.34) / lb
<i>Payback</i>	5.3 years	5.6 years	5.1 years
<i>Cobalt sulphate</i>	5,500tpa	6,900tpa	10,000tpa
<i>Nickel sulphate</i>	41,500tpa	55,300tpa	81,000tpa

- ✓ PFS of 1Mtpa and 1.5Mtpa base case over a 25-year mine life completed
- ✓ Expansion study of 2.25Mtpa with a 25-year mine life completed
- ✓ 94.5% nickel and 95.5% cobalt recovery – life of mine
- ✓ Pre-cobalt credit C1 costs in line with current worldwide operators
- ✓ Pressure Acid Leach (PAL) 5th generation plant is a proven design, successfully operated in other laterite projects globally
- ✓ 2.25Mtpa case based on only 26% of Goongarrie Resource



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

KNP Resource Breakdown



KNP nickel-cobalt JORC Code (2012) Mineral Resource

Resource category	Size (Mt)	Nickel (%)	Cobalt (%)	Contained metal Ni (t)	Co (t)
Measured	9.6	1.02	0.10	98,800	9,700
Indicated	232.9	0.75	0.06	1,759,700	141,200
Inferred	530.5	0.68	0.05	3,600,000	254,400
TOTAL	773.0	0.70	0.05	5,458,400	405,400

Note: 0.5% nickel cutoff grade used to report resources. Note figures are rounded to reflect degree of certainty and may not tally. The information shown on this slide has been previously released on the ASX platform by Ardea in ASX release, Ardea Annual Report 2019, 24 October 2019.

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

The information in this report that relates to Mineral Resources for the Highway, Goongarrie Hill, Goongarrie South, Big Four, Aubils and Boyce Creek Prospects is based on information originally compiled in-house and validated by Steve Jones in 2013. Steve Jones is a member of the Australasian Institute of Mining and Metallurgy. Steve Jones is a full time employee of Heron Resources Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the resource estimation activity that he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Steve Jones consents to the inclusion in this report of the matters based on his information in the form and context that it appears. Note that Mineral Resources that are not Ore Reserves do not have demonstrated viability.

The information in this report that relates to Mineral Resources for the Siberia North, Bulong East, Siberia, Black Range, Taurus and Jump Up Dam Prospects is based on information compiled by Snowden Mining Industry Consultants by members of the Australian Institute of Mining and Metallurgy. Snowden Mining Industry Consultants had sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the resource estimation activity. All resources were internally audited by Snowden and signed off by a person of sufficient experience 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'. Steve Jones has validated the original resource estimates during 2013. Steve Jones consents to the inclusion in this report of the matters based on his information in the form and context that it appears. Note that Mineral Resources that are not Ore Reserves do not have demonstrated viability.



Goongarrie Nickel Cobalt Project Resources



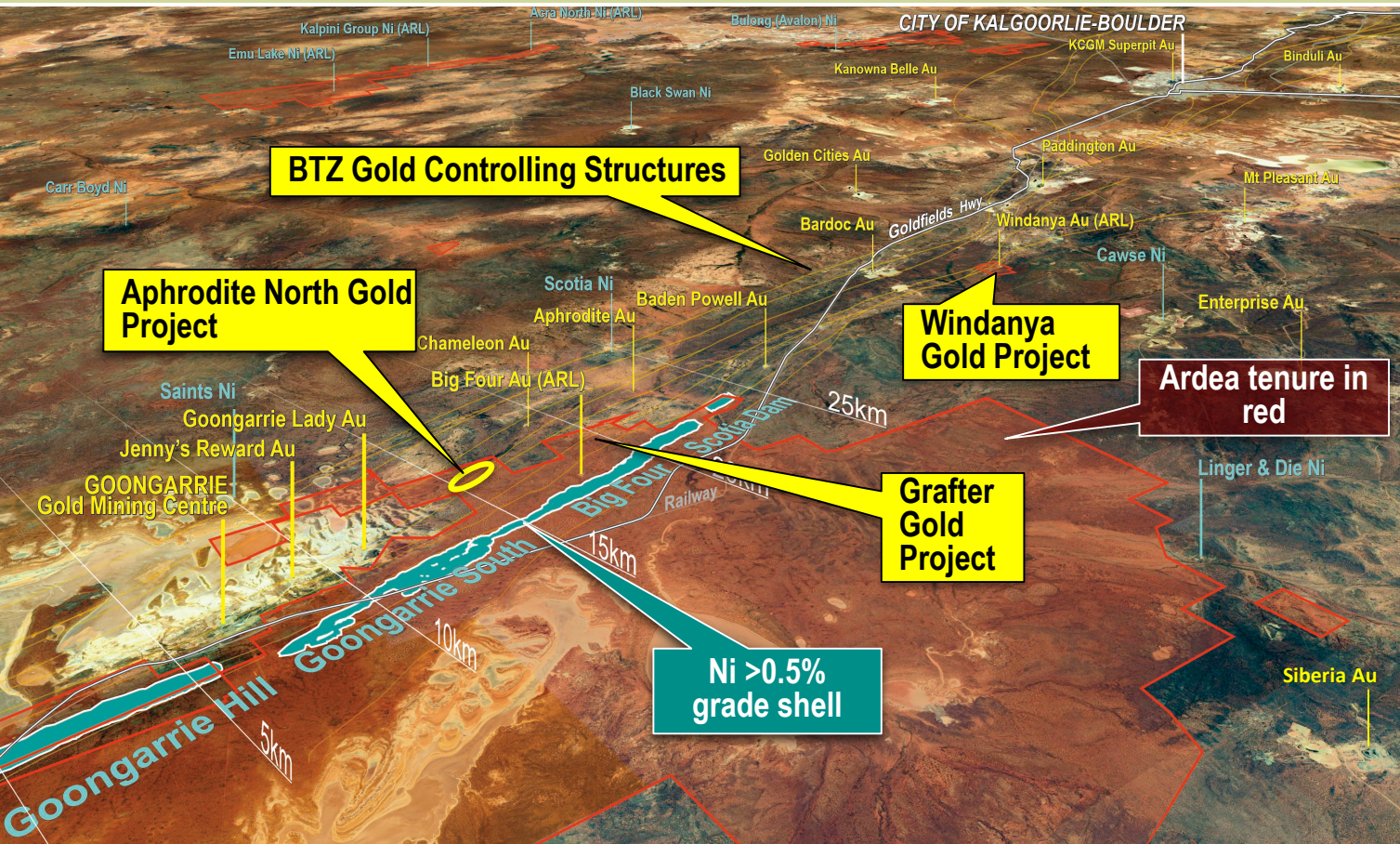
Summary of total mineral Nickel Cobalt Project area, comprising resources at Goongarrie Hill, Goongarrie South, resources within the Goongarrie Big Four, and Scotia Dam (ASX release 14 March 2018).

Camp	Domains	Cut-off %	Resource category	Size (Mt)	Nickel (%)	Cobalt (%)	Contained Ni (t)	metal Co (t)
Goongarrie Hill	Ni & Co	≥ 0.5% Ni or > 0.08% Co	Inferred	52.5	0.65	0.04	340,400	21,600
			Subtotal	52.5	0.65	0.04	340,400	21,600
Goongarrie South	Ni & Co	≥ 0.5%Ni or > 0.08% Co	Measured	10.3	0.98	0.10	101,200	10,200
			Indicated	56.2	0.72	0.07	407,000	37,200
			Inferred	32.2	0.69	0.06	221,200	20,300
			Subtotal	98.7	0.74	0.07	729,300	67,700
Big Four	Ni & Co	≥ 0.5%Ni or > 0.08% Co	Indicated	45.5	0.71	0.06	320,700	28,200
			Inferred	9.9	0.63	0.06	61,900	6,100
			Subtotal	55.4	0.69	0.06	382,700	34,300
Scotia Dam	Ni & Co	≥ 0.5% Ni or > 0.08% Co	Indicated	3.3	0.81	0.09	26,900	3,000
			Inferred	5.7	0.76	0.07	43,300	4,100
			Subtotal	9.0	0.78	0.08	70,200	7,100
Total	All	≥ 0.5% Ni or > 0.08% Co	Measured	10.3	0.98	0.10	101,200	10,200
			Indicated	105.0	0.72	0.07	754,600	68,400
			Inferred	100.3	0.67	0.05	666,900	52,100
Goongarrie Resource Global			TOTAL	215.6	0.71	0.06	1,522,700	130,700

Note: All nickel and cobalt domains are included and are encapsulated by an envelope defined by nickel grades equal to or greater than 0.5%.
Note figures are rounded to reflect degree of certainty and may not tally.



Our Flagship Goongarrie Nickel - Cobalt Project



Goongarrie JORC Resource

**215.6 Mt at
0.71% nickel
and 0.06%
cobalt**

Reserves optimised for
25 year mine life only,
less than
20% of Goongarrie
resource utilised
at this scale
(40.1 Mt at 0.82% Nickel
& 0.09% Cobalt*)

Reserves Defined for Goongarrie Nickel Cobalt Project*



Goongarrie Nickel Cobalt Project, Ore Reserves based on 25 year mine life at 1.5 Mtpa.

Deposits	Class	Size (Mt)	Nickel (%)	Cobalt (%)
Goongarrie South	Proven	8.95	0.96%	0.10%
	Probable	17.26	0.79%	0.09%
	Total	26.22	0.85%	0.10%
Big Four	Proven	—	—	—
	Probable	13.92	0.77%	0.09%
	Total	13.92	0.77%	0.09%
TOTAL	Proven	8.95	0.96%	0.10%
	Probable	31.18	0.78%	0.09%
	Total	40.13	0.82%	0.09%

Using a nickel equivalent cut of >0.81%, which used inputs of A\$18,900/t nickel and A\$120,750/t cobalt. (US\$15,120/t Ni and US\$96,600/t Co, 0.8 exchange rate). Nickel equivalent (Nieq %) = .

Prices used are US\$15,120/t for nickel and US\$96,600/t for cobalt. No assumption about recovery is included here. Recoveries are addressed elsewhere throughout the mining schedule and financial model.

*The information shown on this slide has been previously released on the ASX platform by Ardea in ASX release, Goongarrie Nickel Cobalt Project, PFS study, 28 March 2018. The information in this report that relates to Ore Reserves for the Goongarrie South and Big deposits of the Goongarrie Nickel Cobalt Project is based on information compiled by Mr Steve Lampron who is a Member of the Australasian Institute of Mining and Metallurgy and who has provided expert guidance on mine planning and Ore Reserve estimation. Mr Lampron is a director of Auralia Mining Consulting and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Lampron consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.



Resource Comparison



	RESOURCES - AUSTRALIAN BULK TONNAGE NICKEL					
Ardea ¹	Kalgoorlie Nickel Project, WA			Nickel Laterite		
Classification	Mt	% Ni	% Co	ppm Sc	tonne Ni	tonne Co
Measured	9.6	1.03	0.10	not quoted	98,800	9,700
Indicated	232.9	0.76	0.06	not quoted	1,759,600	141,200
Inferred	530.5	0.68	0.05	not quoted	3,600,000	254,400
Total	773.0	0.71	0.05	not quoted	5,458,400	405,400
Glencore ²	Murrin Murrin Operation, WA			Nickel Laterite		
Measured	144.5	1.01	0.07	not quoted	1,459,450	105,485
Indicated	75.5	0.99	0.08	not quoted	747,450	63,420
Inferred	17.0	0.90	0.07	not quoted	153,000	11,900
Total	237.0	1.00	0.08	not quoted	2,359,900	180,805
BHP ³	Nickel West Operation, WA			Nickel Sulphide		
Measured	327.1	0.70	not quoted	not quoted	2,278,040	
Indicated	280.2	0.66	not quoted	not quoted	1,843,450	
Inferred	324.8	0.68	not quoted	not quoted	2,213,720	
Total	932.1	0.68	not quoted	not quoted	6,335,210	
Clean TeQ ⁴	Sunrise Project, NSW			Nickel Laterite		
Measured	40	0.75	0.15	not quoted	299,000	59,000
Indicated	47	0.55	0.12	not quoted	259,000	58,000
Inferred	14	0.24	0.11	not quoted	35,000	16,000
Total	101	0.59	0.13	not quoted	593,000	133,000
Australian Mines ⁵	Sconi Project, Qld			Nickel Laterite		
Measured	19.7	0.80	0.07	not quoted	157,981	13,425
Indicated	73.8	0.62	0.06	not quoted	456,632	47,326
Inferred	22.3	0.54	0.05	not quoted	121,320	10,476
Total	115.8	0.64	0.06	not quoted	735,933	71,227

Data Sources

1. Ardea 2019 Annual Report to 30 June 2019.
2. Glencore Annual Report 2019, page 246, Resource Statement 31 December 2019.
3. BHP Limited, 2019 Annual Report to 30 June 2019, page 288.
4. NI 43-101 Technical Report, 25 June 2018.
5. Australian Mines Quarterly Report March 2020, ASX Announcement 18 May 2020.



Reserve Comparison



	RESERVES - AUSTRALIAN BULK TONNAGE NICKEL						
Ardea¹	Kalgoorlie Nickel Project, WA			Nickel Laterite			
Classification	Mt	% Ni	% Co	ppm Sc	tonne Ni	tonne Co	tonne Sc
Proved	9.0	0.96	0.10	not quoted	85,920	8,950	
Probable	31.18	0.78	0.09	not quoted	243,538	28,062	
Total	40.1	0.82	0.09	not quoted	329,458	37,012	
Glencore²	Murrin Murrin Operation, WA			Nickel Laterite			
Proved	103.6	1.03	0.08	not quoted	1,070,188	82,880	
Probable	37.80	1.04	0.10	not quoted	393,120	38,934	
Total	141.4	1.03	0.09	not quoted	1,463,308	121,814	
BHP³	Nickel West Operation, WA			Nickel Sulphide			
Proved	182.0	0.57	not quoted	not quoted	1,028,950		
Probable	77.35	0.73	not quoted	not quoted	562,170		
Total	258.4	0.62	not quoted	not quoted	1,591,120		
Clean TeQ⁴	Sunrise Project, NSW			Nickel Laterite			
Proved	65.5	0.65	0.10	48	422,475	67,465	31
Probable	81.9	0.49	0.08	57	403,767	68,796	47
Total	147.4	0.56	0.09	53	826,242	136,261	78
Australian Mines⁵	Sconi Project, Qld			Nickel Laterite			
Proved	8.1	0.72	0.09	44	57,940	7,286	4
Probable	49.2	0.55	0.08	33	273,417	37,195	16
Total	57.3	0.58	0.08	35	331,357	44,481	20

Data Sources

1. Ardea ASX Announcement, 28 March 2018, "Ardea Delivers Outstanding Pre-Feasibility Study for the Goongarrie Nickel Cobalt Project with Significant Expansion Potential".
2. Glencore Annual Report 2019, page 246, Resource Statement 31 December 2019.
3. BHP Limited, 2019 Annual Report to 30 June 2019, page 288.
4. NI 43-101 Technical Report, 25 June 2018.
5. Australian Mines Quarterly Report March 2020, ASX Announcement 18 May 2020.



Big Four Gold Resource



Big Four Gold, (JORC 2012) Mineral Resource (14 May 2020)

	Cut-off Au g/t	Tonnes	Grade Au g/t	Contained gold (oz)
	≥ 0.00	194,000	2.5	15,400
	≥ 0.50	178,000	2.7	15,300
Inferred Resource	≥ 1.00	151,000	3.0	14,600
	≥ 1.5	118,000	3.5	13,300
	≥ 2.00	92,000	4.0	11,800

Inferred resource estimate and cut-off sensitivity for the Big Four Gold deposit, reported above different Au cut-off values. The base case estimate (highlighted) uses a 0.5 g/t Au cut-off. The tonnage figures have been rounded to the nearest thousand tonnes. Au grades rounded to the nearest decimal. Contained gold is rounded to the nearest 100 oz.

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

The information in this report that relates to Mineral Resources or Ore Reserves is based on information compiled by James Ridley, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Ridley is a full-time employee of Ardea Resources Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Ridley consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

