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Unlisted options exercisable at \$0.25 12,310,022

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Corporate Strategy Update

- Strategic Partner process extended with several discussions current
- Goongarrie Definitive Feasibility Study completion contingent upon selection of suitable funding partner
- Accelerate gold and nickel sulphide drill exploration in WA
- Spin-out of NSW gold and base metal assets to be advanced
- Ardea financial position, \$15.8M cash at 30 September

Ardea Resources ("Ardea" or "the Company") advises that it has revised the development timetable for the Goongarrie Nickel Cobalt Project ("Goongarrie" or "GNCP") in order to deliver the best value for shareholders from the Strategic Partner process, where several discussions are current.

While the Company remains focussed on systematically advancing the flagship Goongarrie Project, the full Definitive Feasibility Study (DFS) will only be completed once a suitable Strategic Partner is committed and announced.

Ardea has optimised the Company budget to ensure the GNCP continues to progress through prudent and targeted expenditure but is unlikely to commit to late stage Definitive Feasibility Study work such as engineering for at least six months.

Separately to progressing the GNCP, Ardea has allocated funds to advance drilling of its WA gold and nickel sulphide exploration targets within the Company's extensive WA and NSW 5,484km² land holding. Ardea is also working towards completing a spin-out of the NSW gold and base metal assets over the next 12 months.

Commenting on the revised schedule to business operations, Ardea Executive Chair Katina Law said:

"It has been an extremely successful 12 months for the Company and Goongarrie has advanced considerably. However, in times of challenging market conditions, we should take a considered and metered approach to the ongoing development programs for such a large, world-class Project".

"It has become clear that due to the weakening nickel and cobalt markets the Strategic Partner process should be extended to secure the optimum outcome for our shareholders."

"Your Company is in an enviable position, having world-class assets and a strong cash position, combined with a prudent and diligent development approach."



Goongarrie Nickel Cobalt Project

The Strategic Partner process continues, with a number of well-credentialed parties active in evaluating the Project. Recent production of high-purity nickel sulphate and cobalt sulphate crystals from a pilot plant exceeded all available product specifications, and this has resulted in a renewed wave of interest in the Project. However, due to the current market conditions, the nature of the parties and their corporate decision-making timeframes, a final outcome to the partnership process is now likely to take longer.

These prospective Strategic Partners are looking for security and consistency of supply for multiple decades, and such timeframes exceed the usual short-term business windows which generally are measured in years. Long term, high quality projects such as the GNCP demand detailed scrutiny which process requires a certain amount of time and resources.

As a part of this process the Company has received a range of feedback from evaluating parties which has identified several opportunities to add value to the Project, de-risk further development and enhance the project economics.

Following a thorough review, the Board has set a revised schedule that will continue to advance development and grow the value of Goongarrie in a cost-effective manner while maintaining the Company's strong cash position.

The focus of works over the next six months at Goongarrie is outlined below and will comprise a mix of both value enhancement opportunities and continued work that is required in any event ahead of a DFS commitment. Completion of this work will ensure that, upon confirmation of a Strategic Partner, definitive studies can be undertaken quickly within the shortest possible timeframe to production.

Ardea will continue to advance the Project:

- Resource update An update of the resource estimate is targeted for completion in early 2019. This will include the 47,239m of new drilling completed by Ardea, with the Company currently awaiting the final drill assays. A strong structural control on mineralisation was recognised in 2018 drilling, which will allow more appropriate resource block sizes to be used for selective high-grade mining to be investigated. The resource will also include variably mineralised carbonate saprock to be used for neutralising free acid after leaching the ore, which will provide additional nickel and cobalt production credits.
- **Scandium resource** The new resource will also include for the first time a scandium grade estimate within the Project.
- **High grade mine schedule** The new resource estimate will be used to prepare an updated mine schedule, which will be optimised to ensure the highest nickel-cobalt grades are mined during the payback years of the Project, along with suitable neutraliser recovered from below the ore.
- Approvals Work is ongoing in relation to the referral of the Project to the EPA for evaluation. A number of studies including flora, fauna, tailings, emissions and water are being finalised to support the referral. At this stage Ardea expects to be in a position to refer to the EPA in early 2019. After referral there will be a continuing program of more detailed environmental studies as required to provide ongoing information to the EPA.
- Alternative product options Including manufacture of a Mixed Sulphide Product (MSP) as opposed to solely nickel and cobalt sulphate crystals, or a staged combination (such as commission with MSP with later addition of a crystal refinery).

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- **In-pit tailings discharge** Lower cost in-pit slurry tailings disposal will be examined as opposed to the current higher cost dry-stack tailings model.
- Variability work Further leaching, rheology, neutraliser and comminution studies will take place to cover the full range of ore-types for a 25 year mine-life. Additionally, thickening and filtration work will be completed on a range of geo-metallurgical drill core composites. Comminution work will also be completed on a range of ore samples for the design of the comminution circuit. Comminution and leaching test-work will also be completed on the run-of-mine neutraliser selected from the updated resource model.
- **Mineralised neutraliser** Current metallurgical programs include optimising the mineralised neutraliser nickel-cobalt-scandium recoveries and allow their value to be realised in the financial model (not available in 2018 PFS).
- **Water studies** Recent studies into water sources and water treatment options have identified that significant volumes of plant process water can be sourced from de-watering pits, due to the high permeability of Goongarrie ore.

The Company will continue to hold discussions with interested funding parties and will seek to obtain the best outcome for shareholders. Once Strategic Partner funding is in place, the above DFS programs can be quickly expanded to the full DFS level, including engineering once throughput and product type are settled with the Partner.

Goongarrie offers a wide variety of possibilities in terms product type, product purity, and by-products. Logically these will be determined by the requirements of the Strategic Partner/offtake parties. Therefore, rather than progressing with a single Company-defined option, the most prudent approach for the detailed final stage DFS-level studies, notably the engineering component, is to commence once the Strategic Partner process has been finalised.

Ardea's view is that high quality "ethical" nickel-cobalt-scandium projects such as the GNCP will become integral and a critical aspect in the supply chain for the global battery industry. As auto manufacturers continue to announce production plans far exceeding the most optimistic predictions of only a year ago, government incentives for home battery systems are promoted in the public arena, and sovereign control of energy supplies becomes increasingly important, surety of supply, consistency of quality and reliable production of high volumes of nickel and cobalt will be at the top of battery manufacturers' requirements. Goongarrie can deliver on all fronts.

Gold and Nickel Sulphide Exploration in WA

With the successful completion of the GNCP drill-out, Ardea will utilise this opportunity to move the drillrigs to complementary assets within the Company's highly-prospective exploration portfolio, to potentially add further value for shareholders.

Ardea has a strategic land holding in one of Australia's premier gold and nickel sulphide provinces. The Kalgoorlie Nickel Project (KNP), Mt Zephyr, Perrinvale and Bedonia projects are all highly prospective for both gold and nickel sulphides.

Following completion of the GNCP resource drill-out, Ardea staff commenced evaluation of all the Company's gold and nickel sulphide plays in WA. Recently acquired airborne survey data has added to the understanding of these targets as well as detailed Geographic Information System (GIS) compilation of historic data. This work is being followed by field sampling of defined targets.

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The data gathered has been used to rank these targets and a budget has been allocated which will allow systematic drill testing of the top three targets over the next six months.

Key drill targets include:

- Mount Zephyr gold and nickel sulphide targets have been defined and are ready to be drilled. Strong structural/intrusive parallels for gold mineralisation are drawn between the Mount Zephyr and Gruyere-hosting Yamarna greenstone sequences. Government approvals are expected shortly to enable commencement of drill programs.
- Gold deposits of the Bardoc Tectonic Zone (BTZ) at Goongarrie. A gold corridor parallels the 16km strike length at the eastern contact of the Goongarrie nickel-cobalt-scandium laterite orebodies (including Ardea's historic Big Four gold mine). The BTZ Gold Corridor requires systematic drill assessment.
- Bedonia gold and nickel sulphide targets are at an earlier exploration stage but initial Ardea sampling provides strong anomalism in a little explored area within the western margin of the Albany Fraser Province (which hosts the Nova nickel-copper deposit).

Drilling is planned at advanced gold and nickel targets around Mt Zephyr in the first quarter of 2019.

The majority of Ardea's nickel sulphide targets have been specifically targeted as nickel laterite plays since 1997 and have never been subject to modern ground EM geophysical prospecting.

Further details of the planned exploration activities and target generation will be provided in the coming months.

Spin out of NSW Assets

To create additional value for existing Ardea shareholders, the Company corporate strategy is to complete the spin out of its NSW mineral assets within the next twelve months.

Ardea controls a suite of highly-prospective tenements in NSW within the Lachlan Fold Belt which hosts multiple bulk-tonnage deposits such as Northparkes, Cadia-Ridgeway and Cowal.

Data validation and resource estimation is underway for Lewis Ponds and the Company is currently reviewing the results of promising metallurgical work which has been completed during 2018.

A detailed GIS compilation is underway, with multiple gold targets generated for Copper Hill East. GIS targets at Wiseman's Creek have had initial sampling completed, returning up to 38g/t gold and 348g/t silver at the Black Bullock prospect.

Further information about the proposed spin-put will be provided to shareholders in due course.

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

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

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

This forward-looking information includes, or may be based upon, without limitation, estimates, forecasts and statements as to management's expectations with respect to, among other things, the timing and ability to complete the Ardea spin-out, the timing and amount of funding required to execute the Company's exploration, development and business plans, capital and exploration expenditures, the effect on the Company of any changes to existing legislation or policy, government regulation of mining operations, the length of time required to obtain permits, certifications and approvals, the success of exploration, development and mining activities, the geology of the Company's properties, environmental risks, the availability of labour, the focus of the Company in the future, demand and market outlook for precious metals and the prices thereof, progress in development of mineral properties, the Company's ability to raise funding privately or on a public market in the future, the Company's future growth, results of operations, performance, and business prospects and opportunities. Wherever possible, words such as "anticipate", "believe", "expect", "intend", "may" and similar expressions have been used to identify such forward-looking information. Forward-looking information is based on the opinions and estimates of management at the date the information is given, and on information available to management at such time. Forward-looking information involves significant risks, uncertainties, assumptions and other factors that could cause actual results, performance or achievements to differ materially from the results discussed or implied in the forward-looking information. These factors, including, but not limited to, the ability to complete the Ardea spin-out on the basis of the proposed terms and timing or at all, fluctuations in currency markets, fluctuations in commodity prices, the ability of the Company to access sufficient capital on favourable terms or at all, changes in national and local government legislation, taxation, controls, regulations, political or economic developments in Australia or other countries in which the Company does business or may carry on business in the future, operational or technical difficulties in connection with exploration or development activities, employee relations, the speculative nature of mineral exploration and development, obtaining necessary licenses and permits, diminishing quantities and grades of mineral reserves, contests over title to properties, especially title to undeveloped properties, the inherent risks involved in the exploration and development of mineral properties, the uncertainties involved in interpreting drill results and other geological data, environmental hazards, industrial accidents, unusual or unexpected formations, pressures, cave-ins and flooding, limitations of insurance coverage and the possibility of project cost overruns or unanticipated costs and expenses, and should be considered carefully. Many of these uncertainties and contingencies can affect the Company's actual results and could cause actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of, the Company. Prospective investors should not place undue reliance on any forward-looking information.

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

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



Appendix 1

Gold and Nickel Sulphide Exploration in WA

The broader Kalgoorlie Nickel Project (KNP) which includes the GNCP presents Ardea with a large contiguous tenement portfolio throughout the highly prospective Eastern Goldfields of WA. The KNP has historically targeted specific nickel-endowed rock-types termed komatiites, which only occur associated with major crustal structures and commonly host nickel sulphide mineralisation. The structures also invariably localise gold mineralisation, with the best-known examples including the Boulder-Lefroy Fault with Kambalda nickel sulphide and St Ives gold, and Bardoc Tectonic Zone with Goongarrie nickel laterite and Paddington-Goongarrie-Menzies gold mining centres. The KNP thus delivers Ardea an outstanding gold and nickel sulphide portfolio, much of which is complementary to the GNCP.

Gold and nickel tenure have a surprisingly important role in future development and production at the GNCP:

- The currently defined GNCP bore-field and infrastructure sites have potentially having good gold endowment, and ore-grade gold intercepts associated with a distinctive porphyry intrusive saprock are often recorded in Ardea GNCP laterite drill-outs.
- Initial metallurgical modelling indicates nickel sulphide is a beneficial GNCP autoclave addition for adding high grade nickel units, sulphuric acid generation and oxidation/reduction control.

Gold Targets

The Bardoc Tectonic Zone (BTZ) is a major crustal structure, hosting numerous gold mines such as Paddington and the historic Goongarrie gold mining centre, and connecting through to the Boulder-Lefroy Fault to the south, and to the Ida Fault in the north via Ardea's Ghost Rocks project.

Big Four Gold – associated with GNCP Laterite

The Goongarrie South-Big Four-Scotia Dam nickel-cobalt-scandium mineralisation is hosted by a distinctive komatiite unit termed the Walter Williams Formation (WWF). The proposed mullock site for the GNCP is the eastern side of the WWF, which includes the historic Big Four gold mine (300m strike of historic shafts, deepest historic drill intercept is 6m at 8.6g/t Au, 60m vertical depth, Ardea Prospectus). Big Four Gold is hosted by a distinctive intermediate porphyry intrusive dyke which rock-type is also recognised in saprock in laterite RC drilling, notably within the western WWF at Elsie North (and is typically gold-enriched).

Recognising that the GNCP high grade laterite ore is strongly associated with deeply weathered bedrock shear zones, which also control palaeo-channel water reservoirs and gold-mineralised intermediate dykes, Ardea has just completed high resolution aero-magnetics to help map structures over its GNCP tenure.

The GNCP requires systematic drill-out of the multiple gold targets recognised in current GIS programs, to design GNCP infrastructure sites so as not to compromise gold mineralisation.

Lady Isobel Gold – associated with Ghost Rocks Laterite

The Lady Isobel line of lode is a major underlay shaft, with mullock assays to 5.3g/t Au (Ardea Prospectus).

Ardea has maintained an active tenement acquisition program on all ground proximal to KNP laterite resources. Part of this program included acquiring additional tenure to the southeast of Ghost Rocks within the Lady Isobel gold trend.



Taurus Gold – associated with Bulong Laterite

Workings strike E-W over 400m with lode width up to 4m (Ardea Prospectus).

Regional aeromagnetic data shows that the gold mineralised zone, which is hosted within a felsic sequence near to the contact with the nickel laterite ultramafics, is associated with a strong demagnetisation pattern running east-west parallel to the felsic/ultramafic contact.

Ardea sampling of old RAB holes of unknown provenance has outlined several >1g/t gold assays within the Taurus target zone.

Nickel Sulphide Targets

Emu Lake Nickel Sulphide – associated with the Kalpini Laterite

Ardea Emu Lake is a nickel sulphide-endowed komatiite sequence parallel to and 20km east of the Silver Swan nickel sulphide mine (30.7Mt at 0.6% Ni and 0.01% Co, Poseidon Nickel Limited).

Emu Lake E27/524 and Kalpini E28/1224 are the next ultramafic belt east of Silver Swan. Emu Lake has strong nickel sulphide endowment, with historic core hole ELD015 recording 2m at 6.2% Ni, 1.8% Cu, 2.2g/t PGM (Emu Lake Heron ASX announcement 26 November 2013).

Ghost Rocks Malachite – associated with Ghost Rocks Laterite

Komatiite at Ghost Rocks includes an historically-recorded <u>malachite occurrence</u>. Further work is required to define favourable nickel sulphide settings associated with the copper anomalism.

Gold and Nickel Sulphide Regional Targets

Mt Zephyr Gold and Nickel Sulphide

The broader architecture of the of the Mt Zephyr greenstone belt is felt to be comparable to that of the Yamarna greenstone belt. The Celia Lineament in the <u>Dunn's Line</u> area can be compared to the Yamarna Shear Zone. Parallel to this but further eastward, the <u>Gale</u> structures can be compared to the Dorothy Hills Shear Zone (which hosts the 5.9Moz Gruyere discovery). As such, these prospects are considered high priority exploration drill targets.

<u>Gale</u> is a 273ppb Au soil anomaly which was RAB drilled in the 1990s and intersected consistent >0.25g/t Au from surface to RAB refusal with intercepts of 6-18m at 0.5g/t Au and peak 6m at 1.3g/t Au (Ardea Prospectus). The anomaly is clearly a sub-horizontal geometry and not the narrow sub-vertical interpretation of previous explorers.

Additionally, Mount Zephyr has excellent nickel sulphide targets, generated from recent Ardea GIS data compilations (notably <u>Jones Area A</u>, for which drilling approval was received). The strongly nickel sulphide-endowed Mount Windarra ultramafic unit is present within the eastern Mount Zephyr BIF units. A recently-discovered gold prospect at <u>Paul's Find</u> has received drilling approval.



Bedonia Gold and Nickel Sulphide

The poorly exposed Bedonia project covers forested country near the south-eastern margin of the Eastern Goldfields. Archaean-aged granite and greenstones are cross-cut by Proterozoic-aged mafic dykes, some of which are known to host magmatic Ni-Cu-PGM mineralization. The largest of these, the Jimberlana Dyke, contains several documented mineralised occurrences that will be the focus of Ardea's exploration (Ardea Supplementary Prospectus, January 2017).

Drill targets have been generated in the eastern project area marginal to the Albany Fraser Province at <u>Cleanthes</u> (peak 1m at 2.7g/t Au in an historic aircore drill-hole, western-most hole in reconnaissance drill traverse) and <u>Lila</u> (peak 1m at 2.3g/t Au in sericite schist associated with Cunderlee Fault Zone, historic aircore drill-hole).

Perrinvale Gold and Nickel Sulphide

St George Mining (ASX:SGQ) has made nickel sulphide discoveries at Mt Alexander along the Cathedrals nickel sulphide trend. Cathedrals trends ENE in ultramafic within granite, and is cross-cutting the dominant NNW Archaean greenstone regional trend. The Ardea Perrinvale tenure E29/1006 is located at the eastern boundary of St George tenure E29/954, some 10.5km ENE from Cathedrals along strike of the Cathedrals trend.

Additionally, Perrinvale includes the gold-endowed N-S trending Ida Fault, which hosts gold mining centres to the south at Mt Ida and Davyhurst. Grant of the Perrinvale tenure is awaited.



