Ardea Resources

World-significant Australian cobalt and nickel for the battery industry

www.ardearesources.com.au
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 Company’s 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) and the Goongarrie Expansion Study (24 July 2018). This presentation is not an invitation, offer or recommendation (express or implied) to subscribe for, or apply for the purchase of, or to take any other action in respect of securities of any entity described herein and is not a prospectus, product disclosure statement or disclosure document for the purposes of the Corporations Act 2001 (Cth) and has not been lodged with ASIC. None of Ardea Resources Limited (Ardea or the Company) or its representatives are providing or offering investment advice or services by making this presentation.

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

This presentation contains forward-looking statements regarding the Company’s resources, intentions and future business. These statements reflect current information, expectations, intentions and strategies regarding the future, and are subject to certain risks and uncertainties. Should one or more of these risks or uncertainties materialise, or should any of 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, 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. Application for securities under the Company’s public offer can only be made under the prospectus, a copy of which is available from the Company. Investors should consider the prospectus in deciding whether to acquire Ardea shares and will need to complete the application form that accompanies the prospectus.
ARDEA RESOURCES
An Australian minerals exploration and development company

1. DEVELOP the Goongarrie Nickel-Cobalt Project

2. EXPLORE our WA Gold and Nickel Sulphide Assets

3. DIVEST our NSW Gold and Base Metals Assets
Experience management team with global experience in corporate fundraising, processing and engineering for laterite nickel-cobalt deposits, laterite geology and geometallurgy, ensures the right mix to make Goongarrie succeed.
Bulk Tonnage Gold Projects, WA

Mt Zephyr Greenstone Belt, high-grade anomalies along Celia Lineament, Bardoc Tectonic Zone, Taurus gold project

Nickel-Cobalt Laterites, WA

Goongarrie Nickel Cobalt Project

Other deposits also under assessment:
Black Range, Kalpini, Yerilla, Boyce Creek, Aubils, Siberia, Highway, Ghost Rocks

Nickel Sulphide Projects, WA

Includes Bedonia, Perrinvale magmatic nickel sulphide targets

Porphyry & Epithermal Copper-Gold Projects, NSW

Lachlan Fold Belt, NSW is Australia’s premier address for porphyry and epithermal copper-gold projects

Lewis Ponds Zinc-Silver-Gold, NSW

Historic silver-gold-base metal mine
High-grade resources
Bulk mining option

bulk mining option

Bulk Tonnage Gold Projects, NSW

Includes Ophir, Australia’s first goldfield
Ardea’s flagship is Australia’s premier nickel-cobalt project
The Kalgoorlie Nickel Project

- The Goongarrie Nickel Cobalt Project is part of the broader Kalgoorlie Nickel Project (KNP)
- KNP has a **globally significant nickel and cobalt resource of 773Mt at 0.7% Ni and 0.05% Co**
  - 5.6 million tonnes contained Nickel
  - 405,000 tonnes contained Cobalt
- Potential for **multiple processing hubs** and multi-decade mine life
- **Ethical, low environmental impact** and long life source of nickel-cobalt from a **stable jurisdiction**
- A **targeted plan** will be utilised to prove up the resources at the following deposits:
  - Siberia/Highway/Ghost Rocks
  - Black Range
  - Aubils/Boyce Creek
  - Kalpini

* See appendix for resource breakdown
Investment criteria

<table>
<thead>
<tr>
<th>Company resources</th>
<th>Ardea Resources (KNP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 700 million tonnes of cobalt and nickel resources, WA</td>
<td></td>
</tr>
<tr>
<td>Numerous deposits within 100km radius, including Goongarrie, Black Range, Kalpini, Yerilla, Boyce Creek, Aubils, Siberia, Highway, Ghost Rocks</td>
<td></td>
</tr>
</tbody>
</table>

| Metal contained in resources | >5,458,000 t nickel |
|                             | >405,000 t cobalt |

| Market capitalisation | $51 million |

| Market cap per nickel tonne (in resources) | ~A$9.1 / t nickel |
| Market cap per cobalt tonne (in resources) | ~A$ 127.50/ t cobalt |

Source data:
- Company: Ardea Resources (ARL)
- Project: KNP
- Source: Website
- Date: 14/2/2019

- Company: Australian Mines (AUZ)
- Project: Sconi
- Source: Announcement
- Date: 14/2/2019

- Company: CleanTeQ (CLQ)
- Project: Sunrise
- Source: Website (fact sheet)
- Date: 14/2/2019
Goongarrie Nickel Cobalt Project Highlights

The 100% owned Goongarrie Project is part of the largest Cobalt Resource in the developed world

- Potential multi-decade producer of high-quality nickel and cobalt sulphate
- 100% nickel and cobalt offtake available
- 1.0Mtpa base case PFS – low CAPEX start-up with robust project economics
- 2.25Mtpa expanded case – mill feed grades 0.88% Ni and 0.10% Co
- Low technical risk project to provide nickel and cobalt for the burgeoning EV market
- DFS programs underway
- Strategic partner interest is high as concerns rise around secure long-term supply of battery grade nickel and cobalt

*Cobalt sulphate produced from Goongarrie ore

*Ardea Resources Annual Report 2017
Our Flagship Goongarrie Nickel Cobalt Project

Continuous nickel cobalt mineralisation exceeding 15 km at Goongarrie

Goongarrie JORC Resource
215.6 Mt at 0.06% cobalt and 0.71% nickel*

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*)

* See appendix for resource breakdown
# Outstanding results delivered from PFS* and Expansion Studies completed in 2018:

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

- **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**
- **95.5% cobalt and 94.5% nickel recovery – life of mine**
- **Pre-cobalt credit C1 costs in line with current worldwide operators**
- **PAL** 5th generation plant, proven design, successfully operated in other laterite projects globally
- **2.25Mtpa case based on 26% of Goongarrie Resource**

---

*Goongarrie Nickel Cobalt Project, PFS study, 28 March 2018, ** PAL = Pressure Acid Leach
+Goongarrie Expansion Study, 24 July 2018**
Simple Mining Characteristics

- Uniform mineralisation grades and mineralogy
- Open pit mining potential
- Scheduled pits within 60m of surface
- Soft, free-digging open-pit mining
- Low strip ratio
Developing Goongarrie into a Successful Long-Term HPAL Operation

• The high quality of Goongarrie ore is key to the project’s success:
  – uniform in composition
  – laterally continuous over kilometres
  – high levels of cobalt, scandium credit
  – overwhelmingly goethitic (unlike many other laterite deposits),
  – highly soluble in HPAL acid, low acid consumption
  – no screen upgrade required
    (commonly a stumbling block for non-goethitic deposits)

• Onsite neutralizer recovered during laterite mining

• Environmentally friendly, water resources adjoin the orebody

• Comparable capital intensity with successful nickel operations

• A thorough and detailed understanding of ore types and processing operations from PFS work
Significant Progress in 2018

Building on the $50 Million spent by Vale and Heron on 2005-2009 PFS

Geology
✓ Resource upgrade at Goongarrie
✓ Maiden reserve announced for Goongarrie
✓ 47,239m of drilling to date by Ardea since listing

Metallurgy
✓ Variability and Rheology test work to date favourable
✓ Pilot Plant testing successfully produced nickel and cobalt sulphate crystals
✓ Crystals meet specifications of several battery industry off-takers
✓ Marketing samples to be evaluated by off-takers and battery end-users

Project Studies
✓ Pre-Feasibility Study completed for 1.0 and 1.5Mtpa processing options
✓ Scoping Study completed for 2.25Mtpa expansion case option

Nickel sulphate (l) and cobalt sulphate (r) produced from Goongarrie.
Current activities

- **Strategic Partner** process
- Goongarrie **Resource Upgrade**
- **High Grade Mine Schedule** based on Resource Upgrade
- **Mineralised Neutraliser** study
- Extensive **Variability Program** planned to extend the geo-metallurgy database to reflect the ore LOM
- **Water** studies
- **Tailings** studies
- **Alternative Product** options
- **EPA Lodgement** and related environmental studies

Nickel sulphate crystallisation in progress.
Kalgoorlie, Western Australia offers **world-class infrastructure in an established mining hub**
- Over 125 years of mining in the region
- Low sovereign risk
- World-leading workplace practices enshrined in law
- Goongarrie is 80 km north on the main Goldfields Highway
- Railway lines, power lines cross Goongarrie tenements
- Gas pipeline close by

- An **Australian source for battery metals** removes supply line concerns

- **Goongarrie offers a safe, secure** non-conflict alternative to DRC cobalt
EXPLORING FOR WESTERN AUSTRALIAN GOLD AND NICKEL SULPHIDES

Exceptional greenfields opportunities in overlooked areas of the Eastern Goldfields
First pass drill programs completed at Mount Zephyr, assays pending

Gold targeting program at Bardoc Tectonic Zone (BTZ) at Goongarrie
- Over 300 drillholes in Phase I
- Drilling commenced

Systematic assessment and ranking of all non-nickel cobalt laterite projects during 2019
- Taurus, Bedonia, Ghost Rocks (on BTZ) gold projects in WA to be assessed, likely to be drilled.
- Bedonia, Perrinvale, and Emu Lake nickel(-copper-PGE) sulphide projects in WA to be assessed.
One of the major gold-bearing structures of the Eastern Goldfields runs through the GNCP

- 80 km long gold-producing regional shear / fault system
- Hosts Paddington gold mine, Goongarrie, Menzies, and Comet Vale historic gold mining centres
- Contiguous with Boulder-Lefroy Fault, hosts Kalgoorlie, St Ives mining centres.

Laterite cover has obscured the BTZ’s true potential at Goongarrie

Program of over 300 holes has commenced

- Holes to penetrate laterite to fresh rock beneath to test for gold
- Structural gold targets being tested
- Program doubles as sterilisation drilling for the GNCP

Gold endowment along the Bardoc Tectonic Zone and the contiguous Boulder-Lefroy Fault, after Hodkiewicz et al. 2005.
✓ Prime exploration opportunity for Ardea, virtually no systematic gold exploration since 1990s.

✓ First pass drill programs completed:
  • Gold at Gale, Dunn’s North, Dunn’s Line Paul’s Find
  • Ni-Cu sulphides (+ gold) at Jones Area A

✓ Multiple gold and base metal targets in the process of being defined, ranked, assessed.

Ardea’s active programs (bright yellow) in the Mount Zephyr project area, superimposed on the new proprietary regional geology.
Gale gold drill program, Mt Zephyr

✓ **Outcropping gold-mineralised granite:**
  - Exceptional 900 x 300 m outcrop-limited anomaly at gold over 0.1 g/t (up to 1.49 g/t at surface)
  - Sericite, pyrite, hematite alteration.
  - Gold, arsenic, copper and barium anomalism.
  - Parallels with Dacian’s Jupiter mine & Gold Field’s Wallaby mine.

✓ **First-pass RC drill program completed, assays pending.**
  - Initial 21 hole program finished early February, 50 m deep holes with some to 100 m
  - Numerous sulphide-bearing altered granite intercepts
Examining historic silver mine workings at Lewis Ponds, NSW

Australia’s premier address for porphyry and epithermal copper-gold projects
Spinning out the NSW assets

- Resource upgrade underway at Lewis Ponds
- Data upgrades for all projects, focus on Mt Aubrey and Yeoval
- Present timeline:
  - prospectus expected to be issued in Q3 2019
  - Aiming to list by end 2019
- Also considering project sale opportunities
Ardea’s suite of high-quality 100% owned projects:

- **Lewis Ponds** zinc-silver-lead-gold-copper deposit
- High-grade epithermal Au-Ag mineralisation
  - Mount Aubrey (fmr BHP)
  - Wiseman’s Creek
- Porphyry systems
  - Yeoval Cu-Au-Mo-Rh
- Orogenic gold
  - Calarie (at Forbes)
  - Ophir (Australia’s first gold field)
  - Gundagai
Mt Aubrey – former BHP epithermal gold mine

- Mt Aubrey epithermal gold, >1km strike length.
- Mined by BHP Gold in 1990-91
  - 3 backfilled open pits
  - +10g/t Au ore left in pit floor
- Comparable to upper levels of Vera-Nancy mine (Pajingo)

BHP drill results include:

- 12m @ 18g/t Au from 15m (MAR070)
- 36m @ 2.87g/t Au from 28m (MAR145)
- 7m @ 20g/t Au from 17m (MAR147)
Extensive mining history from 1850s through to early 1900s

**JORC Inferred Resource:**
6.6Mt at 1.5g/t Au, 69g/t Ag and 2.4% Zn

**Exploration Target:**
15–25 Mt at 2.2–3.7 % ZnEq* or 1.2–2.0 g/t AuEq*

- Resource Upgrade underway
- Soil gold anomalies + McPhillamys-style gold targets with no previous testing
- **Premium exploration potential**, 50km strike Godolphin Fault from McPhillamys in south to Copper Hill East in north

2 concentrates produced from first-pass met test work:
- Clean zinc concentrate - over **66 % contained zinc**
- Cu-Pb-Ag-Au concentrate containing **1,619 g/t silver, 17.6 g/t gold, 4.78 % copper**, and **30.3 % lead**
- Excellent recovery of payable metals and fast flotation kinetics

*21/12/2016 US$ price, recovery): Zn ($2617/t, 100%), Au ($1133/oz, 90%), Ag ($16.00, 80%), Pb ($2259/t, 80%), Cu ($5488.5/t, 80%), Zn equiv. = Zn(%) + 1.253Au(g/t) + 0.016Ag(g/t) + 0.665Pb(%) + 1.678Cu(%). Au equiv. = 0.575Zn(%) + Au(g/t) + 0.016Ag(g/t) + 0.478Pb(%) + 1.205Cu(%)
Drill samples from Black Range west of the Goongarrie Nickel Cobalt Project. Black Range contains high nickel, and cobalt, and accessory scandium, platinum and palladium.
Advanced Australian nickel-cobalt project at Goongarrie
  - Large mineral resource in a stable jurisdiction
  - Significant drilling and metallurgical work already completed
  - Project Studies completed:
    • 1Mtpa and 1.5Mtpa case studies offer significant economic opportunity
    • Scoping Study completed on 2.25Mtpa case shows excellent upside
  - DFS Programs underway
  - Leveraged to increasing nickel and cobalt demand from the rapidly growing EV and Static Storage Battery markets

Ardea has a highly prospective landholding in WA with active drill programs for gold and nickel sulphides

Excellent portfolio of NSW gold and base metal assets
APPENDICES
Summary of total mineral resources within the Goongarrie Nickel Cobalt Project area, comprising resources at Goongarrie Hill, Goongarrie South, Big Four, and Scotia Dam (14 March 2018).

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

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 that figures are rounded to reflect degree of certainty and may not tally.
Goongarrie Nickel Cobalt Project, Ore Reserves based on 25 year mine life at 1.5 Mtpa.

<table>
<thead>
<tr>
<th>Deposits</th>
<th>Class</th>
<th>Size (Mt)</th>
<th>Cobalt (%)</th>
<th>Nickel (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goongarrie South</td>
<td>Proven</td>
<td>8.95</td>
<td>0.10%</td>
<td>0.96%</td>
</tr>
<tr>
<td></td>
<td>Probable</td>
<td>17.26</td>
<td>0.09%</td>
<td>0.79%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>26.22</td>
<td>0.10%</td>
<td>0.85%</td>
</tr>
<tr>
<td>Big Four</td>
<td>Proven</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Probable</td>
<td>13.92</td>
<td>0.09%</td>
<td>0.77%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>13.92</td>
<td>0.09%</td>
<td>0.77%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>Proven</td>
<td>8.95</td>
<td>0.10%</td>
<td>0.96%</td>
</tr>
<tr>
<td></td>
<td>Probable</td>
<td>31.18</td>
<td>0.09%</td>
<td>0.78%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>40.13</td>
<td>0.09%</td>
<td>0.82%</td>
</tr>
</tbody>
</table>

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 %) = \( Ni \ grade + \frac{Co \ grade \times Co \ price}{Ni \ price} \). 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.
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 validated the Snowden Mining Siberia North estimate in 2013. Note that Mineral Resources that are not Ore Reserves do not have demonstrated viability.

<table>
<thead>
<tr>
<th>Resource Category</th>
<th>Quantity (Mt)</th>
<th>Cobalt (%)</th>
<th>Nickel (%)</th>
<th>Contained cobalt (t)</th>
<th>Contained nickel (t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measured</td>
<td>9.6</td>
<td>0.10</td>
<td>1.02</td>
<td>9,700</td>
<td>98,800</td>
</tr>
<tr>
<td>Indicated</td>
<td>232.9</td>
<td>0.06</td>
<td>0.75</td>
<td>141,200</td>
<td>1,759,700</td>
</tr>
<tr>
<td>Inferred</td>
<td>530.5</td>
<td>0.05</td>
<td>0.68</td>
<td>254,400</td>
<td>3,600,000</td>
</tr>
<tr>
<td><strong>KNP Total Resources</strong></td>
<td><strong>773.0</strong></td>
<td><strong>0.05</strong></td>
<td><strong>0.70</strong></td>
<td><strong>405,400</strong></td>
<td><strong>5,458,400</strong></td>
</tr>
</tbody>
</table>
## APPENDIX – The Sulphate Markets

- Strong growth in sulphate pricing is expected with rapidly increasing demand for high-purity product from manufacturers globally. Increased battery production is required to power the Automotive Electrification Revolution

- Cobalt sulphate and nickel sulphate attract a price premium (based on contained metal)
  - Cobalt sulphate – 5% premium
  - Nickel sulphate – 30% premium

- East Asia is the major consumer, manufacturing most of the world’s lithium ion batteries – ongoing discussions with a number of interested parties from this region.

- Sulphate market is strong with spot prices increasing substantially since PFS release

<table>
<thead>
<tr>
<th>Price date</th>
<th>Units</th>
<th>CNY / t</th>
<th>USD / t</th>
<th>USD / lb</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cobalt sulphate</strong></td>
<td>(contains 20.97% cobalt)</td>
<td>Feb 2018 (avg)</td>
<td>Sulphate</td>
<td>¥121,600</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$91,771</td>
</tr>
<tr>
<td>Spot 4 Apr 2018</td>
<td>Sulphate</td>
<td>¥142,000</td>
<td>$22,469</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contained metal equiv.</td>
<td>$107,167</td>
<td>$48.61</td>
<td></td>
</tr>
<tr>
<td><strong>Nickel sulphate</strong></td>
<td>(contains 22.33% nickel)</td>
<td>Feb 2018 (avg)</td>
<td>Sulphate</td>
<td>¥27,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$19,486</td>
</tr>
<tr>
<td>Spot 4 Apr 2018</td>
<td>Sulphate</td>
<td>¥28,500</td>
<td>$4,510</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contained metal equiv.</td>
<td>$21,509</td>
<td>$9.76</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX – Base case flowsheet
Pressure Acid Leach, with Mixed Sulphide precipitation yields high purity product
Ardea Resources Limited

ASX : ARL

www.ardearesources.com.au