

BRIDGING THE RARE EARTHS GAP

July 2014

Richard Brescianini
General Manager Exploration
& Development



ARAFURA
RESOURCES LIMITED

ABN 22 080 933 455



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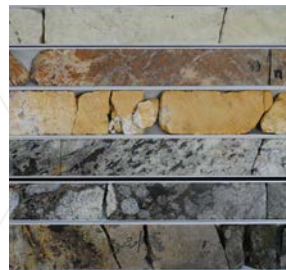
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Mr Brescianini is a full-time employee of Arafura Resources.



COMPANY SNAPSHOT

- ▲ ASX listed company developing the **Nolans Rare Earths Project** in Australia
- ▲ Focused strategy targeting full-scale production **this decade**
- ▲ **Strategic partnerships** enhance access to RE expertise
- ▲ **Demonstrated process** from resource to separated REO products



Mineralisation



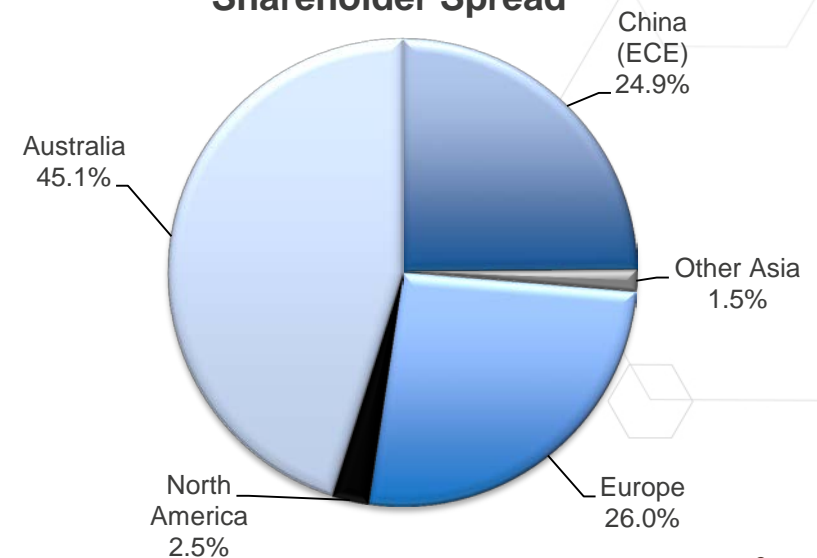
Final REO products



Arafura Resources Limited (ASX: ARU)

ASX Code	ARU
Market Cap @ 8c	A\$35.3 million
1-year range	5.5 – 13.5 cents
Cash at 22/05/14	A\$25.4 million
Debt	nil

Shareholder Spread



KEY MESSAGES



- ▲ Focused strategy for **first production this decade**
- ▲ World-leading **magnets leverage** to drive high-value growth
- ▲ World scale project with **robust economics on realistic assumptions**
- ▲ Management delivering on large scale, value add initiatives
- ▲ **Strategic Chinese alliances** provide gateway to technical expertise and funding
- ▲ Share price – disconnect from recent performance
- ▲ Re-rating catalysts imminent – internal and external



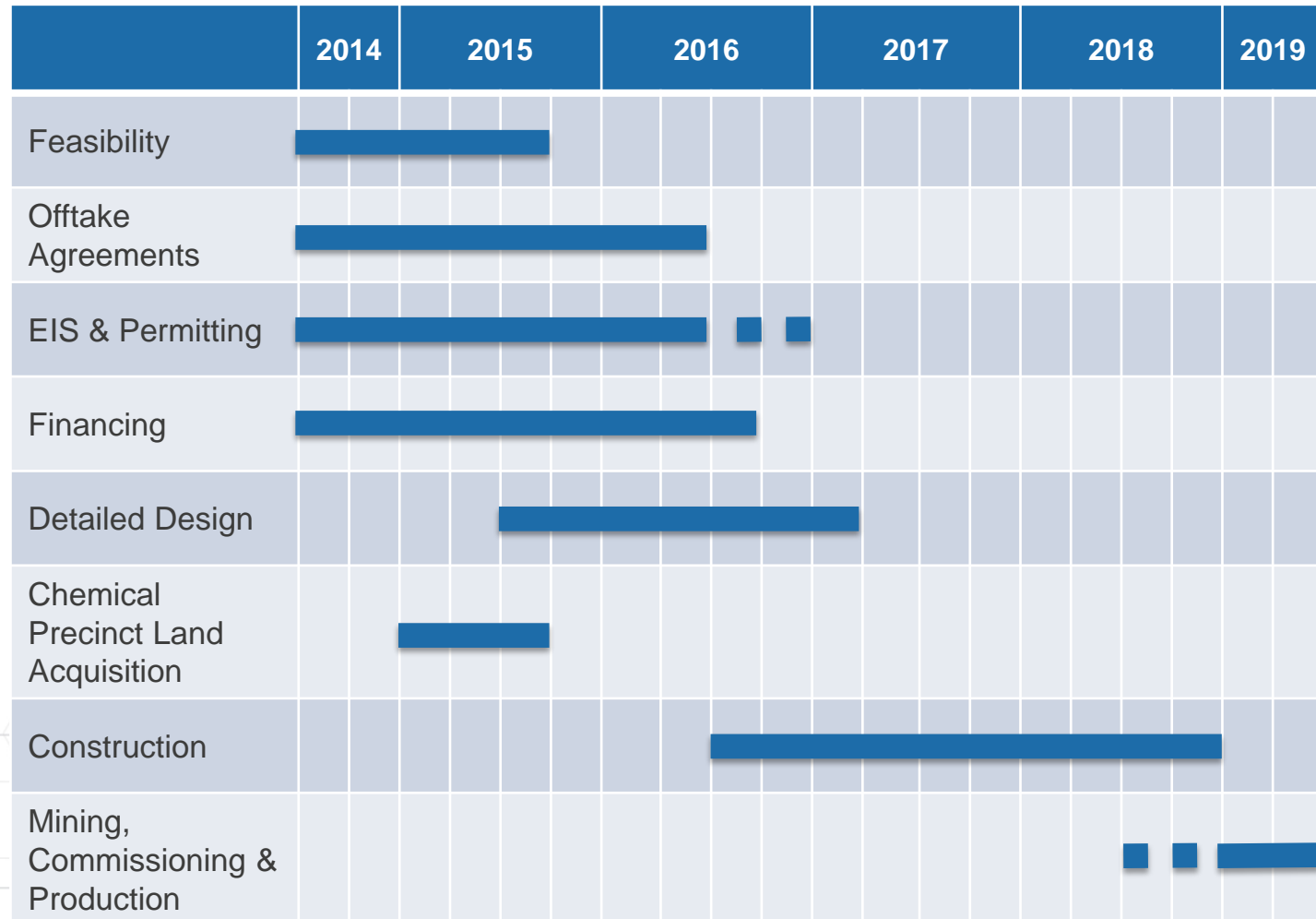
FOCUSED STRATEGY FOR FIRST PRODUCTION THIS DECADE



▲ Extensive development program has **significantly de-risked** project

▲ Moving forward with confidence **towards commercialisation**

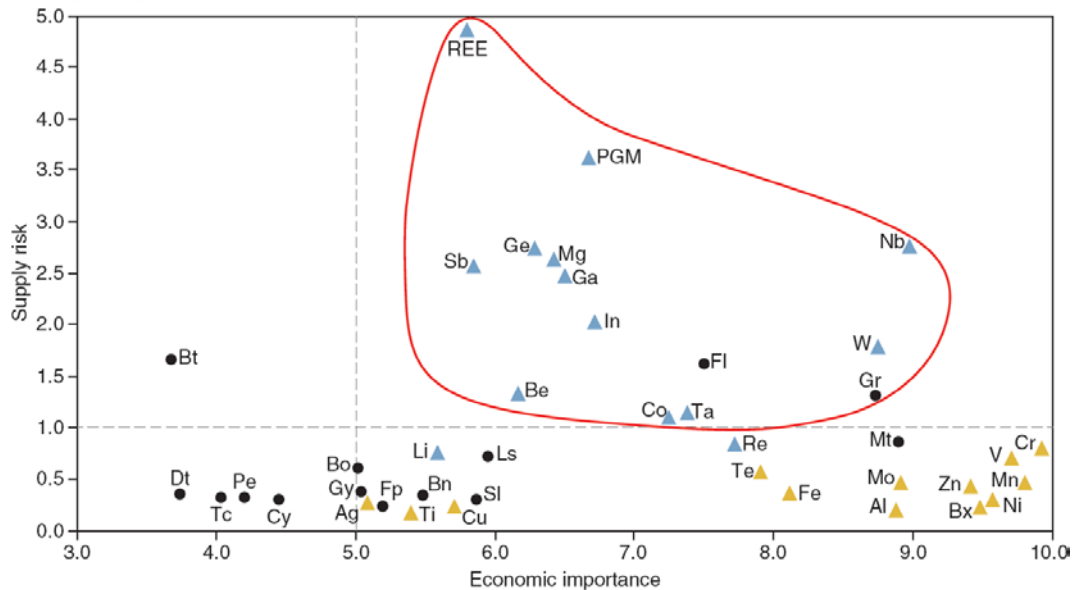
▲ Concurrent **offtake & funding initiatives** well advanced



Arafura Resources Limited (ASX: ARU)

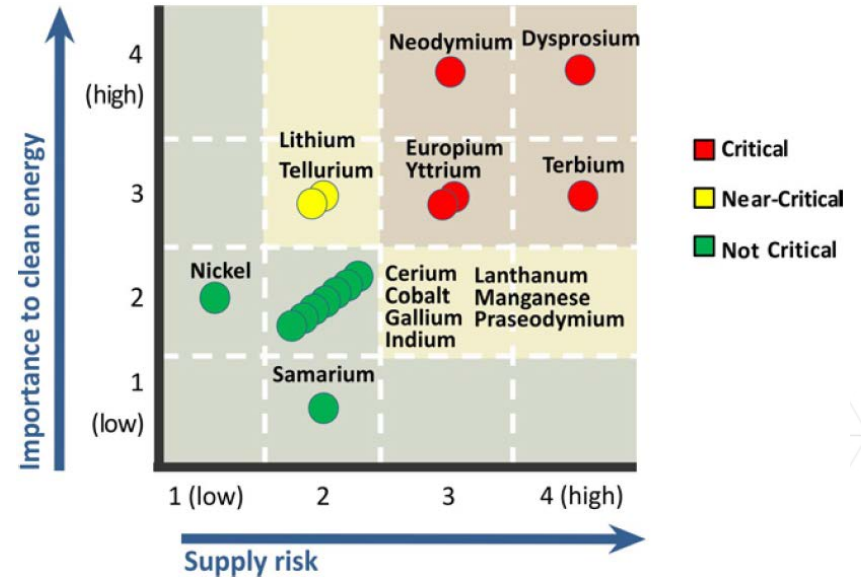
*Estimates of times are indicative only and are subject to change
Arafura reserves the right to vary the timetable without notice*

TIGHT OUTLOOK FOR SUPPLY



EU: Economic Importance & Supply Risk

European Commission, July 2010: Critical Raw Materials for the EU



USDOE: Medium-Term (2015-2025) Criticality Matrix

US Department of Energy, December 2011: Critical Materials Strategy

Fluorescent lamps



Consumer Electronics

Headphones



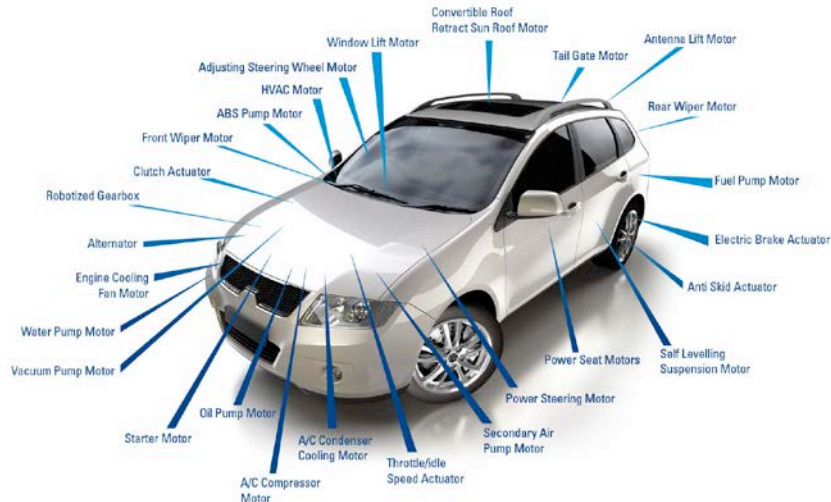
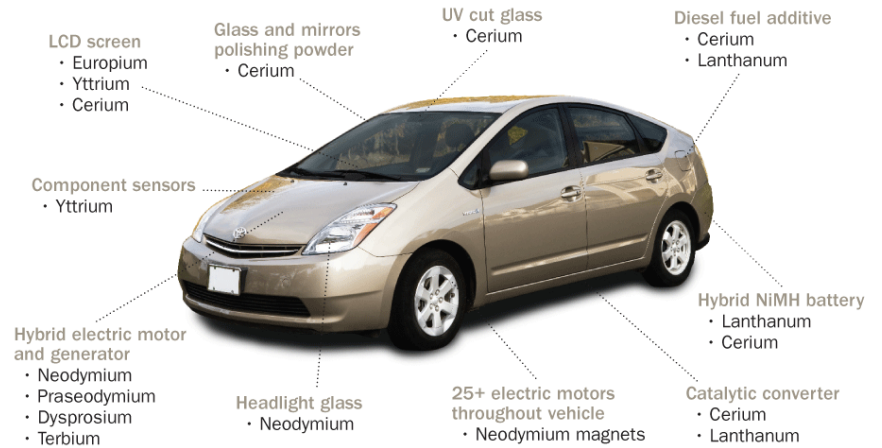
Arafura Resources Limited (ASX: ARU)

WORLD-LEADING MAGNET LEVERAGE



RARE EARTHS MARKET

- ▲ 2013 global RE demand ~115,000 tonnes
- ▲ Global demand forecast to grow at **6-7% p.a.** between 2014 and 2020
- ▲ Demand driven by technology innovation, and industrial and clean energy sectors
- ▲ Global market valued at **US\$3-5 billion**



MAGNET LEVERAGE

- ▲ Nolans has the **highest magnet leverage** of any RE project in the world through NdPr product
- ▲ “Neo” magnets used in many applications including:
 - ▲ Automotive sector
 - ▲ Audio speakers, headphones
 - ▲ Mobile phones
 - ▲ Wind turbines
- ▲ Permanent magnet market forecast to be worth **US\$20 billion** in 2018

PRODUCT MIX GEARED FOR GROWTH



Market Segment	Driver	Market Share by Value	Demand Growth ¹	Arafura's RE Products	Revenue Contribution ²
Magnets	Automotive, Wind Energy	63%	10%	NdPr	77.0%
				HRE	4.1%
Phosphors	Electronics, Lighting	8%	4%	SEG	6.1%
				HRE	0.3%
Metal Alloys	Various	8%	6%	HRE	0.5%
				SEG	0.2%
Polishing & Glass	Optics, UV Filtering	7%	4%	SEG	4.6%
				Ce	1.4%
Ceramics	Electronics	5%	5%	HRE	0.3%
Batteries	Automotive, Electronics	5%	7%	La	0.5%
Catalysts	Emissions Controls, Oil Refining	4%	5%	Ce	1.4%
				La	2.1%

¹ CAGR over 2014-2020 forecast period

² Contribution to Revenue from RE Product sales into target Market Segment

▲ Majority of ARU revenue to be generated by RE products that feed the **highest value market segments** with the **strongest demand outlook**

▲ Further tightening of Chinese RE supply will **enhance Western supply opportunities**

NOLANS PROJECT HIGHLIGHTS



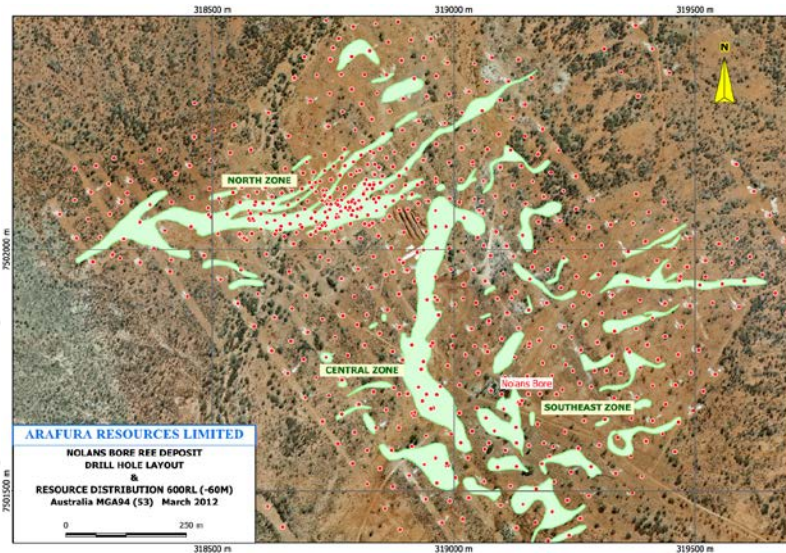
- ▲ Underpinned by a **world-scale, low-risk resource** in Australia's Northern Territory
- ▲ Close to **vital infrastructure** – transport, water, gas, power, workforce, logistical and service support
- ▲ Potential to supply **10% of the world's RE demand**
- ▲ Project status – **well advanced** with feasibility in progress
- ▲ Resource composition geared to **high demand magnet feed REs**
- ▲ **Five REO products** separated to 99% purity (La oxide, Ce oxide, NdPr oxide, SEG oxide, HRE oxide)

A WORLD SCALE, LOW-RISK RESOURCE



Resources	Tonnes (million)	Rare Earths % REO	Tonnes REO	Phosphate % P ₂ O ₅	Uranium % U ₃ O ₈
Measured	4.3	3.3	144,000	13	0.03
Indicated	21	2.6	563,000	12	0.02
Inferred	22	2.4	511,000	10	0.02
TOTAL	47	2.6	1,217,000	11	0.02

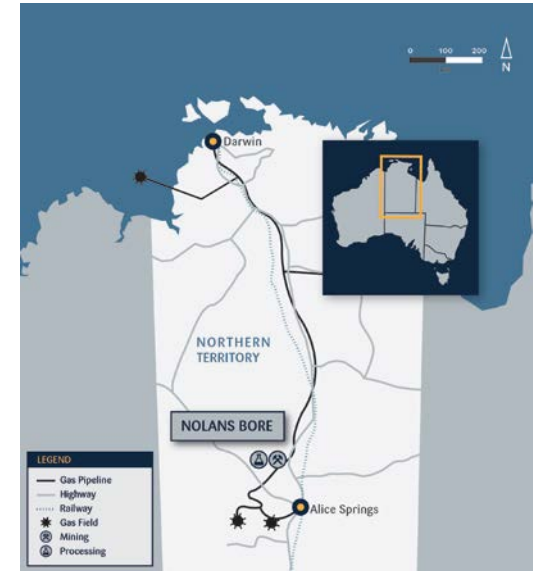
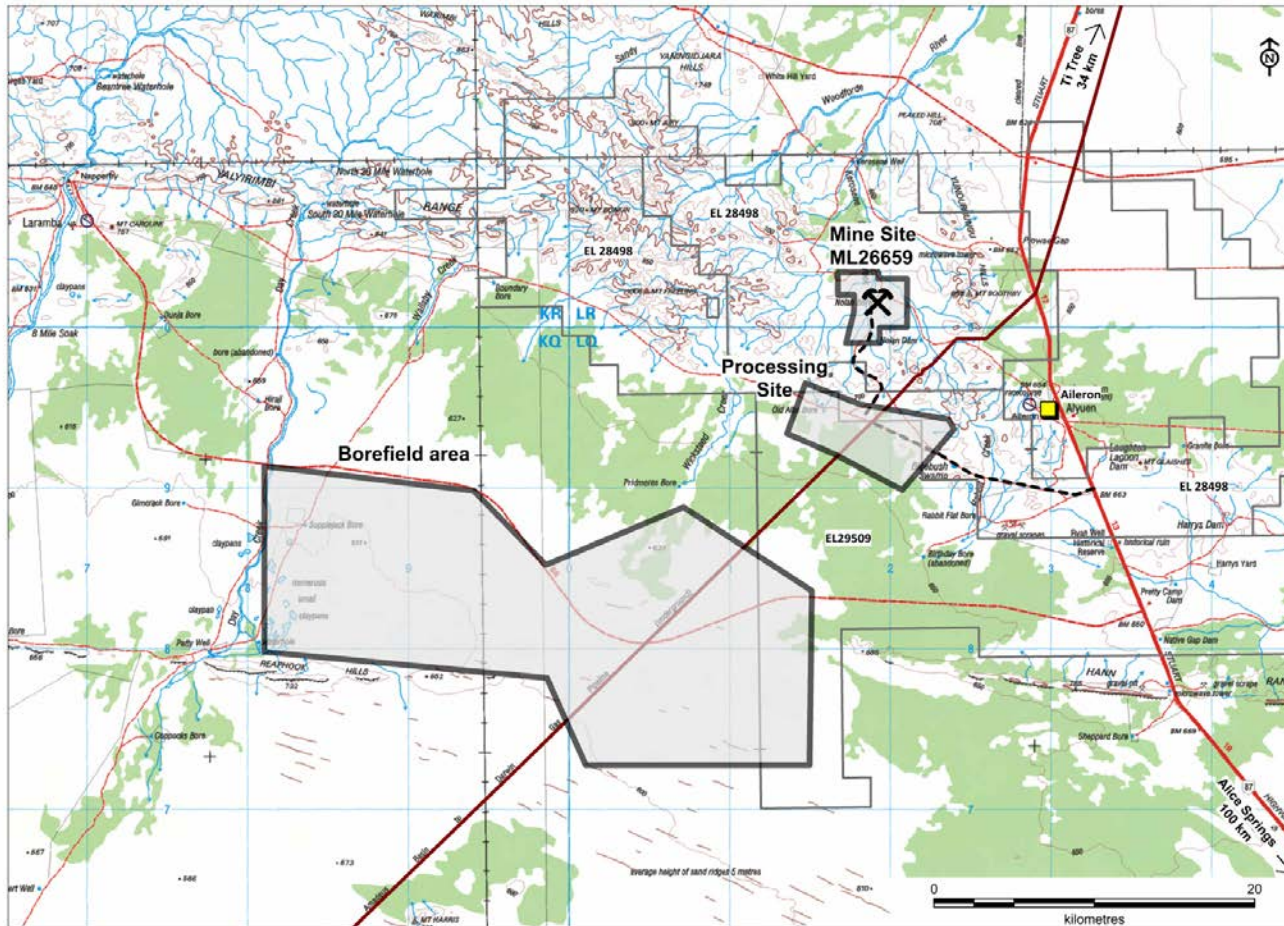
1% REO cut-off grade



Arafura Resources Limited (ASX: ARU)

- ▲ **Premium NdPr** content – 26.5% of RE mix
- ▲ **Low resource risk** – extensive drilling and detailed material type studies
- ▲ **Expansion potential** – resources at surface and open at depths below 220m
- ▲ Amenable to **low-cost open cut** mining and standard beneficiation techniques
- ▲ Financial evaluation based on 20 years of 20,000tpa REO equivalent output from **mining of Measured & Indicated resources**

WHERE ARE WE? MINING & EXTRACTION



MINE & CONCENTRATOR

CAPEX	A\$217.1 million
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OPEX	A\$4.50/kg REO
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RE INTERMEDIATE PLANT

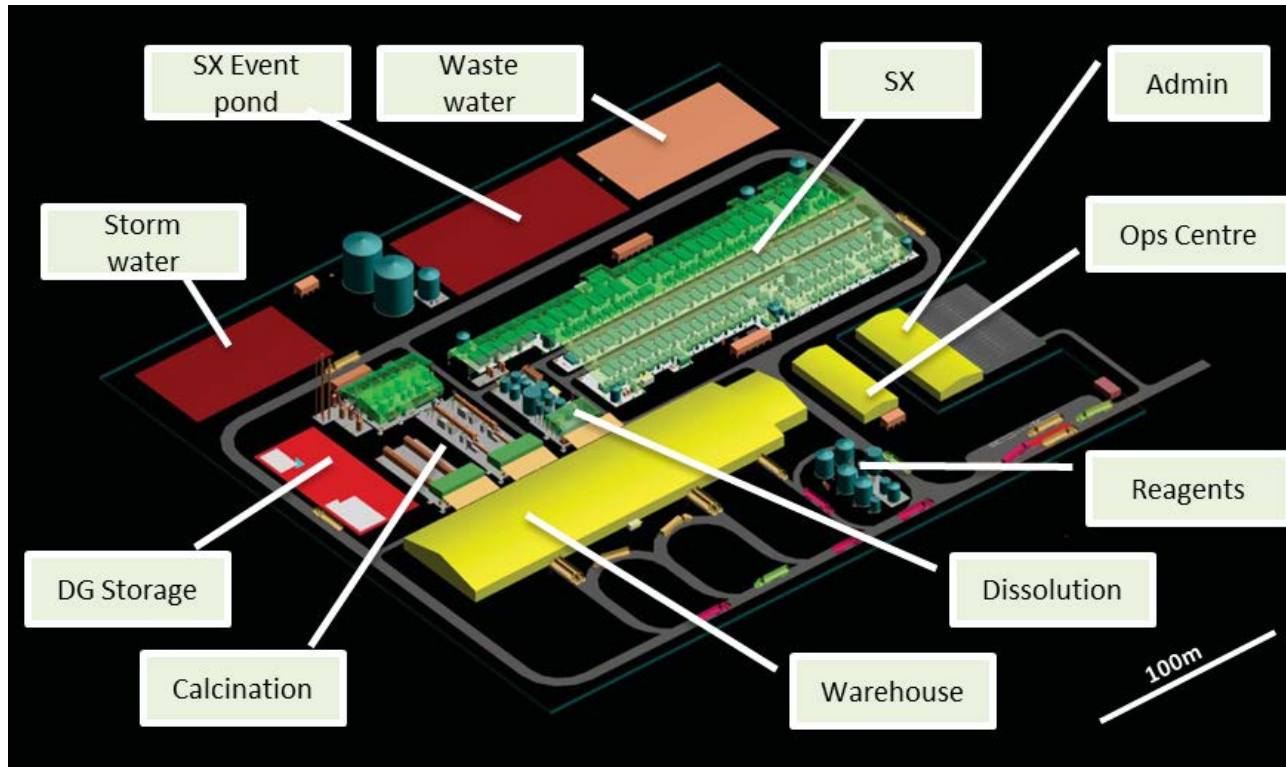
CAPEX	A\$964.2 million
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OPEX	A\$7.84/kg REO
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WHERE ARE WE? SEPARATION



- ▲ Global location study identifies three potential sites for RE Separation
- ▲ Arafura has fully costed a Gulf Coast USA location for a RE Separation Plant in a mature Chemical Precinct
 - ▲ Cost-competitive access to key reagents and utilities a priority
 - ▲ Discussions initiated with regulators and business stakeholders
 - ▲ CAPEX & OPEX estimates to +/-25%
 - ▲ Based on Arafura's process development testwork at ANSTO

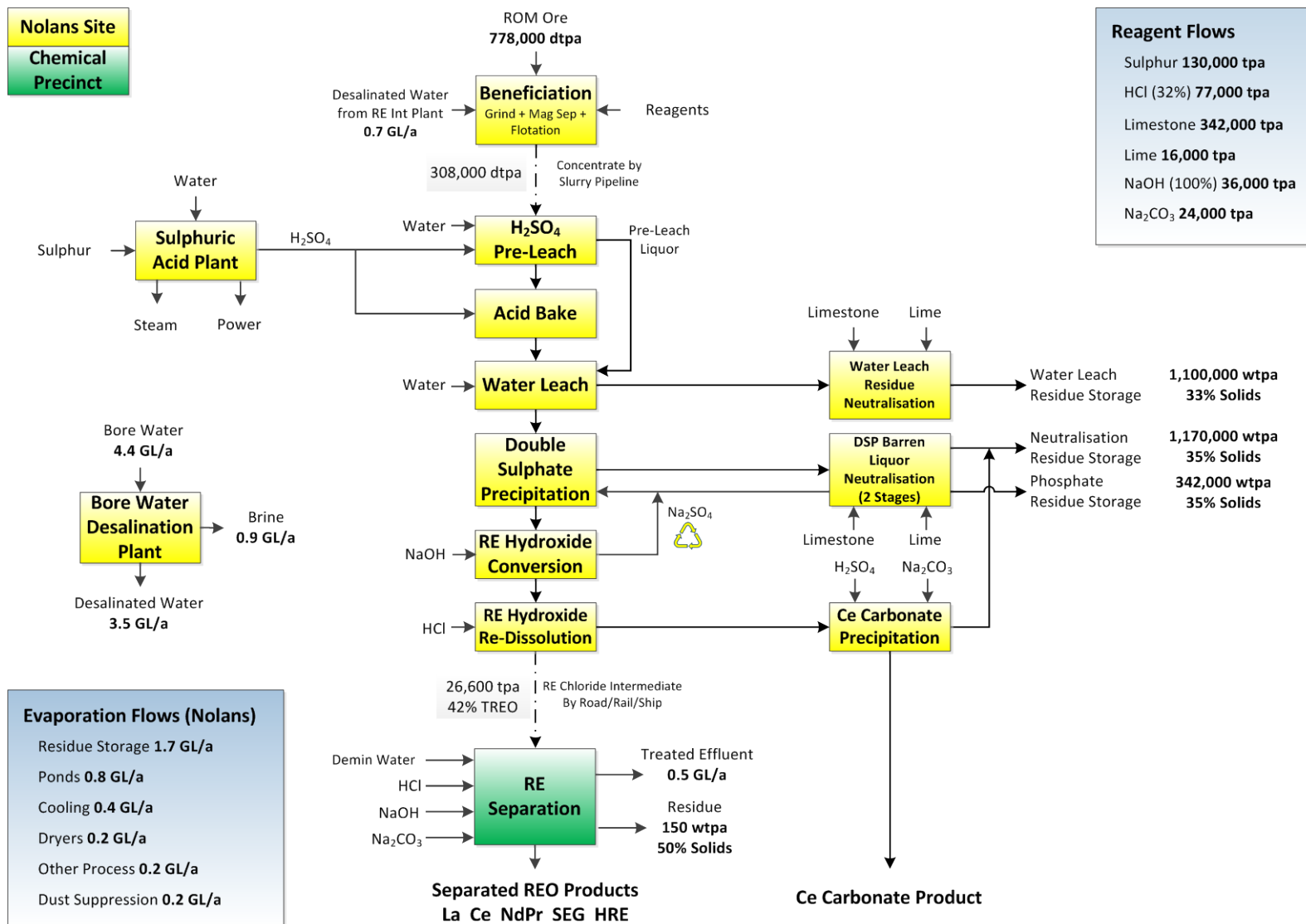
RE SEPARATION PLANT

CAPEX	A\$205.4 million
OPEX	A\$1.79/kg REO

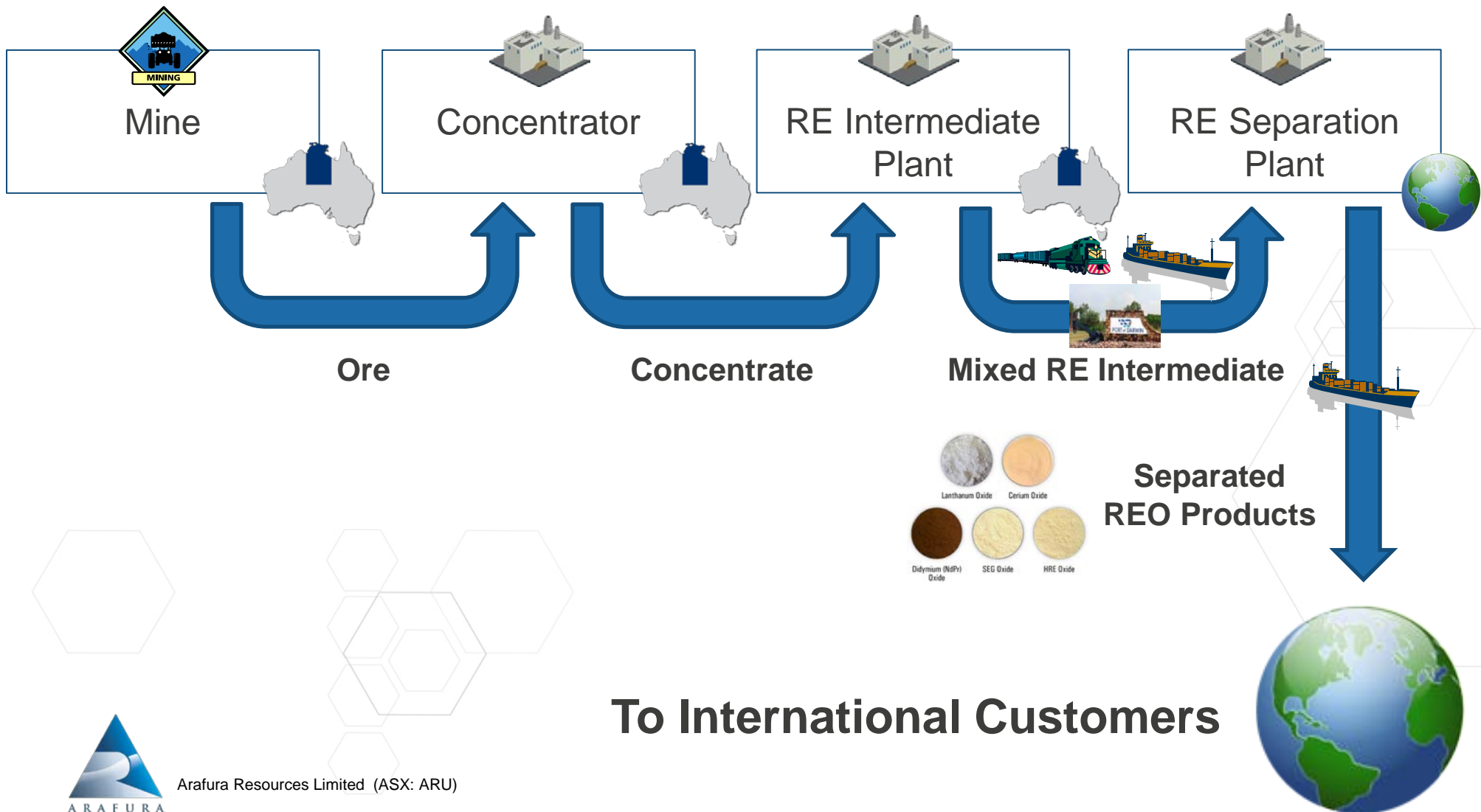


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A NEW SIMPLIFIED FLOWSHEET



FROM MINE TO MARKET



ROBUST PROJECT ECONOMICS ON REALISTIC ASSUMPTIONS



	US\$m pa	A\$m pa
Sales Revenue		
REO equivalent 20,000 tonnes (less Royalty & Selling Expenses)	638	
Total Revenue (A\$1 = US\$0.897)	638	712
OPEX		
Mine & Concentrator		(79)
RE Intermediate Plant		(163)
RE Separation Plant		(39)
Transport & Logistics		(31)
Total OPEX		(312)
EBITDA		400
CAPEX (excluding deferred CAPEX)		1,408
NPV @ 10% after tax & capital payback		2,045
IRR after tax & capital payback	21.4%	
After tax payback period	Year 5 of operations	
OPEX A\$/per kg REO	15.67	

- ▲ The Nolans Project generates a **NPV of A\$2,045 million** and an **IRR of 21.4%**
- ▲ The NPV has been calculated on an after-tax basis with a 10% discount rate
- ▲ The Nolans Project generates an after-tax payback of capital **within five years of operations**
- ▲ Key assumptions relating to this financial evaluation are appended to this presentation

MANAGEMENT DELIVERING VALUE-ADD INITIATIVES



	August 2012 (A\$)	June 2014 (A\$)	Savings (A\$)
NOLANS CAPEX	\$1,912 million	\$1,408 million	\$504 million
NOLANS OPEX	\$20.55/kg REO	\$15.67/kg REO	\$4.88/kg REO
CORPORATE OVERHEADS ¹	\$423k/month	\$283k/month	\$140k/month

¹ Average monthly corporate overheads (administration) cash expenditure in September 2012 and June 2014 quarters. June 2014 quarter cash expenditure unaudited.

 CAPEX and OPEX savings **exclude** the impact of potential improvements arising from the ongoing Chinese optimisation program

CHINESE ALIGNMENT A KEY DIFFERENTIATOR



- ▲ East China Mineral Exploration and Development Bureau (ECE) is a major state-owned enterprise and important long-term strategic partner
- ▲ **Strategic alliance with existing RE producer Shenghe Resources**
- ▲ SKN appointment as key China consultant **will help accelerate Nolans development**

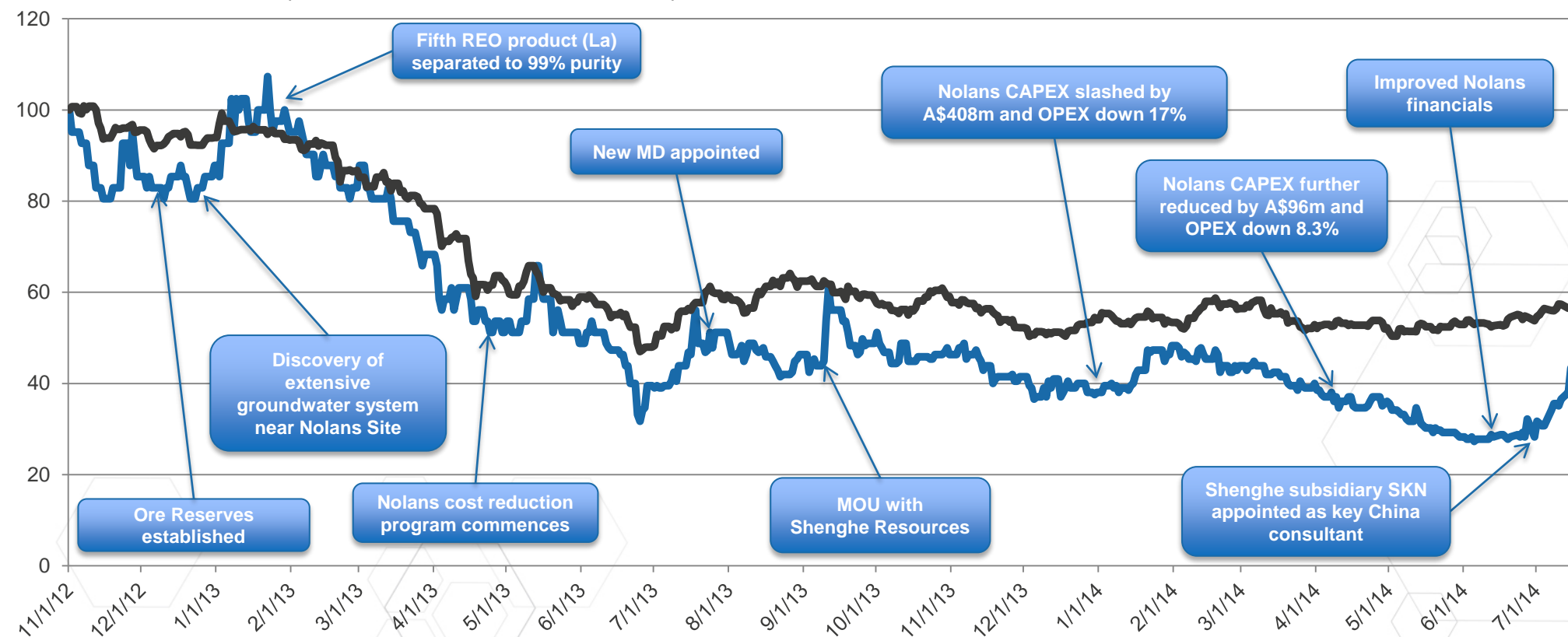
TECHNICAL	FUNDING
<ul style="list-style-type: none">▲ Provides access to specialised Chinese RE technical and industrial experience▲ Chinese RE experts currently reviewing Arafura's process for efficiency & optimisation▲ SKN assisting with Nolans Definitive Feasibility Study▲ Targeting a fast track option for project commercialisation▲ Shenghe provides an existing path to market outside China	<ul style="list-style-type: none">▲ ECE contributed \$32.8 million in funds to date, and holds a 24.86% interest (capped by Australian Government)▲ Facilitating introductions to potential debt and equity funding parties▲ Investigating and securing potential marketing opportunities

SHARE PRICE DISCONNECT FROM RECENT PERFORMANCE



ARU vs ASX Small Resources Index

— ARU share price - rebalanced to 100 — Small Cap Resources Index - rebalanced to 100



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RE-RATING CATALYSTS IMMINENT



INTERNAL

- ▲ Results expected shortly for:
 - ▲ Optimisation program
 - ▲ Beneficiation
 - ▲ RE extraction
 - ▲ Water resources drilling
- ▲ Nolans Development Report
- ▲ Confirmation of binding offtake arrangements
- ▲ Acquisition of offshore site for RE Separation Plant

EXTERNAL

- ▲ China developments
 - ▲ Uncertainty in response to WTO rulings
 - ▲ Continued consolidation in RE sector
- ▲ Non-Chinese supply issues
- ▲ Accelerating demand growth for key critical REs

KEY MESSAGES – A RECAP



- ▲ Focused strategy for first production this decade
- ▲ World-leading magnets leverage to drive high-value growth
- ▲ World scale project with robust economics on realistic assumptions
- ▲ Management delivering on large scale, value add initiatives
- ▲ Strategic Chinese alliances provide gateway to technical expertise and funding
- ▲ Share price – disconnect from recent performance
- ▲ Re-rating catalysts imminent – internal and external



THANK YOU
Questions?



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APPENDIX

FINANCIAL EVALUATION ASSUMPTIONS



CRITERIA	EXPLANATION
Production	<ul style="list-style-type: none"> ▲ Target: 20,000 tpa of REO equivalent from Mining of Measured and Indicated Resources ▲ Ramp Up: Eight quarters ▲ Life: 20 years
Operating Costs	<ul style="list-style-type: none"> ▲ Reagent cost estimate: based on detailed mass balance modelling of the process flowsheet, supported by extensive testwork by Arafura, and unit prices provided by leading suppliers with known available capacity or ability to increase capacity to satisfy Arafura's requirements ▲ Mining costs: based on a mine plan and optimisations ▲ Logistics costs: based on detailed material movement modelling, information from prospective service providers and prevailing market rates ▲ Labour rates: based on current relevant industry survey benchmark data ▲ Operating costs: include general and administration costs ▲ Mine & Concentrator estimate: derived from estimates provided by Lycopodium ▲ RE Intermediate Plant estimate: derived from estimates provided by AMEC Minproc adjusted by Arafura to reflect change in quantities handled ▲ RE Separation Plant estimate: provided by Lycopodium

APPENDIX

FINANCIAL EVALUATION ASSUMPTIONS



CRITERIA	EXPLANATION
Capital Costs (1)	<ul style="list-style-type: none"> ▲ Mine & Concentrator: study compiled by Lycopodium <ul style="list-style-type: none"> • CAPEX of A\$217.1 million includes a 12.0% contingency ▲ Nolans Site Infrastructure: Engineering Cost study (covering access roads, site buildings, camp, slurry pipeline, power, borefield and water supply pipeline, TSFs) compiled by Lycopodium ▲ RE Intermediate Plant estimate: derived from estimates provided by AMEC for the RE Intermediate and RE Separation plants, which were previously combined on a single site in Australia ▲ RE Intermediate Plant: CAPEX of A\$964.2 million includes a 17.7% contingency ▲ RE Separation Plant estimate: study compiled by Lycopodium and is based on the plant being located within or near a Chemical Precinct located on the Gulf Coast of the USA <ul style="list-style-type: none"> • Arafura completed a study of worldwide possible locations for the RE Separation Plant based upon a number of key criteria: <ul style="list-style-type: none"> – Established chemical complex with existing production facilities for caustic soda and hydrochloric acid – Availability and security of supply of principal raw materials and other services – Competitive long-term cost base and drive for enhanced industrial development

APPENDIX

FINANCIAL EVALUATION ASSUMPTIONS



CRITERIA	EXPLANATION
Capital Costs (2)	<ul style="list-style-type: none"> • Site visits and more detailed study identified the potential of some locations with: <ul style="list-style-type: none"> – Gulf Coast USA meeting the criteria and additionally the area is frequently used as a worldwide cost estimating reference baseline – Land owner discussions identifying multiple lease or purchase options – Availability and supply options for cost efficient raw materials and services ▲ RE Separation Plant: CAPEX of A\$205.4 million includes a 14.4% contingency ▲ Transport & Logistics (T&L) estimate: generated by Arafura and incorporates engineering inputs from the aforementioned packages and T&L operators based upon defined volumes and routings with T&L operator consultation ▲ T&L: CAPEX of A\$21.3 million includes a 13.9% contingency ▲ The capital cost estimate: supported by the following information: <ul style="list-style-type: none"> • Process flowsheets, equipment lists and engineering drawings produced with sufficient detail to permit the assessment of the engineering quantities for equipment and materials within the process plants and associated infrastructure

APPENDIX

FINANCIAL EVALUATION ASSUMPTIONS



CRITERIA	EXPLANATION
Capital Costs (3)	<ul style="list-style-type: none"> Equipment costs based on budget quotes received from vendors for major plant items and a substantial proportion of the minor plant items, supplemented where necessary with recent historical engineering contractor cost database information Technology supplier budget estimates for certain turnkey packages such as the sulphuric acid plant Completion of detailed modelling of logistics flows and an assessment of related capital costs of ancillary equipment <p>▲ Capital cost escalation of 3.2% pa during a construction period of 36 months</p> <p>▲ Deferred capital expenditure of A\$115 million for plant expansion and A\$82 million for TSFs in years 7 to 10 of operations</p> <ul style="list-style-type: none"> Arafura will adopt selective mining practices during the first 10 years of production to target the best performing material types <p>▲ Sustaining capital expenditure allowance of 1.4% of total direct capital costs in addition to an annual allowance of approximately A\$7.5 million (in real terms) for TSFs</p>

APPENDIX

FINANCIAL EVALUATION ASSUMPTIONS



CRITERIA	EXPLANATION
Market	<ul style="list-style-type: none"> ▲ Arafura has developed a rare earth supply-demand model to interpret trends in market segments and derive the supply-demand balance and growth outlook for individual rare earths ▲ REO supply: Arafura has not taken into account any disruption to Chinese rare earths supply through centralisation and greater control of illegal production or the impact of increased focus on environmental and sustainability issues ▲ REO demand: CAGR of 6-7% leading to a total market of 180,000 t in 2020. Demand growth assumptions derived from reviewing multiple sources including: <ul style="list-style-type: none"> • Market research and industry studies on the rare earth market and end user applications, such as the catalysts market, wind energy and HEV markets which publish market trends and forecasts • Primary research through meetings with key customers in end user markets, industry participants and distributors • Review of published market forecasts by peer rare earth companies ▲ Magnets: CAGR of 10% <ul style="list-style-type: none"> • Increase in magnet production for use in HEVs and wind turbines (China, USA, Europe)

APPENDIX

FINANCIAL EVALUATION ASSUMPTIONS



CRITERIA	EXPLANATION
Pricing	<ul style="list-style-type: none"> ▲ An internal pricing model has been used as the primary price forecasting tool. Pricing projections adopt market supply and demand fundamentals with an understanding of key market drivers as the basis for pricing assumptions. ▲ Arafura has developed a price forecast from 2014 to 2023 for six RE products that it intends to market. The weighted average price of Arafura's RE products for 2013 is calculated using actual individual REO prices in US\$/kg FOB China from the trade website <i>Metal Pages</i>. The price forecast commences at a 2013 baseline price of US\$33/kg FOB China and Arafura has applied an average price growth of 2.1% pa after 2014. <ul style="list-style-type: none"> • A price CAGR of 7.6% in real terms is applied to NdPr over the forecast period, and remains constant thereafter in real terms • No price growth in real terms has been applied over the forecast period for La, Ce, Sm, Eu, Gd, Tb, Dy and Y on an oxide basis from 2014 prices • Ce carbonate has been marketed at a 50% discount to the FOB China Ce oxide price and no price growth has been applied over the forecast period ▲ The basket price for Nolans separated products in 2019 is US\$44/kg on a FOB basis. Arafura will not be separating all of the REO products in this basket and has discounted the basket price to arrive at an average Nolans RE product price of US\$36.64/kg for the first year of production in 2019 as the starting point for the pricing forecast. <ul style="list-style-type: none"> • These discounts have been calculated from a number of sources, including <i>Metal Pages</i> for NdPr, and discussions with end users for all other RE products.

APPENDIX

FINANCIAL EVALUATION ASSUMPTIONS



CRITERIA	EXPLANATION
Economic Factors	<ul style="list-style-type: none"> ▲ Discount Rate: After-tax discount rate of 10% for DCF analysis determined by: <ul style="list-style-type: none"> • The required cost of equity return to an equity investor • The rates of return for comparable ASX-listed companies • The debt to equity ratios of comparable ASX-listed companies ▲ Financing: 100% equity funding. Does not take account of any uplift that may result from debt raised through a project financing. ▲ Consumer Price Index: Escalation of 2.7% per annum applied to sales and costs, and to convert the cash flows from real to nominal terms sourced from a leading Australian-based forecasting advisory practice ▲ Exchange Rate: A\$1 = US\$0.897 in 2014, gradually reducing to 0.813 by 2017 and remaining constant thereafter, sourced from a leading Australian-based forecasting advisory practice
Other	<ul style="list-style-type: none"> ▲ Sensitivity Analysis: Financial evaluation is most sensitive to REO prices and exchange rate, and relatively less sensitive to movements in CAPEX and OPEX (see graphic on following slide)

SENSITIVITY ANALYSIS

