ARAFURA ADDING VALUE IN AUSTRALIA TO PRODUCE RARE EARTHS FOR USERS WORLDWIDE





Arafura Resources Limited
Mines & Money Australia Conference

16 October 2012 – Chris Tonkin, CEO

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The information in this presentation that relates to exploration results, mineral resources or ore reserves is based on information compiled by Mr Richard Brescianini BSc(Hons). Mr Brescianini is a Member of the Australian Institute of Geoscientists and he has sufficient experience which is 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 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code)". Mr Brescianini consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.

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

An Emerging Rare Earths Producer



Arafura Resources is an emerging rare earths producer with an advanced Australian development project – the Nolans Project

ASX Code	ARU
Shares on offer	396 million
Options	11.5 million
Market Cap@17.0c	\$67.3 million
1-year range	14 - 69 cents
Cash at 30/6/12	\$19.5 million
Debt	nil
Top shareholders	JP Morgan Nominees (27.15%) ECE (16.9%)



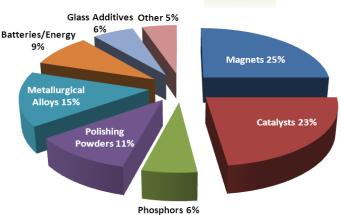
Rare Earths – applications and market



Green technology sector will drive Arafura's REO sales

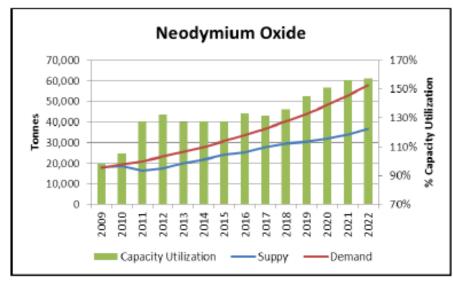
- Hybrid vehicles
- Wind turbines
- Phosphors (energy-efficient lighting)





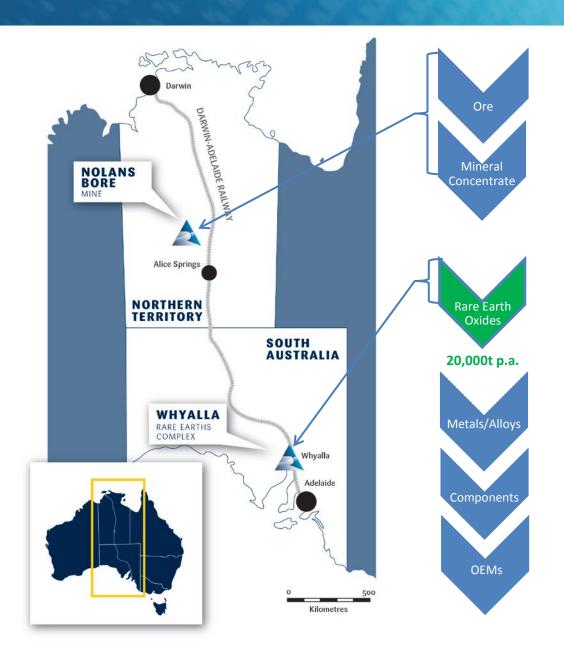
REO Market Segments by Application (2011)

- For most rare earths, the pricing outlook is positive – strong demand and tight supply
- Material supply shortfall expected in selected REO products, such as Didymium (Nd/Pr) product used in permanent magnet end markets
- ▲ Didymium is **strongly represented** in the Nolans product mix, and is expected to generate **50-60% of total revenue**



Nolans Project Base Case





The Nolans Project is one of the most advanced rare earths development projects in the world

The recent Project Update established a Base Case of:

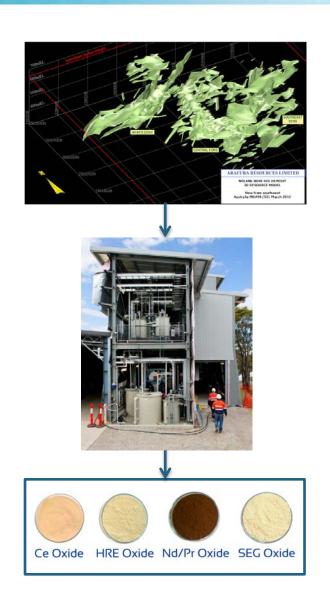
- Mine and concentrator at Nolans Bore,
 Northern Territory
- ▲ Chemical processing operation in Whyalla, South Australia

Business Model - Adding Value in Australia

Nolans Project – key features



- ▲ JORC-compliant rare earths resource recently expanded by 52% to 1.22 million tonnes contained REO
- Low resource risk
- ▲ Feasibility Study well advanced: Extensive testwork completed and process flowsheet developed over 7 years
- ▲ Robust economics: Full capital payback within 4 years of operations
- Nolans Bore and Whyalla sites have access to public infrastructure, services and utilities
- Resource enriched in Didymium Oxide (Nd/Pr) – Expected shortfall in global rare earths market



World-scale, strategic resource



RESOURCES	TONNES (million)	RARE EARTHS REO %	TONNES REO	TONNES P ₂ O ₅	TONNES U ₃ O ₈
Measured	4.3	3.3	144,000	572,000	1,120
Indicated	21	2.6	563,000	2,610,000	4,090
Inferred	22	2.4	511,000	2,220,000	3,610
TOTAL	47	2.6	1,217,000	5,410,000	8,830

1% REO cut-off grade. REO grade excludes Yttrium (Y)

- ▲ Minimal resource risk approximately 90km drilling completed
- ▲ Mineral resource **remains open at depths** below 220m
- Amenable to low cost open cut mining and milling
- Standard beneficiation techniques
- **Expected mine life in excess of 20 years**

Customer qualified REO products



Arafura's separated REO products

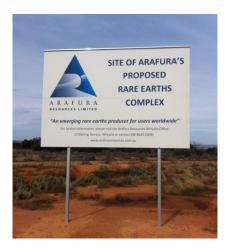


- Produced four separated REO products to 99% purity
- In-specification final REO products verified by customers
- ▲ In the process of finalising production of a separated Lanthanum Oxide product to 99%
- ▲ LOI and MOU signed with **ThyssenKrupp and a major Korean company** for product sales (each 3,000t REO p.a.) and related business arrangements

Regulatory and community support



- ▲ Clearly defined regulatory frameworks in Northern Territory and South Australia
- Whyalla Processing Complex has Major Project status from South Australian government
- Advanced environmental studies at both sites– no major issues identified
- Community relations, engagement and acceptance of the Project have been very positive



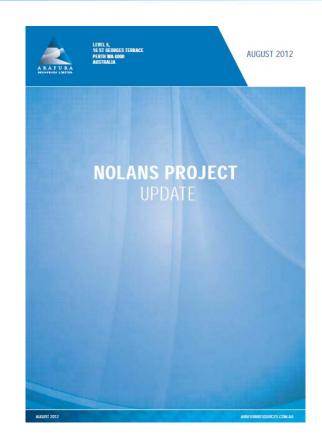


Arafura is committed to open and transparent engagement and consultation with the community as a core organisational value

Project Update validates robust economics



- Comprehensive Project Update released August 2012
- Provides transparency for investors and other stakeholders
- ▲ Nolans Project Base Case confirms robust project economics over 20 years:
 - NPV of A\$4.3 billion (10% discount rate)
 - IRR of 30% (after tax and capital payback)
 - Capital payback within 4 years of operation
 - Core capital cost of A\$1.395 billion



Arafura's objective is to become one of the world's largest rare earth producers

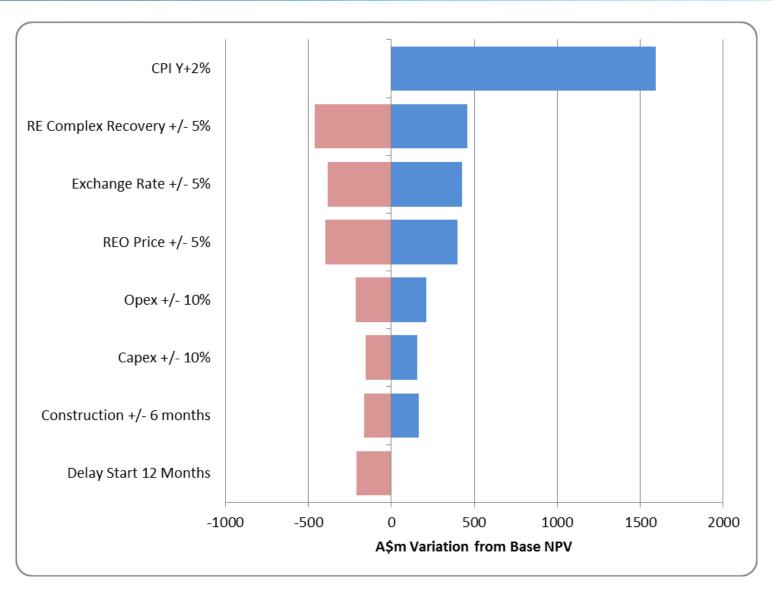
Base Case financial summary



Sales Revenue	US\$ million per annum
REO 20,000 tonnes (less Royalty and Selling Expenses)	1,124
Uranium	15
Other	16
Total Revenue	1,155
	A\$ million per annum
Total Revenue @ US\$1 = A\$1.026	1,125
Operating Expenditure	
Nolans Bore Mine and Concentrator	(77)
Transport and Logistics	(54)
Whyalla Rare Earths Complex	(280)
Total Operating Expenditure	(411)
Revenue less Operating Expenditure	714
Corporate and Emission Permits	(16)
EBITDA	698
NPV @ 10% afater tax and capital payback (A\$m)	4,324
IRR after tax and capital payback	30%
After tax payback period	Year 4 of operations
Operating Cost A\$/kg REO (less co-products)	19.58
NPV = 0 @ US\$/kg Nolans REO Products	28

Sensitivity of Base Case NPV





Independent Expert's Report



IER validates advanced stage and significant valuation upside of the Nolans Rare Earths Project

▲ Independent Expert's utilisation of NPV methodology validates the advanced nature of the Project

▲ IER key findings:

- Estimated value of Nolans Project = A\$2.4bn to A\$4bn, with a preferred value of A\$3.2bn
- Estimated value of Arafura at \$0.243 to A\$0.404 per share, with a preferred value of A\$0.323

IER values the Nolans Project at more than 30 times Arafura's current market capitalisation

^{*} ARU engaged BDO Corporate Finance (WA) Pty Ltd to prepare an Independent Expert's Report ("IER") to determine if the capital injection by a major shareholder, ECE Nolans Investment Company Pty Ltd ("ECE Nolans") is fair and reasonable

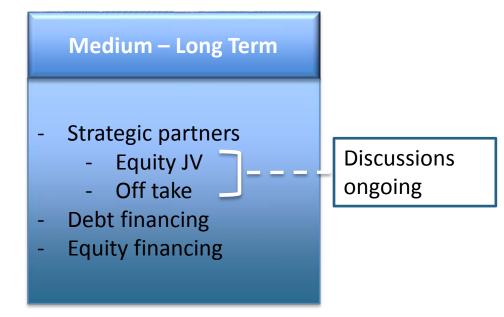
Funding plan in place – multiple options



Recent Project Update and IER enhance funding options

Short Term

- \$10m placement to ECE
- \$22m R&D Claim*
- Existing Cash Reserves
- Capital raising



△ CEO & CFO — bring significant management experience in project finance and have proven track records in structuring and arranging financing at company and project level

^{*} For further details refer to p96 (Note 7) Annual Report 2012

Funding required for 2012/13



Project Refinement

- Conversion to Ore Reserve
- Demonstration Plant Operation
- ▲ Integrated Pilot Plant
- REO purification to customer specification

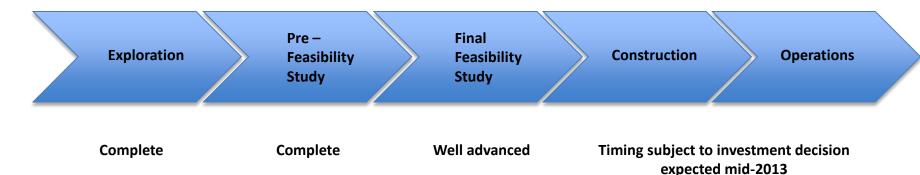
Engineering

- Detailed engineering
- ▲ Transport and logistics

Other

- ▲ EIS submissions
- ▲ Sales and supply contracts
- Strategic partners

Seeking finance second half 2013 for Project construction



Nolans Project – strong investment case

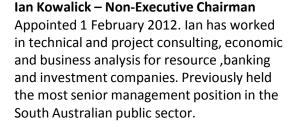


- Nolans Rare Earths Project world scale and well advanced
- Positioned to supply 10% of global rare earths products this decade
- A Recent Project Update confirms robust economics
- Independent Expert's Report validates significant valuation upside
- ▲ Funding plan in place multiple options
- ▲ Support from **government and community**
- ▲ Strong **Board and Management** team

Experienced Board and Management









CFOOver 20 years' international experience in finance and mining. Held positions in senior investment banking, finance, treasury, derivatives and accounting.

Gavin Lockyer – Company Secretary &



Over 25 years' experience as senior business executive. Proven track record in structuring and arranging complex financings for companies and projects in Australia and internationally across all major industry sectors.

Chris Tonkin – Managing Director



Richard Brescianini – General Manager, Exploration & Development Over 25 years' public and private experience in the minerals industry, including BHP Minerals and the NT Government's Geological Survey.



Shasha Lu – Non-Executive Director

Based in Nanjing, China – responsible for business development opportunities in China. Former Executive Director and CEO of Hong Kong East China Non-Ferrous Metal Resources Co. Ltd (part of ECE).



Neil Graham – General Manager,
Operations & Technology
Over 25 years' international experience in
the chemical industry encompassing
design, construction and commissioning of
installations. Chartered engineer, most
recently worked with Orica.



25 years' worldwide experience as geologist, project manager, country general manager for various mining and engineering companies. Also a director of Australian ECE Nolans Investment Limited.

Dr Alex Losada-Calderon – Non-Executive

Director



John Ganser – General Manager, Projects Over 30 years' experience in minerals and metals industry, including Rio Tinto, BHP Billiton, Iluka Resources, Hatch, SKM GHD and Calibre Projects.



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