Arafura Resources Limited

2nd Annual Technology Metals Summit
21-22 April 2013, Toronto

Gd Gadolinium
Ho Holmium
Ce Cerium

Tb Terbium
Eu Europium
Lu Lutetium
Sm Samarium

Nd Neodymium
Y Yttrium
Er Erbium
Dy Dysprosium
Tm Thulium
Yb Ytterbium
La Lanthanum

Pr Praseodymium

ARAFURA
RESOURCES LIMITED

Disclaimer

Important Notice

This presentation contains certain statements which may constitute "forward-looking statements". Such statements are only expectations or beliefs and are subject to inherent risks and uncertainties which could cause actual values, results or performance achievements to differ materially from those expressed or implied in this presentation. No representation or warranty, express or implied is made by Arafura Resources Limited ("**Arafura Resources**") that any forward-looking statement contained in this presentation will occur, be achieved or prove to be correct. You are cautioned against relying upon any forward looking statement.

Except for statutory liability which cannot be excluded, each of Arafura Resources and its related body corporates and their officers, employees and advisers expressly disclaims any responsibility for the accuracy or completeness of the material contained in this presentation and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this presentation or any error in it or omission from it. Arafura Resources accepts no responsibility to update any person regarding any inaccuracy, omission or change in information in this presentation or any other information made available to a person, nor any obligation to furnish the person with any further information.

This presentation does not constitute an offer of securities in Arafura Resources, nor an invitation to apply for such securities. This presentation does not provide investment advice or financial product advice. You should obtain professional advice and carry out your own independent investigations and assessment of the information in this presentation (including any assumptions) before acting.

Information in this presentation which is attributed to a third party source has not been checked or verified by Arafura Resources.

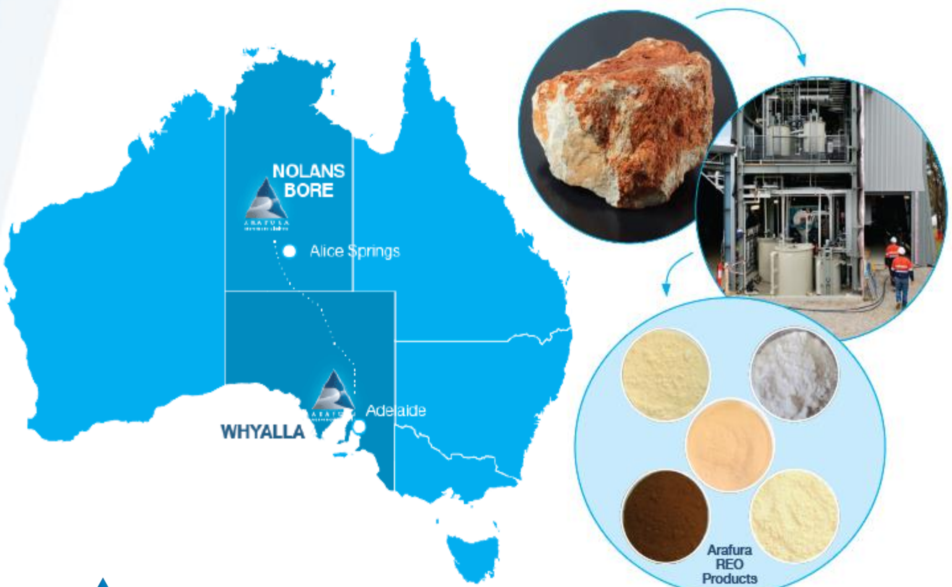
The information in this presentation that relates to exploration results, mineral resources or ore reserves is based on information compiled by Mr Richard Brescianini BSc (Hons). Mr Brescianini is a Member of the Australian Institute of Geoscientists and he has sufficient experience which is relevant 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.

Company Snapshot

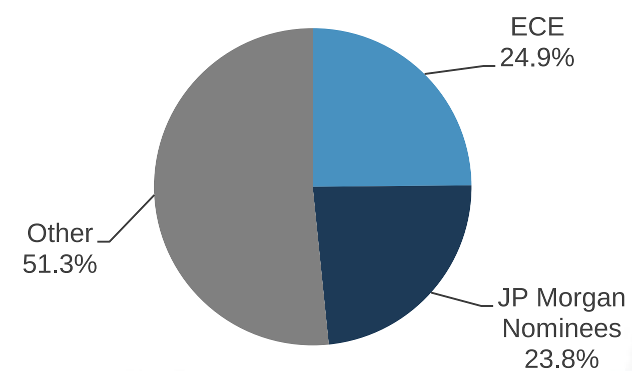
Arafura Resources

- Australian company developing a major Rare Earths project – the Nolans Project.
- World class resource located in the Northern Territory, Australia.

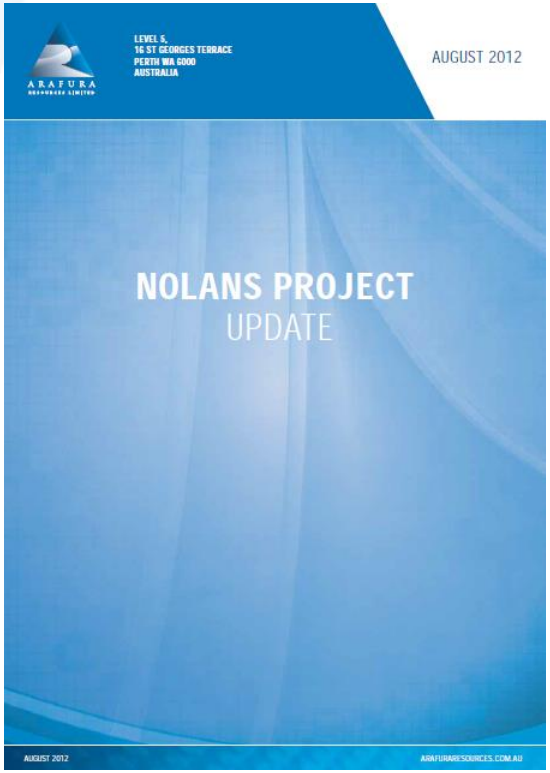


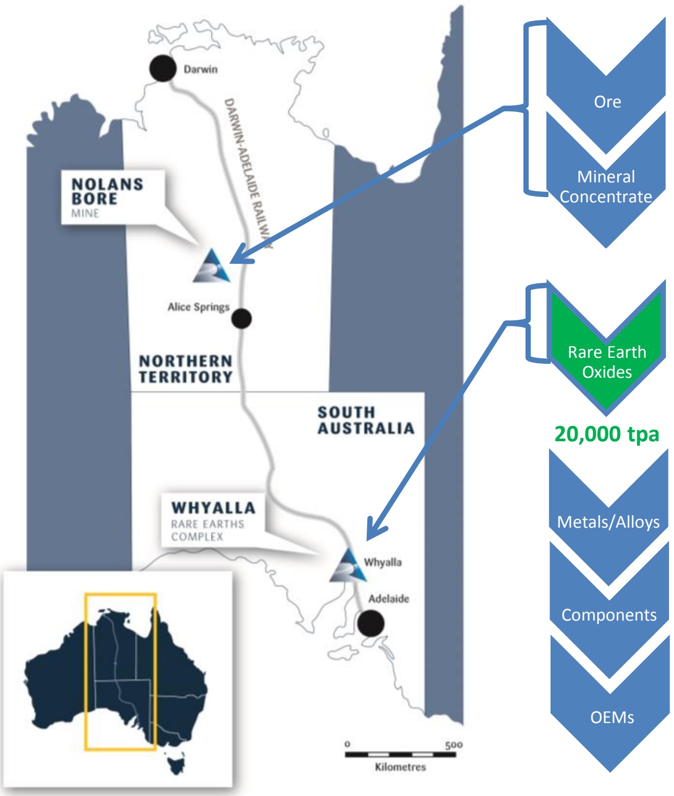
ASX Code	ARU
Shares on offer	441.3 million
Options	11.5 million
Market Cap @ 12c	A$52.9 million
1-year range	11 - 31 cents
Cash at 31/03/13	A$36.3 million
Debt	nil

Major Shareholders



Nolans Project – Existing Base Case Configuration



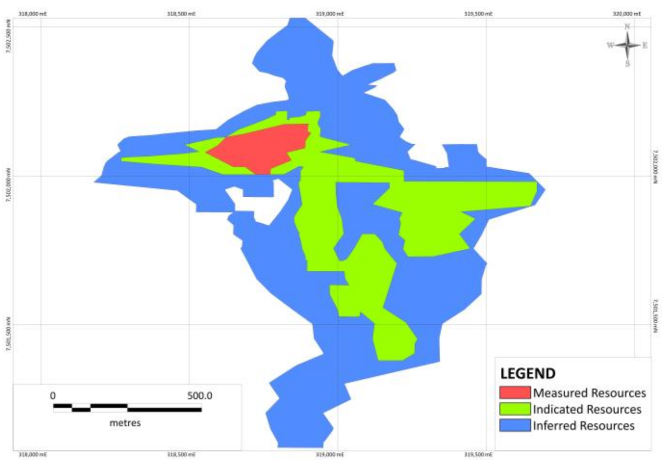


- Mining and Beneficiation at Nolans Bore in the Northern Territory
- Intermediate Chemical Processing and Rare Earths Separation in Whyalla, South Australia

Nolans Bore Mineral Resources (June 2012)

Resources	Tonnes (million)	Rare Earths % REO	Tonnes REO	Phosphate % P_2O_5	Uranium % U_3O_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**

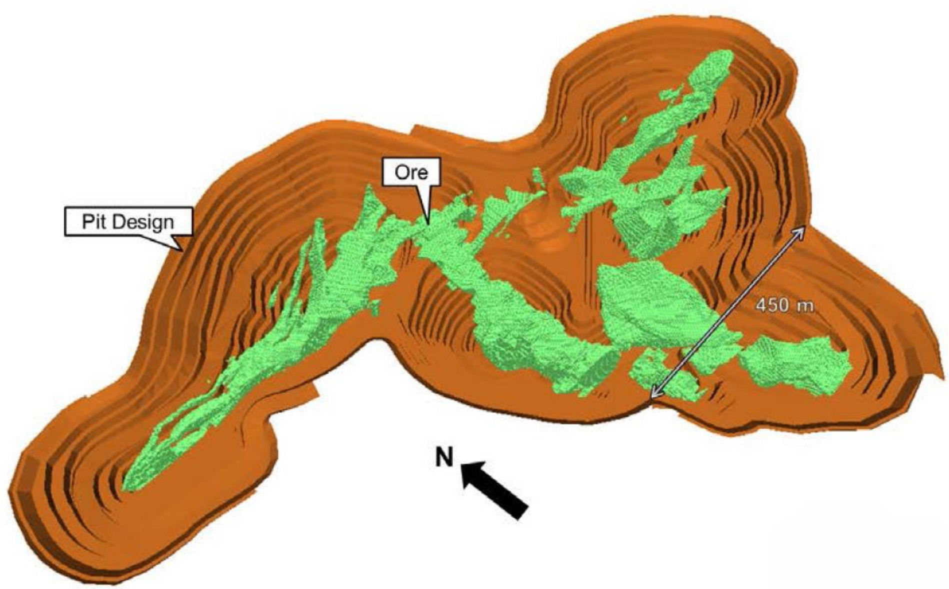
1% REO cut-off grade



- **Minimal resource risk** – approximately 90km drilling
- Mineral resource **remains open at depths** below 220m
- Amenable to low cost open cut mining and milling
- Standard beneficiation techniques

Nolans Bore Ore Reserves (December 2012)

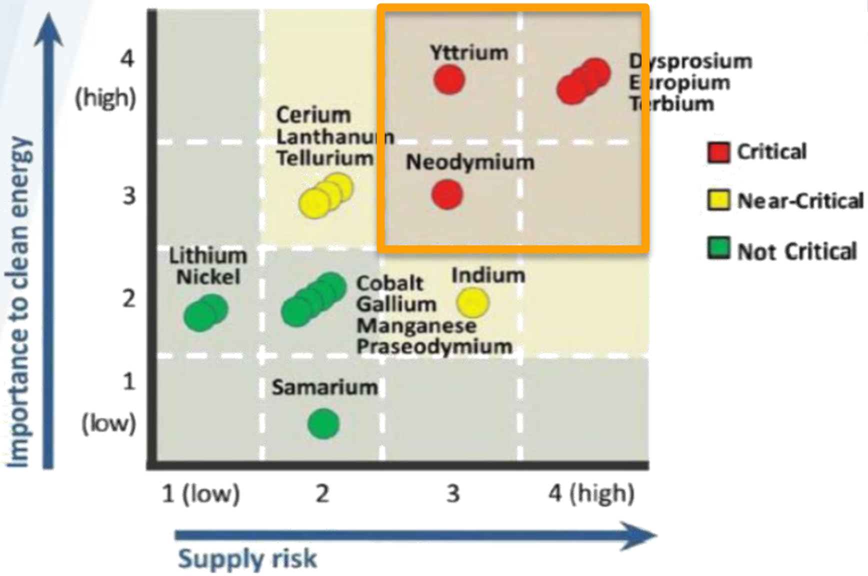
Reserves	Tonnes (million)	Rare Earths % REO	Tonnes REO	Phosphate % P_2O_5	Uranium % U_3O_8
Probable	24	2.8	672,000	12	0.02



- 95% of Measured and Indicated Resources converted to Ore Reserves
- Independently prepared Ore Reserve for Nolans Bore to support **a 22 year mine life**
- **Inferred Resources of 21 Mt** available for potential future conversion to Ore Reserves

A major supplier of 'Critical Rare Earths'

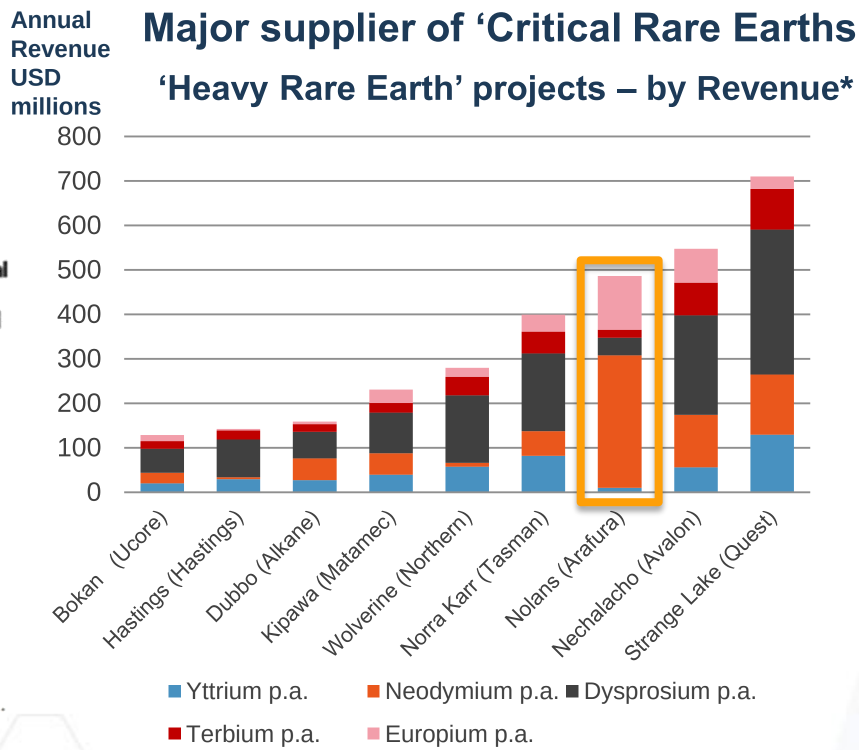
Short-Term (0–5 years) Criticality Matrix



Source: US Department of Energy – Critical Materials Strategy, December 2011.

Major supplier of 'Critical Rare Earths'

'Heavy Rare Earth' projects – by Revenue*



***Rare earth prices as at 28/3/13**

Market Conditions impacting Base Case

Nolans Project Base Case:

- Established in August 2012
- Project economics over 20 years
- NPV of A$4.3 billion (10% discount rate)
- IRR of 30% (after tax & capital payback)
- Capital payback within 4yrs of operation
- **Capital cost A$1.9 billion**

Since Base Case established:

- Rare earth prices have fallen further
- Upward pressures on costs
- Depressed financial markets impact funding options
- **Viability of Base Case is compromised under current economic conditions**

Project Initiatives underway to materially reduce costs and enhance economic viability of the Nolans Project

Project Initiatives target cost reductions

Arafura is actively pursuing initiatives to:

- Identify and apply process flow sheet improvements and design efficiencies
- Improve and optimise the Project's configuration and logistics
- Substantially reduce capital and operating costs

→ **Immediate savings can be achieved** by relocating Intermediate Chemical Processing from Whyalla to the Northern Territory, close to the Nolans Bore Mine site

→ **Material savings from relocation – $160 million in capital costs and $1.60/kg REO in operating costs;** additional transport, logistics and environmental benefits

→ **Further savings and cost reductions** expected from **Trade-Off Study initiatives** and **Optimisation Program** with Chinese experts

→ **Nolans is no longer a A$2 billion project – Arafura is targeting total capital cost reductions of up to A$1 billion**

ECE and Optimisation Program

- ECE is a **strategic and important partner for Arafura**
- Long-term and supportive relationship with Arafura since 2009. Equity increased to 24.86% via SPP (A$10 million) in 2012
- **Project Review and Optimisation Program underway with** Chinese rare earth experts (via ECE introductions) to identify synergies and further optimisation of the Project
- **Importance to and advantage for Arafura**:
  - Access to Chinese rare earth industrial experience and expertise
  - Access to Chinese technology and resources
  - Strategic, technical and financial support

Funding requirements significantly reduced

Targeted Initiatives & Savings = ↓ **Capex & Funding** → ↑ **Returns**

- **Prospective elimination** of previously announced funding (A$30 million) required to complete Feasibility Study
- Immediate savings identified through project reconfiguration
- Total capital **cost reduction target of up to A$1 billion**
- With targeted initiatives in place, Arafura is confident it can advance the Nolans Project **towards financing and commercialisation**

Undervalued compared to peers

Company	Location	Mining Method	Project Stage	Market Cap^ (US$m)	EV (US$m)	TREO Resources (Mt)	Forecast REO Production (tpa)	EV/Tonne Resources (US$/tonne)	Avg. Grade %
Arafura	**Australia**	**Open Pit**	**Feasibility**	**53**	**10**	**1.2**	**20,000**	**9x**	**2.6%**
Lynas Corp	Australia	Open Pit	Commissioning	1,059	1,241	1.9	22,000	653x	7.9%
Molycorp	US	Open Pit	Commissioning	1,067	2,079	2.6	40,000	800x	6.6%
Alkane Reources	Australia	Open Pit	Feasibility	188	10	0.7	4,800	15x	0.9%
Avalon Rare Metals	Canada	Underground	Feasibility	111	86	4.3	10,000	20x	1.4%
Rare Element Resources	US	Open Pit	PEA	100	61	0.7	9,400	87x	3.2%
Frontier Rare Earths	South Africa	Open Pit	PEA	48	(4)	1.0	20,000	(4)X	2.2%
Quest Rare minerals	Canada	Open Pit	PEA	32	17	2.1	15,000	8x	0.9%
Greenland Minerals & Energy	Greenland	Open Pit	PEA	183	172	10.3	44,000	17x	1.2%
Mean	**(excl. ARU)**			**349**	**498**	**3.0**	**17,200**	**199x**	**1.7%**
Median	**(excl. ARU)**			**147**	**149**	**2.0**	**12,500**	**18x**	**1.7%**

Source: Cashel House

Arafura Resources Limited
Level 5, 16 St Georges Terrace
Perth WA 6000 Australia
Tel: +61 8 6210 7666
arafura@arafuraresources.com.au

Gd Gadolinium
Ho Holmium
Ce Cerium

Tb Terbium
Eu Europium
Lu Lutetium
Sm Samarium

Y Yttrium
Er Erbium
Dy Dysprosium

Nd Neodymium
Tm Thulium
Yb Ytterbium
La Lanthanum

Pr Praseodymium

ARAFURA RESOURCES LIMITED

www.arafuraresources.com.au