

PPR Media Event Presentation

Perth, Western Australia
10 March 2010



64	65	66	67	68	69	70	71
Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
Gadolinium 157.25	Terbium 158.925	Dysprosium 162.5	Holmium 164.9303	Erbium 167.259	Thulium 168.9342	Ytterbium 173.04	Lutetium 174.967

Disclaimer

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The information in this release that relates to exploration results and geological interpretation has been compiled by Mr Richard Brescianini BSc (Hons), and the information in this release that relates to metallurgical results and interpretation has been compiled by Mr Steve Mackowski BAppSc, both full-time employees of Arafura Resources. Mr Brescianini is a Member of the Australian Institute of Geoscientists and he has sufficient experience with the style of mineralisation being reported 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)” for reporting the exploration results. Mr Brescianini consents to the inclusion in this report of the contained technical information in the form and context in which it appears.

Mr Mackowski is a Fellow of the Australian Institute of Mining and Metallurgy and he has sufficient experience with the style of mineralisation being reported 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)” for reporting these metallurgical results. Mr Mackowski consents to the inclusion in this report of the contained technical information in the form and context in which it appears.



Arafura Resources Limited

Arafura is an Australian-based mineral exploration and development company which listed on the Australian Securities Exchange in 2003

Our Vision is to be the pre-eminent supplier of rare earths to the world and we will do this by:

- developing the Nolans Rare Earths-Phosphate-Uranium Project; and
- pursuing long-term strategic growth opportunities through exploration success and strategic partnerships

We will relentlessly pursue growth in shareholder value in a sustainable way



Corporate Structure (ASX: ARU)

As at 8 March 2010

Capital

287.4m shares; 15.5m Board/Employee options

Market capitalisation (ASX:ARU closing price @ 8 March 2010)

@ A\$0.60 = ~A\$175 million

Cash (@ 8 March 2010)

A\$25.2 million

Top shareholders

ANZ Nominees ¹	30.2%
ECE ²	22.4%
Citicorp Nominees	3.3%
Board & Management	3.0%

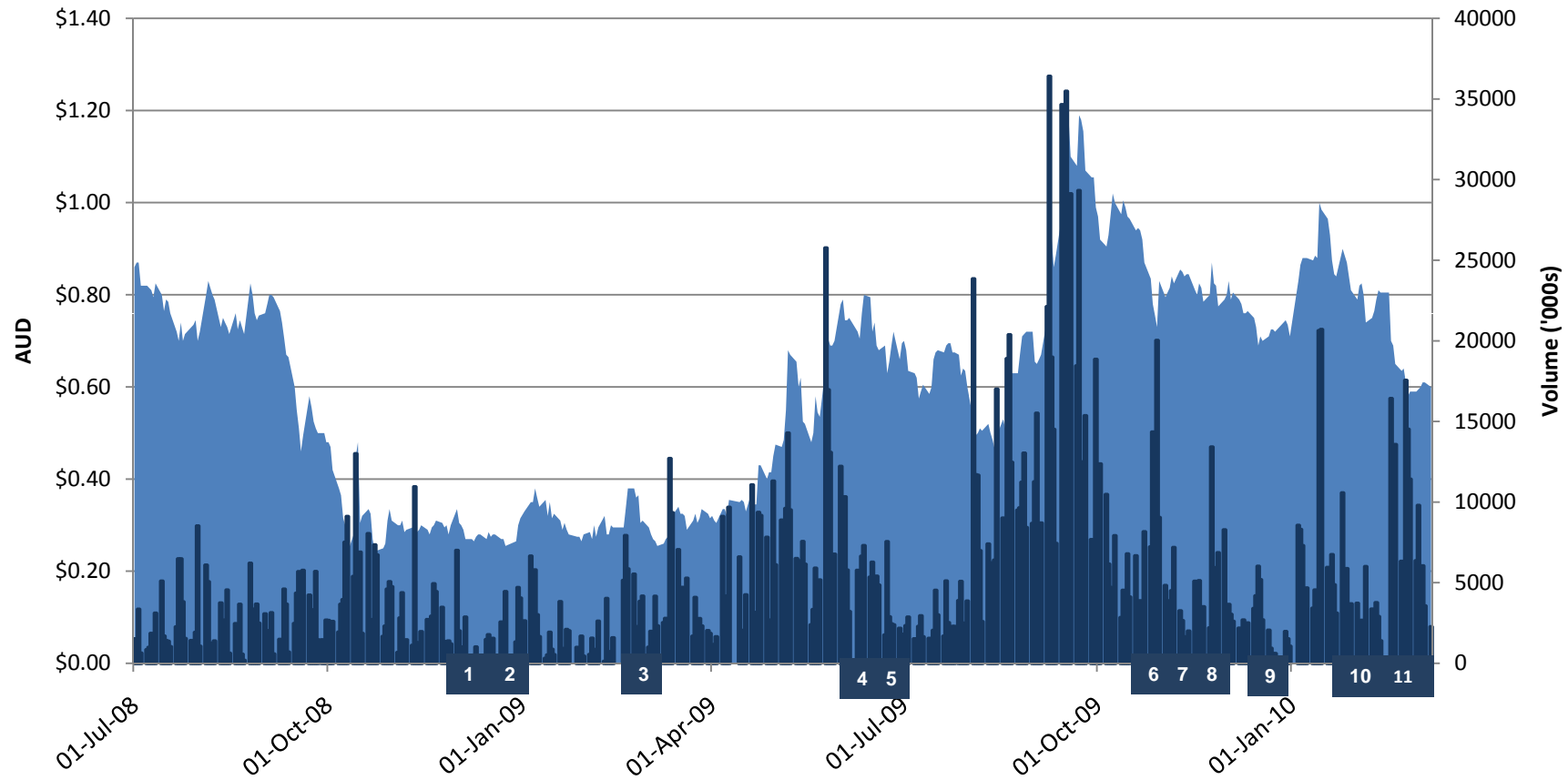
1. Substantial German-based shareholding amongst many shareholders
2. East China Mineral Exploration & Development Bureau

Capital raising via Renounceable Rights Issue (1 for 10) in progress



Share price data (ASX: ARU)

ARU SHARE PRICE AND VOLUME



1. Rights Issue

2. Shortfall Issue

3. Placement announced

4. FIRB approve ECE investment

5. ECE First tranche

6. Nolans Project BFS update

7. Shareholders approve ECE deal

8. ECE second tranche

9. New Managing Director
Steve Ward appointed

10. February 23 2010 placement

11. March 2010 Rights Issue



Board & Management summary

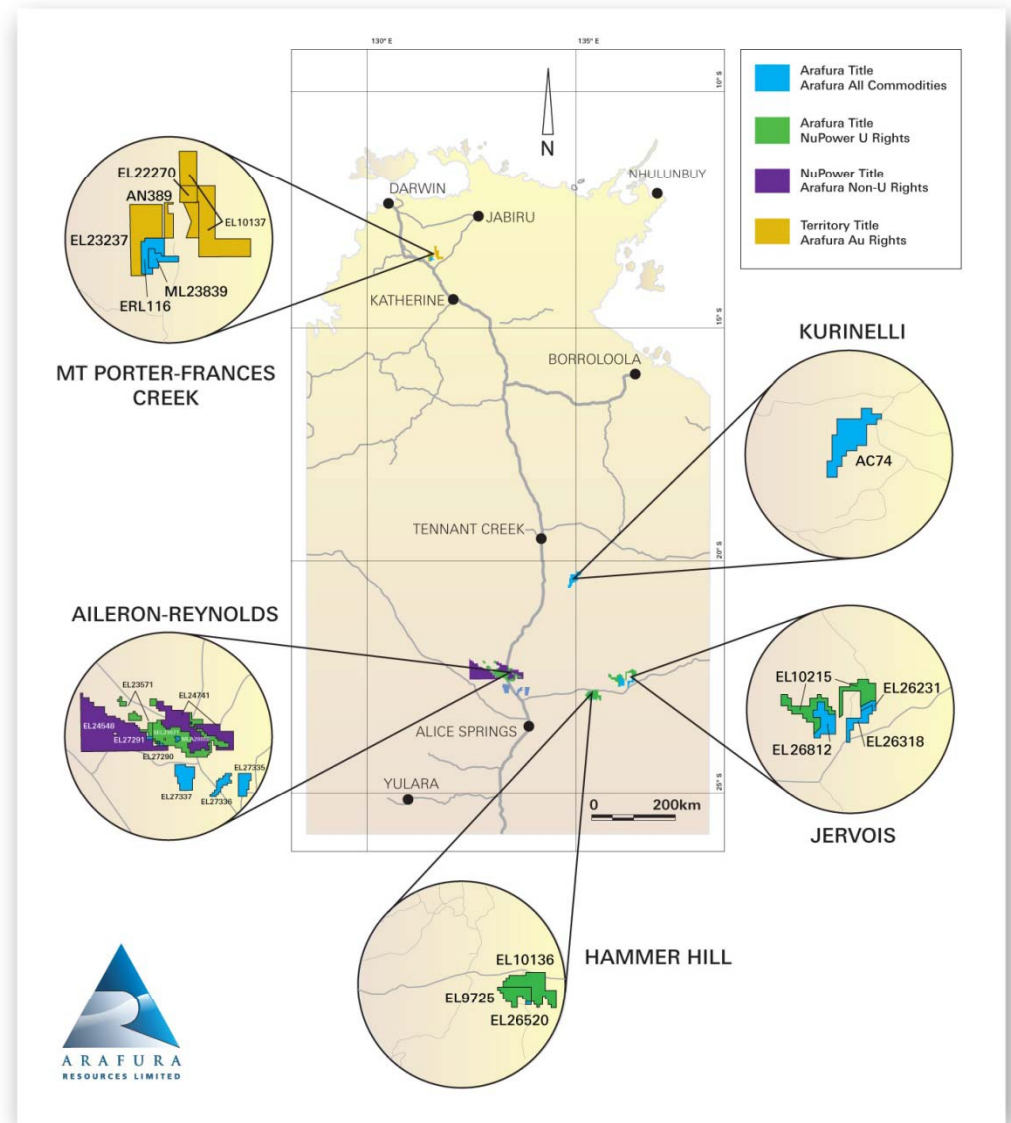
Proven skills and experience taking projects from greenfields exploration to production (see backup slides for further detail):

- Good blend of experience and skills
- Start-up Directors / seed investors
- New Directors with relevant experience added
- Good blend of age distribution between Board and Management
- Managerial specific expertise in:
 - Northern Territory
 - Fundraising
 - Political/Regulatory
 - Technical & Operations
 - Sales & Marketing
 - Community & Environment
- Board and Management leveraged to Arafura's success

Business Plan





To create shareholder value by:

- focusing on the Nolans Rare Earths-Phosphate-Uranium Project
- identifying other rare earth projects
- JV or explore current projects in gold, base metals and iron-vanadium (ongoing JV discussions)



Rare earths applications

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ENERGY PRODUCTION	ENERGY REDUCTION	ENERGY EFFICIENCY	LIFESTYLE
			
Petroleum Refining La	UV Filters in Glass Ce	New Generation Vehicles Nd Sm	Colour Screen LCDs/PDPs Eu Tb Y
High-Powered Electric Motors Nd Dy Tb	Reducing Fuel Consumption Nd	Rechargeable Batteries La	Components to Hardware Nd
New Generation Vehicles La	Lighter Vehicles - Improved performance Dy	Energy-Efficient Lighting Pr Eu	Medical Services Nd Gd
			Medical Services Ce

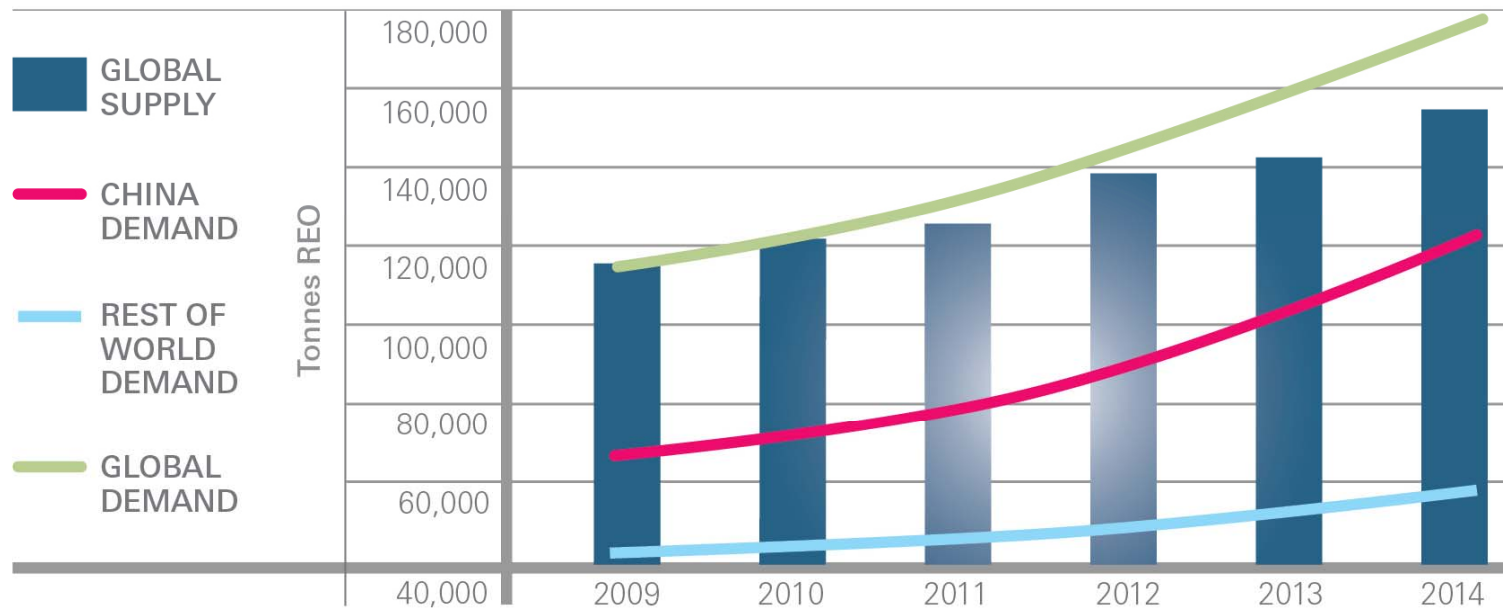
La (Lanthanum) **Nd** (Neodymium) **Dy** (Dysprosium) **Tb** (Terbium)
Ce (Cerium) **Sm** (Samarium) **Pr** (Praseodymium) **Eu** (Europium)
Y (Yttrium) **Gd** (Gadolinium)

Rare earths - global supply restricted

- China currently supplies 95% of rare earths
- China restricting supply through industry consolidation, closing old and environmentally unfriendly operations, export quotas and tariffs.
- Each RE deposit is geologically unique and requires its own metallurgy to be developed. (i.e. long lead time to production and return on investment)
- New significant resources with proven technology are extremely limited.
- Users worldwide are seeking to secure future supplies. industry commentators predict very tight markets
- Arafura is well positioned to meet global growing demand and importantly, can supply users located anywhere in the world.

Rare earths: demand growth, constrained supply

RARE EARTHS: SUPPLY & DEMAND TO 2014²



1,2: BCC Research, June 2009 Market Research Report. Rare Earths: Worldwide Markets, Applications, Technologies

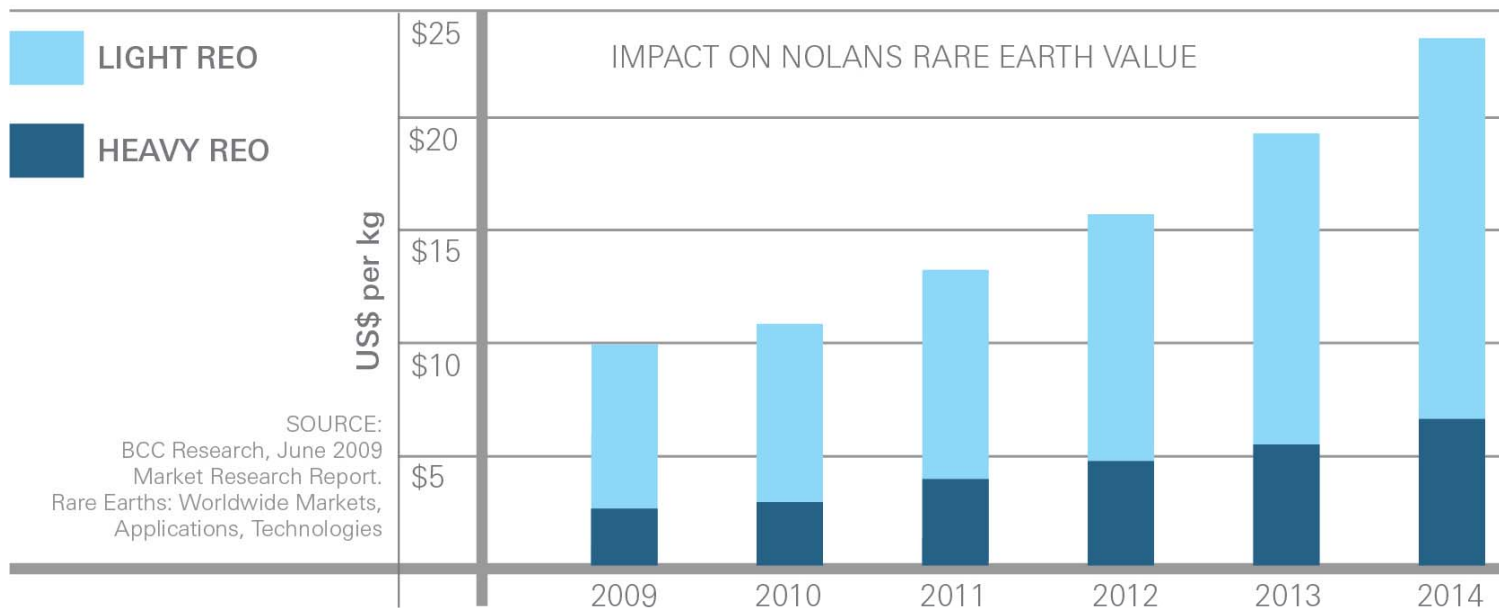
The Nolans resource is well positioned to become a substantial supply source to the world market far into the future



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Rare earths – prices forecast to rise significantly

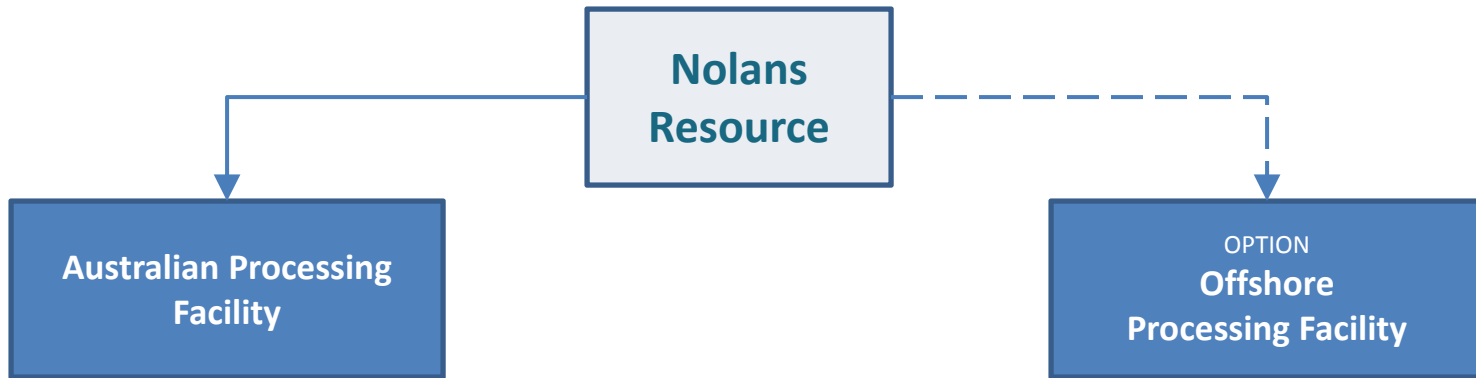
RARE EARTHS: PRICES WILL RISE WITH DEMAND



BCC Research forecasts 20-30% Compound Annual Growth Rate increase in rare earth prices over the next five years

Arafura's rare earths business structure

- Nolans current resource is sufficient to sustain production of 20,000 t of REO p.a for more than 20 years
- With further drilling, Arafura is confident Nolans has geological potential to expand to support increased production beyond 20,000 t p.a.



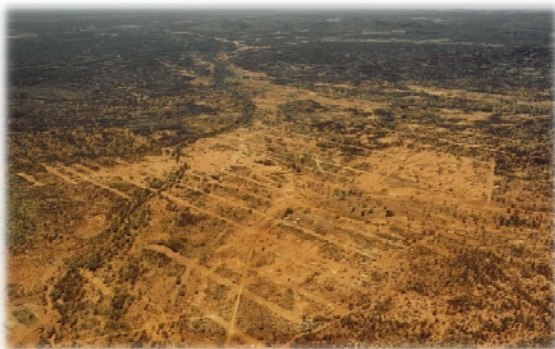
(if value creating for shareholders)

Annual production	
REO	20,000t
P ₂ O ₅	80,000t
CaCl ₂	400kt
U ₃ O ₈	150t

Nolans location



- Central Australian location
- No competing land use
- Not too remote from infrastructure
 - 5 km to gas line
 - 10 km to Stuart Highway
 - 60 km to rail line
 - 135 km north of Alice Springs
 - 1200 km north to Darwin
 - 1300 km south to Port Pirie

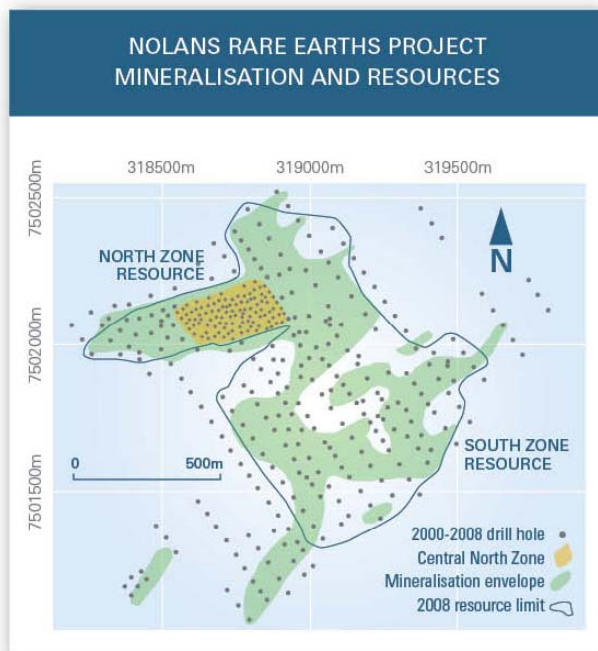


Nolans is a globally significant resource

Total resources for Nolans Project

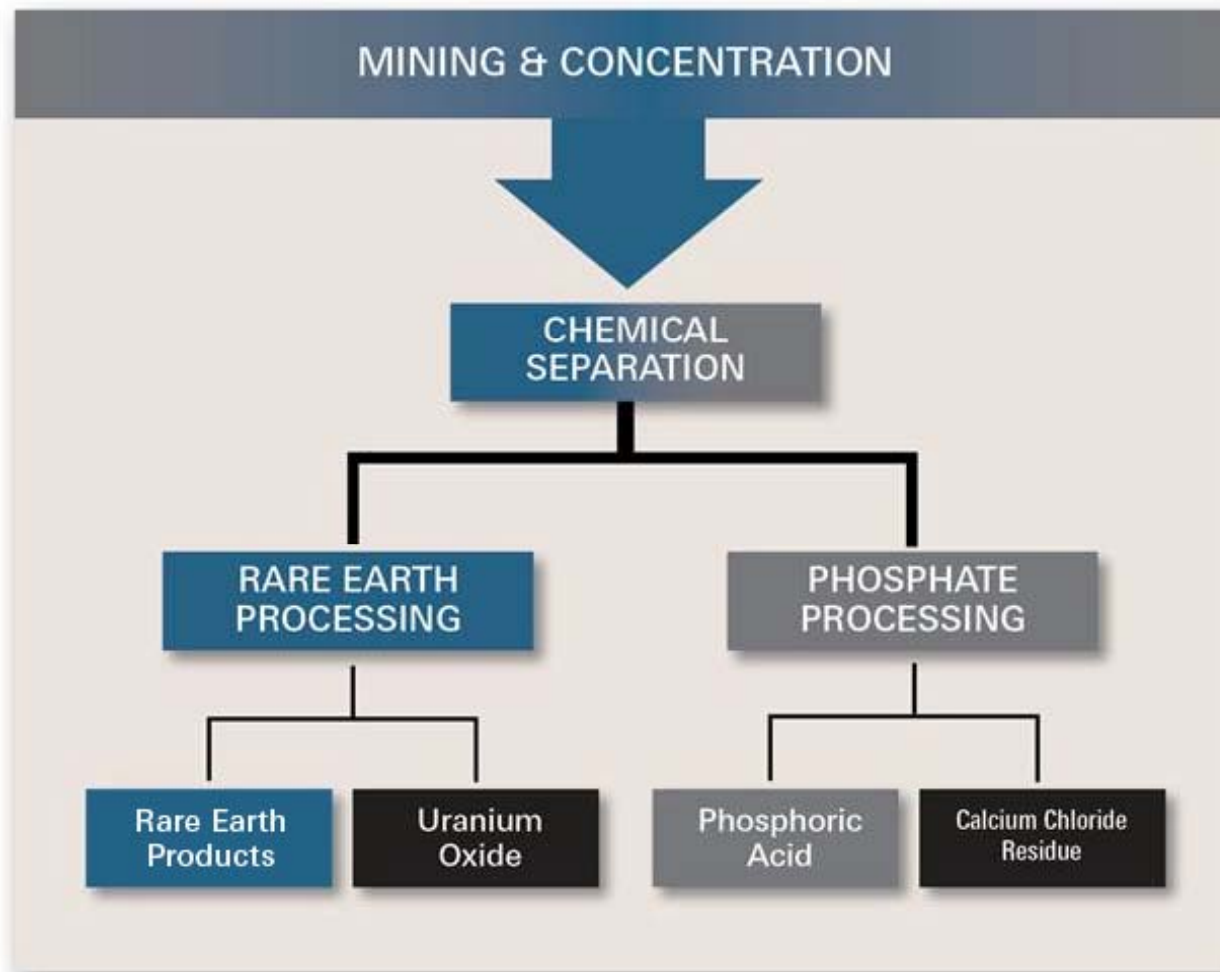
RESOURCES	TONNES ¹ (million)	RARE EARTHS REO %	PHOSPHATE P ₂ O ₅ %	URANIUM U ₃ O ₈ lb/t
Measured	5.1	3.2	13.5	0.57
Indicated	12.3	2.8	13.4	0.43
Inferred	12.8	2.6	12.2	0.40
TOTAL	30.3	2.8	12.9	0.44
CONTAINED METAL		848,000 t	3.9 Mt	13.3 Milb

1. Using 1% REE cut-off grade



- Exposed at surface
- Size extent unknown
- Only drilled to 130m below surface
- Estimated initial mine life 20+ years; nevertheless
- Further drilling planned to expand resource base and reduce resource risk

Nolans process



Processing technology makes a successful rare earths company

Arafura intellectual property developed to specifically exploit the Nolans deposit

Proven process from mine site to product through Demonstration Plant

Nolans demonstration plant



Heavy Media Separation



Froth Flotation

Utilising the expertise of ANSTO

Utilising the expertise of Bateman Litwin



Rare Earth Processing



Acid Bake



Phosphoric Acid SX



Rare Earth Products



Uranium



Phosphoric Acid & CaCl₂



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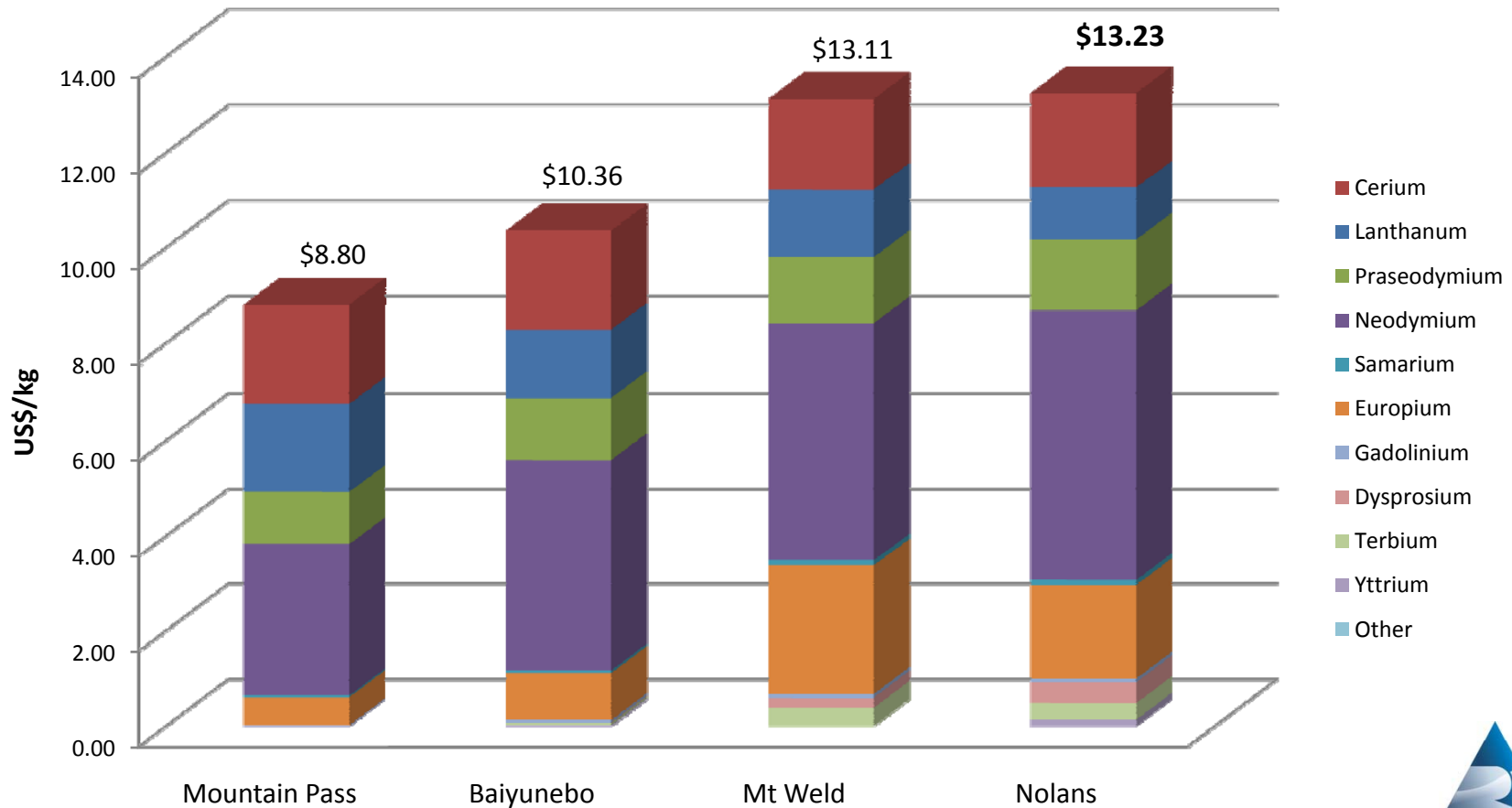
Nolans has a superior rare earth mix

Rare Earth Oxide	Applications	Nolans Australia	Mt Weld Australia	Mountain Pass USA	Baiyunebo China
Lanthanum	Petroleum cracking catalysts; Batteries (NiMH)	19.74%	25.6%	33.2%	27.1%
Cerium	Autocatalysts; Glass; Polishing	47.53%	45.74%	49.1%	49.86%
Praseodymium	Magnets; Glass	5.82%	5.42%	4.34%	5.15%
Neodymium	Magnets (NdFeB)	21.2%	18.62%	12.0%	15.4%
Samarium	Magnets (SmCo)	2.37%	2.44%	0.8%	1.15%
Europium	Phosphors; Nuclear control applications	0.4%	0.55%	0.12%	0.19%
Gadolinium	Intravenous contrast agents; Phosphors	1.0%	0.97%	0.17%	0.4%
Terbium	Phosphors	0.08%	0.09%		
Dysprosium	Magnets (NdFeB); Lasers	0.33%	0.16%		0.3%
Yttrium	Phosphors; Metal alloys	1.32%	0.37%	0.1%	0.2%
Other		0.21%	0.04%	0.16%	0.03%

Nolans rare earth mix: a competitive advantage

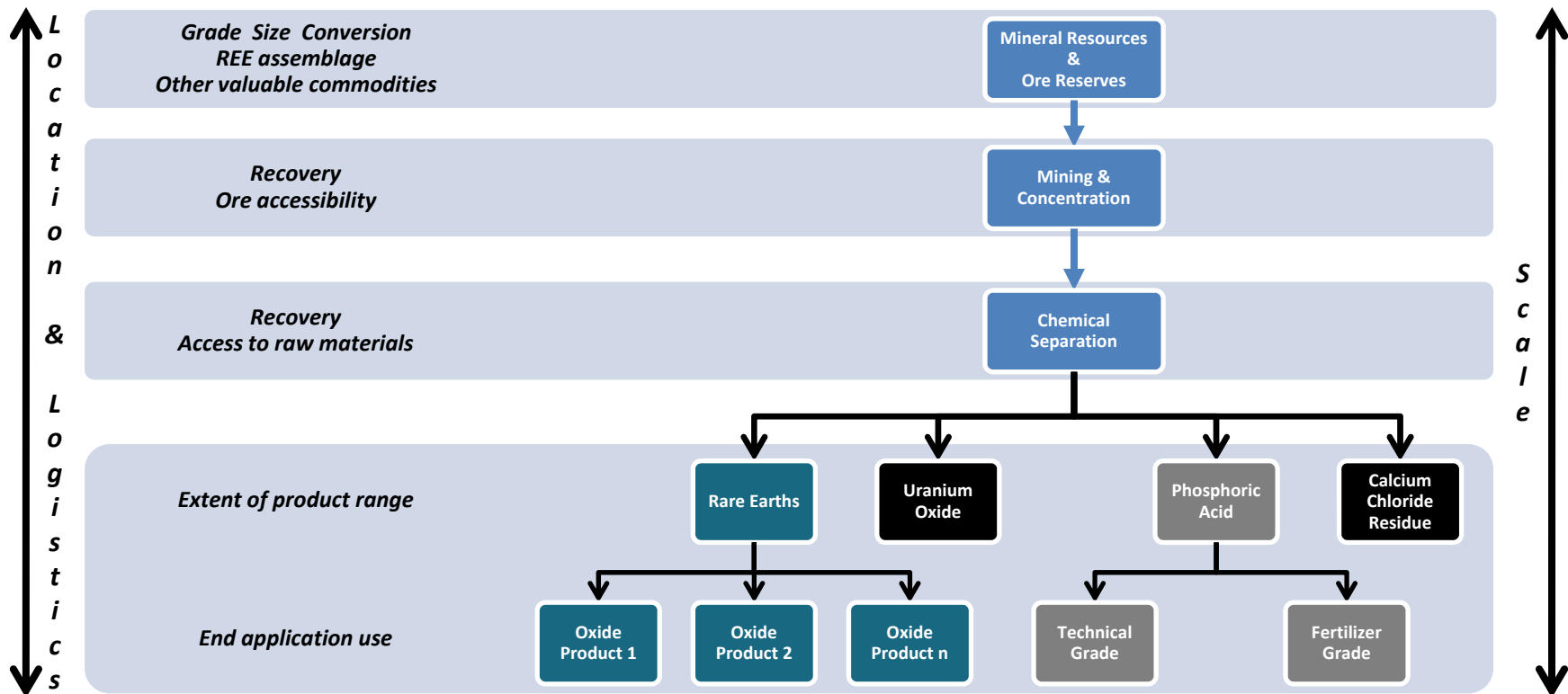
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In Situ REO value (February 2010)



Value creation: pit to customer across all products

Rare earths are much more complex than some other commodities.
There are many *value drivers* to consider.

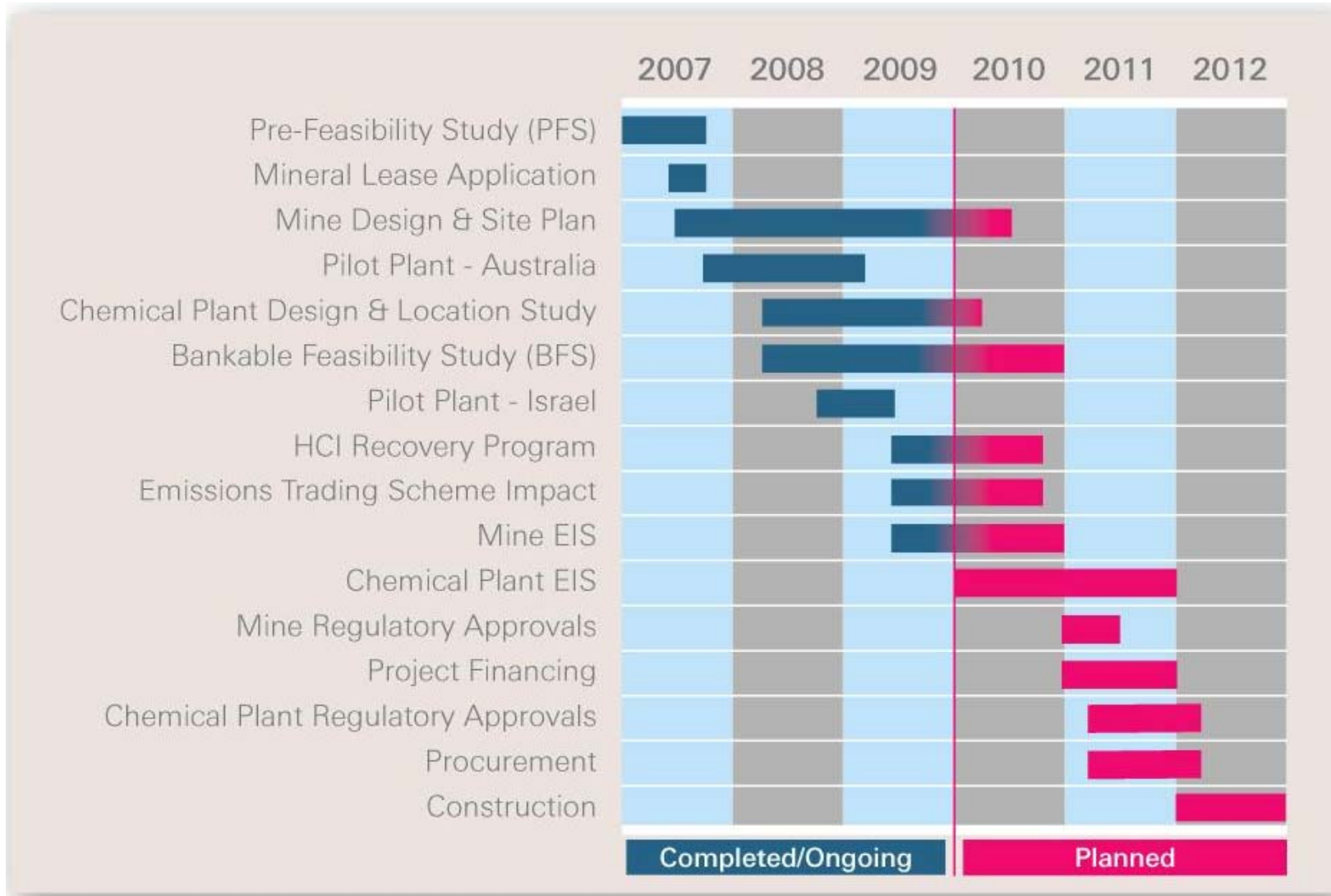


Nolans valuation as at November 2009

Project valuation (estimated costs)	US\$ million
Capital Cost	\$420m
Sales Revenue	
Rare Earths separated products @ US\$10,000 per tonne	\$200m
Phosphoric Acid @ US\$750 per tonne	\$60m
Calcium Chloride @ US\$100 per tonne	\$40m
Uranium @ US\$50 per pound	\$15m
Total Revenue	\$315m
Annual Operating Costs	\$150m
EBITDA	\$165m
Net Present Value @10% after tax and capital payback	\$1.1 billion
Capital Payback	6 years
Production output per annum of: 20,000 tonnes of REO (@ 86% recovery) 80,000 tonnes of P ₂ O ₅ (@ 85% recovery) 330,000 pounds of U ₃ O ₈ (@ 80% recovery) 400,000 tonnes of CaCl ₂ (as residue)	

Nolans development timeline – looking forward

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Thank You

Arafura Board



Hon Ian Laurance AM
Chairman

Ian Laurance is Chairman of the publicly listed property development company, Axiom Properties Limited (AXI). Ian represented the electorate of Gascoyne in the Western Australian Parliament for 14 years and at various times held the Ministerial portfolios of Housing, Tourism, lands, Environment and Regional Development. Ian chairs Australia's North West Tourism, the Ningaloo Research Centre Inc in WA and Anglicare WA Winter Appeal. In 2006, Ian was made a Member of the Order of Australia (AM).



Mick Muir
Non-Executive Director

Mick Muir is a Western Australian businessman with 30 years experience in the mining industry. Mick is an economics graduate and has worked in the securities industry and for the Western Australian Chamber of Mines.



Shasha Lu
Executive Director

Ms Lu is an Executive Director and CEO of Hong Kong East China Non-Ferrous Mineral Resources Co. Ltd. (HKECE), a wholly owned subsidiary of Eastern China Geological & Mining Bureau for Non-Ferrous Metals (ECE). Ms Lu graduated with a Masters Degree from Nanjing University and completed her doctorate at Tianjin University. She has held posts within the World Health Organisation in Geneva and the Karolinska Institute in Stockholm. She is currently studying an EMBA at Nanjing University.

Arafura Board



Alex Losada-Calderon
Non-Executive Director

Dr Losada-Calderon is an independent consultant to East China Mineral Exploration & Development Bureau. Formally he was Vice-President of Exploration for Southwestern Resources Corp located in Canada. He has a PhD in Sciences from Monash University, holds Honours in Geological Science from the Universidad Nacional del Sur, Argentina and has over 20 years' experience as a geologist and project manager. He is a Member of the Australasian Institute of Mining and Metallurgy.



Ian Kowalick
Non-Executive Director

Ian Kowalick is a director and consultant on business strategy and has worked in technical and project consulting, economic and business analysis for resource companies, banking and investment. Ian was previously the CEO of the South Australian Premiers Department. Ian is Chair of the Audit & Risk sub-committee for Arafura.



Terry Jackson AM
Non-Executive Director

Terry Jackson is a Western Australian industrialist and entrepreneur with a private group of companies that has interests in innovative manufacturing, intellectual property development and vineyards.

Arafura Management



Dr. Steve Ward

Managing Director & CEO
Age 54

Holds PhD in Physical Chemistry and over 30 years experience in the chemical, mining and minerals processing industries.

Formally engaged by Cristal, a Saudi Arabian based titanium pigment producer as Snr Vice President Strategy and Development and was Chairman and CEO of Bemax Resources



Gavin Lockyer

Company Sec & CFO
Age 42

Has over 15 years experience in the banking and mining industries.

Previously with Newmont, Newcrest, Tethyan Copper, Bankwest and ANZ, and Bankers Trust and Deutsche Bank London.



Steven Mackowski

GM - Project Development
Age 57

Has 30 years technical and operational experience in uranium, industrial minerals, nickel, kaolin and iron ore.

He also has experience in utility industries including gas and electric power generation, most recently with Sydney Gas.



Richard Brescianini

GM - Exploration
Age 47

Has over 20 years experience in the minerals industry.

He has worked with BHP Minerals on base and precious metals exploration programs throughout Australasia and North America.

Recently he held the position of Director with the Northern Territory Geological Survey.



Brian Fowler

GM - Sustainability
Age 57

Has over 30 years environmental and mining experience working in the gold and base metals sectors in mining, mineral processing and exploration.

Most recently, Brian worked for Newmont Australia and prior to that for Normandy, Bendigo Gold, Metana Minerals, Billiton and Peko Wallsend.

Corporate Information

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For a copy of the 2009 Financial report
or further information please visit
www.arafuraresources.com.au



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