ARAFURA
RESOURCES LIMITED

Nolans Project

A Rare Earths supply opportunity for users worldwide from 2013

Rare Earths, Europe and Australia: Trade, Security and Sustainability Conference
The Hague, Netherlands
1 December 2010

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). The information in this presentation that relates to mineral resources or ore reserves is also based on metallurgical results and interpretation complied by Mr Steven Mackowski BAppSc. Both are full-time employees of Arafura Resources.

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 Mackowski is a Fellow of the Australasian Institute of Mining and Metallurgy 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 Mackowski consents to the inclusion in this presentation of the matters based on his metallurgical results and interpretation in the form and context in which it appears.

ARAFURA
RESOURCES LIMITED

Arafura – Our Company

"A speciality chemical company" which will make products to pharmaceutical quality standards

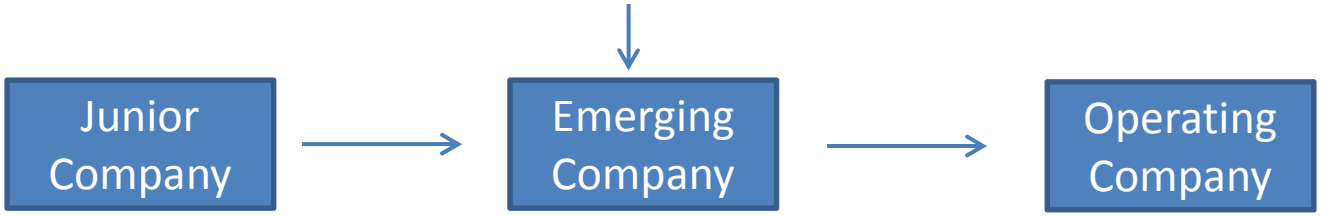
Confirmed Strategy

Our vision is to be the recognised leading supplier of Rare Earths to the world

Mission

To create and maximise shareholder value in a sustainable manner

An Emerging Company on a fast track to achieve Operating Company status



1997 – 2010

- Exploration
- Confirmed resource
- Technology Development
- PFS

2010 – 2012

- Confirmed Business Model
- BFS
- Project Financing
- Construction of production facilities

2013 +

- Sales
- Production
- Profits & Dividends
- Expansion
- Increasing Shareholder Value

APPROX 15 YEARS FOR A RARE EARTHS PROJECT

ARAFURA RESOURCES LIMITED

Arafura – Corporate Summary

Successful fundraising recently completed ….

As at 30 November 2010

Capital

335M shares
18.1M Board/Employee options

Market capitalisation

@ A$1.20 = ~A$400 million

Cash (@ 30 November 2010)

A$62 million

Top shareholders

JP Morgan Nominees[1]	26.9%
ECE[2]	19.2%
Institutions[3]	13.0%
Board & Management	2.5%

*As at 9 December 2010

Capital

366M shares
18.1M Board/Employee options

Market capitalisation

@ A$1.20 = ~A$440 million

Cash forecast

A$95 million (estimate)

Top shareholders

JP Morgan Nominees	24.6%
ECE	17.6%
Institutions[4]	20.5%
Board & Management	2.3%

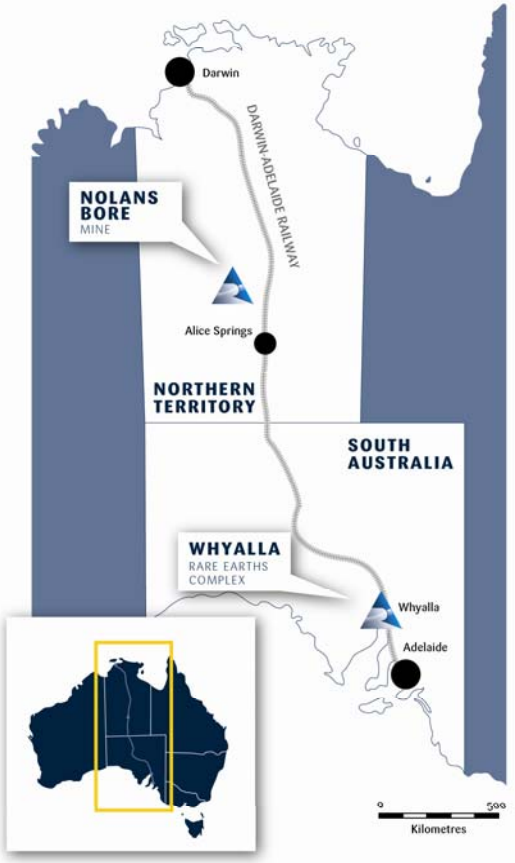
1. Substantial German-based shareholding amongst many shareholders (formerly ANZ Nominees)
2. East China Mineral Exploration & Development Bureau
3. Tranche 1 of the $90m placement to institutions
4. Includes placement to institutions from tranche 2

* Subject to shareholder approval at EGM

ARAFURA RESOURCES LIMITED

Business Model

Confirmed Business Model ....



Adding Value in Australia

- Mining & ore beneficiation at Nolans Bore in the Northern Territory
- Mineral Concentrate transported by rail to Whyalla in South Australia
- 20,000 t p.a. Rare Earth Oxides (REO) produced in Whyalla

Capturing the Australian Value in the Supply Chain

- Production of higher value rare earth oxides
- Rare Earth oxides sales to users worldwide
- Excellent product mix to supply high growth markets

Ore → Mineral Concentrate → Rare Earth Intermediates (Carbonate) → **Rare Earth Oxides** → Metals/Alloys → Components → OEMs

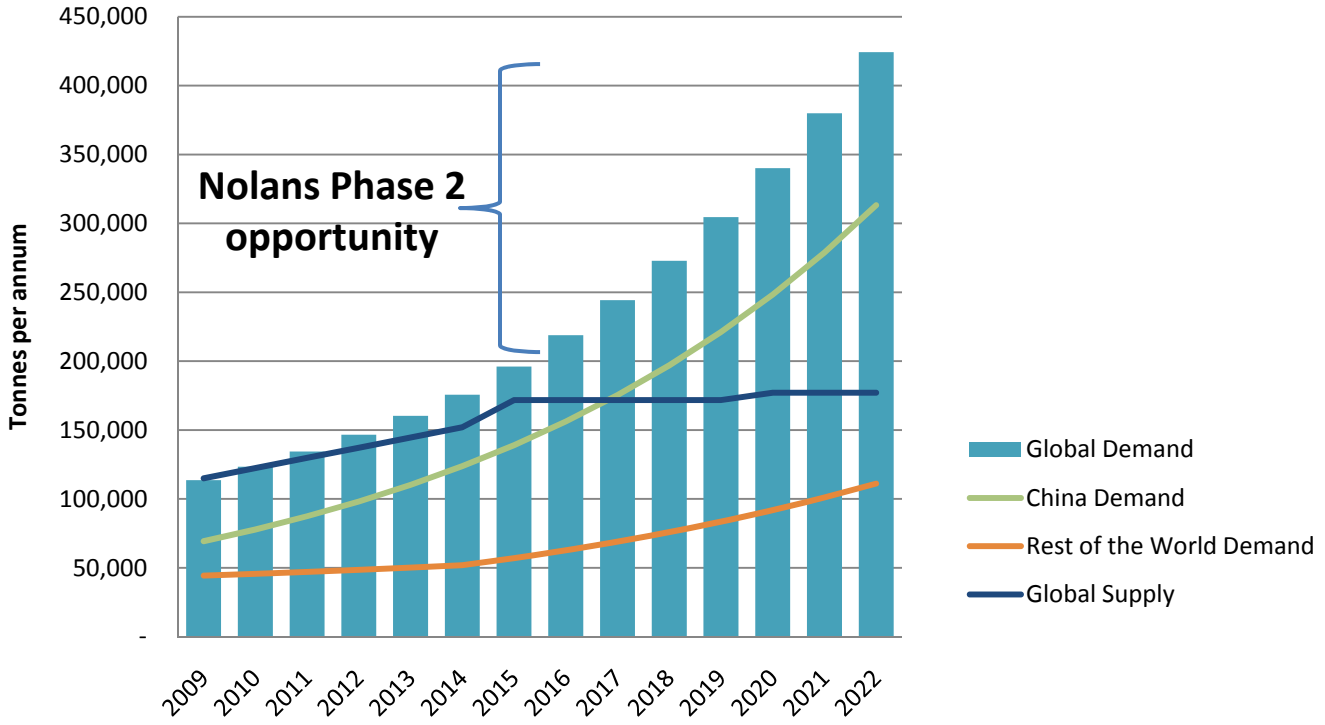
ARAFURA RESOURCES LIMITED

Rare Earths Market

Rare Earths – Supply and Demand

The Industry challenge is on the Supply side to keep up with Demand ….

<u>Overall global tightness</u> has been exacerbated in markets outside of China by Chinese export quota reductions



REO Global & China Demand/Supply (BCC Forecast 2009-2014, Internal Supply Forecast 2014-2022)

Rare Earths – Market Dynamics

The Industry challenge is on the Supply side to keep up with Demand ....

Demand outlook is very strong

- End use markets are forecast to grow at 2 to 3 times GDP

New potential suppliers are very limited in the short to medium term

- Rare Earths present in many places *but* extremely few deposits are economically exploitable
- Many recent new exploration announcements *but* there are high technology and capital barriers to successful production and long project lead times
- *Overall global tightness* has been exacerbated outside of China by Chinese export quota reductions
- Australian Government announces intention for Australia to supply Japan

Prices will follow normal supply/demand dynamics

- Price increases in 2010 are comparable to what has been seen in recent times for other products such as iron ore, coal etc.

ARAFURA RESOURCES LIMITED

Nolans Project

Nolans Bore – a globally significant resource

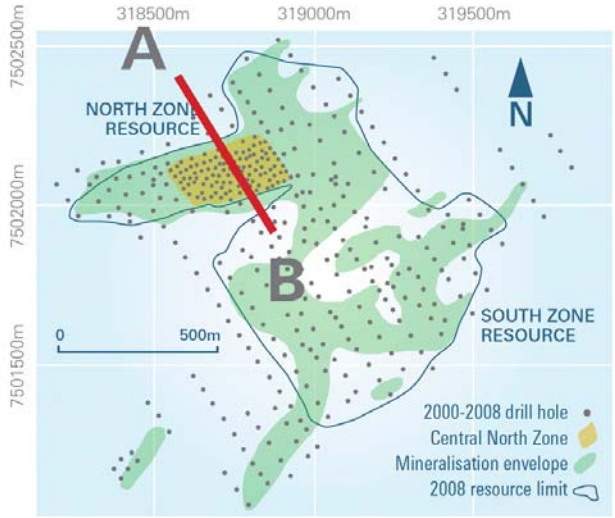
Total resources for Nolans Project

RESOURCES	TONNES[1] (million)	RARE EARTHS REO %	PHOSPHATE P_2O_5 %	URANIUM U_3O_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 Mlb

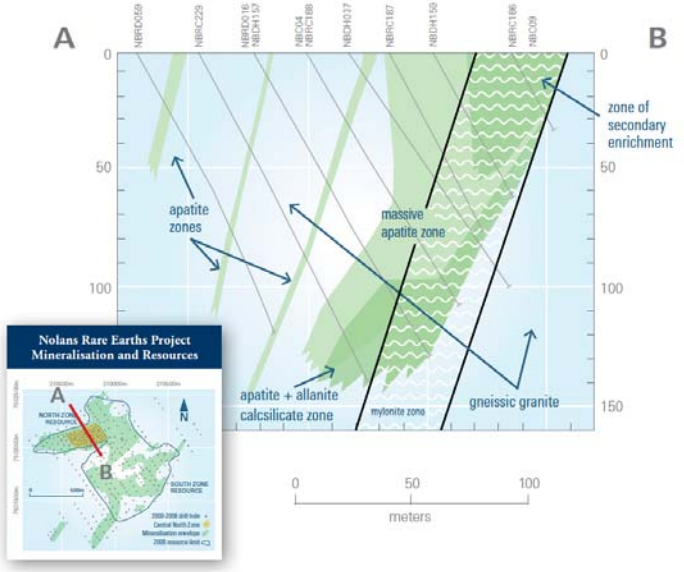
1. Using 1% REE cut-off grade

- Exposed at surface
- Most drilling to approx 130 m below surface
- Further drilling planned to identify potential to support expanded production

Nolans Rare Earths Project Mineralisation and Resources



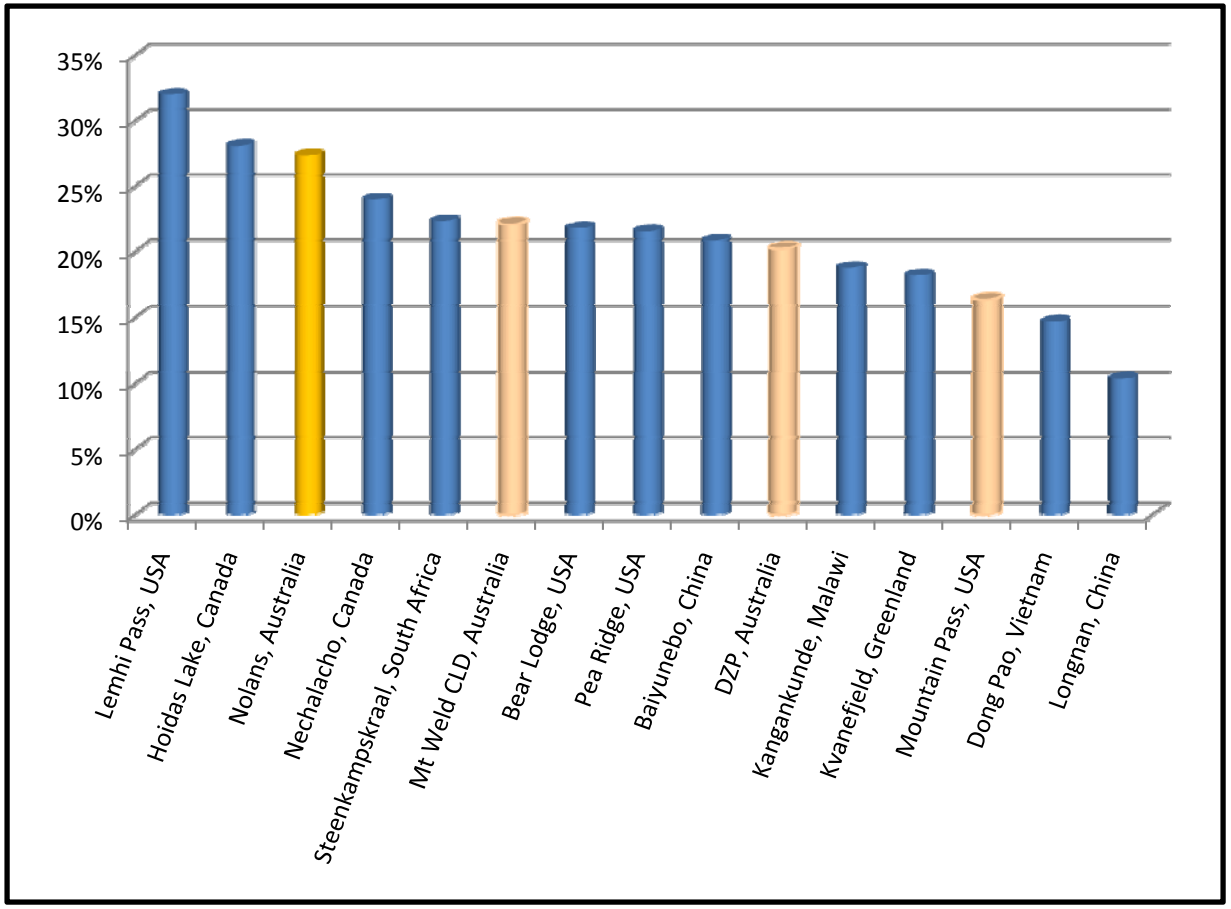
Nolans Bore Cross Section



ARAFURA RESOURCES LIMITED

Nolans Bore – a desirable Rare Earths mix

"Magnet Feed" Nd + Pr + Dy as a proportion of total Rare Earths mix



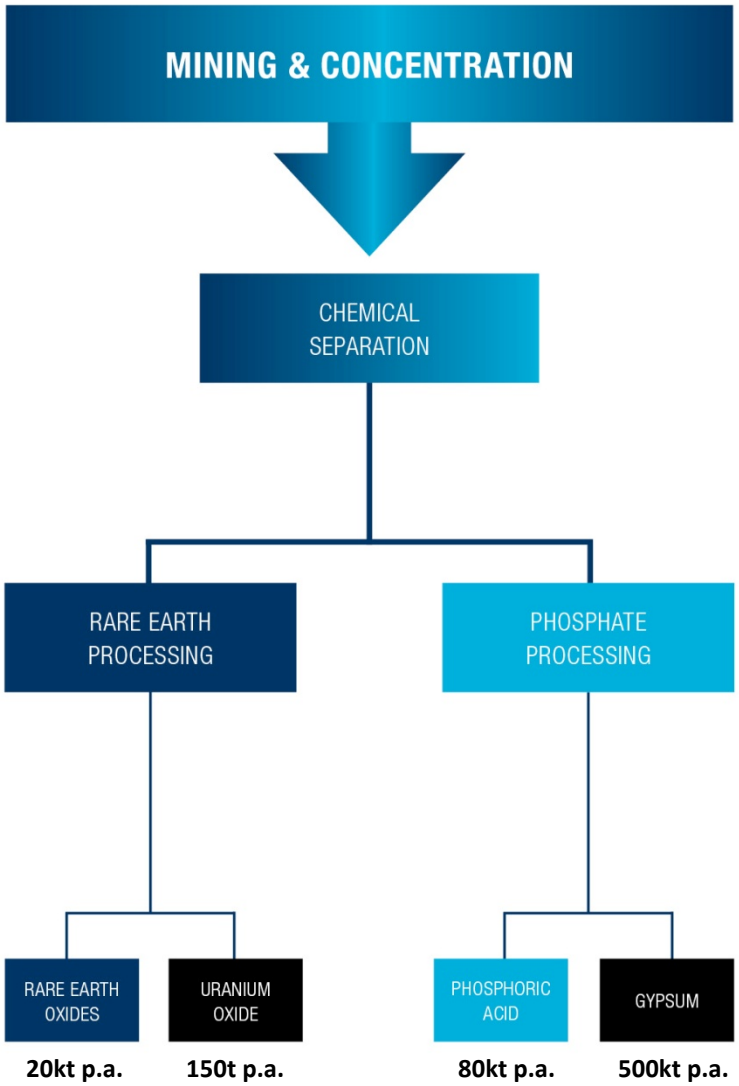
Nolans has a higher proportion of desirable "magnet feed" rare earths Nd, Pr & Dy compared with other deposits.

The permanent magnet market is forecast to grow at 8% per annum.

Nolans is one of only four rare earths projects that could be operating by 2015.

ARAFURA RESOURCES LIMITED

Nolans Project – the process



Nolans Bore Mine

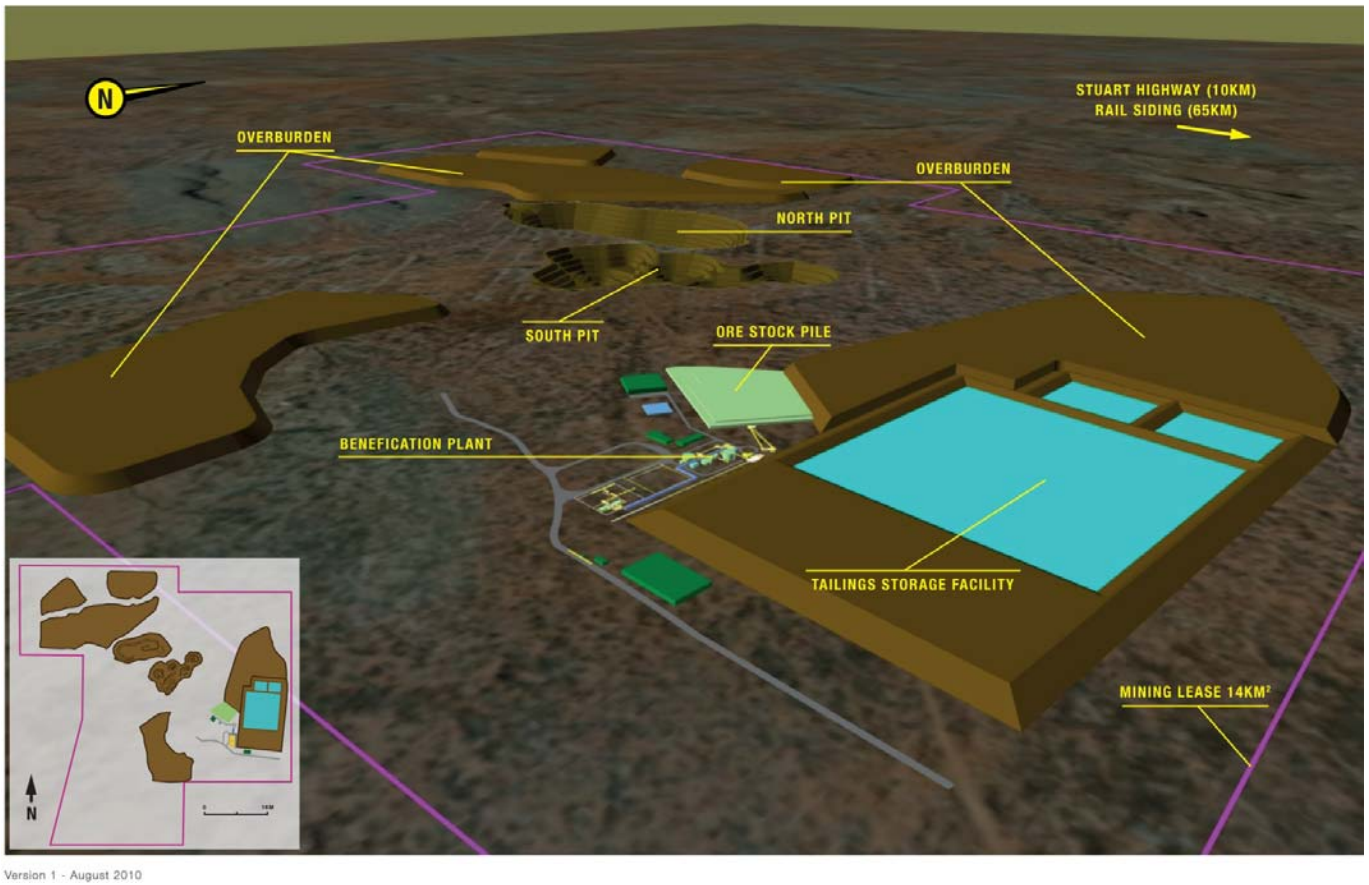
- Mining Operation
- Beneficiation Plant

Whyalla Rare Earths Complex

- Rare Earth Oxide Plant
- Phosphoric Acid Plant
- Sulphuric Acid Plant
- Chloride recycle/Gypsum Plant
- Chlor-alkali Plant
- Reverse osmosis Plant
- Rail Siding

ARAFURA RESOURCES LIMITED

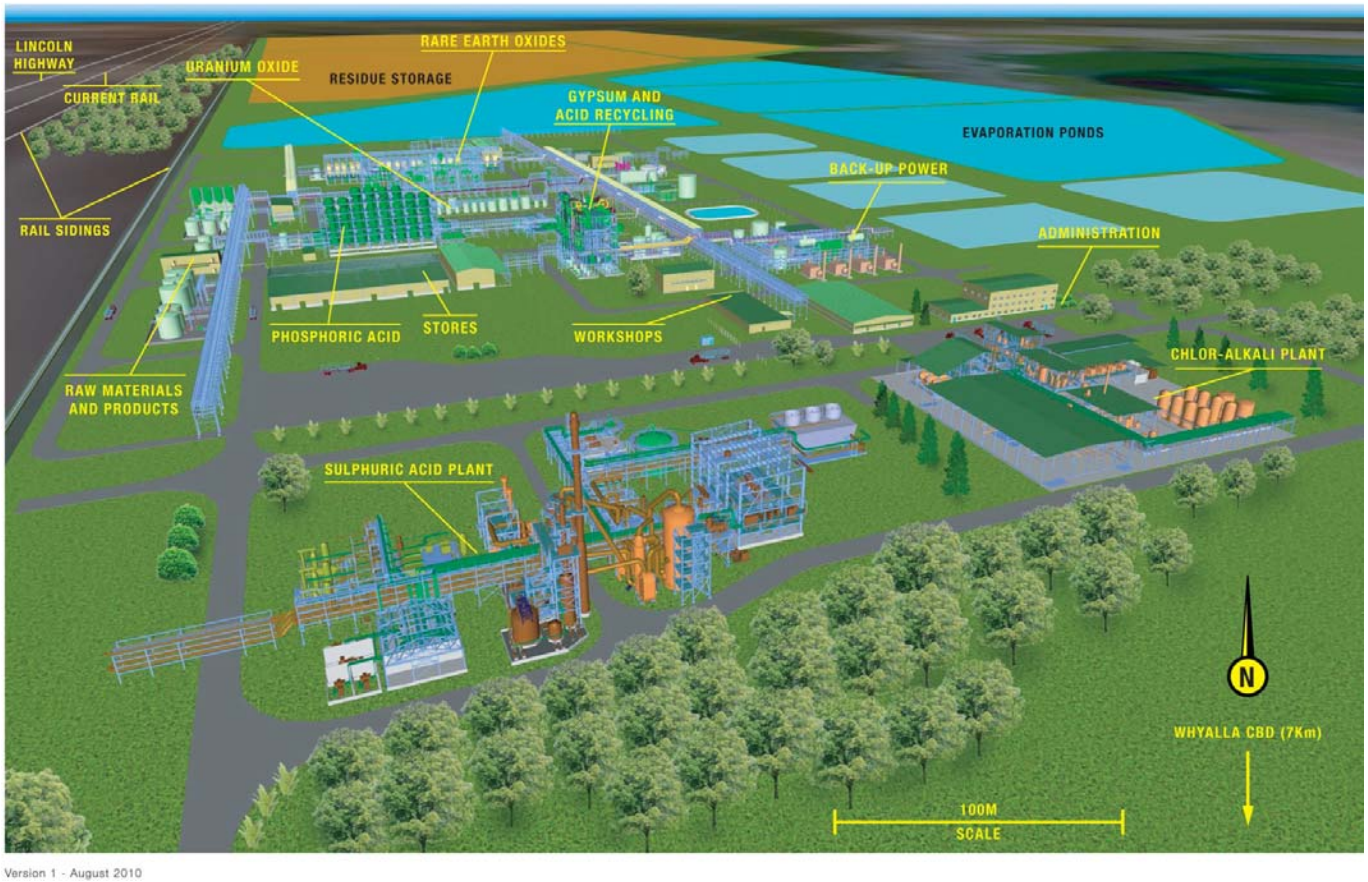
Nolans Bore Mine



- Beneficiation circuit comprises crushing, screening, gravity separation, flotation;
- 500,000 - 700,000 t p.a. of mineral concentrate.

The Nolans Bore Mine and its supporting infrastructure will act as a catalyst for business opportunities throughout Central Australia.

Whyalla Rare Earths Complex



- Comprises facilities for production of feed chemicals, and final products;
- Arafura will consider partners in, or third party owners of, major feed chemical plants.

The Whyalla Rare Earths Complex will be a very substantial chemical processing operation by Australian standards.

ARAFURA RESOURCES LIMITED

Our Progress in 2009 and 2010

Substantial progress on the journey to Operating Company status ….

Confirmed Business Model

- Rare Earth Oxide separation technology success
- Whyalla selected as preferred site for Rare Earths Complex

Work Programs stepped up in 2010 to achieve Project Financing by the end of 2011

- Technology demonstration program in progress
- Project Financials updated and confirm significant potential value creation
- Successful fund raisings
- EIS program for Nolans Bore and Whyalla in progress
- All Bankable Feasibility Study work streams underway
- Discussions with potential customers continue
- Assessment of Project Financing options has begun

Organisation and Capability

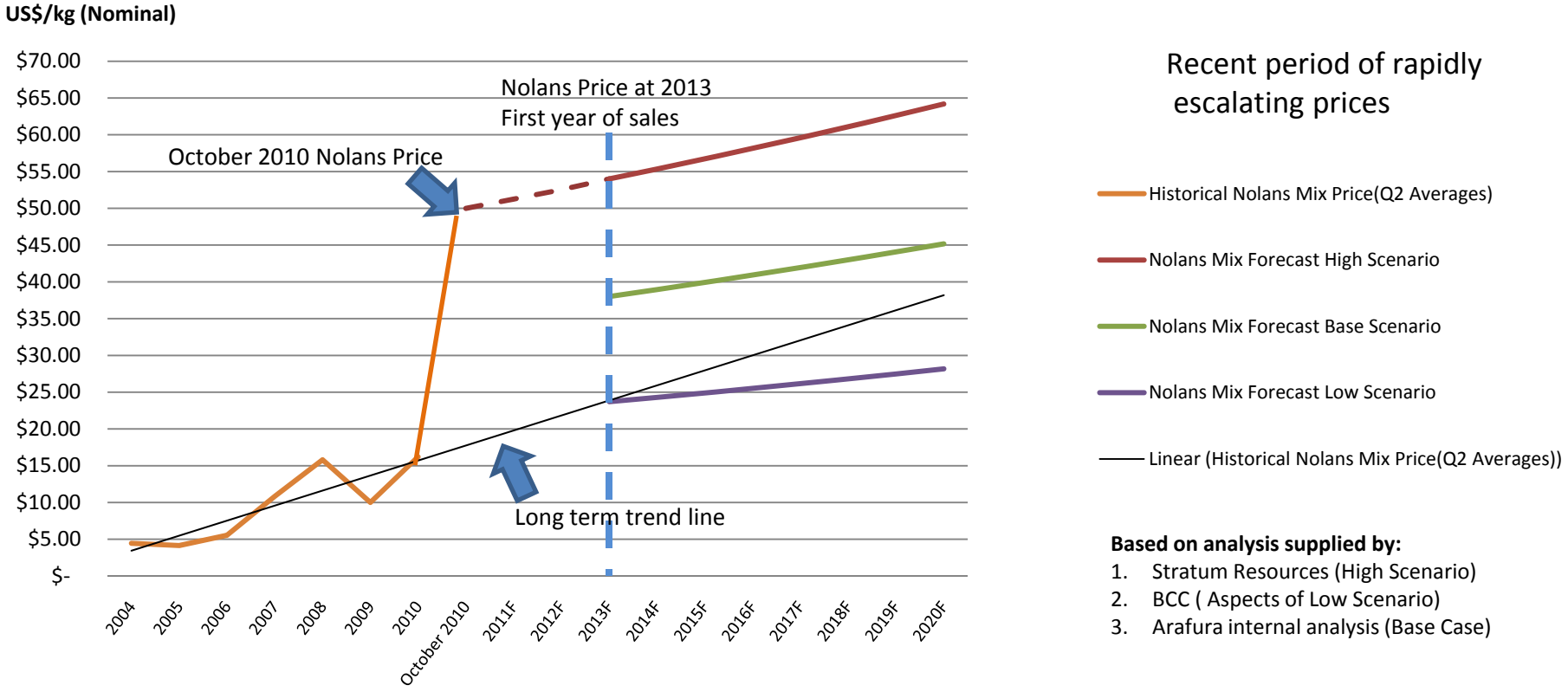
- Key appointments made to complement existing leadership team
- Business capability rapidly increasing
- Risk management a key activity

ARAFURA RESOURCES LIMITED

Financial Update
(as at October 2010 – prior to final BFS)

Rare Earths Pricing: history and future prospects

Historical and Forecast Prices – the Nolans Mix



Based on analysis supplied by:

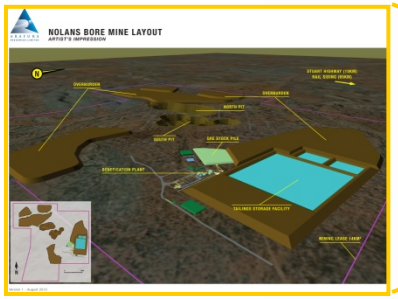
1. Stratum Resources (High Scenario)
2. BCC (Aspects of Low Scenario)
3. Arafura internal analysis (Base Case)

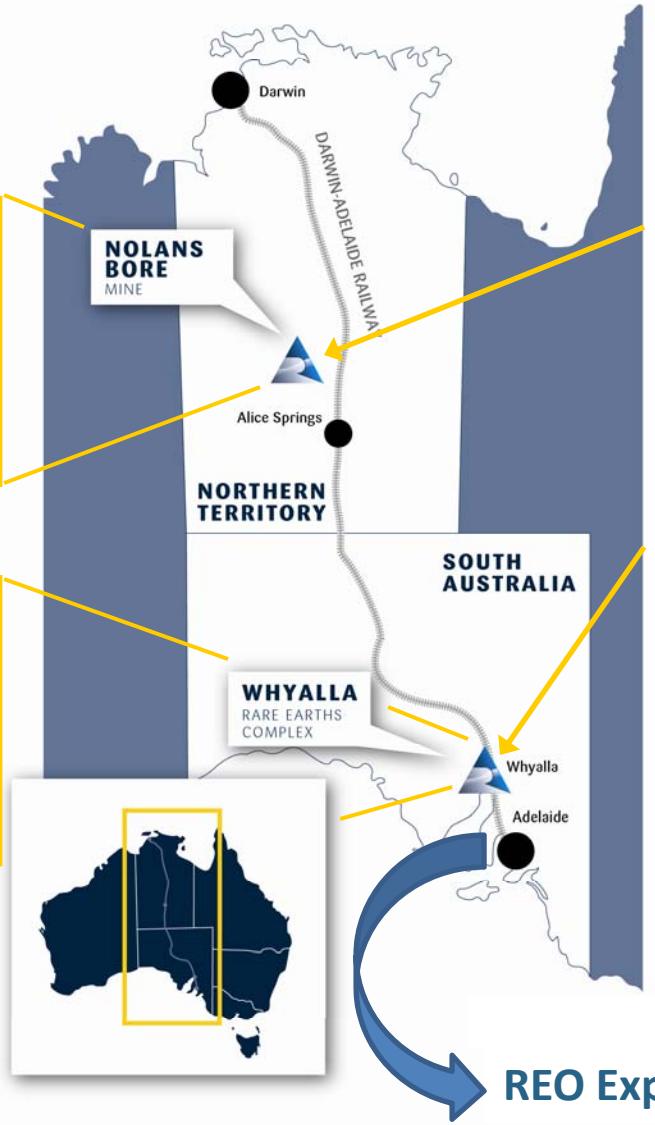
Notes

1. Historical Nolans price based on Q2 average historical China rare earth oxide FOB export prices supplied by Metal Pages – pre-export quota tightening.
2. 3 scenarios based on Nolans price expressed in nominal terms, each indexed at an annual growth rate of 2.5% from 2013.
3. High scenario starting value of US$54/kg. In 2013
4. Base scenario starting value of US$38/kg in 2013.
5. Low scenario starting value of US$22/kg. In 2013
6. 2004-2010 trend line indicates consistency with low scenario starting point.

ARAFURA RESOURCES LIMITED

October 2010 CAPEX & OPEX

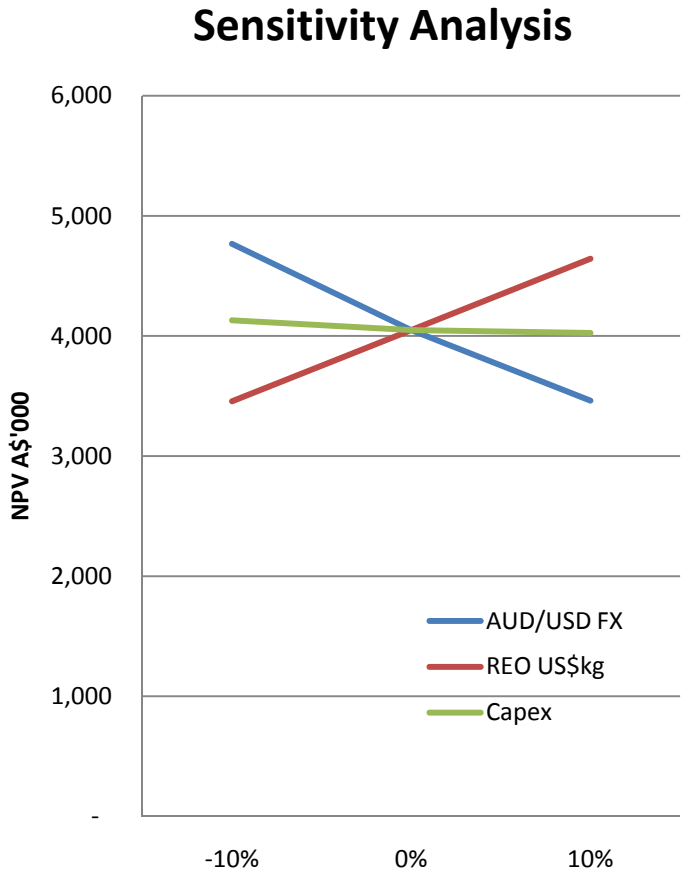




Stage	Location	CAPEX A$M	OPEX A$M p.a.
Mining	Nolans Bore	20	29
Beneficiation	Nolans Bore	80	18
Transport			38
Rare Earth Oxides (REO) and co-products	Whyalla	690	291
Base Project Costs		**790**	
Contingency 20%		160	
NOLANS MODEL PROJECT TOTAL	**Nolans Bore & Whyalla**	**950**	**376**

Project Valuation and Sensitivity

October 2010 Project Economics			
Capital Costs @ 0.95	A$950 million		
Sales Revenue	US$		
	Low	Mid	High
Rare earth oxides US$/kg	$22.00	$38.00	$54.00
Rare earth oxides 20,000t US$	$440	$760	$1,080
Phosphoric Acid 80,000t US$1,250/t	$100		
Gypsum 500,000t US$25/t	$12		
Uranium 150t US$40/lb	$13		
Total Revenue p.a. US$M	$565	$885	$1,205
	A$M		
Total Revenue p.a. @ 0.95	$595	$932	$1,268
Annual Operating Expenses @ 0.95	($376)		
EBITDA p.a.	$219	$556	$892
NPV @ 10% after tax and capital payback	$1,420	$4,050	$6,549
Capital Payback - years	5	4	3

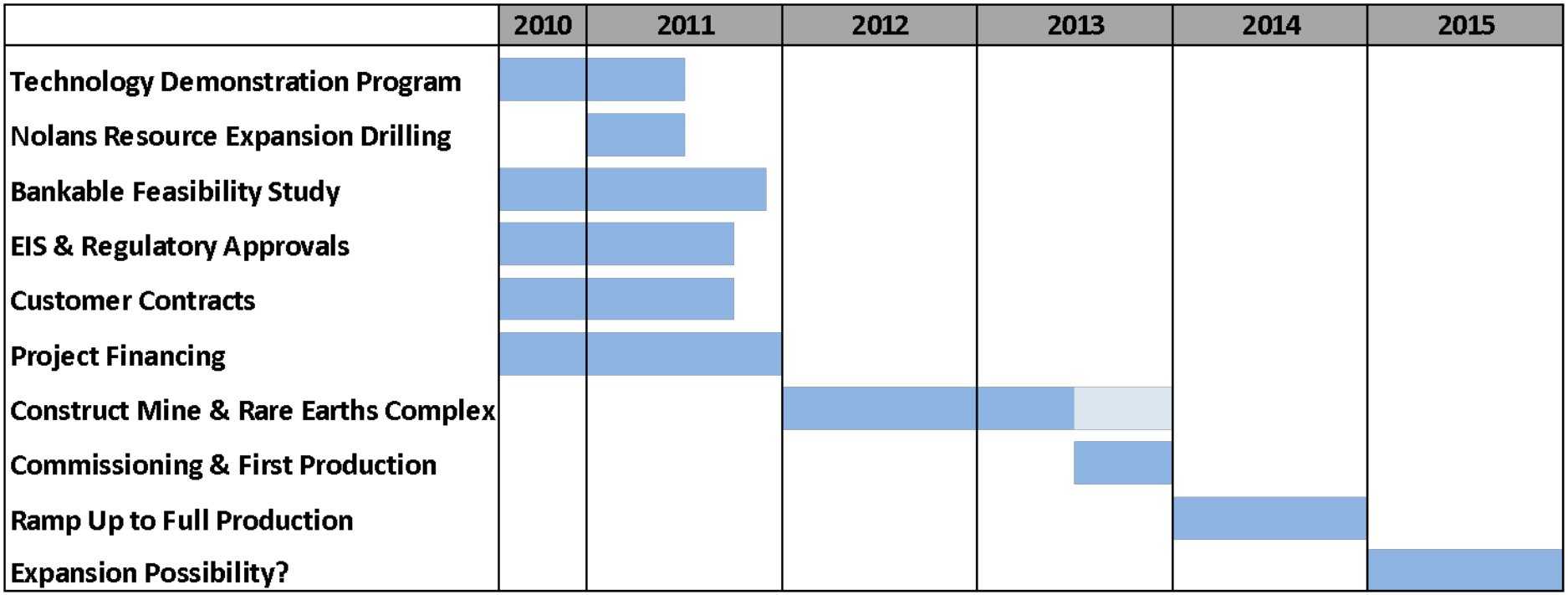


USD/ AUD Forward Curve				
2011	2012	2013	2014	2015
0.96	0.93	0.845	0.82	0.82

Summary

Future Work Program

A fast track program to Rare Earth Oxide production in 2013 ….



ARAFURA RESOURCES LIMITED

Why Arafura?

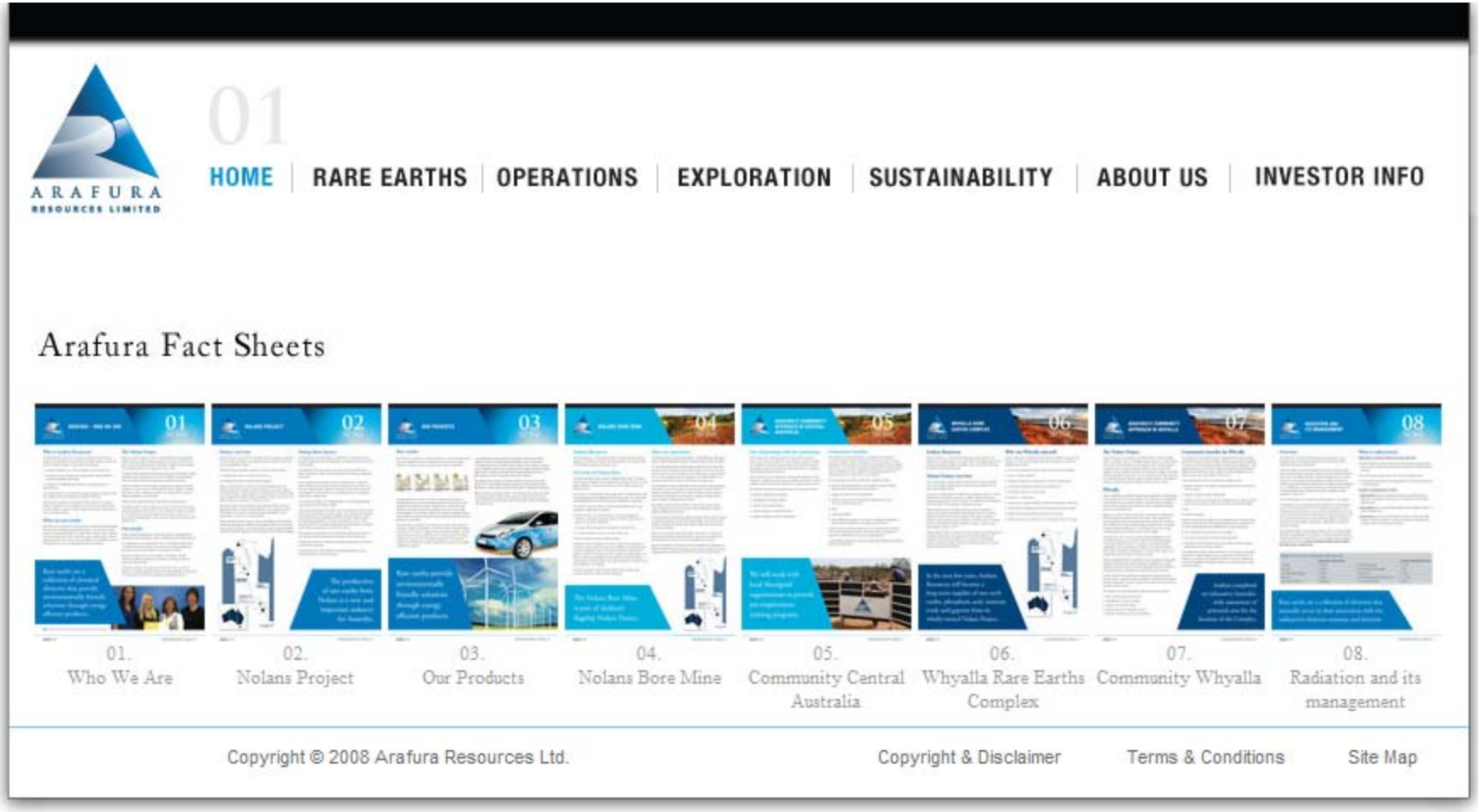
- Confirmed Strategy and Business Model ☑
- World class long life and economically exploitable resources ☑
- High value creating Nolans Project ☑
- Highly efficient production process developed with experts and de-risked through demonstration ☑
- Uncommitted high value Rare Earth products for customers worldwide ☑
- Near term production opportunity – one of very few available ☑
- Upside potential with Nolans Bore expansion ☑
- A highly committed team with “can-do” culture ☑

ARAFURA RESOURCES LIMITED

ARAFURA
RESOURCES LIMITED

Thank You

For more information……



Nolans Project Fact Sheets at www.arafuraresources.com.au

ARAFURA
RESOURCES LIMITED