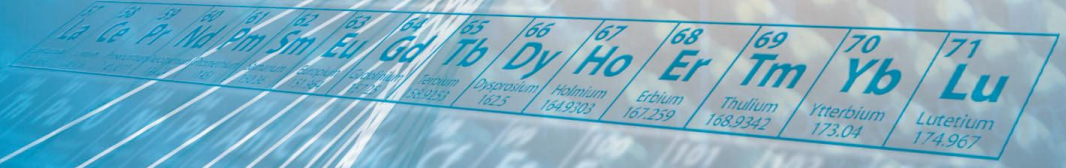
Arafura Resources – On Track to Supply Rare Earths To Users Worldwide in 2013



Dr. Steve Ward – MD & CEO, Arafura Resources

TREM 11, Pentagon City, 23 March 2011

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- 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.

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Agenda

- Introduce Arafura
- Developments since TREM 2010
  - Global strategic considerations for rare earths
  - Rare earths supply/demand update
- Arafura's Nolans Rare Earths Project progress
- Arafura's position as a future supplier of rare earths
- Summary and Conclusion

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Arafura Resources Limited

Introduction

Introduction to Arafura

Corporate Summary

- Australian Public Company
- Listed on Australian Securities Exchange ASX in 2003 (code ARU)
- Nolans Project for Rare Earths
- Own technology developed
- Bankable Feasibility Study due end 2011
- First production in 2013

As at 22 March 2011

Capital

368 million shares
18.1 million Board/Employee options

Market capitalisation

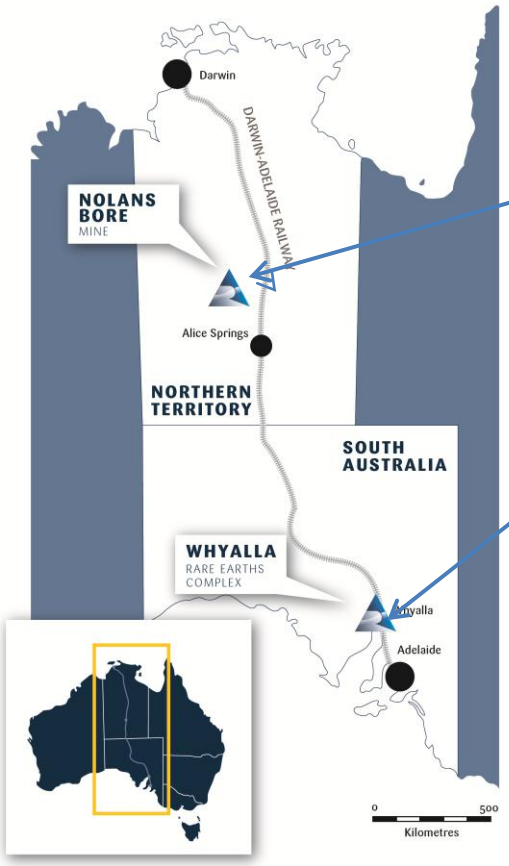
@ A$1.19 = ~A$438 million

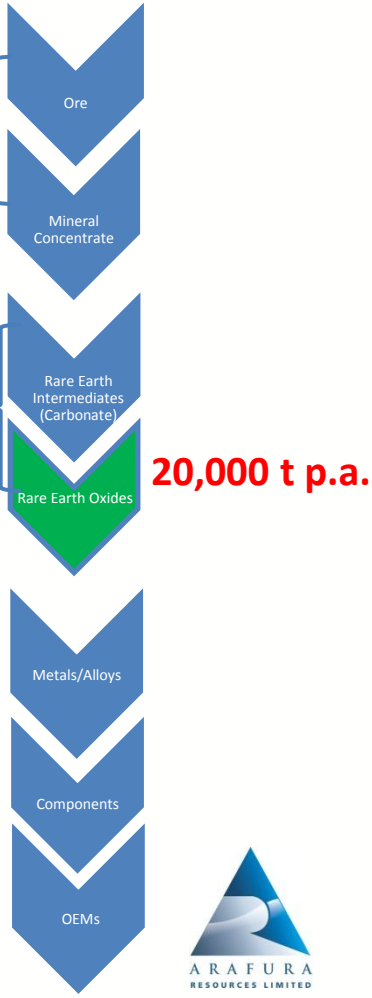
Top shareholders

JP Morgan Nominees[1]	27.4%
ECE[2]	17.59%
Institutions[3]	20.5%
Board & Management	2.5%

1. Substantial German-based shareholding amongst many shareholders
2. East China Mineral Exploration & Development Bureau
3. Placement of $90m to institutions in Q4 2010

Business Model - Adding Value in Australia





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Nolans Project – Globally Significant

High potential value, long life, multiple revenue streams with upside potential….

Phase 1 Annual Production	
REO Rare Earths Oxides	20,000 t
P_2O_5 as 61% Phosphoric Acid	80,000 t
U_3O_8 Uranium Oxide	150 t
$CaSO_4$ Gypsum	500,000 t

Upside Potential

Further drilling is currently underway to identify the full size and extent of the Nolans Bore resource – it is currently open and may be able to support expanded production.

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

Financial Evaluation October 2010

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

→ **Current price (18 March 2011) US$120.55/kg**

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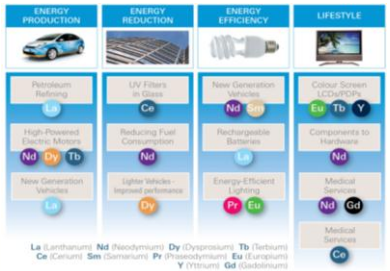
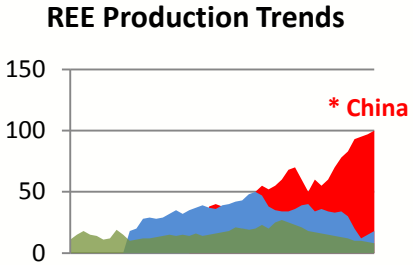
Developments Since TREM 2010

Current Market Dynamics – 'The Perfect Storm'

The warning signs have been present for some time…..





USGS science for a changing world

Rare Earth Elements—Critical Resources for High Technology

Chinese Export Quota History 2004-2010 (Tonnes REO)

Year	Domestic Companies	Foreign Companies	Total	Y on Y Change	ROW Demand
2005	48,040	17,659	65,699	0%	46,000
2006	45,752	16,069	61,821	-6.00%	50,000
2007	43,574	10,069	53,643	-4.00%	50,000
2008 *	49,871	15,834	65,705	-5.50%	50,000
2009	33,300	16,485	49,785	-12.00%	25,000
2010	22,513	7,746	30,259	-40.00%	48,000

High growth in demand of 2,3 to 4 times GDP fuelled by:
Hi-tech goods – consumers
Clean green energy – society
Energy efficiency - regulators

Global production consolidated in one country, China. Very few projects outside China progressed.

Criticality of Rare Earths and their strategic nature highlighted in 2002 by the USGS.

Chinese export quotas began in 2005 with gradual tightening.
H1 2011 quota less than H1 2010.

The Global Financial Crisis masked the development of the 'Perfect Storm' during 2008 and 2009. A return to more normal global economic activity has unleashed the 'Perfect Storm.'

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Rare Earths – Strategic to Government Policies

The strategic importance of Arafura Resources to the global rare earth supply chain.

- March 2010 USA government demand a strategic plan for future USA supplies. Much ongoing focus on this matter, including introduction of new legislation.
- Mid 2010 Japanese government initiate a program to secure future supplies.
- November 2010 Australian Foreign Minister stated Australia stands ready to be a long-term, secure, reliable supplier of rare earths to the Japanese economy in the future.
- March 2011 Australian Trade Minister identifies rare earths as one of two areas where cooperation between Australia and the EU could be expanded.
- March 2011 Rare Earths reported to have been top of the Agenda for Australian FIRB Meeting in December 2010

- **2010**
  Arafura invited to present at the TREM Conference (Washington DC, USA); the Rare Earths, Europe and Australia: Trade Security and Sustainability Conference (The Hague, The Netherlands); and the Metal Research Bureau International Rare Earths Conference (Tokyo, Japan).

- **Early 2011**
  Arafura invited to present at the 34th Australia -Japan HLG on Energy & Minerals (Melbourne, Australia); and the TREM Conference (Washington DC, USA).

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Future Supplies – Background

Lots of hype regarding new sources of rare earths, but, in reality, suppliers will struggle to keep up with demand for many years to come …..

- Rare Earths is a complex industry and requires a deep understanding;
- Rare Earths are common in the Earth's crust but they are very scarce in economically exploitable deposits;
- It is easy to make an initial exploration find and many have been announced in the past 12 months (the alleged 'bubble').

But

It is extremely difficult to progress a project successfully through to production (in reality no 'bubble')

- Takes approximately 15 years from initial find to successful production;
- There are high technical and capital barriers to success;
- Very few projects are advanced sufficiently to come into production successfully this decade;
- The current market dynamics are not a classic bubble.

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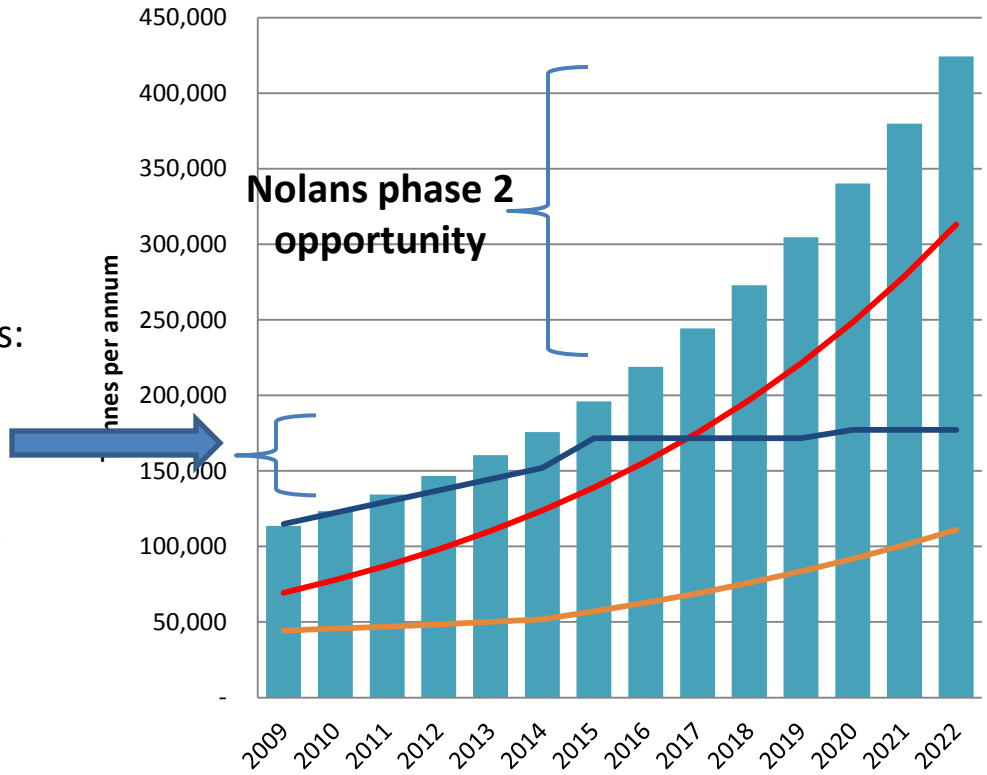
Supply and demand

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

These forecasts include new projects: Lynas, Molycorp, Alkane and Arafura. The supply side will still struggle to keep up with demand.

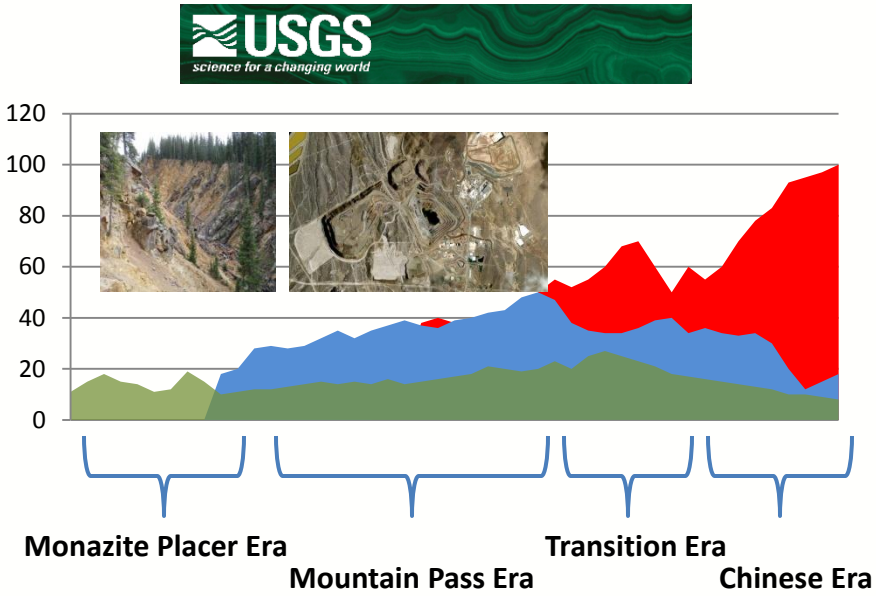


REO Global & China Demand/Supply (BCC Forecast 2009-2014, Internal Supply Forecast 2014-2022)

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

Rare Earths – Entering a New Era, Supply Shortage

USGS report: Uncertainty after 2002



New Western Supply Era 2011-2015

- Demand soars
- Supply transitions
- Prices increase
- China export quotas
- Environmental costs

Supply Opportunity Era 2016-2020

- China a net importer
- Long lead time for capacity
- 20,000 tpa additional supply required each year
- Where will supply come from...?

Global shortage exacerbated outside China by Chinese export quota reductions

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Future Supplies – Summary

2011 – 2015 New Western Supply Era

- Underpinned principally by Molycorp, Lynas and Arafura. Each has/is/will be:
  - large scale production 20,000+ t p.a.
  - proven resources
  - singularly rare earth focused
  - industry cost competitive

2016 – 2020 Supply Opportunity Era

- Demand growing circa 20,000 t p.a.
- China becomes importer
- Insufficient existing projects (some small) are advanced enough to make this Era

2021+

- More of known projects under development start up
- Some of recent exploration finds begin to enter market

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Arafura's World-Class Nolans Project

Update on Progress

Progress and Future Plan

"Our vision is to be the recognized leading supplier of rare earths to users worldwide"

2010	2011	2012	2013	2014
• Business model established • Australian based	• Company's Future Confirmed	• Building the company	• Arafura debut	• Delivering our vision
Successful capital raising	Completion of BFS	Construction of Nolans Bore Mine	Plant starts H2 2013	Ramp-up to full capacity
Whyalla site selection for Rare Earths Complex	Regulatory approvals secured Customer contracts in place	Construction of Whyalla Rare Earths Complex	First sales commence	
Rare Earth Oxide products	Technology demonstration program complete	Organizational build out		
Building Organizational Capability	Nolans financing secured Expansion drilling program	Start-up planning		

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Nolans Project – Nolans Bore Mine

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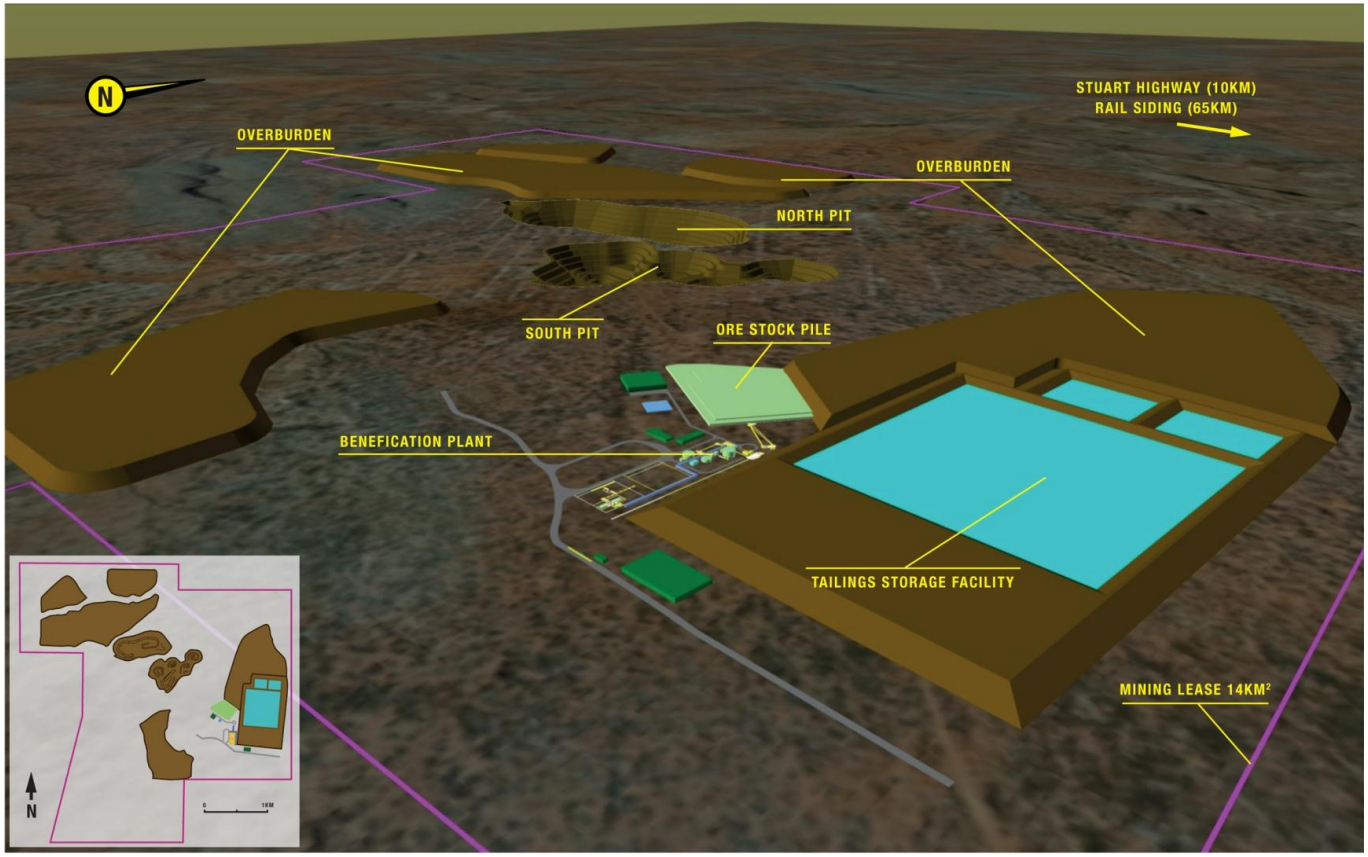
NOLANS BORE MINE LAYOUT

ARTIST'S IMPRESSION



Version 1 - August 2010

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

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Nolans Project – Whyalla Rare Earths Complex

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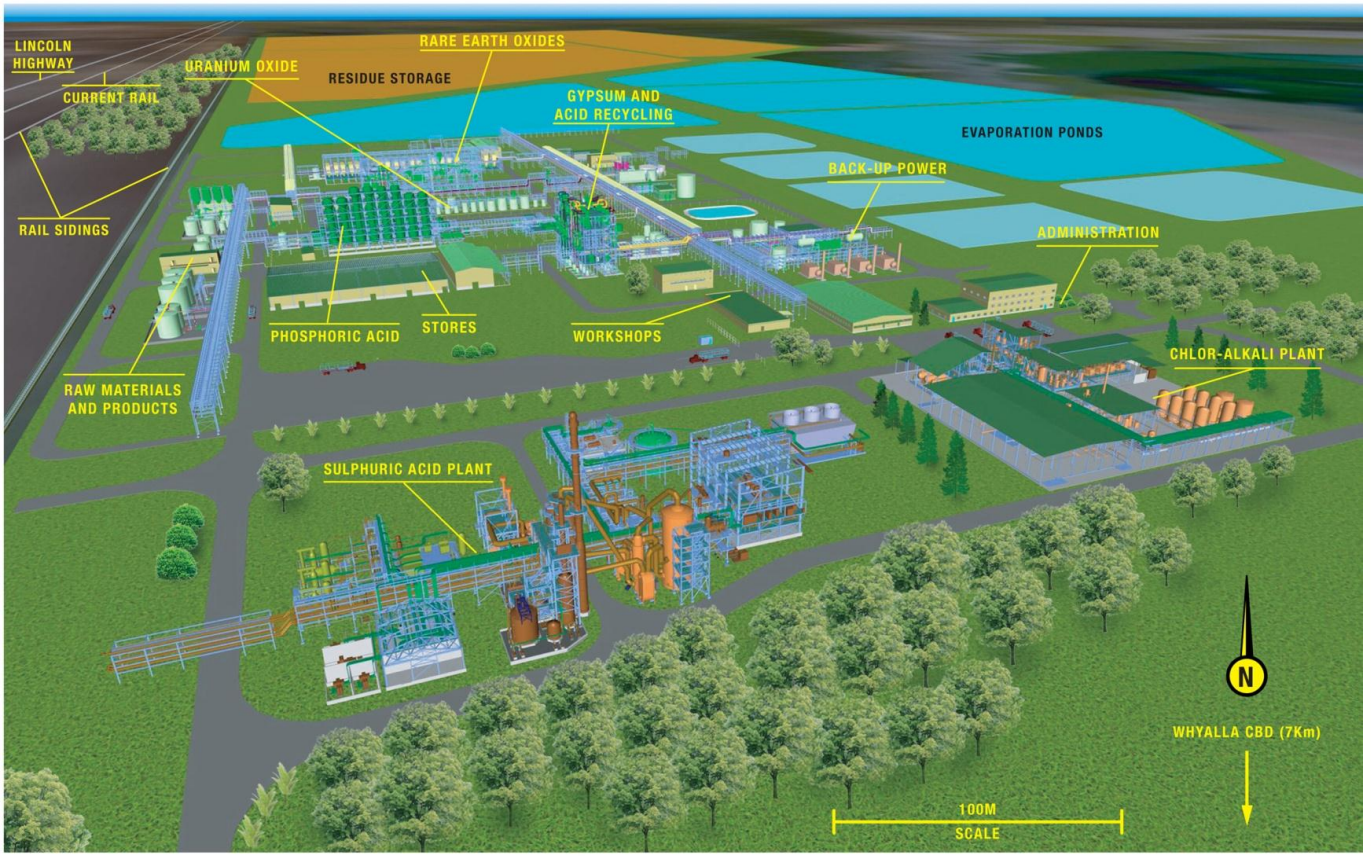
ARAFURA RARE EARTHS COMPLEX

ARTIST'S IMPRESSION



Version 1 - August 2010

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

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Nolans Project – Key Metrics

Each rare earth project is different in scope and care is required when making comparisons…..

- Capital Cost (A$950 million) caters for mine and four processing plants:

  Rare Earth Oxides, Phosphoric Acid, Uranium Oxide and Gypsum;
- Rare Earths – 20,000 t p.a. of Rare Earth Oxides produced;
- Good potential financial returns on Rare Earth prices lower than long term trend line;
- Excellent potential financial returns if higher prices than long term trend line (likely) are contemplated

Nolans Project is not dependent on current high rare earth pricing to be viable;

Nolans Project has industry competitive costs;

- Excellent mix of Rare Earth Oxide products.

** Data sourced from Arafura Business Update October 2010*

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Arafura's Position as a Future Supplier

U.S.A. and Australia – Long term Strategic partners

“An ally for the 60 years past and Australia is an ally for all the years to come.”

- Australian Prime Minister Julia Gillard, Speech to a joint session of the US Congress, March 9, 2011

- Successful and longstanding trade relations between the USA and Australia;
- Trade history includes strategic materials;
- Australia has low sovereign risk, political stability and strong regulatory environment;
- Starting up in 2013, Nolans is able to provide a range of light and heavy rare earth oxide products for commercial and defense applications.

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U.S.A. Strategic materials – What works already?

- Impractical for any country to be self sufficient in all strategic materials – imports can be used successfully to supplement existing or emerging USA domestic supplies;
- What works already for the USA in terms of strategic materials imports can be a model for rare earths;
- Suggest titanium metal is a good example. Titanium minerals from mineral sands mining have been imported into the USA successfully for many years;
- Similarities to rare earths in that there are few suppliers;
- Australia is a proven supplier country.

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Arafura's Current Sales Activities

- Arafura is the only new (short to medium term) producer with significant quantities of Rare Earth Oxides still for sale;
- Good mix of Rare Earth Oxides available and suitable for all end applications;
- Significant interest in Arafura and its products;
- Highly experienced sales and marketing consultant appointed to assist Arafura team;
- Discussions with target potential customers are in progress;
- Focus is on end markets and customers outside of China;
- Seeking USA customers!

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Nolans Rare Earths mix

Rare Earth Element	% REO contained	Volume (tonnes)	REO Price (US$/kg) 18 March 2011	Projected Revenue (US$ millions) p.a.	% Revenue
Lanthanum	19.74%	3,948	$96.00	$379	15.7%
Cerium	47.53%	9,506	$96.00	$913	37.8%
Praseodymium	5.82%	1,164	$156.00	$182	7.5%
Neodymium	21.20%	4,240	$170.00	$721	29.9%
Samarium	2.37%	474	$94.00	$45	1.9%
Europium	0.40%	80	$820.00	$66	2.7%
Gadolinium	1.00%	200	$130.50	$26	1.1%
Dysprosium	0.33%	66	$517.00	$34	1.4%
Terbium	0.08%	16	$810.00	$13	0.5%
Yttrium	1.32%	264	$127.50	$34	1.4%
Others	0.21%	42			
	100.00%	20,000	$120.55	$2,413	100.0%

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Summary and Conclusion

Arafura Resources – Summary

Arafura is a credible part of the future of the Rare Earths industry …..

- Confirmed Strategy and Business Model ☑
- World class, large scale, long life, high value creating Nolans Project ☑
- Strategically important for countries outside China ☑
- Highly efficient production process developed with experts and derisked through demonstration. Funded through to completion of BFS ☑
- Uncommitted high value rare earth products for customers worldwide ☑
- Near term production opportunity – one of very few available ☑
- Upside potential from Nolans Bore expansion – to be proven ☑
- A highly committed team with “can-do” culture ☑

An excellent supply source to meet some of the USA’s future needs

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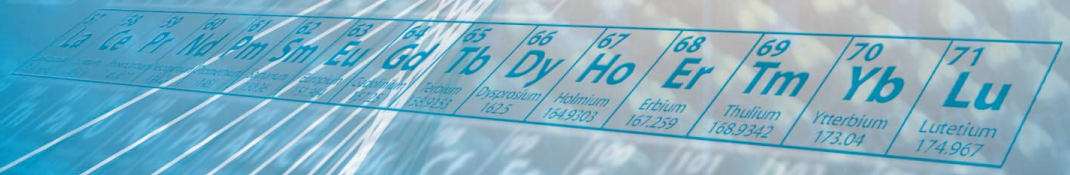
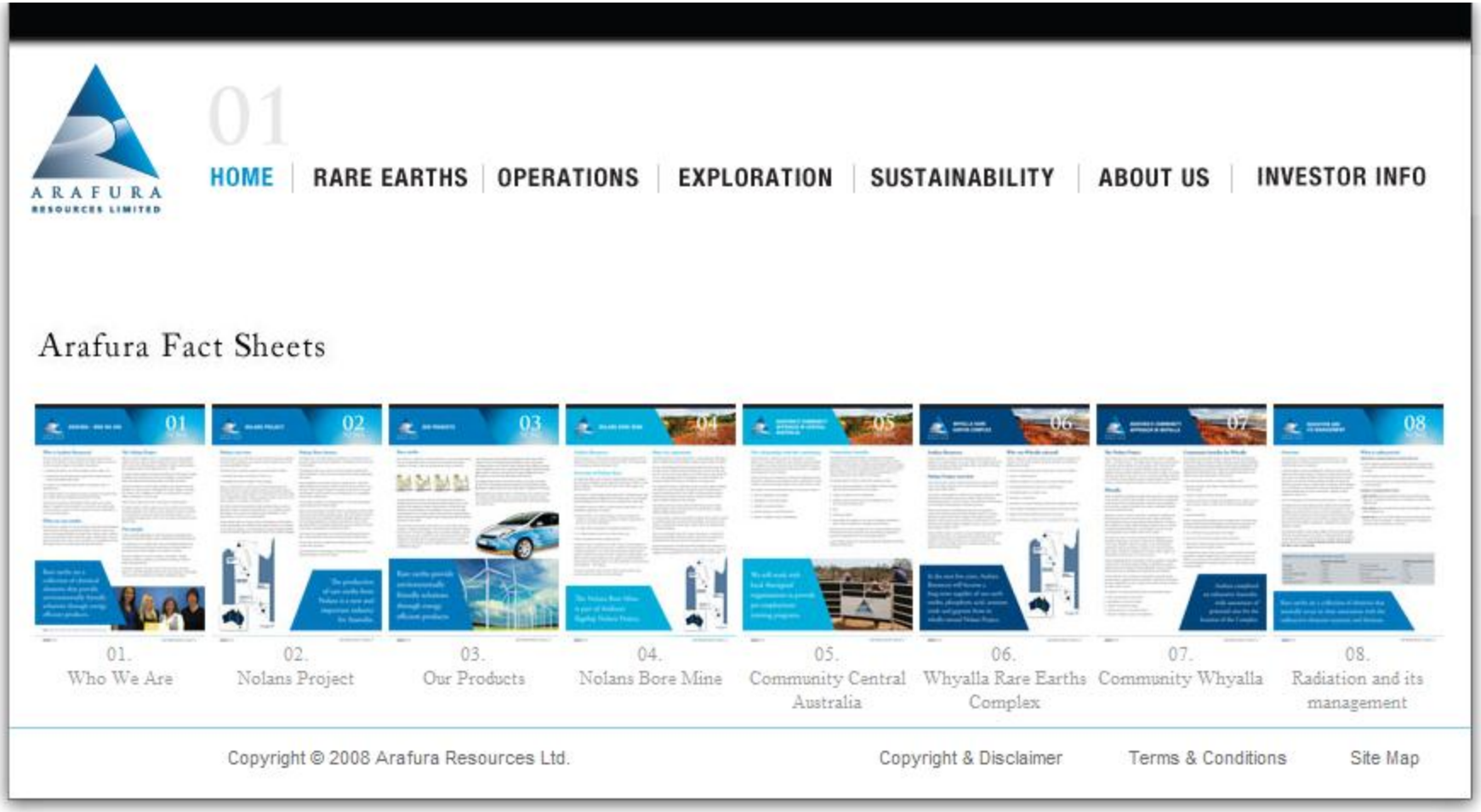
Thank You



For more information……



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

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