



A R A F U R A
RESOURCES LIMITED

Arafura - Rare Earths

Mining South Australia Conference & Exhibition

Neil Graham - General Manager Operations
30th November 2010

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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). The information in this presentation that relates to mineral resources or ore reserves is also based on metallurgical results and interpretation compiled 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 - An Emerging Rare Earths Company

“Clear Strategy + Confirmed Business Model + World class Nolans Project + Robust Plan for delivery + growing organizational capability = creation of wealth for shareholders”

As at 28th November 2010

Capital

335m shares

Market capitalisation

@ A\$1.26 = ~A\$422 million

Top shareholders

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

Company formed in 1997

Listed on Australian Stock Exchange (ASX) in 2003 (ARU)

Making rapid excellent progress through the ‘Emerging Company’ phase towards first production in 2013

‘We know where we are going and what we have to do, are building the capability to succeed and are going full pace to deliver’

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 –details announced shortly.



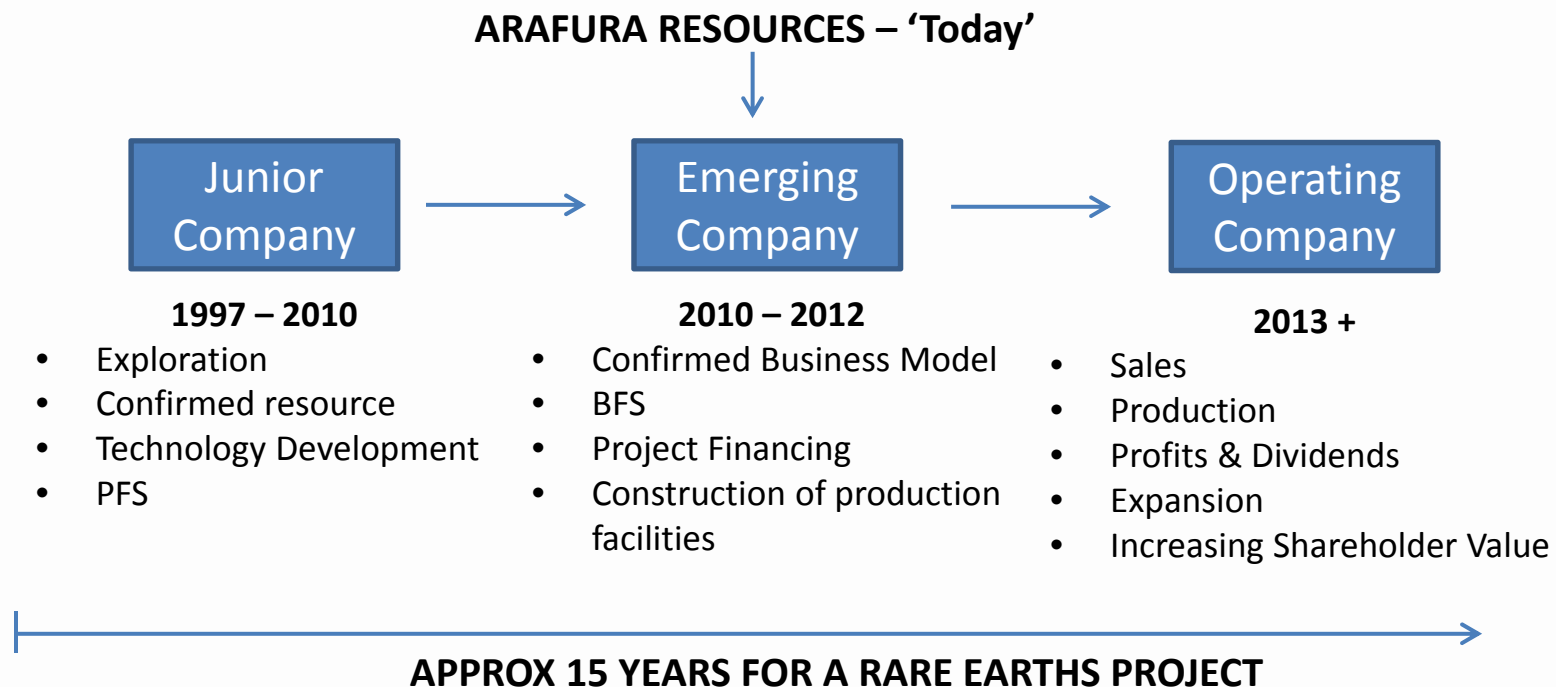
Arafura – Resources & Chemicals

“A speciality chemical company” which will make products to pharmaceutical quality standards.

Confirmed Strategy

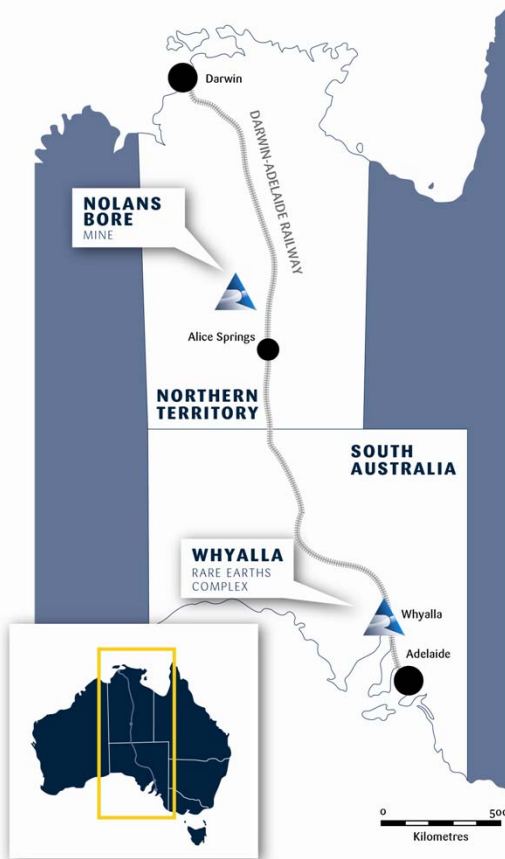
- Our vision is to be the recognised leading supplier of Rare Earths to the world.
- Exhibit EHS & manufacturing excellence in all of our operations
- Focus on rare earths
- To create and maximise shareholder value in a sustainable manner.

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



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 tpa 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

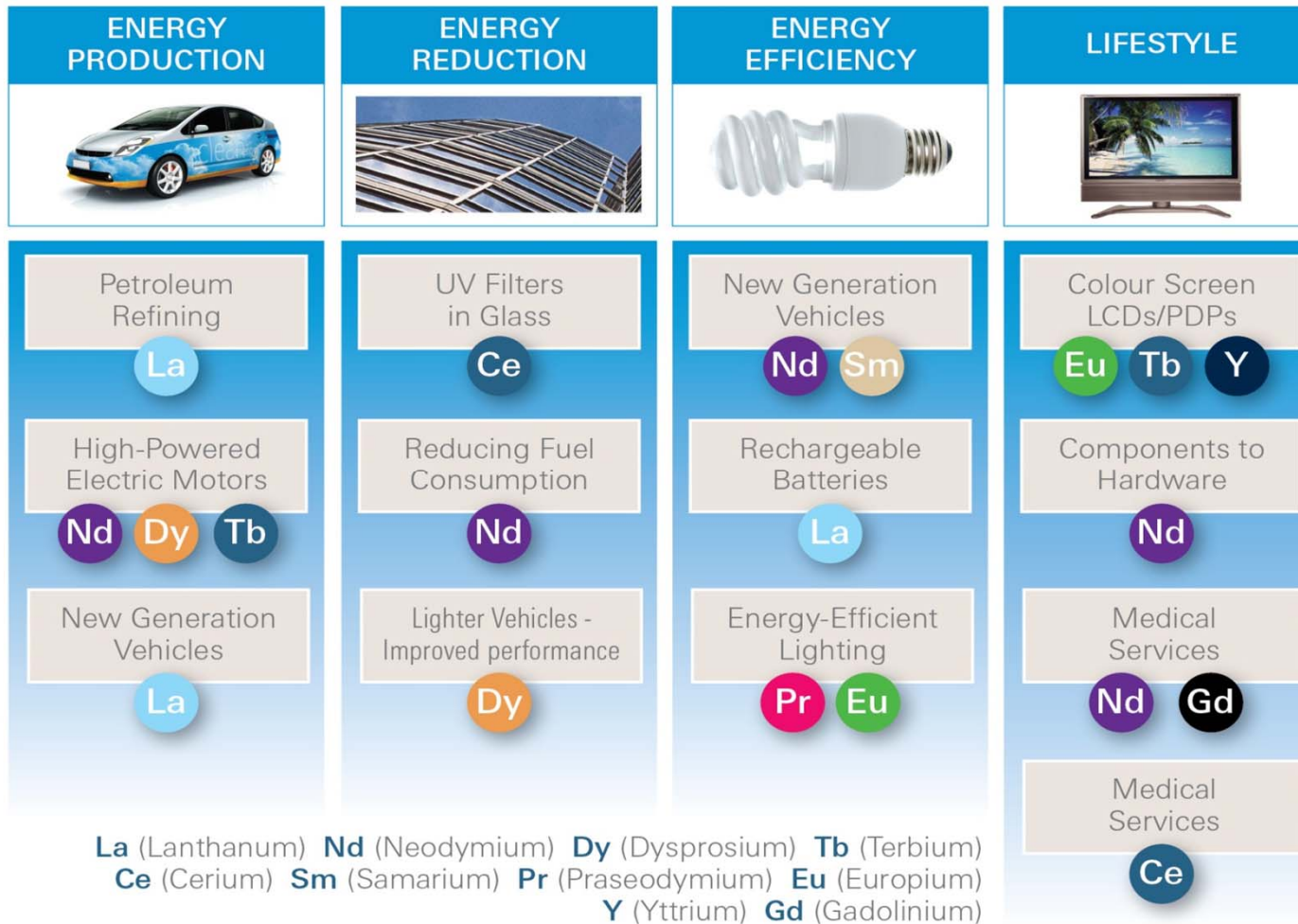




Rare Earths Market

Rare Earths - Applications

An exciting market outlook in new high technology applications with increasing demand driven by consumers, society & regulators



- Critical ingredients of end products
- No substitutes available
- Minor recycling opportunities
- Very small part of end product cost

Rare Earths – Market Dynamics

The industry challenge is for 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.



Nolans Project Progress

Nolans is a globally significant resource

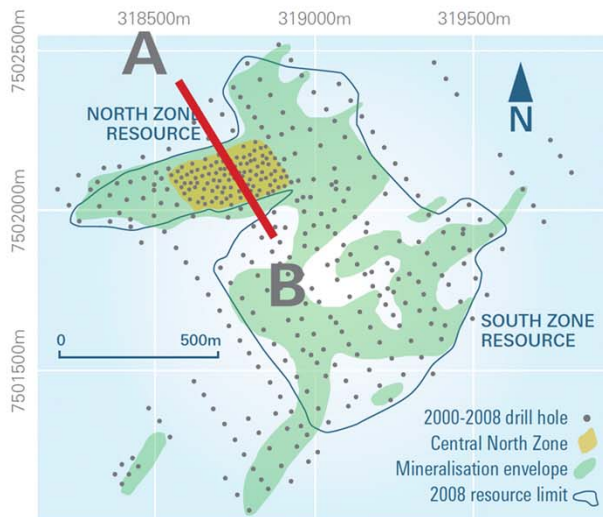
Total resources for Nolans Project

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 Mlb

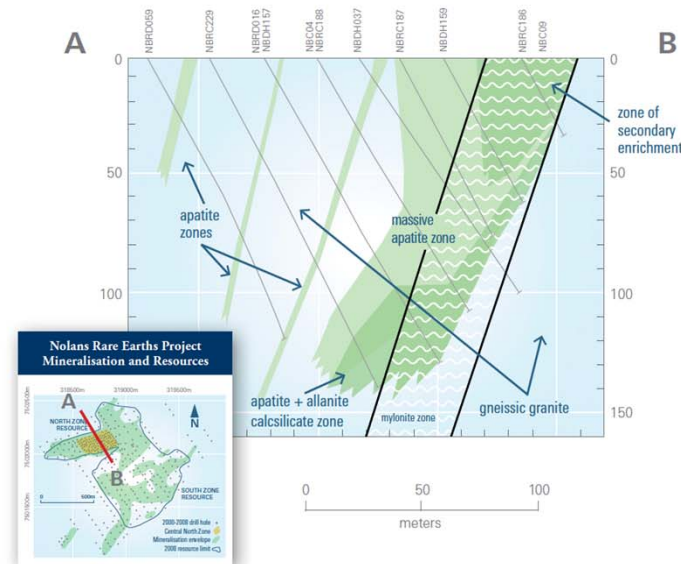
1. Using 1% REE cut-off grade

- Exposed at surface
- Upside potential
- Most drilling to approx 130 m below surface.

Nolans Rare Earths Project Mineralisation and Resources



Nolans Bore Cross Section



Nolans Project update 2010

Building momentum towards project financing....

Nolans Bore

- Additional resource drilling
- Large diameter drilling programme completed
- Commenced engineering and environmental studies

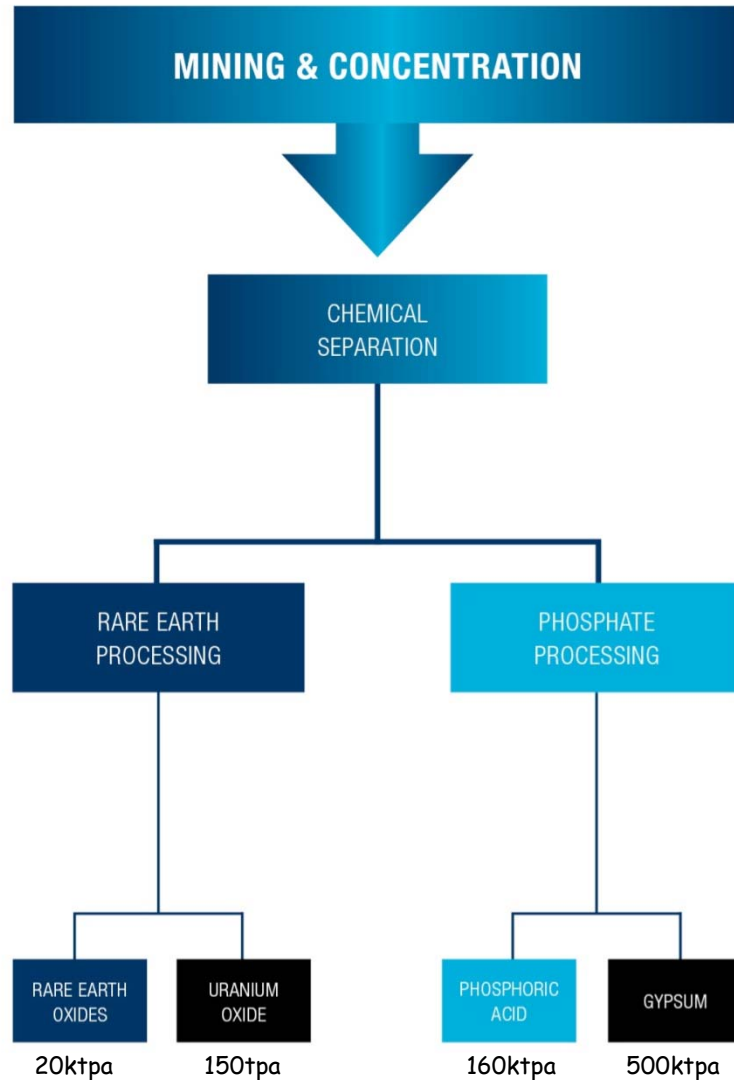
Rare Earths Complex

- Confirmed Whyalla as the preferred site location
- Major Project Status declared by South Australian Government
- Commenced engineering and environmental studies

Corporate

- Key employee appointments as part of building all-round capabilities
- Engaged with prospective marketing and supply partners
- Successful fund raising recently completed

Nolans Project – the process



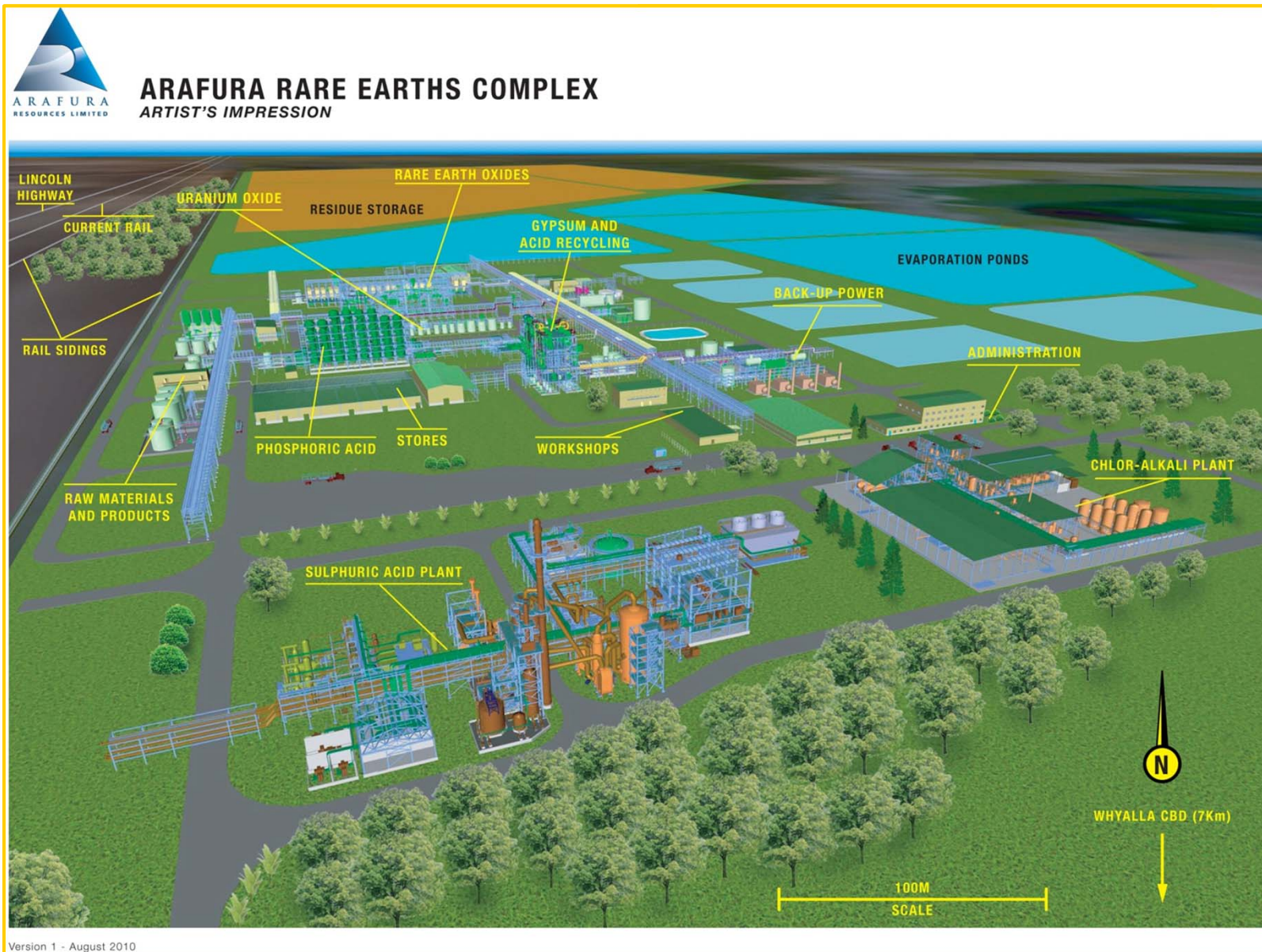
Nolans Mine

- Mining Operation
- Beneficiation Plant
- Iron Thorium Precipitate Storage

Whyalla Rare Earths Complex

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

Locations



Rare Earths Complex Location



Whyalla Progress



The Site

- Environmental studies



The People

- The first “Arafuran”

Environment Health and Safety Coordinator - Arafura Resources

*Environment Health and Safety
Coordinator*

Autonomous Role
Future Strategic Leadership Position



Nolans Project Activities 2011

The next 12 months:

Technology

- Commercial quantities of Rare Earth Oxides produced
- Complete piloting and demonstration programs

Mine

- Complete all engineering and environmental studies
- Regulatory approvals
- Resource definition and expansion drilling

Rare Earths Complex

- Complete all engineering and environmental studies
- Regulatory approvals

Corporate

- Continue to build technical capabilities
- Marketing and Supply contracts
- Finalise project finance

Future Work Program

A fast track program to production.....

	2010	2011	2012	2013	2014	2015
Technology Demonstration Program						
Nolans Resource Expansion Drilling						
Bankable Feasibility Study						
EIS & Regulatory Approvals						
Customer Contracts						
Project Financing						
Construct Mine & Rare Earths Complex						
Commissioning & First Production						
Ramp Up to Full Production						
Expansion Possibility?						



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Thank You

57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
Lanthanum 138.90547	Cerium 140.12	Praseodymium 140.90766	Neodymium 144.242	Europium 151.964	Samarium 150.36	Erbium 167.259	Gadolinium 157.25	Terbium 158.92534	Dysprosium 162.5	Holmium 164.93033	Erbium 167.259	Thulium 168.9342	Ytterbium 173.04	Lutetium 174.967

For more information.....

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Arafura Fact Sheets

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Who We Are	Nolans Project	Our Products	Nolans Bore Mine	Community Central Australia	Whyalla Rare Earths Complex	Community Whyalla	Radiation and its management

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

