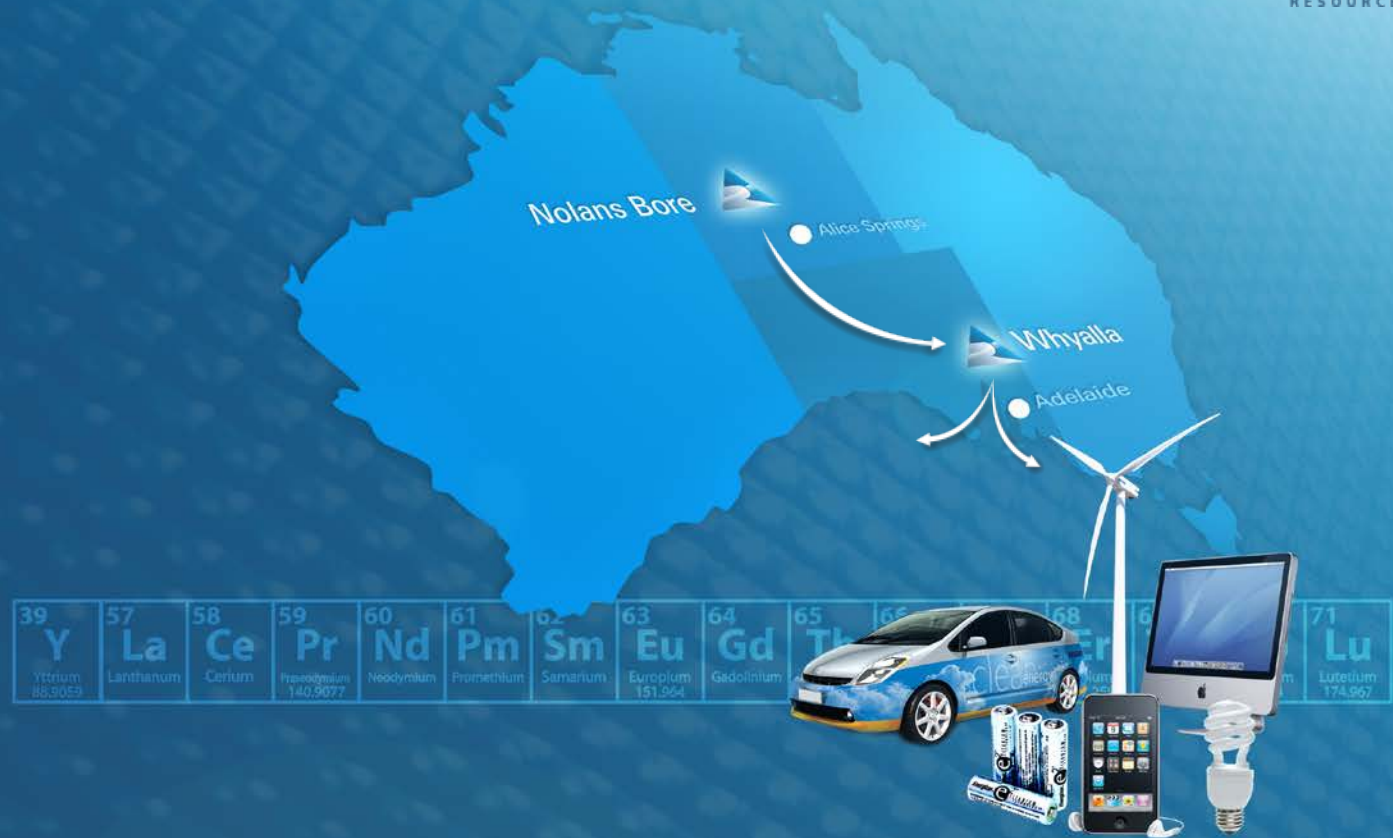


ARAFURA ADDING VALUE IN AUSTRALIA
TO PRODUCE RARE EARTHS
FOR USERS WORLDWIDE



2012 GMUSG & SACOME Mining & Resources
Conference & Trade Expo

Chris Tonkin
Chief Executive Officer
29 August 2012

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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). 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.

Today's Agenda

- ▲ Introduction to Arafura
- ▲ The Nolans Rare Earths Project
- ▲ Recent Achievements
- ▲ Nolans Project – Resource and Processing
- ▲ Next Steps
- ▲ Summary



An Emerging Rare Earths Producer

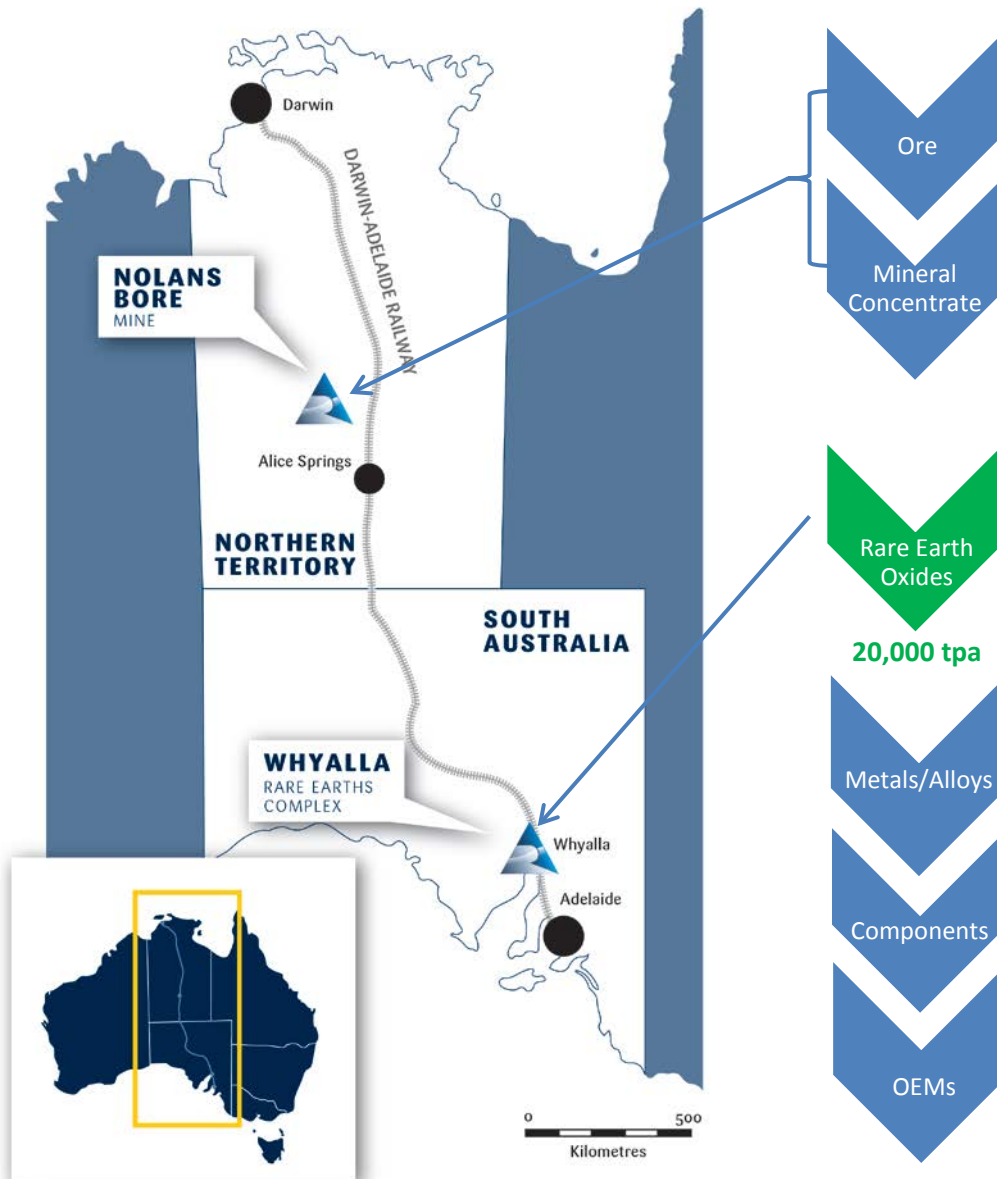
Arafura Resources is an emerging rare earths producer with an advanced development project

- ▲ Australian public company – formed in 1997
- ▲ Listed on ASX in 2003
- ▲ Flagship 100%-owned Nolans Rare Earths Project
- ▲ Processing technology developed in Australia

ASX Code	ARU
Shares on offer	396 million
Options	11.5 million
Market cap at 18.0c	\$71.2 million
1-year range	15.5 - 76.0 cents
Cash at 30/6/12	\$19.5 million
Debt	nil
Top shareholders	JP Morgan Nominees (27.15%) ECE (16.97%)



Nolans Rare Earths Project



The Nolans Project is one of the most advanced rare earths development projects in the world

The recent Project Update established a Base Case of:

- ▲ **Mine and concentrator at Nolans Bore, Northern Territory**
- ▲ **Chemical processing operation in Whyalla, South Australia**

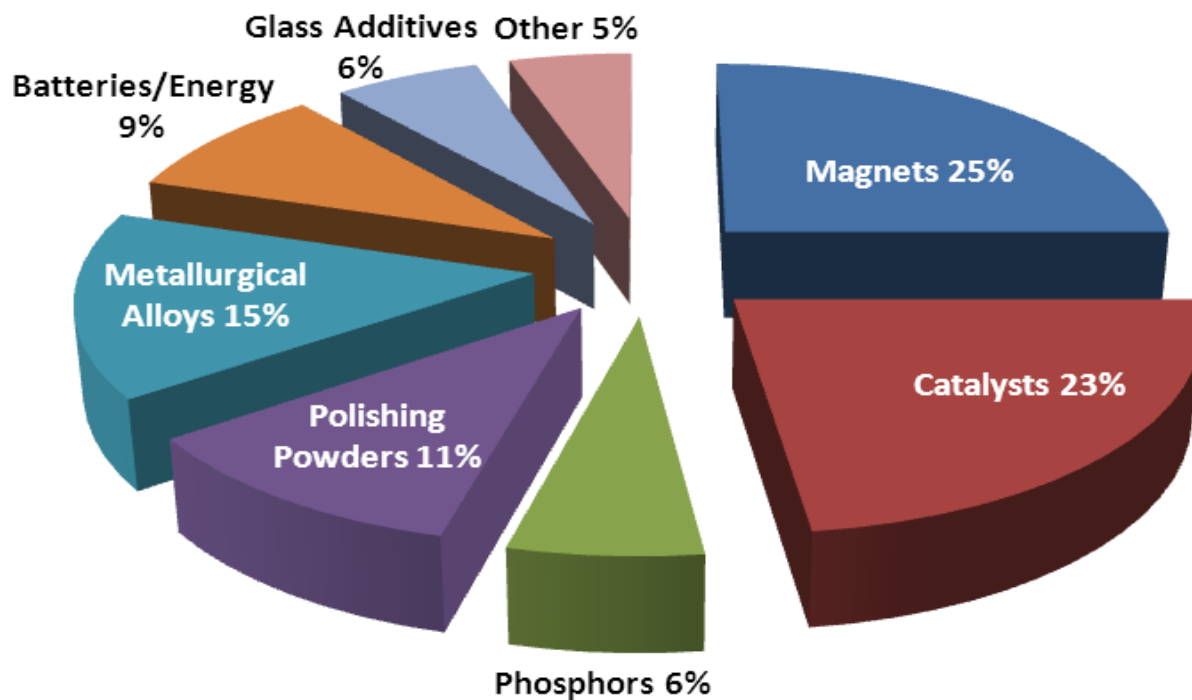
Business Model - Adding Value in Australia

Key Features of the Project

- ▲ Nolans Bore is one of the world's largest rare earths deposits – **JORC-compliant Resource recently expanded to 1.22 million tonnes REOs**
- ▲ **Low resource risk**
- ▲ Extensive testwork completed and the process flowsheet developed over 7 years
- ▲ **Robust economics:** Full capital payback within 4 years of operations
- ▲ Both Nolans Bore and Whyalla sites have **access to public infrastructure, services and utilities**
- ▲ **Expected shortfall in global rare earths market** over medium to long term, in particular Didymium Oxide (Nd/Pr)



Rare Earth Applications



REO Market Segments by Application (2011)



Arafura REO product samples



World Scale, Strategically Significant Resource



RESOURCES	TONNES (million)	RARE EARTHS REO %	TONNES REO	TONNES P ₂ O ₅	TONNES U ₃ O ₈
Measured	4.3	3.3	144,000	572,000	1,120
Indicated	21	2.6	563,000	2,610,000	4,090
Inferred	22	2.4	511,000	2,220,000	3,610
TOTAL	47	2.6	1,217,000	5,410,000	8,830

- ▲ **Minimal resource risk** – approximately 90km drilling completed
- ▲ Resource **remains open at depths** below 220m
- ▲ Amenable to low cost open cut mining and milling
- ▲ Standard beneficiation techniques
- ▲ **Expected mine life in excess of 20 years**

Project Achievements

- ▲ **Whyalla selected** for Rare Earths Complex
- ▲ Definition of a **major Rare Earths resource** at Nolans Bore
- ▲ **Process proven** from mine to separated final products
- ▲ **Experienced management team** focused on finalising key technical and planning work streams
- ▲ Rare Earth Oxides **produced to customer quality specifications** at 99% purity
- ▲ **Global alliances formed** with strategic off-take partners

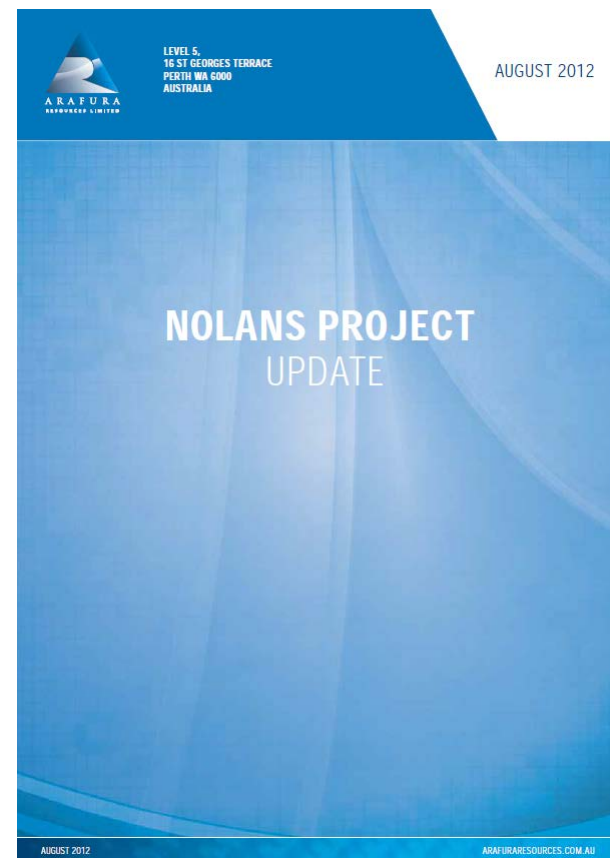


Recent Achievements – 2012

- ▲ **Board and Management** changes
- ▲ **Focus** on cost containment
- ▲ **Major resource expansion**
- ▲ Share Purchase Plan raised **\$8.2 million**
- ▲ **Strategic MOU** with Korean multinational
- ▲ **Separated REO products** for customer assessment
- ▲ ECE agreement to inject **\$9.9 million**
- ▲ Definitive **Nolans Project Update**

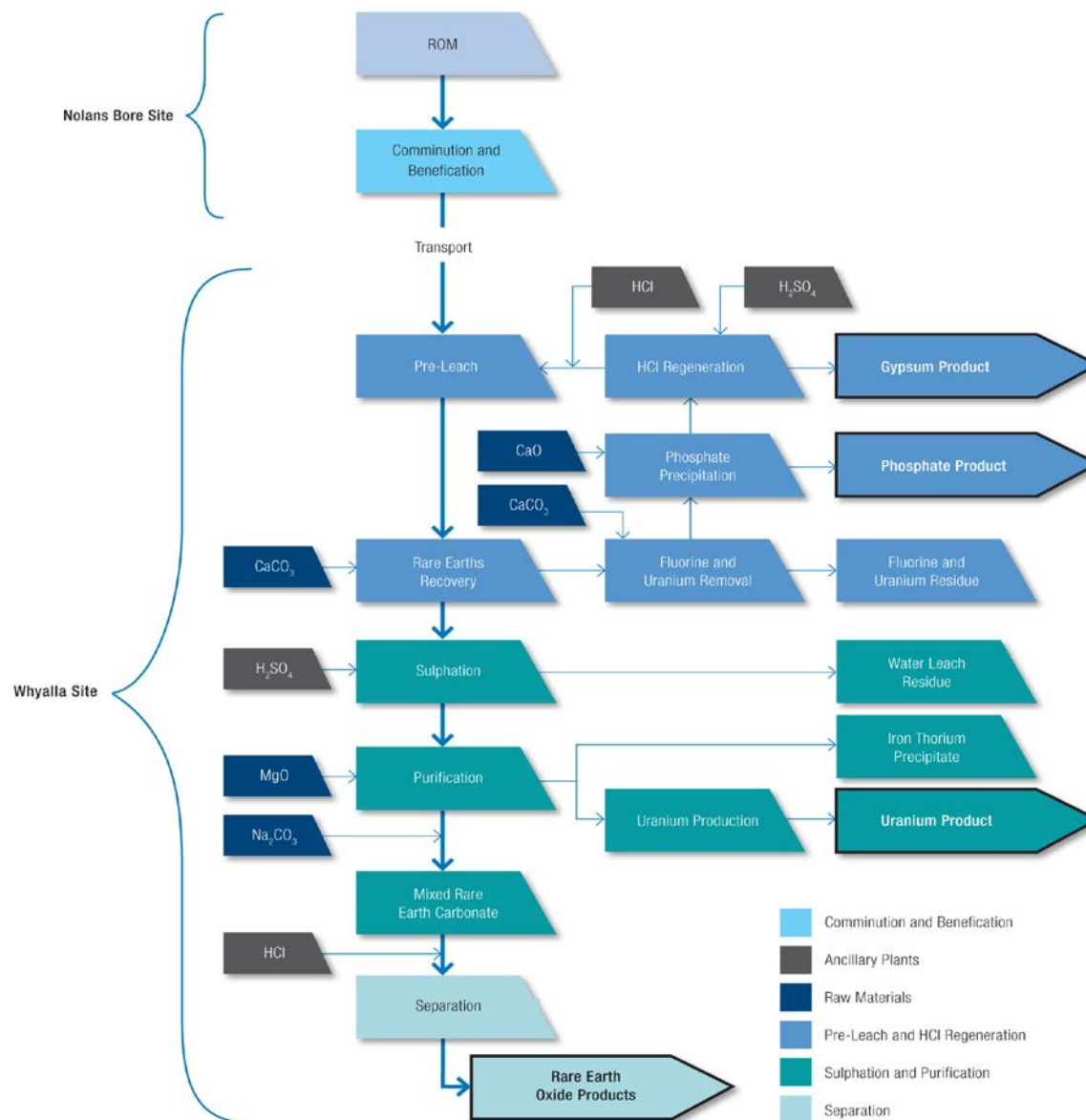
Why did we produce a Project Update?

- ▲ Feasibility study is **well advanced**
- ▲ Necessary to define a Project Base Case for shareholders and investors
- ▲ To establish that Arafura is **on track** with all aspects of the Project
- ▲ To demonstrate **Project scale and longevity**
- ▲ To reinforce the **prospective strong returns** for Arafura and its shareholders

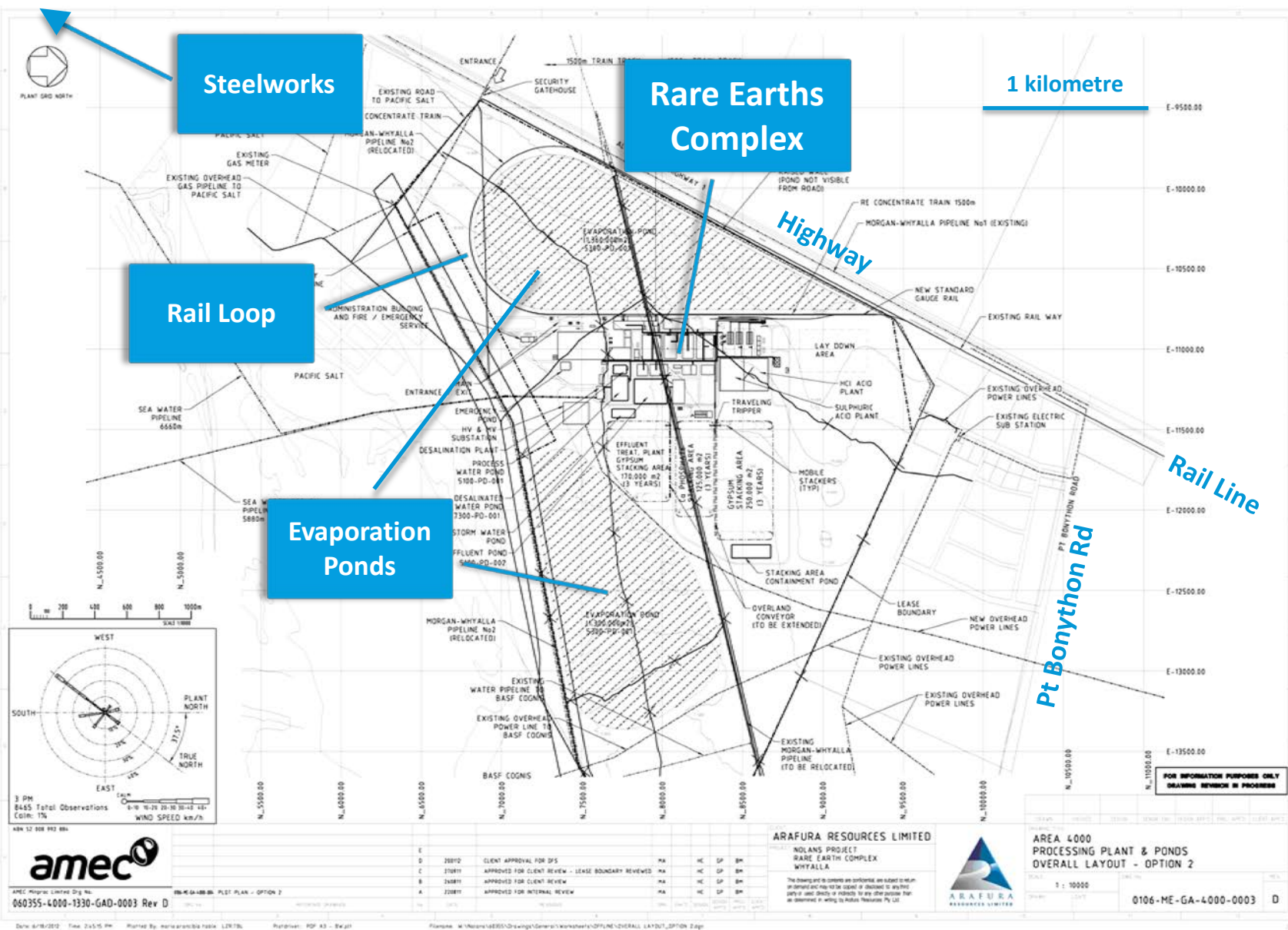


<http://www.arafuraresources.com.au/nolans-update.html>

Nolans Project Processing Flow Diagram

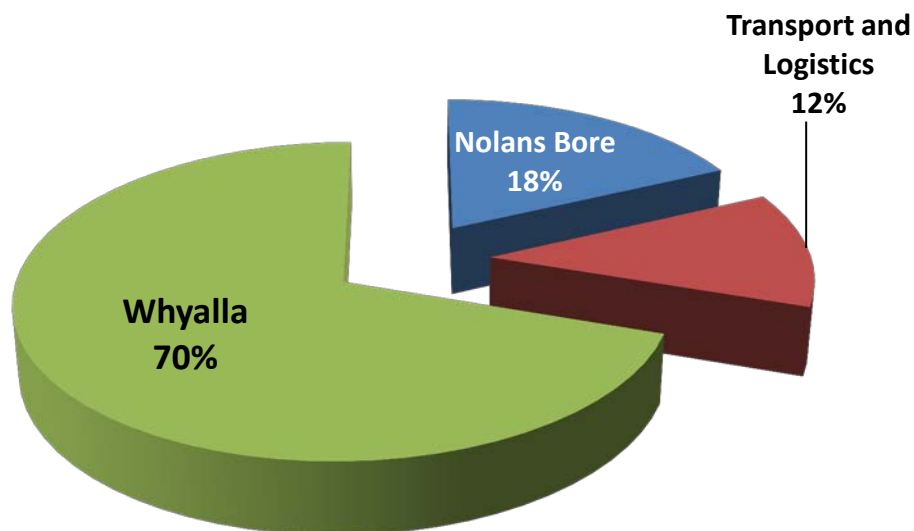


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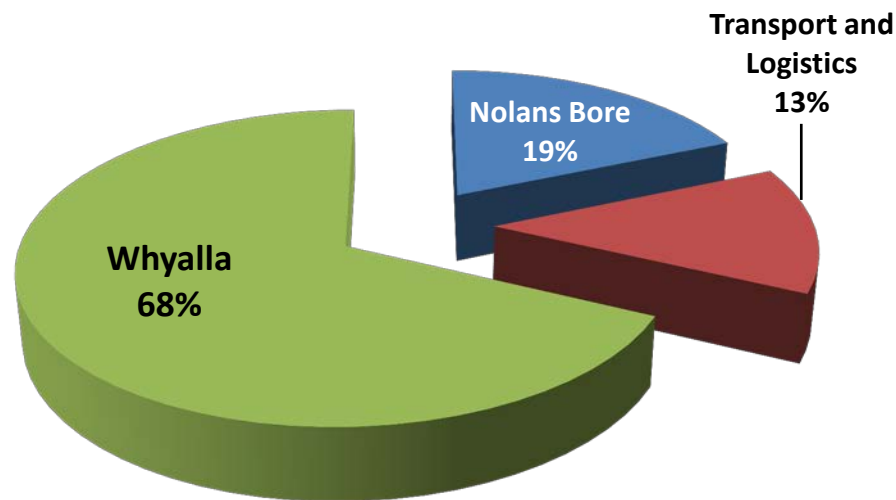
Cost Breakdown

Forecast Capital expenditure



**\$1.9 billion
(over 3 years)**

Forecast Operating expenditure



\$411 million per annum

Next Steps – 2012/13

Technology

- ▲ Declaration of Ore Reserves
- ▲ Demonstration Plant
- ▲ Integrated Pilot Plant
- ▲ Further piloting of REO separation

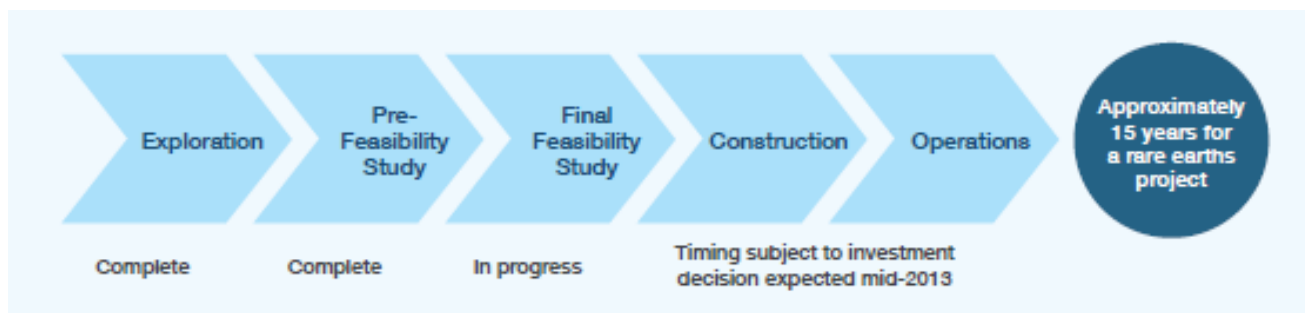
Engineering

- ▲ Final Mine Plan
- ▲ Mine and Concentrator Engineering
- ▲ Transport and logistics
- ▲ Rare Earths Complex engineering

Other

- ▲ EGM for ECE investment
- ▲ Short term funding
- ▲ EIS submissions
- ▲ Sales and supply contracts
- ▲ Project financing
- ▲ Strategic partners

Finalising feasibility studies – targeting project financing for 2013

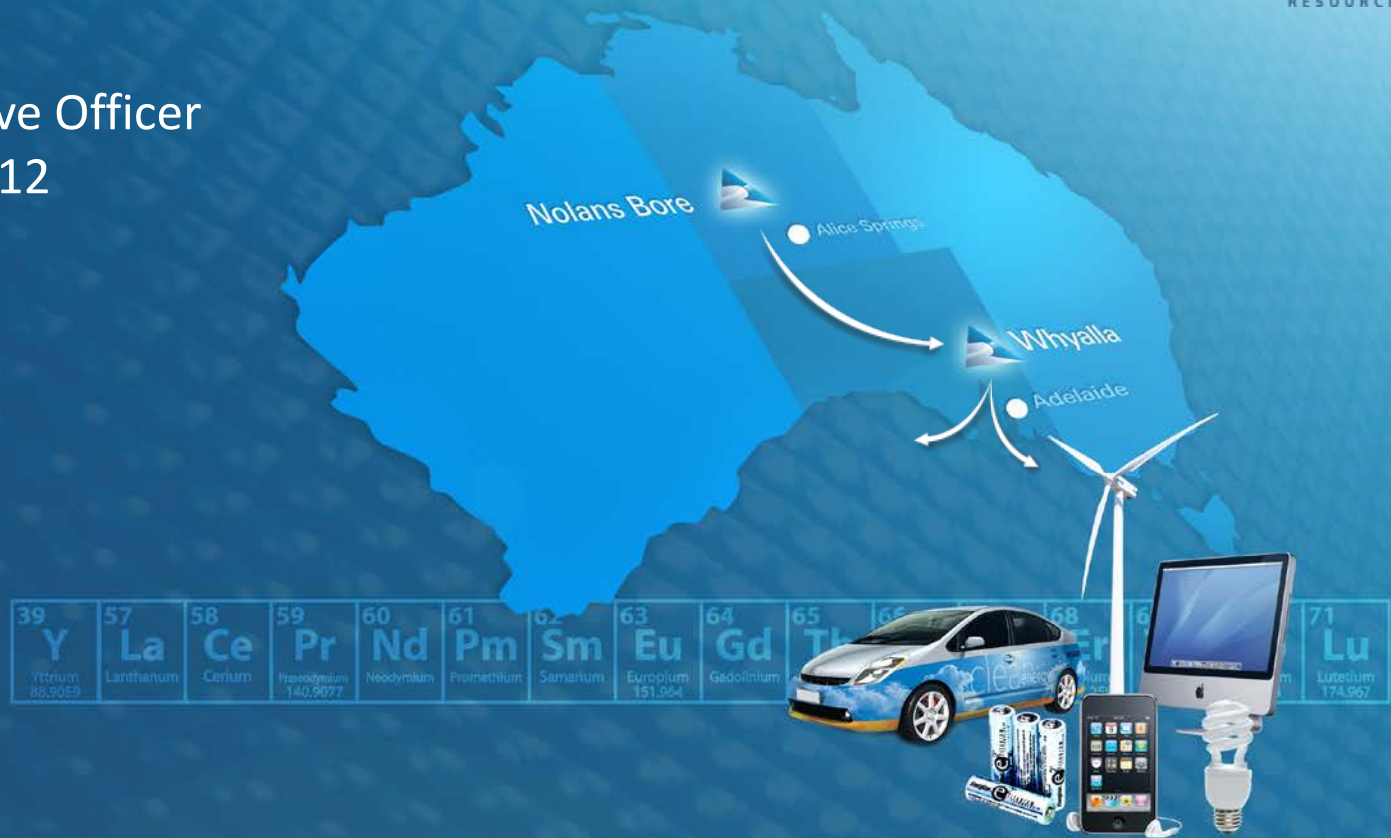


- ▲ On track to be one of the world's largest rare earth producers and one of very few new supply sources this decade
- ▲ Uniquely advanced Australian-based project with de-risked path to production and commercialisation
- ▲ Robust project economics
- ▲ Low risk, world-scale resource at Nolans Bore
- ▲ Excellent access to pre-existing public infrastructure, services and utilities, and site secured for Whyalla processing operation
- ▲ Significant government and community support

Thank You



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