



2011 ELECTRIC METALS CONFERENCE
TUESDAY, APRIL 12, 2011

Arafura Resources – On Track to Be a Key Part of The New Rare Earths Supply Era

Richard Brescianini, Arafura Resources
Toronto, 12 April 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.

Agenda

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- Introduce Arafura
- Arafura's Nolans Rare Earths Project progress
- Rare Earth Industry Highlights
- Arafura's position as part of the new supply era
- Summary and Conclusion

Introduction to Arafura

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Corporate Summary

- Australian Public Company – formed 1997
- Listed on ASX in 2003 (code ARU)
- Nolans Project for Rare Earths
- Own technology developed
- Bankable Feasibility Study due H2 2011
- Project Financing sought by end 2011
- First production in 2013

As at 8 April 2011

Capital

368 million shares
16.5 million Board/Employee options

Market capitalisation

@ A\$1.35 = ~A\$497 million

Top shareholders

JP Morgan Nominees ¹	26.99%
ECE ²	17.51%
Institutions ³	20.5%
Board & Management	2.5%

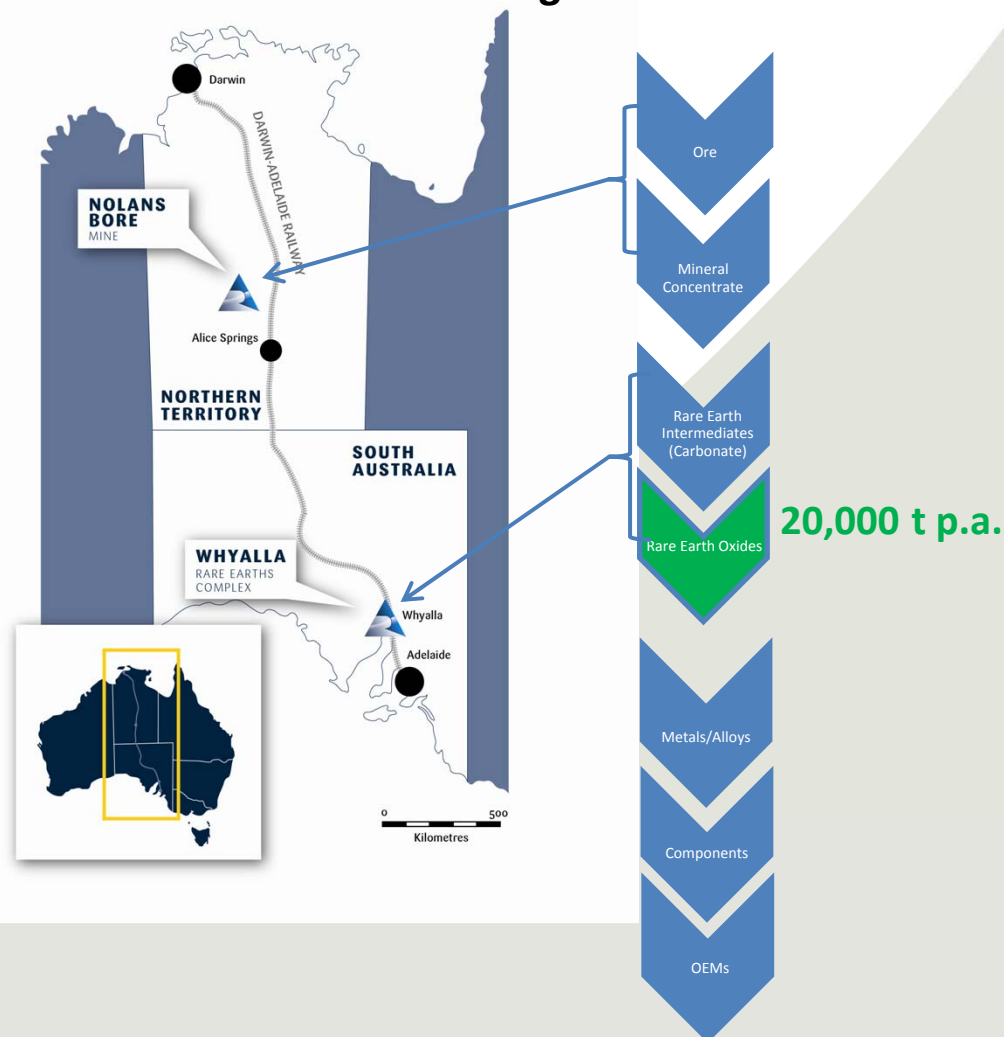
Debt

Zero

Cash

A\$97 million (31 December 2010)

Business Model - Adding Value in Australia



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

Nolans Project – Globally Significant

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

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

Phase 1 Annual Production	
REO Rare Earths Oxides	20,000 t
P ₂ O ₅ as 61% Phosphoric Acid	80,000 t
U ₃ O 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.

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

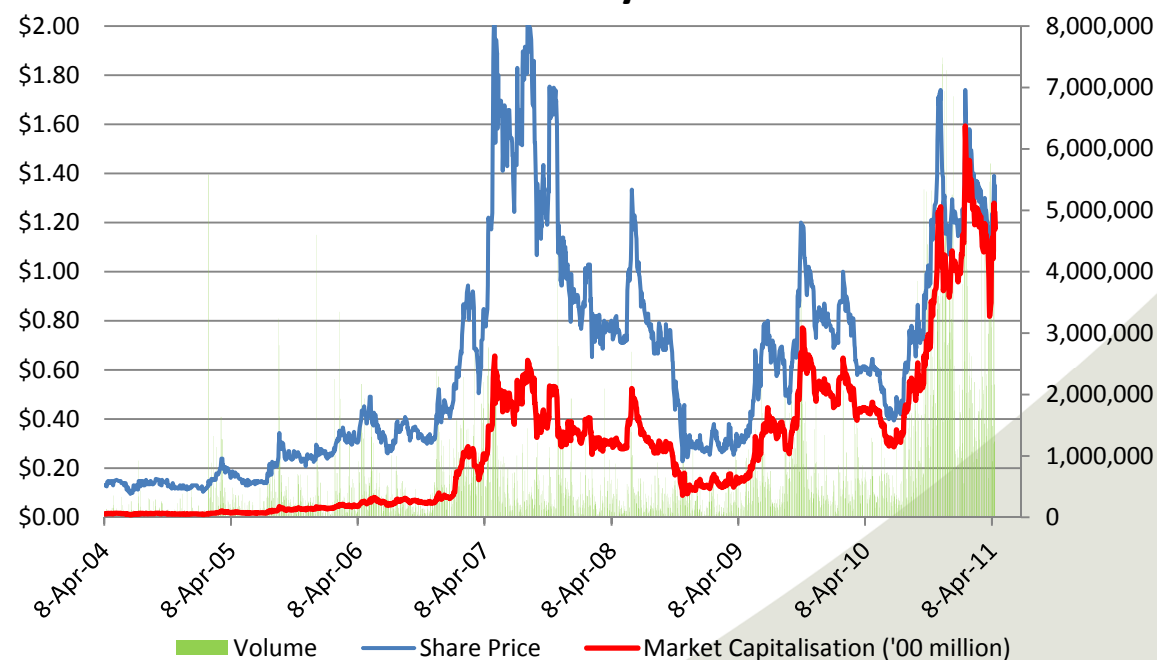
→ **Current price
(8 April 2011)
US\$149.63/kg**

Market Value

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Increasing recognition of value in Arafura

ARU Price History and Volume



Arafura now covered by:

	Report Date	12 month Price Target
BBY	28 October 2010	A\$3.64/share
Bell Potter	23 February 2011	A\$2.31/share
Byron CM	31 August 2010	A\$2.75/share
RCR	16 February 2011	A\$3.08/share
Shaws	10 December 2010	A\$2.15/share

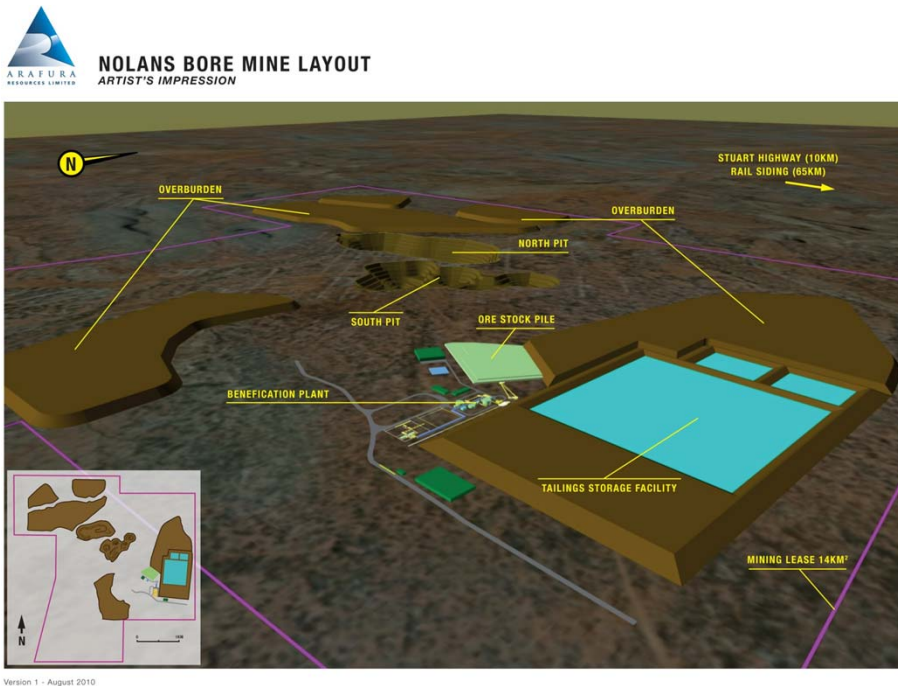
Peer	Market Capitalisation
Lynas	A\$4.26 billion
Molycorp	US\$5.10 billion

Peer comparison

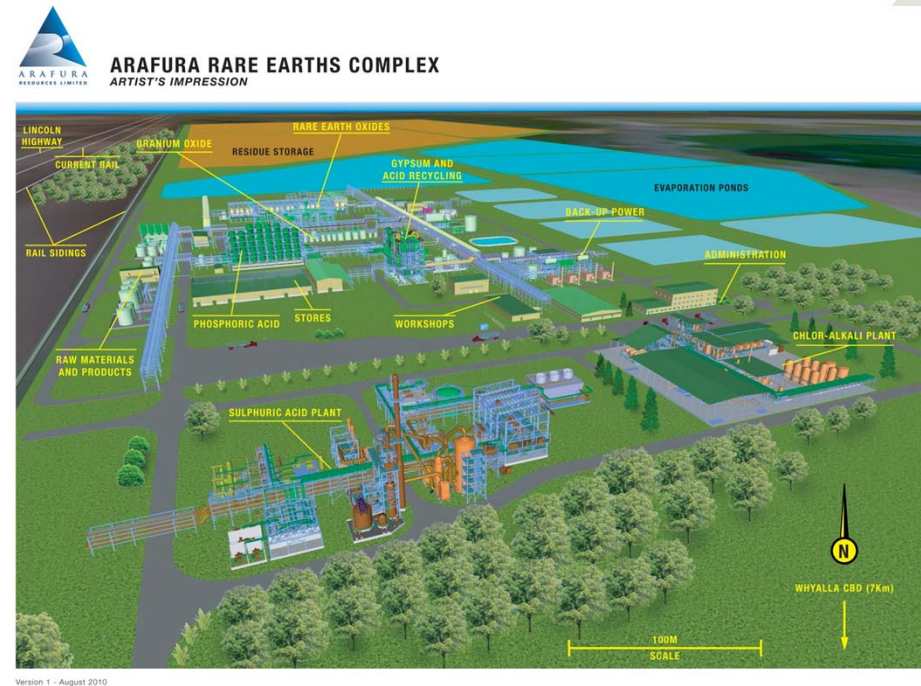


Nolans Project – Mine & Rare Earths Complex

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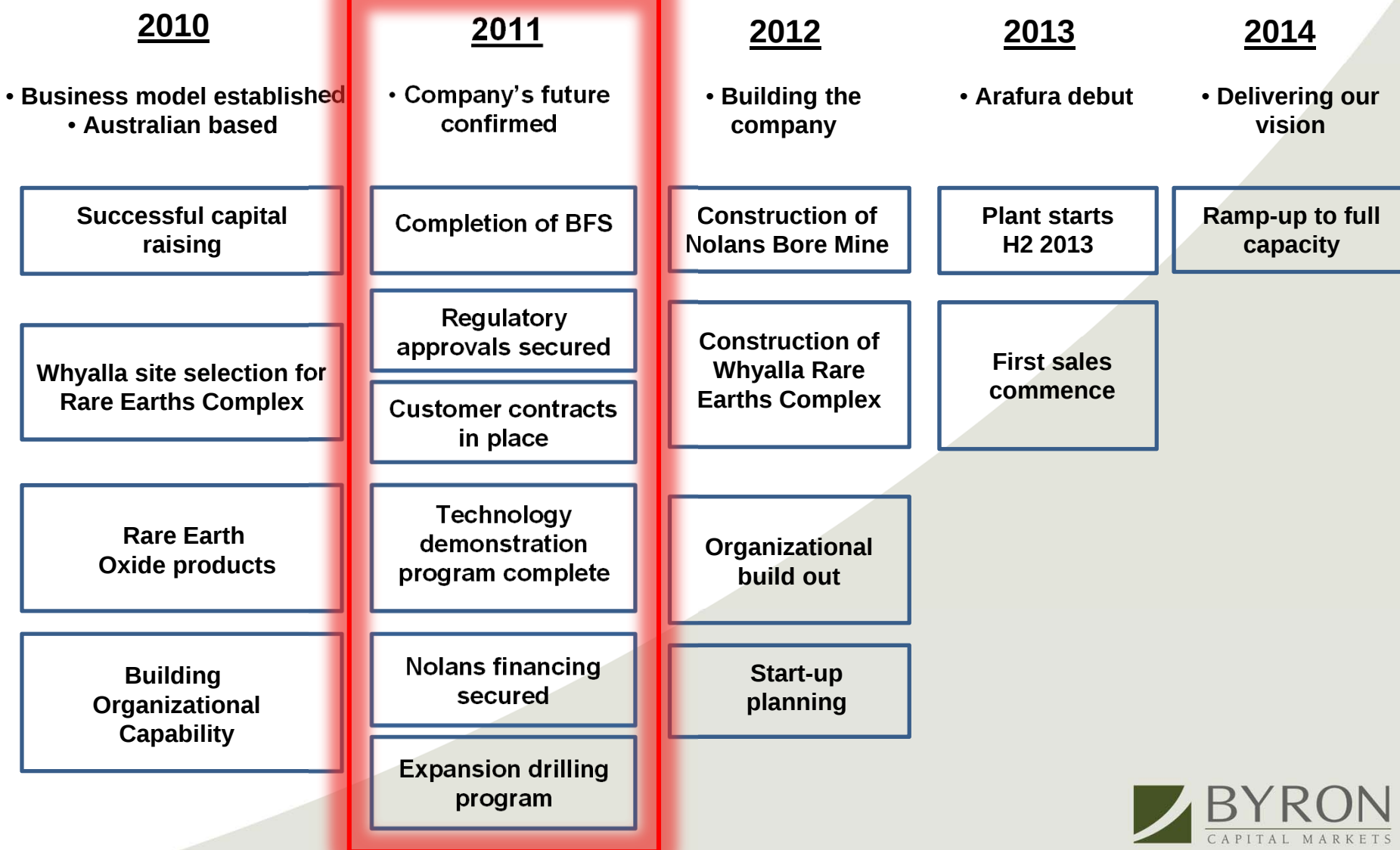
The Nolans Bore Mine and its supporting infrastructure will act as a catalyst for business opportunities throughout Central Australia



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

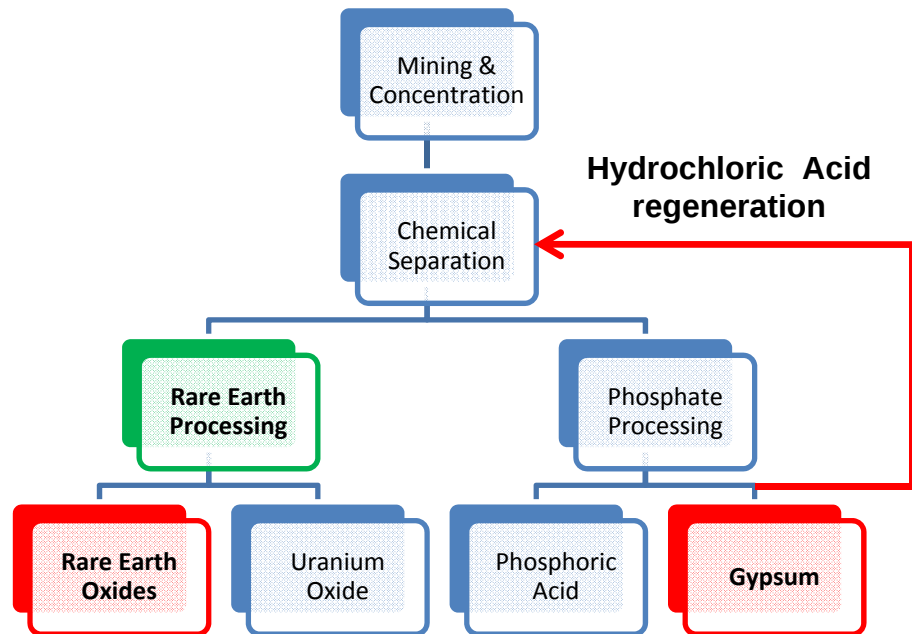
Progress and Future Plan

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



Final Technology Programs Underway

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-  Already proven / demonstrated
-  Piloting & demonstration program
-  Optimisation program



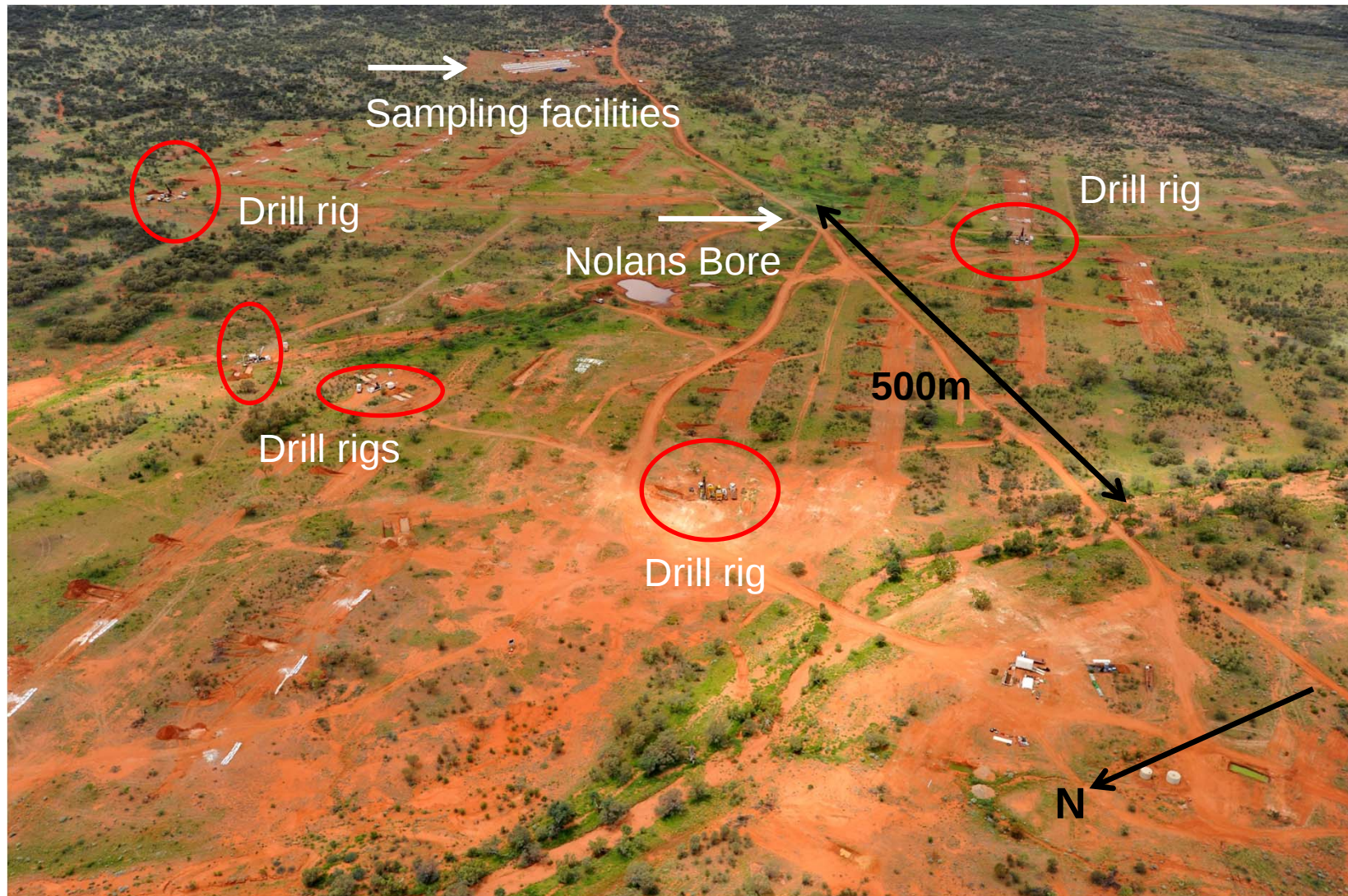
Gypsum production from Hydrochloric Acid regeneration demo plant at AMMTEC, Perth.

De-risking novel technology will facilitate project financing and enable nameplate production rate to be achieved quickly.

Expansion Drilling Program – In Progress

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Major program – 45,000m in 2011 which is more than previous total (43,000m)



Regulatory Approvals Underway

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- Environmental impact statements are being prepared for Nolans Bore & Whyalla
- Surveys and studies are progressing well
- South Australian Government has granted Major Project status for Whyalla Rare Earths Complex

Scientists test Arafura site

Arafura Resources Limited has dug 29 test pits and drilled four ground water bores to carry out soil and water tests.

The company is progressing well with its proposed rare earths processing plant and has completed a number of studies.

Company's environment, health and safety coordinator Allan Kane said the tests were being carried out with minimum damage being done to the environment.

He said a narrow bucket was being used to dig the three-metre deep pits and the drills had not gone beyond 13 metres.

Whyalla Earthworks has done the digging works while an Adelaide company was contracted to do the drilling.

"Arafura's objective is to operate in a responsible manner which minimises our impact on the environment," Mr Kane said.

"We believe that caring for the environment and protecting our heritage are an integral part of our business and we will ensure that we will manage our environmental performance with the same rigor as the financial and production aspects of our business."

The company has hired specialists from AECOM a global

provider of professional technical and management support services to carry out the tests.

Environmental scientist at the Whyalla site Carina Polimeni said nothing unusual was found during the drilling and digging.

She said samples would be tested out and a report would be submitted to Arafura within a week.

"We will be installing PVC tubes into the bores to do further water tests within a week," Ms Polimeni said.

"The next step of action would be decided after we get all the test results."

"The results would indicate if further tests were needed."

Mr Kane said the tests would help determine the characterisation of ground water and the soil quality in the proposed area.

He said this baseline knowledge would help the company make some crucial decisions on the way forward.

"We have completed the flora and fauna, marine and air quality studies so far," Mr Kane said.

"Our timeline is spot on and after getting all the results we will go back to the community for consultation."

"With all this important information on hand it will be easier to tell the community what is happening backed with reports from the scientists."

"Our aim is to establish the project in the most safest way while keeping the community informed of our progress."

The \$1 billion proposed plant is expected to create 1000 jobs and supply about 10 per cent of the world's demand for the elements, producing 20,000 tonnes a year when it begins production in 2013.

Rare earths are extremely valuable and priced as high as \$60 a kilogram.

The plant is expected to generate about \$1 billion in annual revenue for about 20 years.

Plant construction is planned for later this year, with 1000 jobs to be created in the first two years and 300 permanent positions.

Progress of the project is dependent on an environmental impact statement and assessment by the state government.

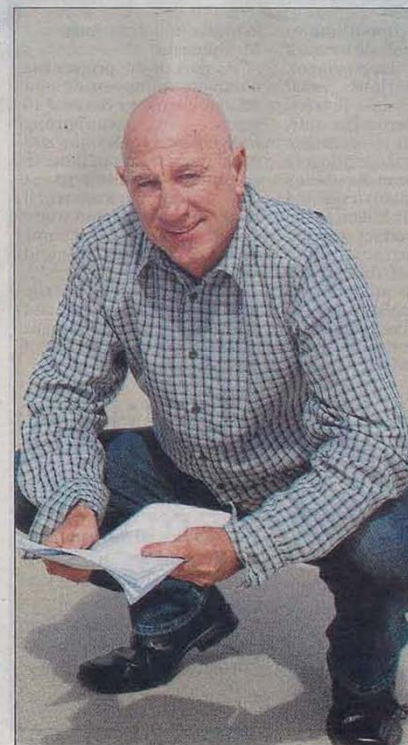
The economic spin-off for Whyalla is an estimated \$100 million wealth generated each year.



SPECIALISTS: Arafura environment, health and safety coordinator Allan Kane has a feel of the samples while environmental scientist Carina Polimeni explained the testing process.



Group happy with Arafura



The Environment Consultation Group (ECG) is pleased with the progress of the Arafura Resources Limited so far and has applauded their move to open a local office and have a full time staff member.

ECG chairperson Eddie Hughes said the group met Arafura representatives last week and was looking forward to receiving updated reports after the recent tests.

He said the company had an open relationship with the community, which was a good sign.

"There is a lot of work Arafura will be doing for the Environment Impact Statement (EIS) and with the type of communication we have had so far we are sure to share a good relationship in the future," Mr Hughes said.

"It is good to see that they are making a steady progress with their proposed project."

"The company will continue to update its website with the latest information as far as the Whyalla project is concerned and I guess it will be a good way to keep the community informed also."

Mr Hughes said part of the positive reception from the community was due to the site.

He said selecting the OneSteel industrial site was a positive move in itself because it was away from recreational sites.

Mr Hughes said environmentalists and concerned residents would keep a lookout on a possible impact on the marine environment.

He said open communication would help iron out any confusion and concerns.

LEFT:
HAPPY: Environment Consultation Group (ECG) chairperson Eddie Hughes is happy with Arafura's progress and is looking forward to open discussions with the company as it progresses with its environmental studies.

Nolans BFS and Project Financing

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Significant build up of expert assistance.....

- Major engineering contractors have been engaged to assist with Bankable Feasibility Study:
 - Nolans Bore Mine: Lycopodium
 - Whyalla Rare Earths Complex: AMEC Minproc;
- Arafura's in-house team has been reinforced with staff from Parsons Brinkerhoff and Battery Limits;
- A selection process to engage a Corporate Financial Advisor is in progress;
- Arafura's leadership team was expanded with additional skills added in 2010.

Arafura's Current Sales Activities

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- 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.

Future Supplies – Background

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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')

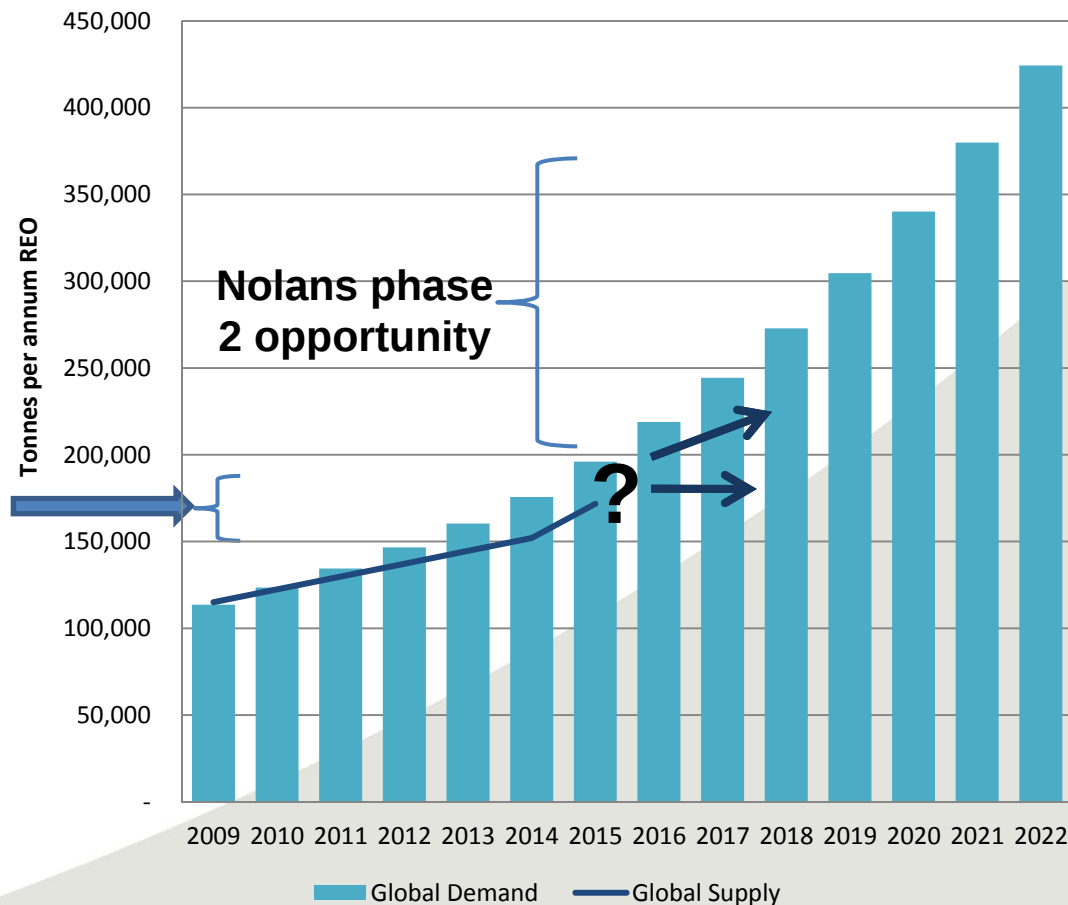
- Takes approximately 15 years from initial find to successful production;
- There are high technical and capital barriers to success;
- Very few projects are advanced sufficiently to come into production successfully this decade;
- The current market dynamics are not a classic bubble.

Supply and Demand

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

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



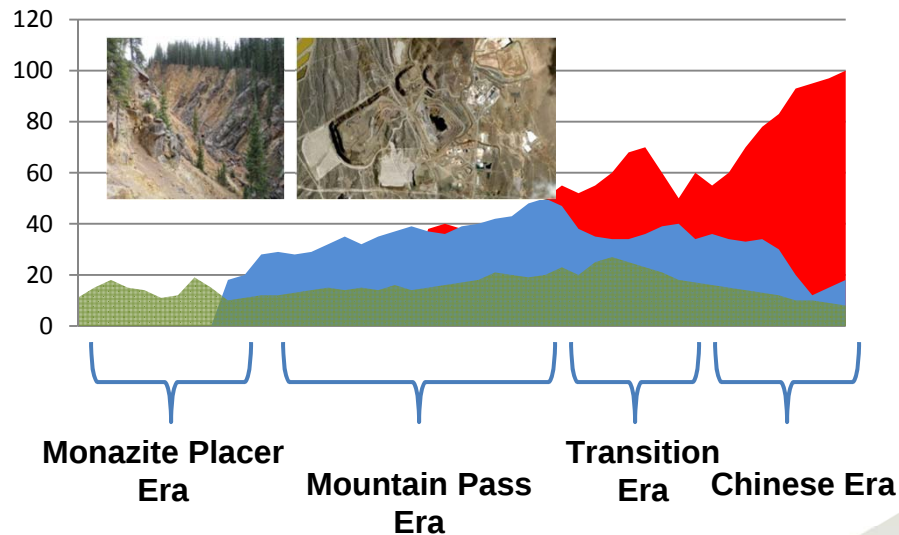
These supply forecasts include new projects: Lynas, Molycorp, Alkane and Arafura. The supply side will still struggle to keep up with demand.

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

Rare Earths – Entering a New Era, Supply Shortage

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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

Arafura Resources – Summary

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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





BYRON

CAPITAL MARKETS

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Thank You

