ARAFURA
RESOURCES LTD

Shareholder presentation

September 2009

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The information in this release that relates to exploration results and geological interpretation has been compiled by Mr Richard Brescianini BSc (Hons), and the information in this release that relates to metallurgical results and interpretation has been compiled by Mr Steven Mackowski BAppSc, both full-time employees of Arafura Resources. Mr Brescianini is a Member of the Australian Institute of Geoscientists and he has sufficient experience with the style of mineralisation being reported 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)” for reporting the exploration results. Mr Brescianini consents to the inclusion in this report of the contained technical information in the form and context in which it appears.

Mr Mackowski is a Fellow of the Australian Institute of Mining and Metallurgy and he has sufficient experience with the style of mineralisation being reported 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)” for reporting these metallurgical results. Mr Mackowski consents to the inclusion in this report of the contained technical information in the form and context in which it appears.

Topics

- **Introduction by Arafura Resources Chairman – Mr. Ian Laurance AM**
- **Introduction of ECE Director General – Mr. Shao Yi**
- **ECE – Strategic Investment Partner**
  - ECE investment
  - Arafura corporate structure (pre and post EGM)
  - Independent Expert's opinion
  - Use of funds
- **Nolans Project Update**
- **Outlook**

Mr. Ian Laurance AM

Chairman

Arafura Resources Ltd

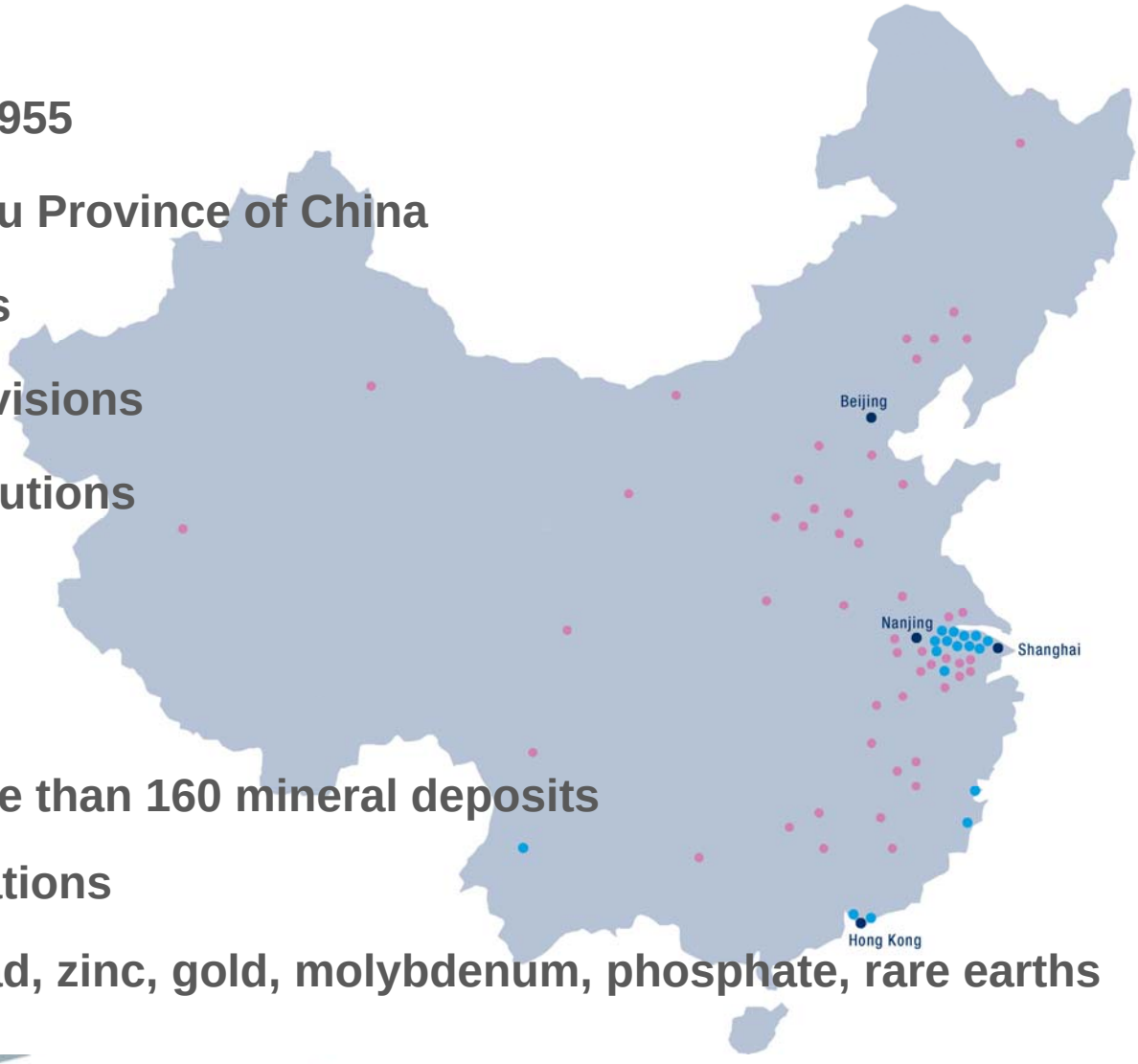
Introduction

Mr. Shao Yi
Director General
East China Mineral Exploration & Development Bureau

ECE – Strategic Investment Partner

ECE – Strategic Investment Partner

- Established in 1955
- Based in Jiangsu Province of China
- 4,000 employees
- 8 exploration divisions
- 7 research institutions

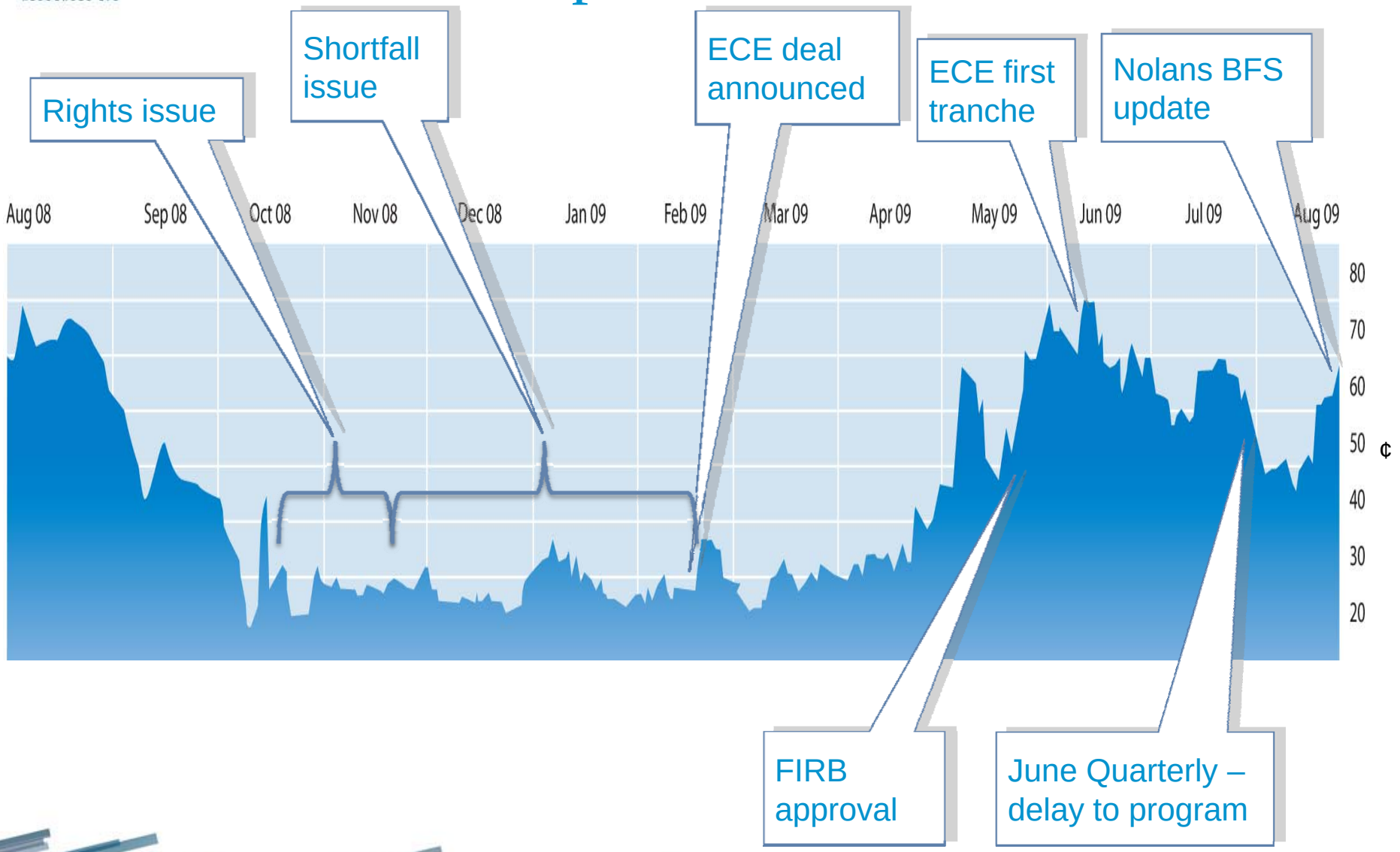


- Discovered more than 160 mineral deposits
- 22 mining operations
- Iron, copper, lead, zinc, gold, molybdenum, phosphate, rare earths

Mr. Alistair Stephens
Managing Director
Arafura Resources Ltd

Shareholder Presentation

Arafura share price



ECE strategic investment

- Proposed total investment of A$22.94 million for 25% shareholding
- Investment completed over two tranches
- FIRB approval in May 2009

Stage 1
- Completed in June
- A$8.5M investment
- 12.7% at $0.30 /share

Stage 2
- Shareholder approval
- A$14.44M investment
- 12.3% at $0.40 /share

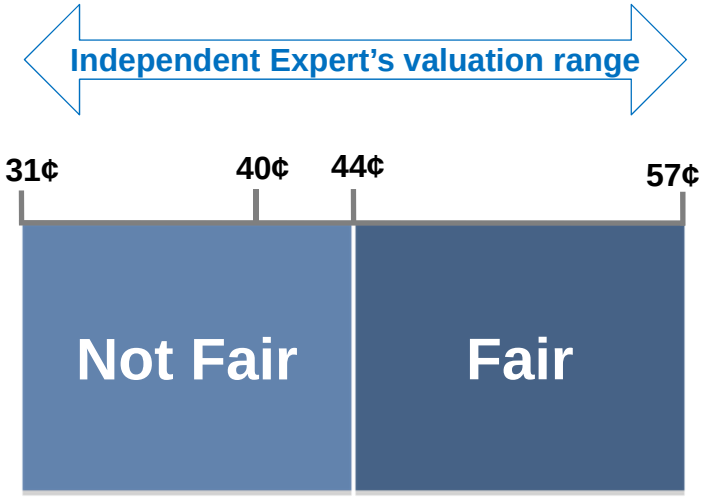
Arafura corporate structure

Current	Post EGM (assuming Shareholder approval)
Shares on issue 223.1 million	**Shares on issue** 259.2 million
Market capitalisation @ A$0.70 = ~A$156M	**Market capitalisation** @ A$0.70 = ~A$181M
Top shareholders:	**Top shareholders:**
ANZ Nominees 42.6%	ANZ Nominees 36.6%
ECE 12.7%	ECE 24.9%
Board & management 4%	Board & management 3.6%
Citicorp Nominees 2.5%	Citicorp Nominees 2.1%

Independent Expert's opinion

'Not fair but reasonable' – Why?

'Not Fair…'



'… But Reasonable'

- Placement price was 35-40% above share price at time of negotiation
- Funds vital to continue Nolans feasibility program
- ECE will be a long-term, well-funded, experienced strategic partner
- Partnership will develop synergies (and already is)
- Secures a platform for further growth

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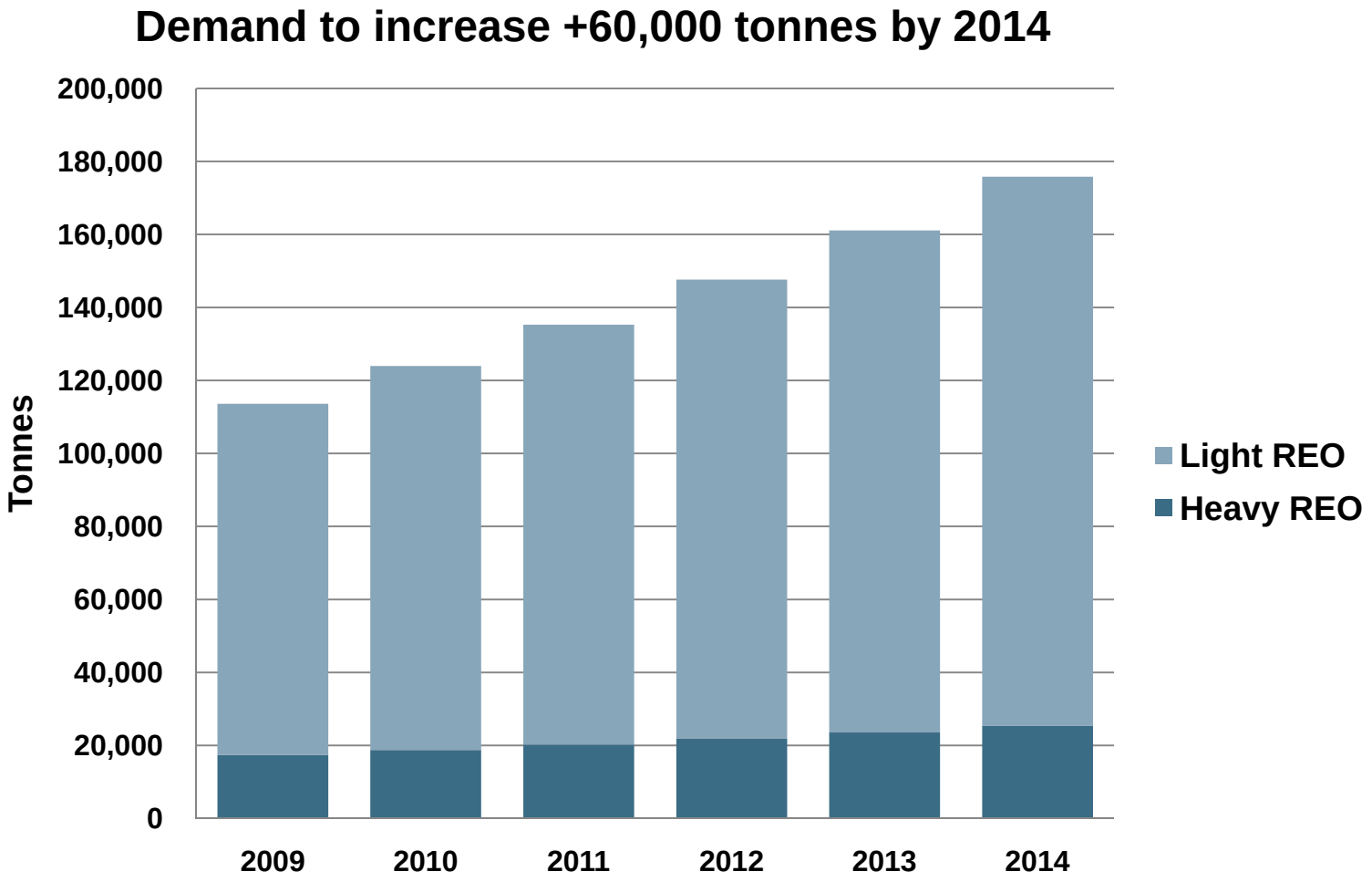
Nolans

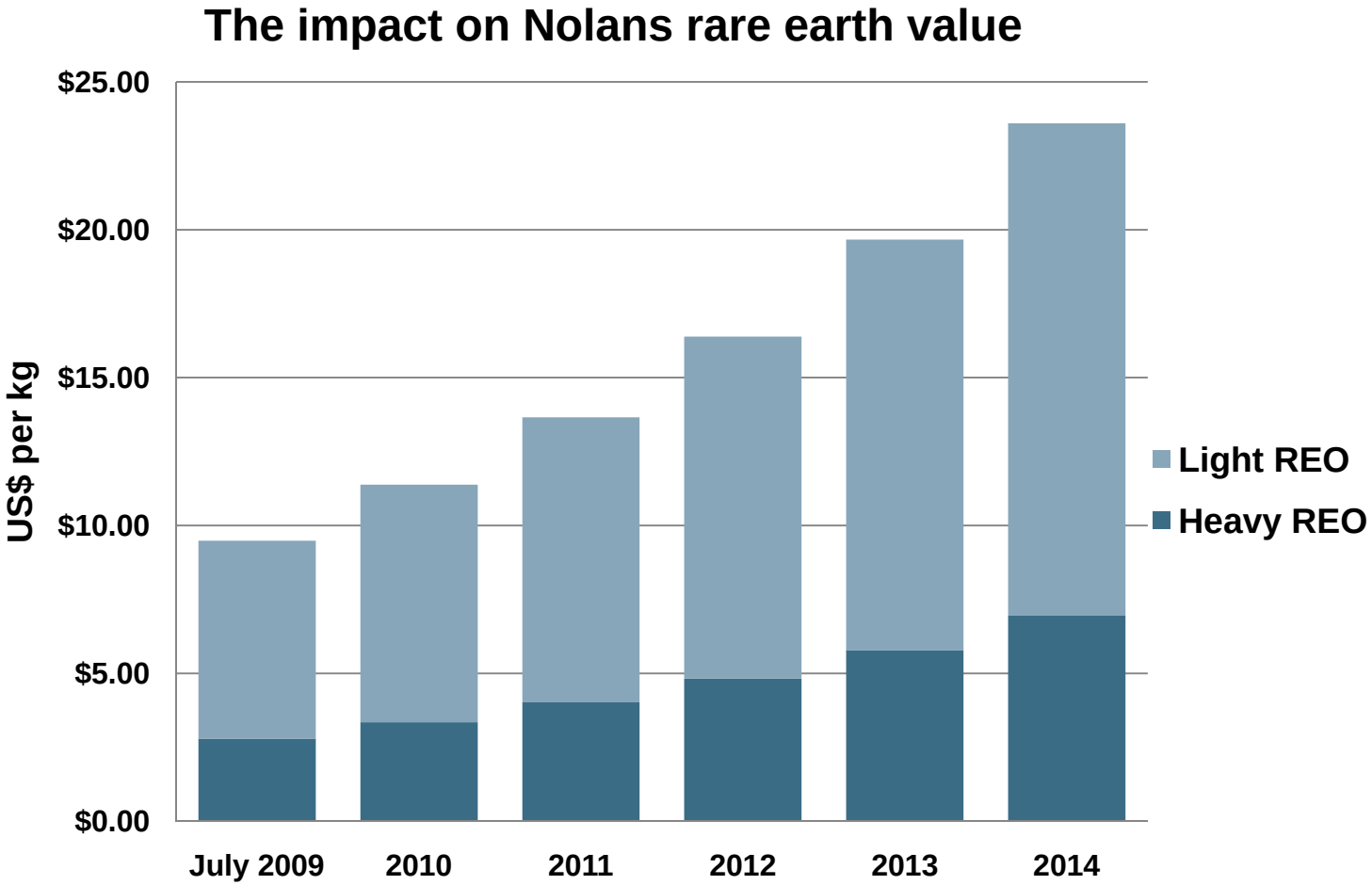
Project Update

Rare Earth – strong growth is forecast



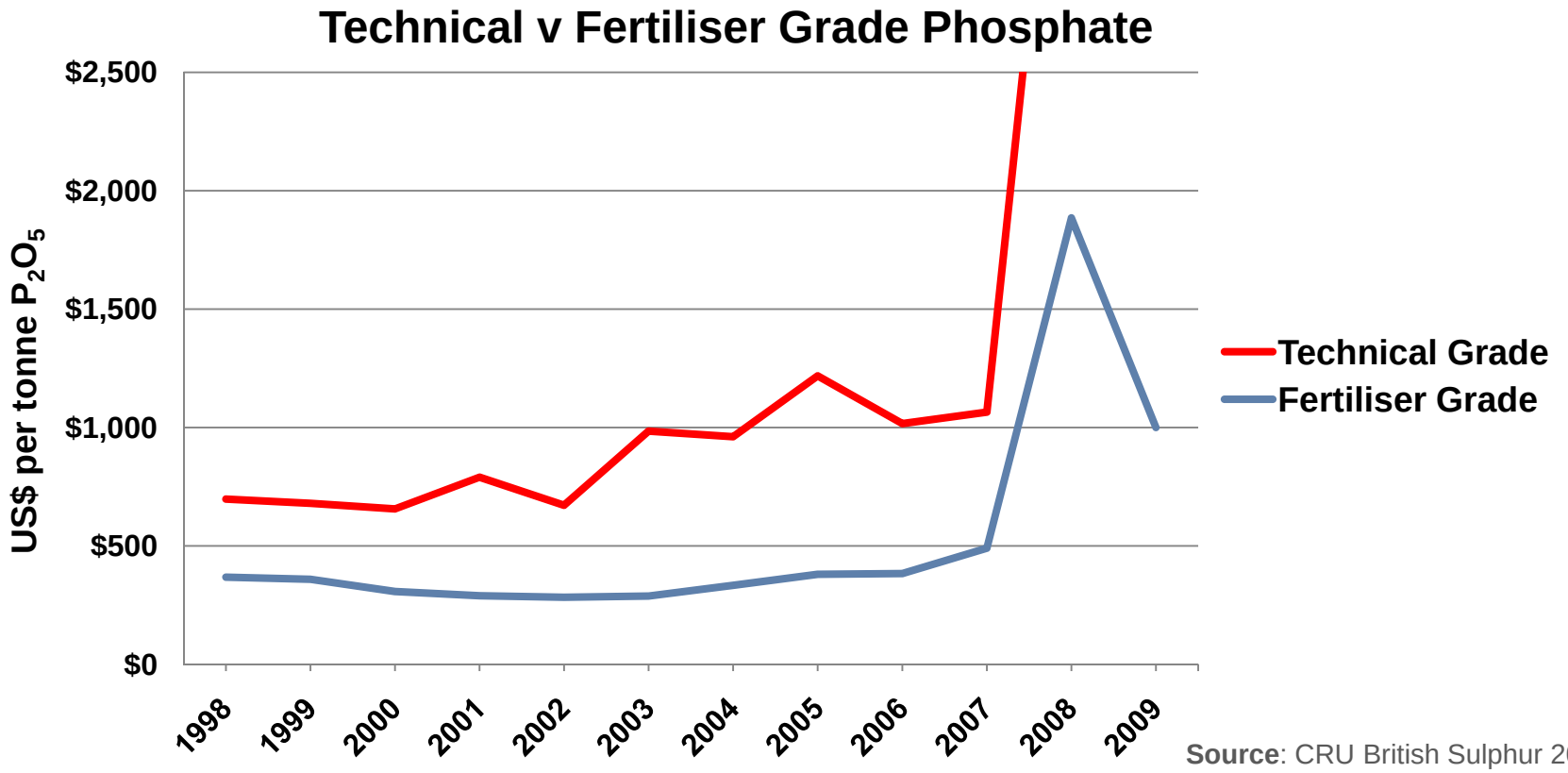
Source: BCC Research, June 2009 – 'Rare Earths worldwide market, applications, technologies'

Rare Earth prices will rise with demand



Source: BCC 2009 REO report. Forecasts 20-30% CAGR increase in REO prices over the next five years (pp92).

Phosphate revenue will be higher



Source: CRU British Sulphur 2009

- **Higher recoveries for higher quality phosphate will increase revenue**
- **Expansion into technical grade phosphate opens new opportunities**

Nolans resource

- **Current total resources of 30.3 million tonnes**
- **Estimated mine life 20+ years**
- **Mineralisation present over 150 hectares and exposed at the surface**
- **Resource contains**
  - 848,000 tonnes of rare earths (REO)
  - 3.9 million tonnes of phosphate (P_2O_5)
  - 13.3 million pounds of uranium (U_3O_8)
- **Ample scope to grow resource base if needed**

Recoveries have improved

	BFS recovery	Previous estimate
HMS Concentration	90%	90%
Rare Earths (recovery to carbonate)	**86%**	80%
Phosphoric Acid (technical grade)	**85%**	80%
Uranium	80%	80%

	Production p.a. (tonnes)	Price (June 09)
Rare Earths REO	20,000	US$10/kg
Phosphoric acid P_2O_5	80,000	**US$1000/t**
Uranium U_3O_8	150	US$50/lb

Phosphate price is based on fertiliser grade product for conservatism. Technical grade 50% higher.

Capital & operating costs

BFS has lowered operating costs

- **Hydrochloric acid consumption down 30%**
- **Sulphuric acid consumption down 20%**
- **Have replaced 50% of caustic with lime, reducing costs**

Capital savings identified

- **Plant can be modularised, shipped and then assembled in Australia**
- **4 million labour hours associated with overseas modular plant**

Current scope of works

Mine site design

Behind schedule

- **Mine pit & waste dump design**
- **Concentration (HMS) plant**
- **Haulage roads**
- **Environmental studies**
- **Offices and facilities**

Chemical plant

On track

- **Chemical supply logistics**
- **Detailed leach plant**
- **Detailed rare earths plant**
- **Detailed phosphoric acid plant**
- **Detailed waste disposal facilities**

Chemical plant location study

Key criteria for chemical plant location study

- Access to major chemical reagents
- Transport corridor of road, rail and shipping
- Must be close to a port

Rare Earths separation plant

- Location for rare earth separation plant not yet determined

Carbon Pollution Reduction Scheme

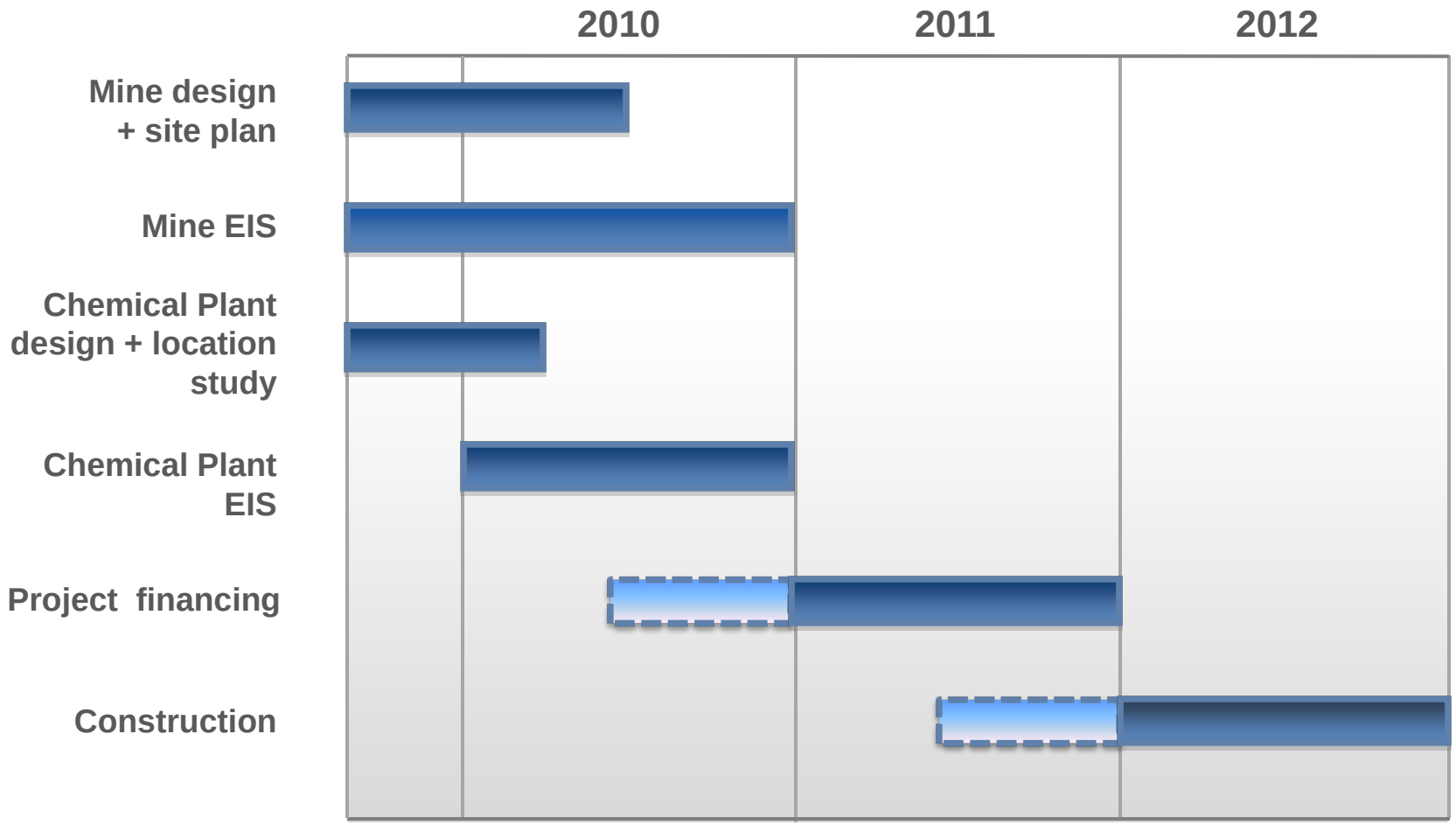
Australian Government's proposed Carbon Pollution Reduction Scheme (CPRS)

- Main impact will be power, fuel and cement (lime)
- Nolans chemical plant may be power and carbon emissions neutral

How will this be achieved?

- Treat calcium chloride with sulphuric acid
- Recycle hydrochloric acid to leach circuit
- Heat from sulphuric acid plant can be used to generate power

Project timeline



Outlook – with ECE funding

Complete Bankable Feasibility Study

Mine site feasibility can commence

Determine chemical plant location

Environmental works to commence

Technical studies completed in 2010

2010 and 2011 dedicated to project funding