Arafura Resources Limited

Alistair J Stephens
Managing Director

September 2008

Arafura Resources Ltd

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Topics

- Why we are here?
- Overview of Arafura
- Overview of the Nolans project
- Community benefits
- Rare earth products
- Rare earths market

Overview of Arafura

ASX listed

ASX:ARU 157.2 million shares (as at 1 Sept 2008)

Principal project – Nolans phosphate hosted rare earths

Rare earths – strategically vital commodities

Exploration projects

Rare earths

Magnetite hosted vanadium, nickel, gold

Business strategy

Resources for +20 years life – expansion capability

Looking to expand our rare earths footprint

Looking for a committed and motivated strategic growth partner

Partnerships

Looking for appropriate opportunities to joint venture projects

Board of Directors

Mick Muir	Non-Executive Chairman
Alistair Stephens	Managing Director / CEO
Hon Ian Laurance AN	Non-Executive Director
Ian Kowalick	Non-Executive Director
Stephen Ward	Non-Executive Director
Terry Jackson AN	Non-Executive Director

Senior Management

Gavin Lockyer	Company Secretary / CFO
Steven Mackowski	GM - Project Development
Richard Brescianini	GM - Strategic Development & Exploration
Ross Terry	GM – Corporate Affairs & HR
Brian Fowler	Manager Sustainability

Rare earths applications

ARAFURA RESOURCES PRODUCTS AND THEIR MARKETS

ENERGY PRODUCTION

- Petroleum Refining — La
- High-powered Electric Motors — Nd, Dy, Tb
- New Generation Vehicles — La

ENERGY REDUCTION

- UV Filters in Glass — Ce
- Reducing Fuel Consumption — Nd
- Lighter Vehicles - Improved Performance — Dy

ENERGY EFFICIENCY

- New Generation Vehicles — Nd, Sm
- Rechargeable Batteries — La
- Energy Efficient Lighting — Pr, Eu

LIFESTYLE

- Colour Screen LCDs/PDPs — Eu, Tb, Y
- Components to Hardware — Nd
- Medical Services — Nd, Gd
- Autocatalysts — Ce

La - Lanthanum, **Nd** - Neodymium, **Dy** - Dysprosium, **Tb** - Terbium, **Ce** - Cerium
Sm - Samarium, **Pr** - Praseodymium, **Eu** - Europium, **Y** - Yttrium, **Gd** - Gadolinium

Nolans Project

Nolans project location

Nolans project

135 km north of Alice Springs

5km to gas line

10km to Stuart Highway

15km to Aileron Roadhouse

60 km to rail line

1200 km north to Darwin

1300 km south to Port Pirie

Simple small scale open pit mining

No pre-strip needed

Small mining operation - 800,000 tpa ore at 1:1 ore:waste strip ratio

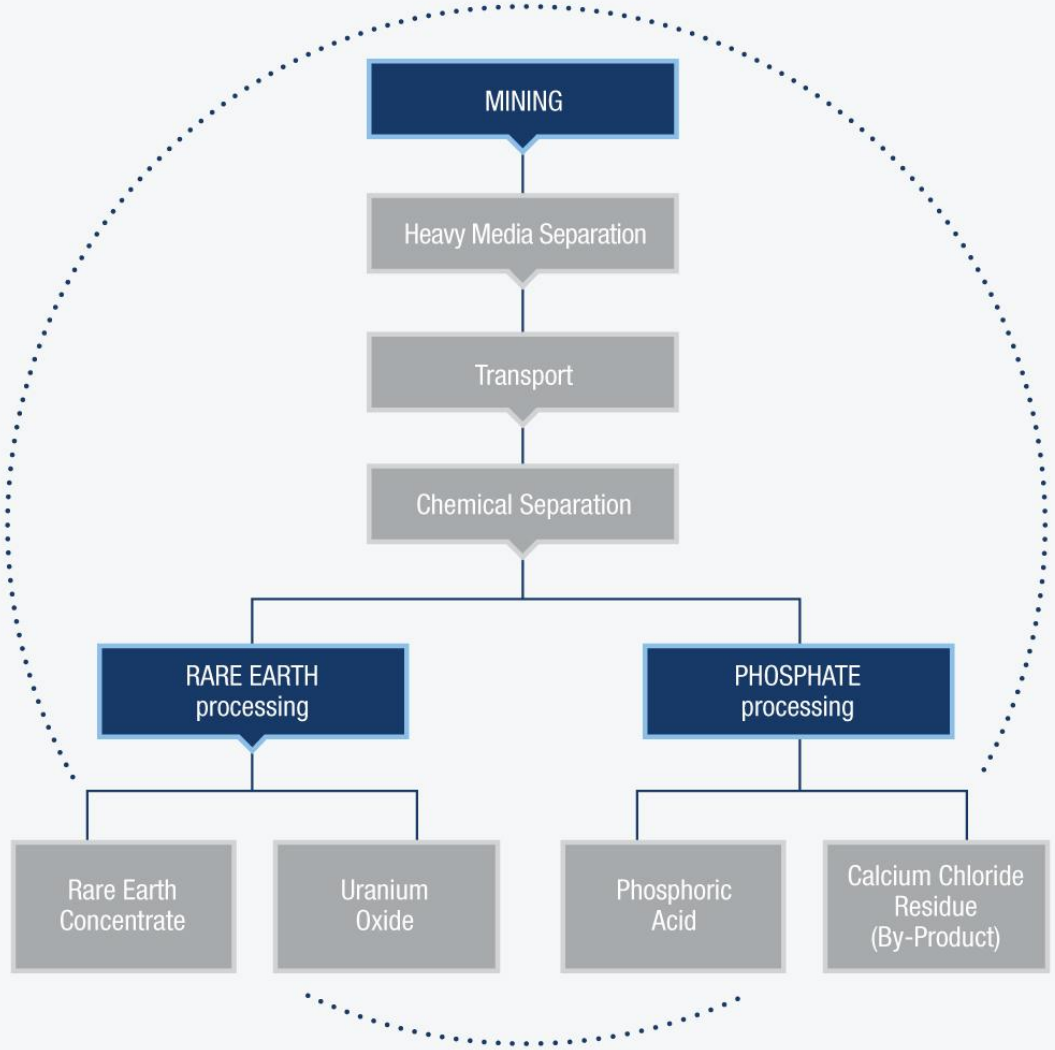
Crush, screen, wash ore by heavy media separation

Transport <500,000 tpa concentrated ore using truck and rail

Low power and water demand

ARAFURA
RESOURCES LIMITED

Nolans Project Flowsheet



Community benefits from the mine site

50 to 60 jobs with priority to locals

Opportunities for Anmatjere people

Service and supply contracts in Central Australia

Community benefits

- Indigenous economic benefit
- Health, education, communications
- Water and power synergies

Aileron Roadhouse

Use of NT infrastructure

Community benefits from the process plant

100 jobs with priority to locals

Local purchasing policy

Local people

Capital expenditure $630 million

Economic benefits

- Capital – Gross State Product $242 million
- 3400 jobs in construction
- 60 full-time

New Industry

Project Timeline

Project Schedule

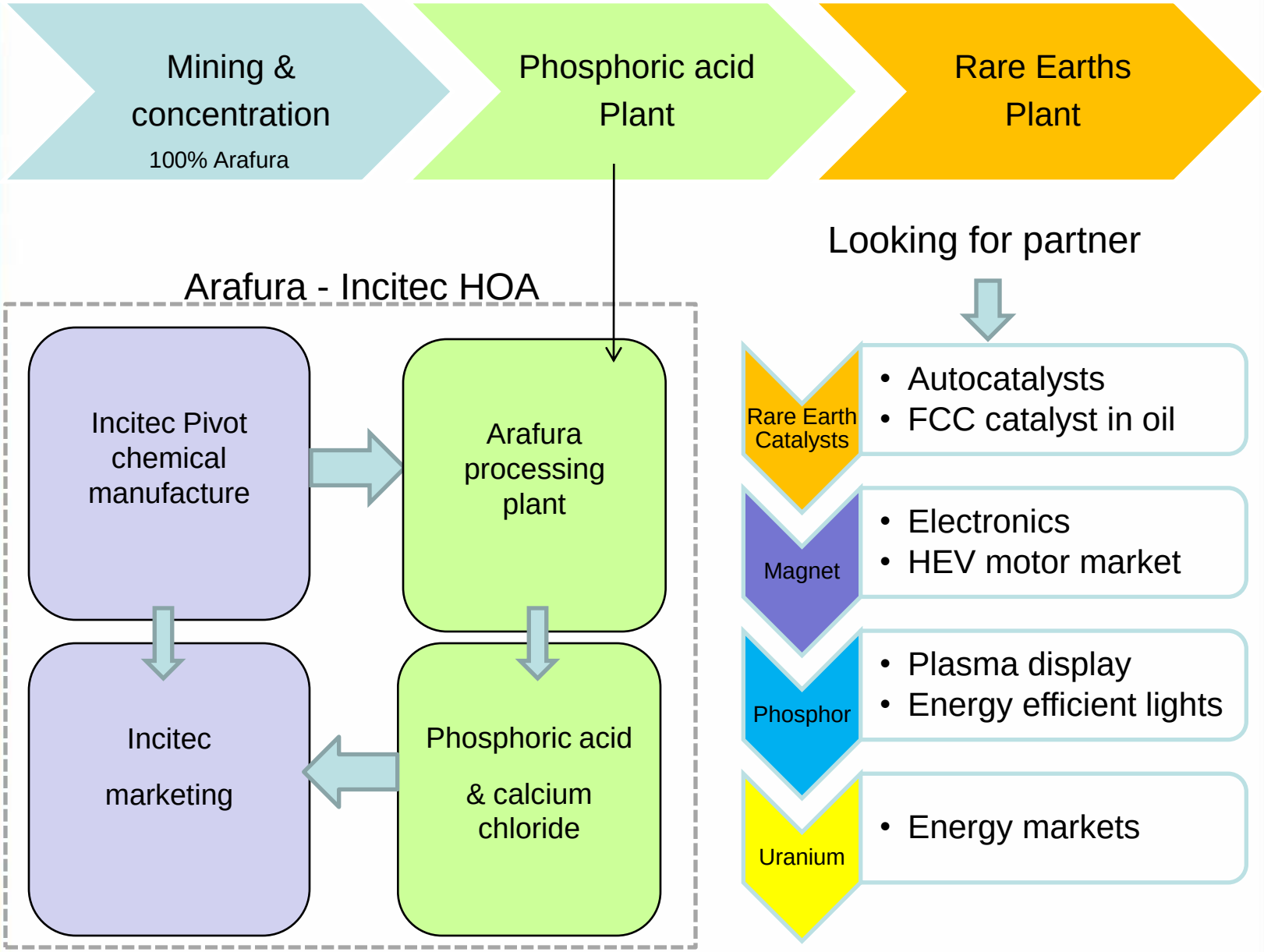
Activity	2008	2009	2010	2011	2012	2013
Submit NOI Mine						
Studies for Mine approval						
Mine approval						
Demonstration Plant Studies						
Definitive Feasibility Study						
Process Plant Site Selection						
Studies & Process Plant NOI + Approval						
Procurement & Construction						
Production 50%						
Production 75%						
Production 100%						

Nolans production

	Production per annum (tonnes)	Current price ($US)	Total revenue US$ million
Rare earths	20,000	*15,000/tonne	300
Phosphoric acid	150,000	>1,000/tonne	150
Calcium chloride	400,000	100/tonne	40
Uranium	150	75/lb	25
Total revenue			US$515
Total revenue at USD:AUD 0.86			**AUD$600**
Less operating expenses (excluding chemical transport costs)			**AUD$250
Gross Margin			AUD$350
Capital cost $630m			
Revenue over 20 years undiscounted A$12 billion			

*based on Nolans mix of rare earths at prices for a 99% separated product
** does not account for increases in chemical costs since Nov 2007

Nolans business structure



Rare Earths Market

Rare earths – history and future

Market driver		Industry Structure
1900s	Emerging market in flint	Emerging market
1950s	Polishing and glass	
1960s	Oil industry catalyst	Strong growth
1970s	CRT TV era	Industry reforms
1980s	Phosphor era	
1990s	Magnet era	China's dominance
2000	Electronics and HEV era	
2010s	Renewable and energy efficient products, lifestyle and electronics Nolans is strategically vital	Rapid growth Economies of scale Industry consolidation

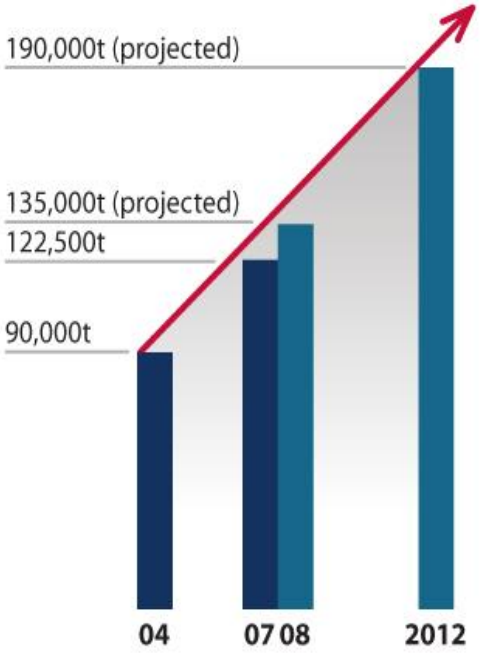
China's export transition

	Market driver	Strategy
1970s	RE mineral concentrates	Dominate the market
1980s	Mixed RE chemical concentrates	Displace competition
1990s	Separated RE metals and oxide	Add value
2000	Alloys, magnets, polishing powders	Foster China's growth
Now	Lights, LCDs, computers, batteries, motors Western companies forced to move manufacturing to China to ensure access to rare earths	Preserve China's resources for its own development

Rare earths market

RARE EARTHS MARKET ANALYSIS

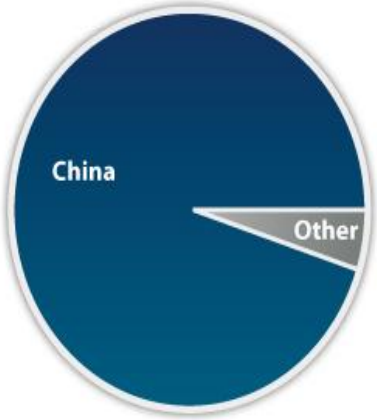
DEMAND



SUPPLY

China – Currently produces approximately 95% of total demand

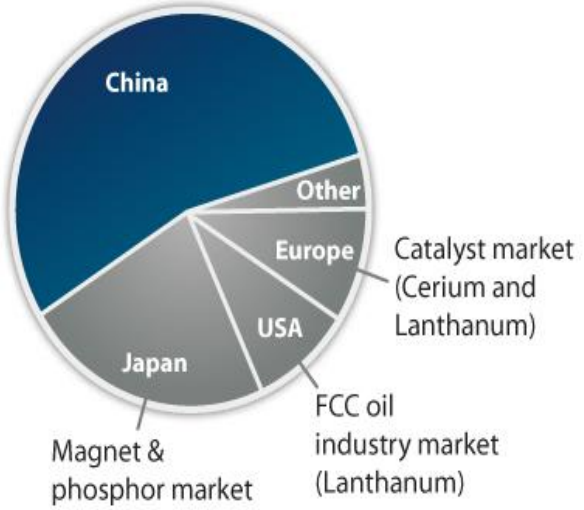
Non-Chinese – Limited resources with modest expansion capability. Currently dominated by low value light rare earths (Cerium and Lanthanum)



CONSUMERS

China – Consumes 55% of total demand

Non-Chinese – High demand for Neodymium, Praseodymium, Dysprosium, Terbium and Europium



Demand for our product is strong

Rare earths

Chemical catalysts

Growing at 5% to 10% per annum

Stronger growth to come from rechargeable battery market and increased heavy crude oil production

Magnets

Market growth currently 15% to 20% per year

Strong growth in the hybrid car market

Current production of NdFeB = 50,000t (2007) to double to 100,000t by 2010

Phosphorescence

Demand growing at 15% to 20% per annum

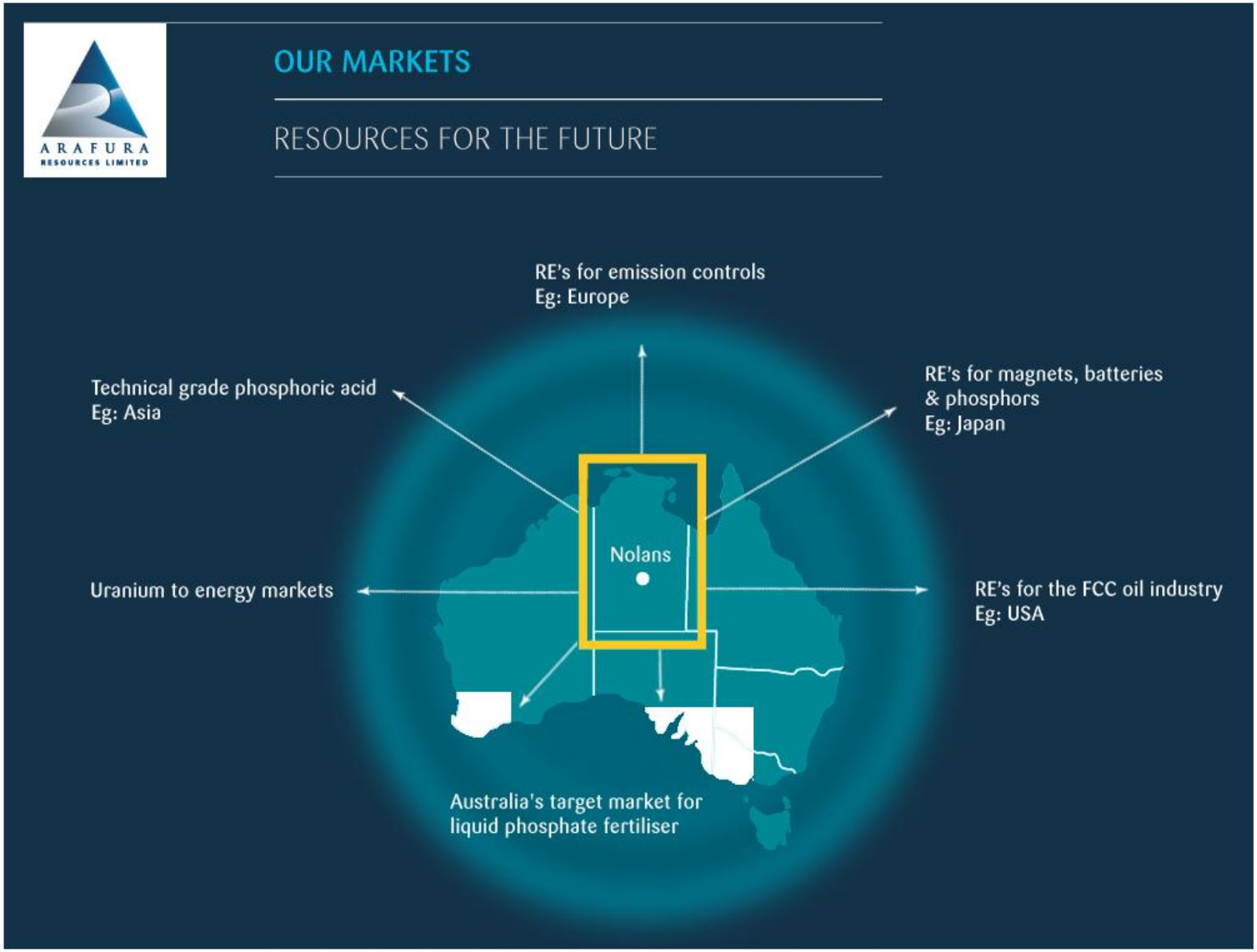
Plasma panel market, low energy lights bulbs

Phosphoric acid

Strong growth as it is manufacturing constrained market (not resource constrained)

Agricultural and fuel markets - the world's need for protein and energy

Nolans markets



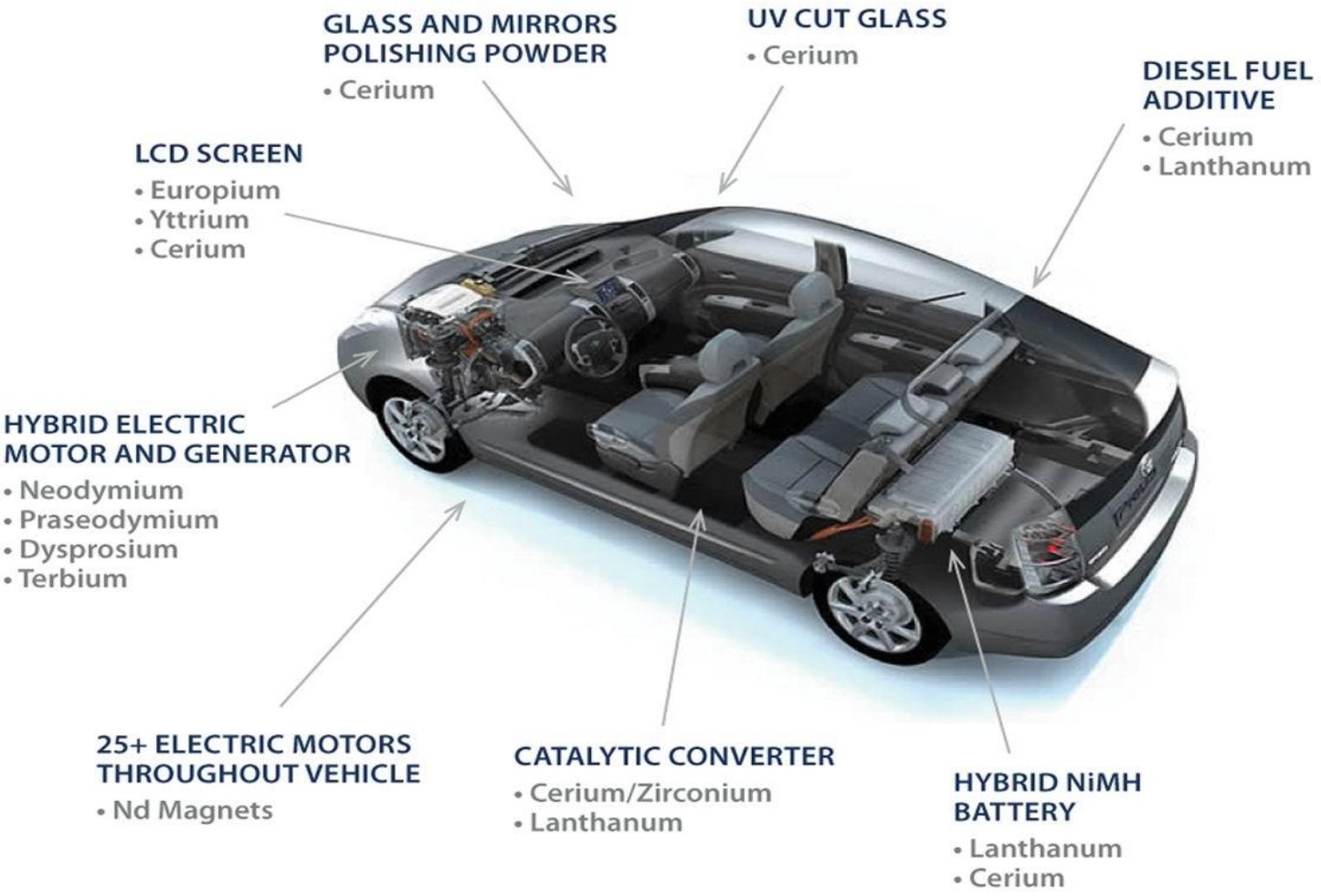
Issues

Site location needs and Infrastructure

- Water
- Power
- Gas
- Road and rail
- Port access
- Other
  - Waste management
  - Emissions
  - Uranium

Appendices

Rare earths - metals for the future

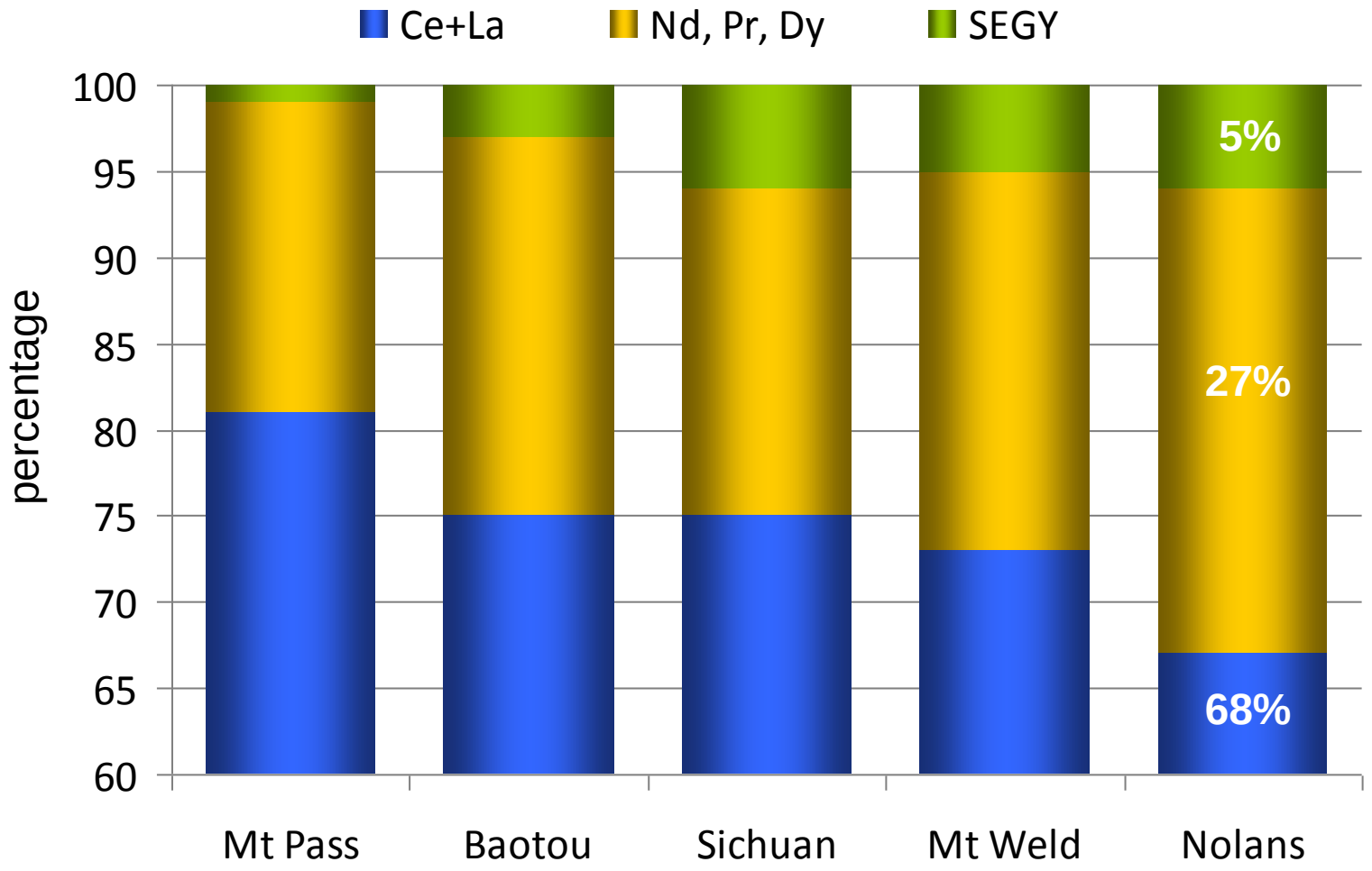


Project environmental and social benefits

REO	Production	Component	End Product	Environmental Savings
CeO_2	3,500t	Auto catalysts	25 million cars	Reduces NO_X which aggravates respiratory problems, causes acid rain and damages aquatic environments.
CeO_2	1,600t	Ultra violet filtering agent	Architectural glass	Reduces UV light.
CeO2	2,500t	Batteries	500,000 hybrid cars	Fuel savings* = 660 litres @ $1.40/l x 500,000 = A$462 million p.a. CO_2 savings^ = 1 million tonnes p.a.
La_2O_3	4,000t			
Nd/Pr	5,200t	Magnets		
Eu_2O_3	74t	Phosphor	200 million energy efficient lights	Energy cost savings~ = A$2.2 billion p.a. CO_2 savings° = 16.6 million tonnes p.a.

*Fuel savings based on difference between Toyota Prius city driving of 5.6L/100km and other medium sized cars at 10L/100km on 15,000km annually.
^CO_2 savings based on difference between Toyota Prius emission of 106g/km and other medium sized cars (10L/100km) emission at 3.6 tonnes annually.
~Bill savings based on annual running cost savings of $11 by replacing a 75W incandescent globe with an 18W energy saving lamp. *From:* www.sedo.energy.wa.gov.au/pages/lightrun.asp
° CO_2 savings based on reduction of 83kg of CO_2 by replacing a 75W incandescent globe with an 18W energy saving lamp. *From:* www.sedo.energy.wa.gov.au/pages/lightrun.asp

Nolans is enriched in higher value RE



Value US$/Kg	10.9	12.5	12.5	15.1	15.6

Nolans has additional a co-product of phosphoric acid and by-products of uranium and calcium chloride
Baotou has a co-product of iron
SEGY = Samarium, europium, gadolinium, yttrium and terbium
Prices based on the 2nd quarter 2008 price for all rare earths published on metal pages.

Nolans final product value

Product value including co-product and by-product credits in US$/kg as REO equivalent