Arafura Resources Limited

Singapore Asia Mining Conference

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Arafura Resources Ltd

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Topics

1. Presentation overview
2. What are rare earths?
3. Overview of the Nolans project
4. Project opportunities
5. Proposed business structure
6. Why Arafura?

Overview

ASX listed

ASX:ARU ASX:ARUO

Principle project – Nolans phosphate hosted rare earth-uranium

Rare earths essential to products with environmental benefits

Exploration projects

Magnetite hosted vanadium, nickel, gold

Strong Board and management team

Experienced Board with influence

Experienced, talented, motivated, focused management team

Business strategy

Define resources for +20 years life with growth potential

A demonstration plant to optimise the process & produce sample products

Looking for a committed and motivated strategic growth partner

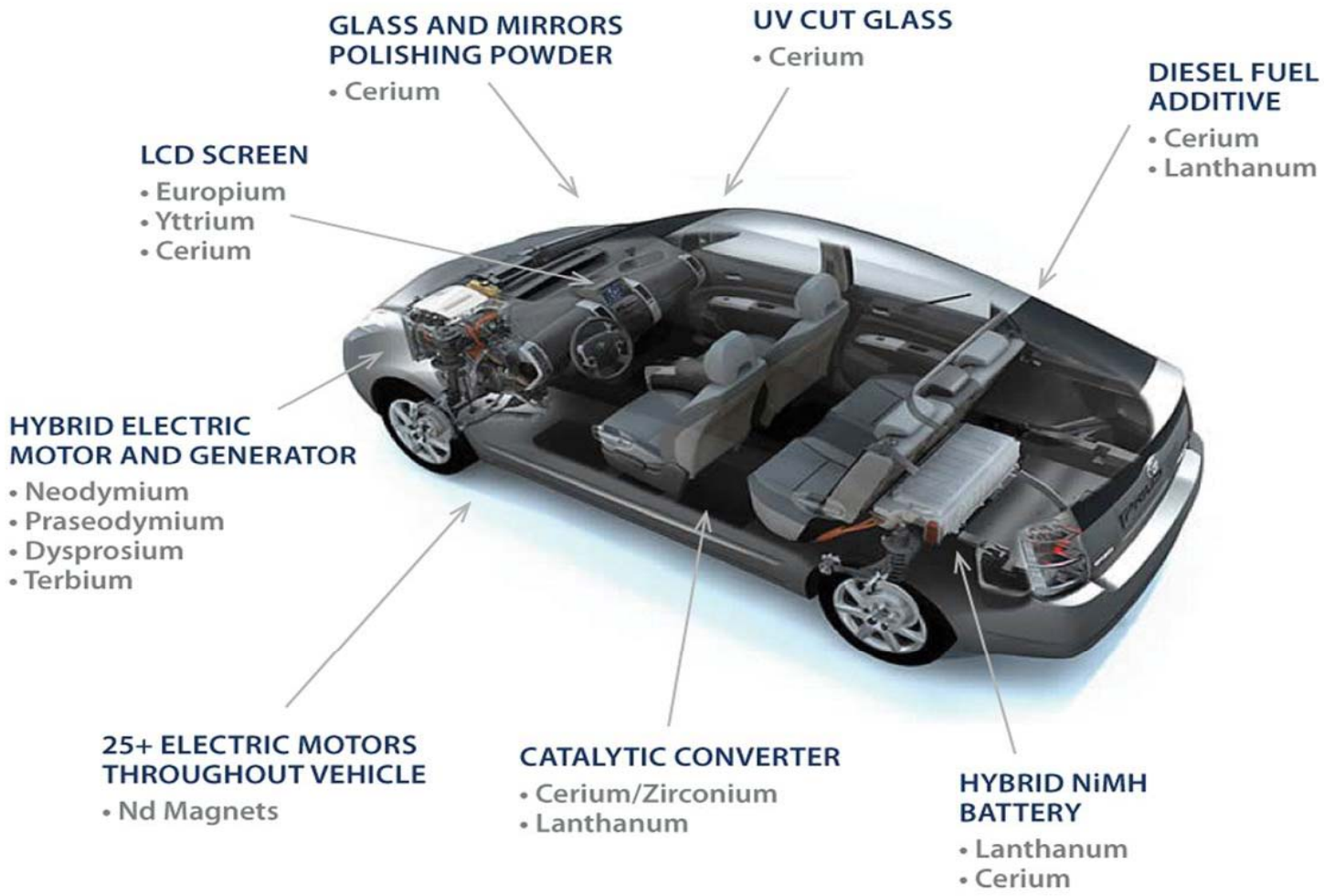
Revenues

The rare earth and phosphoric acid markets continue to grow strongly

Rare earths – history and future

Market driver		Industry Structure
1900s	Emerging market in flint	Emerging market
1950s	Polishing & glass	
1960s	Oil Industry Catalyst	Strong growth
1970s	CRT TV era	
1980s	Battery era	Industry reforms
1990s	Magnet era	
2000	Electronics & HEV era	China's dominance
2010's	Energy, lifestyle, communications Nolans is vitally strategic	Rapid Growth Economies of scale Industry consolidation

Rare earths - metals for the future



Rare earths – the source of energy

ENERGY PRODUCTION

Petroleum Refining

Lanthanum oxide is used in petroleum cracking catalysts in the oil refining industry.

High-powered Electric Motors

Neodymium, Dysprosium and Terbium are used in the strongest permanent magnets known. Electric motors use these magnets to achieve superior output in power generation from wind.

New Generation Vehicles

Lanthanum is also used as a catalyst in hydrogen fuel cell technology.

ENERGY REDUCTION

UV Filters in Glass

Cerium added to glass is a filter of ultra-violet radiation used in many vehicles.

Reducing Fuel Consumption

Neodymium is used in the electric motors in hybrid cars, which reduces fuel consumption.

Lighter - Faster

Rare earths used in vehicles improve performance and lowers car weight resulting in reduced fuel consumption.

Rare earths - our lifestyle needs

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ENERGY EFFICIENCY

New Generation Vehicles

Neodymium and Samarium are used in the strongest permanent magnets known. Electric motors in hybrid cars use these magnets to achieve superior output and torque.

Rechargeable Batteries

Lanthanum is a key component in the rechargeable NiMH batteries used in hybrid cars.

Energy Efficient Lighting

Praseodymium and Europium are key elements in rare earths used in energy efficient lighting.

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LIFESTYLE

Colour Screen LCDs/PDPs

Europium, Terbium and Yttrium are used as phosphors in electronic screens.

Components to Hardware

Neodymium permanent magnets and other rare earths are used in computer hard disk drives.

Medical Services

Rare earths are essential components in MRIs.

Autocatalysts

Mixed rare earth oxides are used in environmental catalysts including exhaust converters, chemical scrubbers and other gaseous products and waste streams.

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

Nolans project location

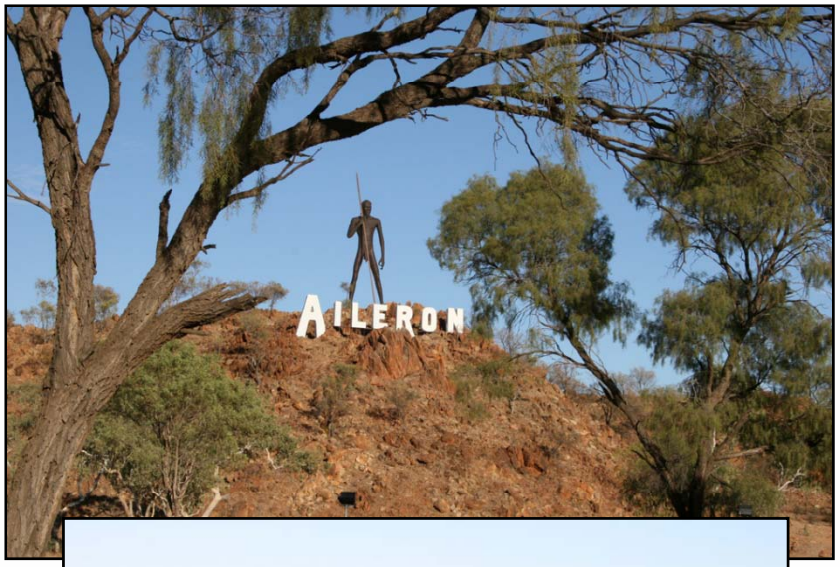
Small shallow open pit mine

+20 year mine life

Close to infrastructure

On a Pastoral lease

Aboriginal Anmatjerre Country



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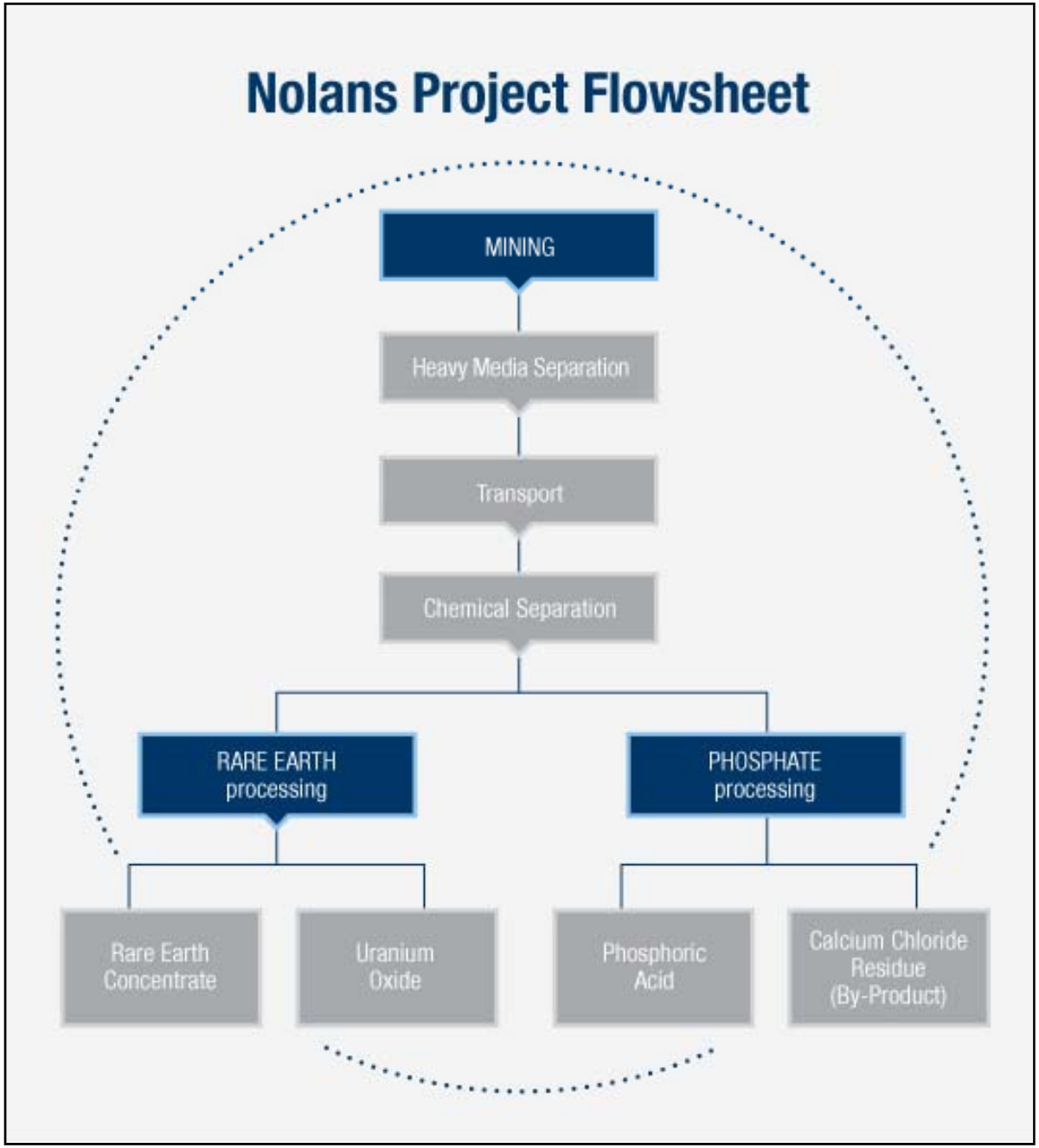


Nolans resource

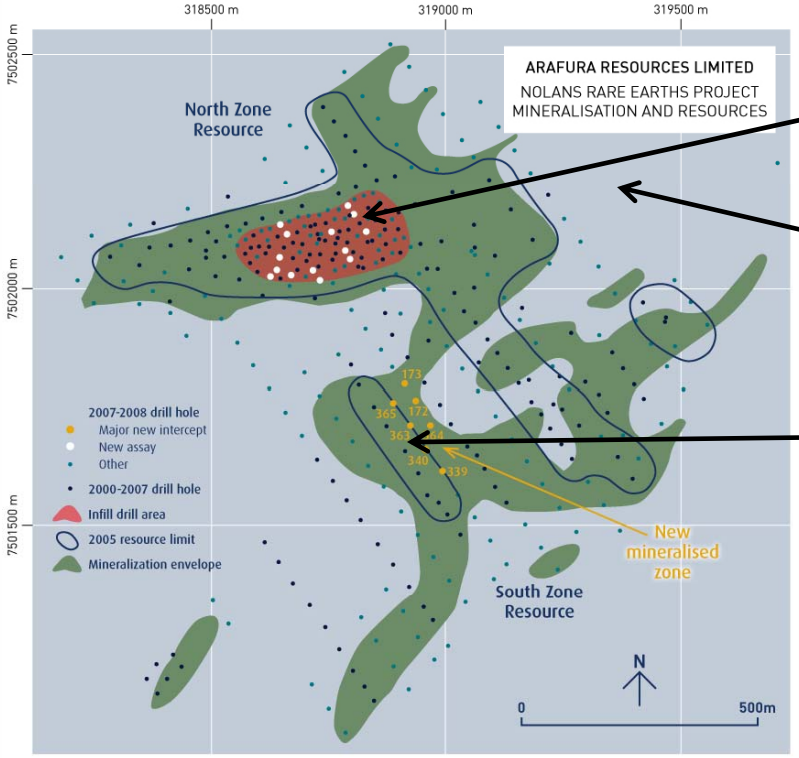
18.6 mt of indicated & Inferred resources - JORC compliant

577,000 tonnes REO (3.1%) and 2.1mt P_2O_5 (14%), 4,000 t U_3O_8 (0.47lb/t).

Only drilled to 100m below surface – open at depth

Current drilling looking for the lateral closure – still open along strike

Exposed at surface – no expensive pre-stripping



Exposed at surface

Open along strike

Hidden under cover

And open at depth

Simple mining

- Mining 1.7M tpa for about 800,000 tpa ore
- Conventional drill & blast open cut operation using excavator and truck
- Crush, screen, wash ore by heavy media separation
- Transport about 500,000 tpa concentrated ore using truck and rail
- Low power and water demand

Heavy media separation (HMS)

HMS Demonstration plant results

- 35% rejection of waste and 85% recovery of REO and Phosphate
- Will upgrade the resource from 3.1% REO to a process feed grade of +5.8%

HMS Demonstration plant optimisation

- looking to improve recovery
- optimise the rejection of waste
- a simple, efficient, low cost process

Pre-feasibility estimates capital ±30%

PFS Capital costs accurate to ±30%		
Equipment costs ±30%		AUD$ million
	Mine site capital costs	
	- mine, HMS and site offices	75
	Processing plant*	215
	Total	*290*
Direct costs ±30%		
	Civil, concrete, pipes, electrical etc	160
Indirect costs ±30%		
	EPCM	90
	First fill and working capital	90
Sub total plant costs ±30%		**630**
Project contingency		120
TOTAL CAPITAL ESTIMATE ±30%		**750**

***includes all grinding, leaching, phosphoric acid, rare earths (to 99% separated product) calcium chloride and uranium plant – based on Australian built & manufactured plant**

Pre-feasibility estimates Opex ±30%

PFS Operating costs accurate to ±30%	
	AUD$ million per annum
Administration, mining and transport, and labour	50
Chemicals	150
Power and maintenance	50
Sub-total operating costs	**250**
Transport of imported chemicals	100

Excludes royalties or corporate costs

Several chemical manufacturers have expressed strong interest in building and operating chlor-alkali and sulphuric acid plants on site. This will eliminate transportation costs of imported chemicals

Nolans revenues – at March 2008

	Production per annum (tonnes)	Current price ($US)	Total revenue US$ million pa
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 0.90			**AUD$570**
Less operating expenses (excluding transport costs)			AUD$250
Gross Margin			AUD$320
Revenue over 20 years undiscounted AUD$11.5 billion			

*based on Nolans mix of rare earths

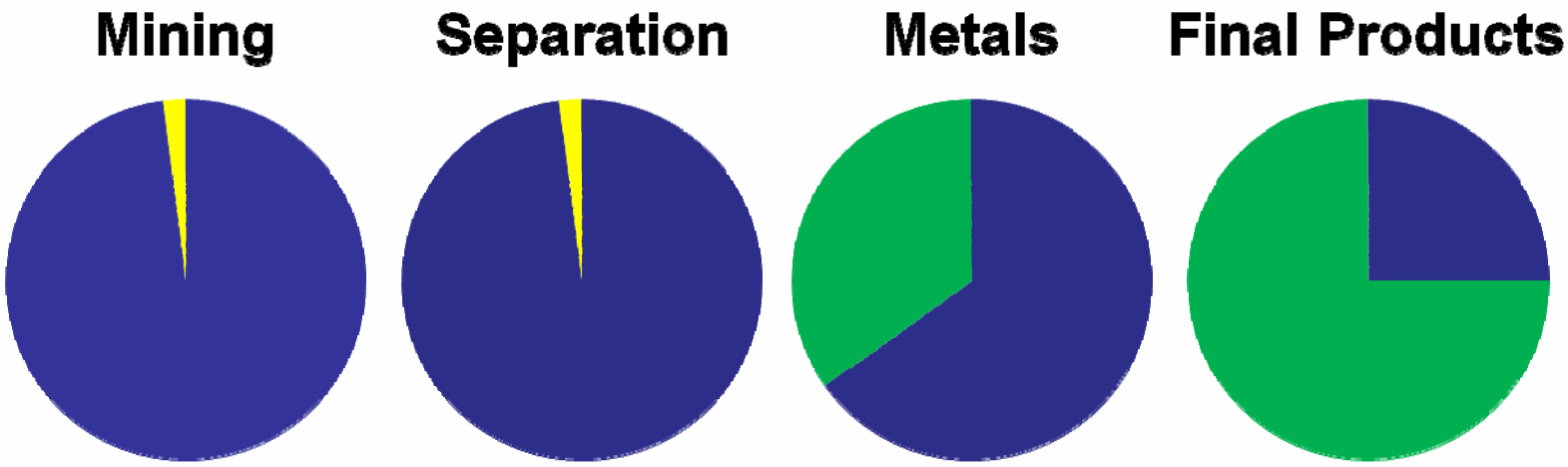
Project timeline

Project Schedule

Activity	2008	2009	2010	2011	2012	2013
Mine NOI Mine						
Studies for Mine approval						
Mine approval						
Pilot Plant Studies						
Definitive Feasibility Study						
Process Plant Approval						
Pre-ordering & Construction						
Production 50%						
Production 75%						
Production 100%						

Rare earths supply chain

China Japan & Europe India & Russia



China dominates supply & controls the supply chain

Demand for our products is strong

Rare Earths

1. Chemical catalysts
   - Market outlook moderately strong at 5% to 10% per annum
2. Magnets
   - Strong growth in the hybrid car market – wind power is the sleeper
   - Current production of NdFeB = 50,000t to double to 100,000t by 2010
   - Market growth currently 15% to 20% per year
3. Phosphorescence
   - Strong outlook in the plasma panel market
   - Demand growing at 40% per annum

Phosphoric acid

Agricultural productivity - the World's need for more protein

Biofuel market - growing rapidly in volume, strength and reputation

Calcium chloride

Australia's need to reduce water wastage in mining and industry

Uranium

Everyone wants it.

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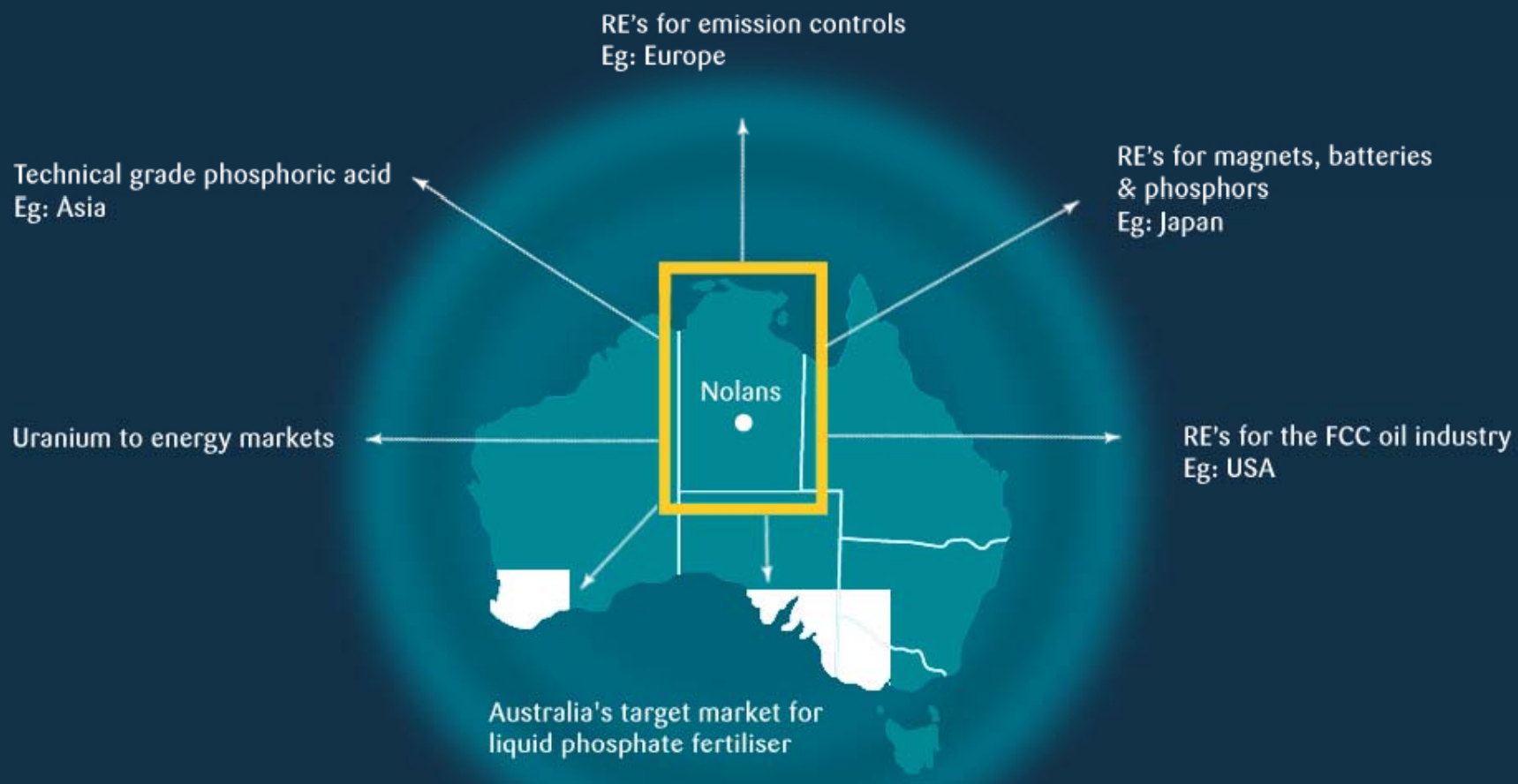
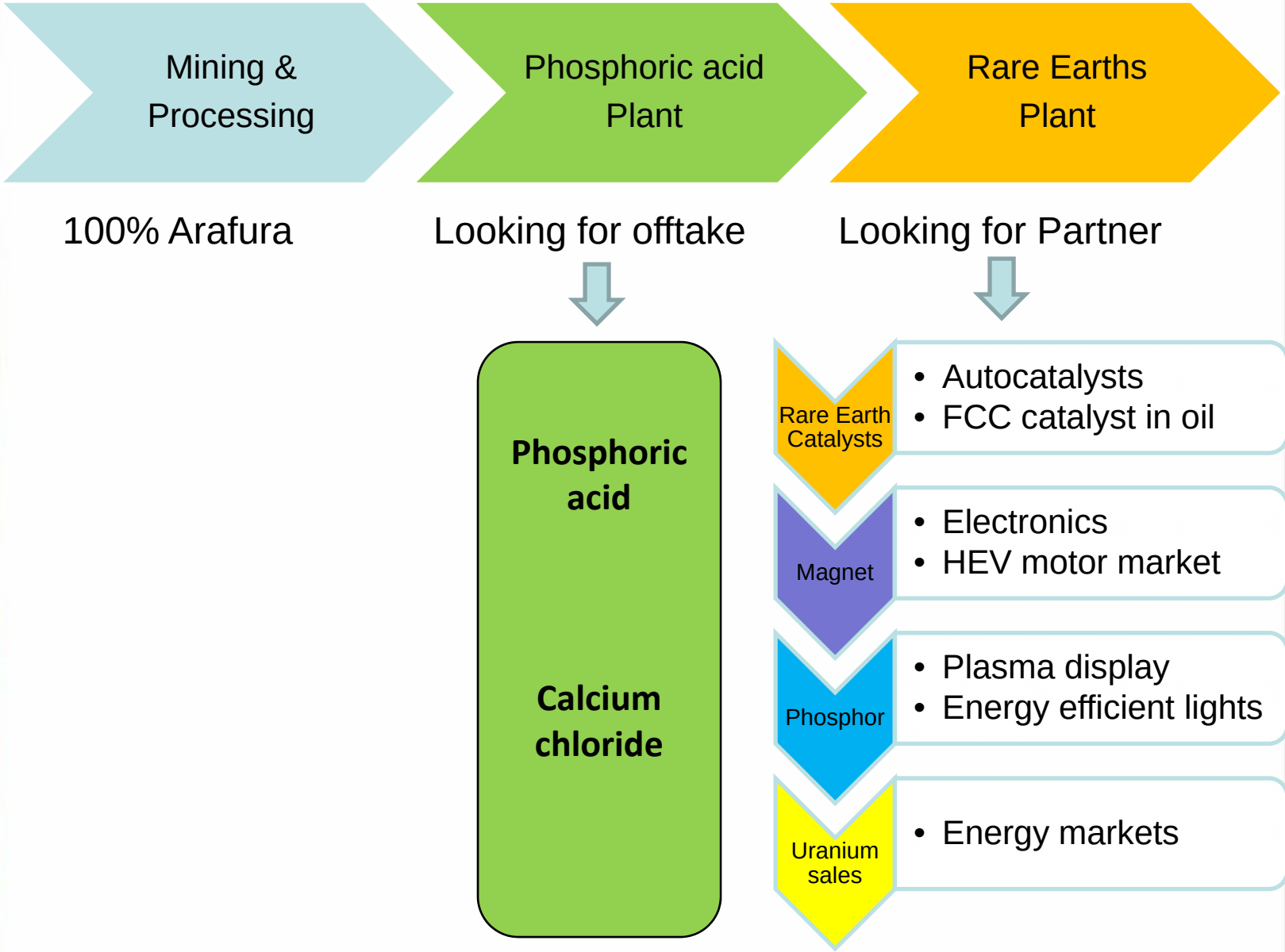
OUR MARKETS

RESOURCES FOR THE FUTURE



Nolans business structure



Why invest in Arafura?

Strong Management Team

- Experienced and motivated
- A reputation of delivering

Nolans Project

- A open resource to support long life, strategic growth opportunities
- Community endorsement of the project
- Strategically important with strong industry interest in the project

Commodities

- Rare Earths are strategically vital - “vitamins of electronics”
- Phosphoric acid in very strong demand
- Everyone wants the uranium

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