

ABN 22 080 933 455

November 2015

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Mr Hussey is a full-time employee of Arafura Resources.



## **AGENDA**



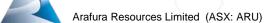
- 1. Chairman's Address
- 2. Formal Business
- 3. Managing Director's Report
- 4. ECE Address by Mr Cungen Ding
- 5. Shareholder Questions





# Mr Ian Kowalick Chairman







# **Formal Business**





A R A F U R A

# RESOLUTIONS



**Accounts and Reports** – To receive and consider the consolidated financial statements of the Company and its controlled entities for the year ended 30 June 2015 and the reports of the Directors and auditors for the financial year ended 30 June 2015.

	Resolutions	
1	Remuneration Report	
2	Re-election of Chris Tonkin as Director	X
3	Re-election of Ian Kowalick as Director	
4	Election of Cungen Ding as Director	





Presentation by Gavin Lockyer

**Managing Director** 



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## 2014/2015 COMPANY HIGHLIGHTS



## Nolans Development

- ▲ Release of fully referenced *Nolans Development Report* in September 2014
- △ Continued substantial reductions in operating & capital costs **7% and 16%** respectively
- △ Commenced Environmental Impact Statement (EIS) after receipt of Terms of Reference
- ▲ Escalation of **community and stakeholder engagement**
- ▲ LOI with OCI Company Ltd to establish partnership for offshore RE Separation Plant

## Corporate

- △ Downsize & re-location of corporate office
- ▲ 2013 salary freeze maintained, head count reduced by 20%
- ▲ A\$3.4m R&D tax refund received
- ▲ Strong cash balance with A\$13.5m as at end of September 2015



# 2014/2015 RARE EARTHS MARKET UPDATE



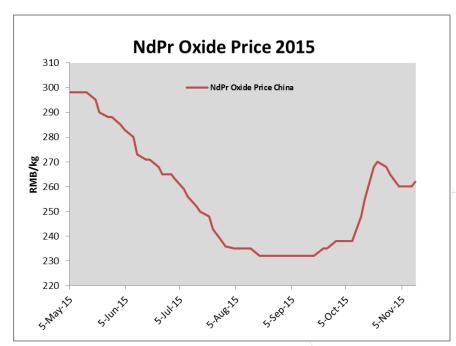


## △ Chinese Policy – May 2015

- ▲ Abolished export duties and quotas
- A Restricted exports to 9 designated ports
- ▲ Consolidate RE Production under 6 State-Owned hubs
- ▲ Imposition of RE resources tax on value of RE concentrates

## <u>▲ However</u>

- ▲ Up to 40% of all NdPr supply to magnet market in 2015 is still attributed to illegal production
- ▲ China FOB prices have fallen significantly but not all in proportion (La, Ce, Y 50%; NdPr 35%)



Source: Metal Pages

Have we seen the bottom of the cycle?

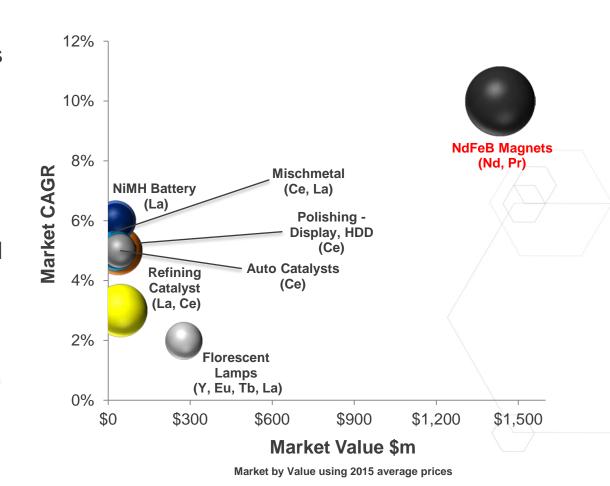


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## **ARAFURA'S VIEW**



- ▲ Global demand for RE magnets forecast to grow at **10% p.a.** between 2015 and 2020
- Current prices not sustainable
- ▲ Greater social call for development of an International RE Standard
- NdPr accounts for 26.5% of Arafura's RE composition – highest in the world



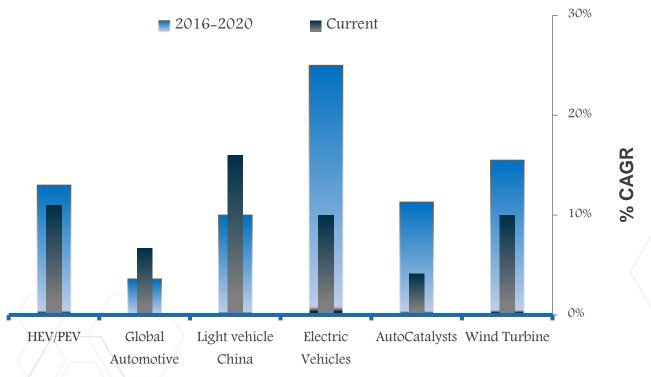


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# DRIVERS FOR RARE EARTH MAGNETS







Major OEMs need to cut fleet emissions by 2020 to meet EU emission targets



# LOWER COSTS – VIABILITY & FINANCING





OPEX (A\$/kg TREO)				
Aug 2012	\$20.55			
Sep 2014 NDR	\$15.67			
Jun 2015	\$14.51			
Nov 2015	\$14.51			

CAPEX (A\$m)				
Aug 2012	\$1,912			
Sep 2014 NDR	\$1,408			
Jun 2015	\$1,437			
Nov 2015	\$1,193			

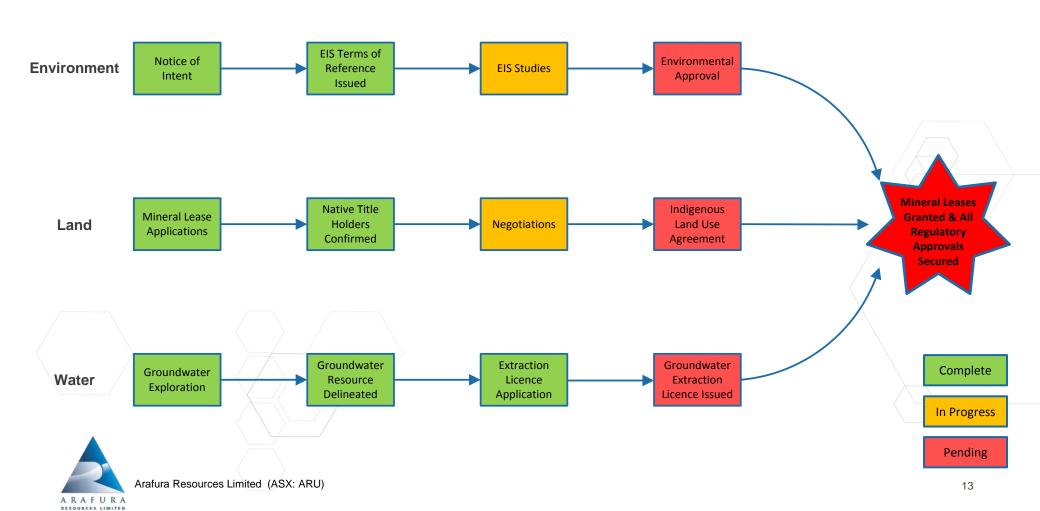
In a low commodity price and constrained capital environment it is imperative we continue to drive down our costs



# PROJECT APPROVALS (1)



## Targeting Project approvals second half of 2016



# PROJECT APPROVALS (2)



#### **Environmental Impact Statement**

- ▲ GHD appointed to lead EIS program
- ▲ Final EIS Terms of Reference received from EPA
- ▲ EIS studies well advanced with **no major risks** identified

#### **Land Access Agreement**

Intensify discussions following EIS submission

#### **Groundwater Extraction Licence**

- Application lodged October 2014
- Follows successful investigation of previously unexplored groundwater system found suitable for Nolans development



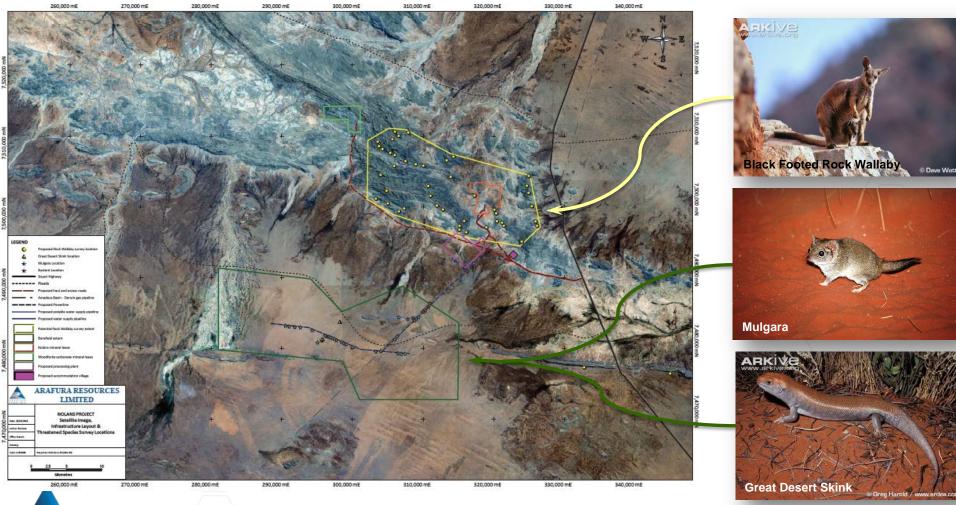






# EIS - BIODIVERSITY SURVEYS

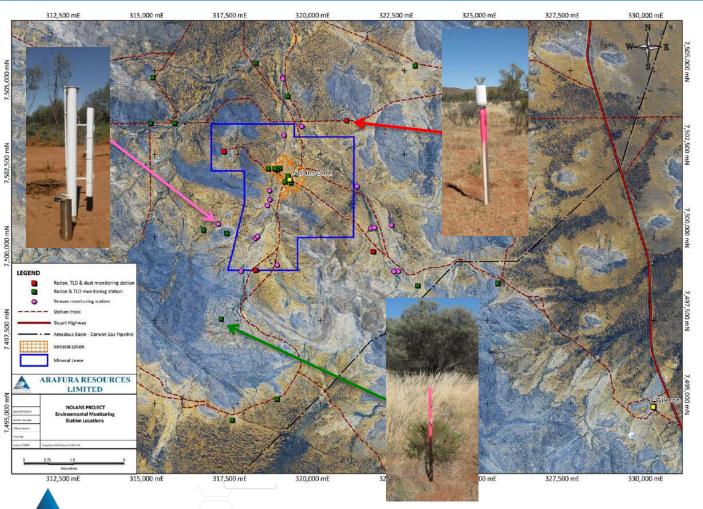




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# EIS - BASELINE MONITORING





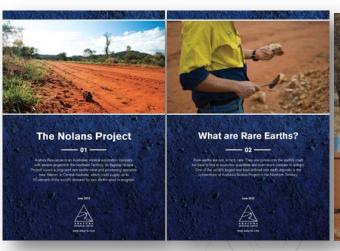
- ▲ 26 monitoring sites have been established on or around Nolans
- At these sites we are measuring natural radioactivity in soil, plants and in the air
- We also have 16 monitoring sites in creeks to measure water quality & flow information
- Many of these sites have been in place since 2010

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# STAKEHOLDER CONSULTATION



- Meeting with stakeholders since 2008
- ▲ Stakeholder consultation has escalated this year as information from EIS studies becomes available and Nolans progresses towards a final investment decision
- Fact sheets freely available to interested parties









# OTHER WORK - PROCESS OPTIMISATION





#### **Offshore RE Separation Plant**

- △ Non-binding LOI signed with South Korea-headquartered OCI Company
- ▲ To form a JV RE Separation processing facility in South Korea
- Arafura continuing to assess offshore options for RE Separation Plant

## **Chinese Flowsheet Optimisation Studies**

- ▲ Beneficiation work completed and **confirms Arafura's process**
- 27 tonnes of material prepared for integrated piloting
- First stage RE extraction test programs with two Beijing RE institutes completed highlighting potential improvements through:
  - More modern process engineering design
  - ▲ Sulphuric acid substitution in pre-leach
- Final reports from first stage currently under review



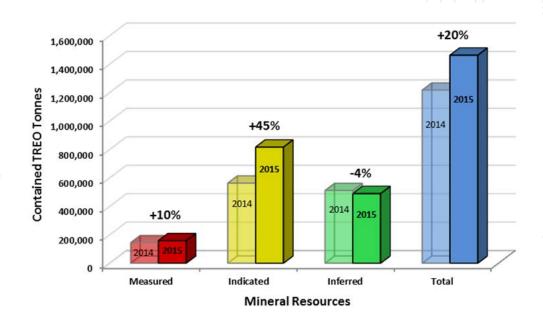




Resources	Tonnes (million)	Rare Earths TREO %	Tonnes TREO	Phosphate P <sub>2</sub> O <sub>5</sub> %	Uranium U₃O <sub>8</sub> lb/t
Measured	4.9	3.2	158,000	13	0.54
Indicated	30	2.7	816,000	12	0.44
Inferred	21	2.3	489,000	10	0.36
TOTAL	56	2.6	1,462,000	12	0.42

<sup>1%</sup> TREO cut-off grade. Numbers may not compute exactly due to rounding. 1 lb/t  $U_3O_8 = 0.0454\%$   $U_3O_8$ .

- ▲ Substantial mineral resource upgrade prompted by key EIS studies
- ▲ Larger inventory of high confidence mineral resources further reduces development risk





## LOOKING AHEAD



- ▲ EIS submission Q1 CY2016 targeting approval in 2016
- ▲ Consider viability of flowsheet optimisation through Chinese test programs and partnerships
- Assess opportunities for commercialisation through **further investigation of CAPEX & OPEX reduction opportunities**, including scalability and/or staged development
- ▲ Minimal exploration, consolidation of land holdings, and farm-ins

We acknowledge the need to secure funding to finalise feasibility and progress to project financing. We are actively working with ECE and others to identify strategic and financial partners to advance the Project with minimal dilution.



# **NOLANS APPEAL**



Attribute	Feature	Advantage
Location	Northern Territory	Low sovereign risk
Resources	Large, at surface, open at depth	Long-life, low-risk open cut mine
NdPr quotient	Highest of all RE projects	Positioned to supply high-growth, high-value magnet market
Infrastructure	Close to vital transport, energy & water	Capital & operating cost savings
Partnerships	Strong support from major shareholder ECE	Access to RE experts in dominant producer country















