



14 July 2010

Manager Announcements  
Company Announcements Office  
ASX Limited  
20 Bridge Street  
Sydney NSW 2000

Dear Sir,

**PRESENTATION**

Attached is a copy of a corporate presentation for investors.

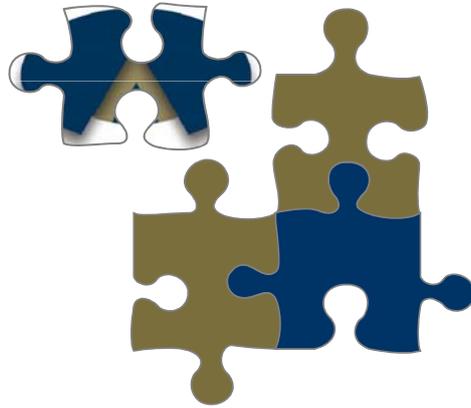
A copy of this presentation will also be available on the Company's website [www.alkane.com.au](http://www.alkane.com.au).

Yours faithfully,  
for **ALKANE RESOURCES LTD**

A handwritten signature in black ink, appearing to read 'D I Chalmers', is written over a light blue, semi-transparent watermark of the company's 'A' logo.

D I Chalmers  
**Managing Director**

*...putting the pieces together*



## Corporate Presentation

July 2010



## Corporate snapshot



Exchanges ASX: ALK

Share Price ( 12 July 2010) A\$0.30

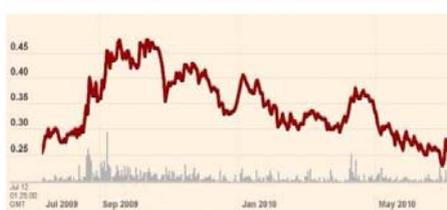
Shares 249m

Fully Diluted Market Cap ~A\$75m

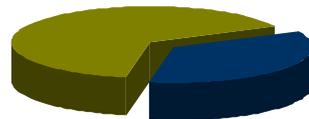
Cash (at 30 June 2010) ~A\$8.5m

No debt

12 Month High / Low A\$0.48/ \$0.18



### Shareholder profile\*



\*at 31 December 2009

Top 20	~60%
Directors & Management	3%
Abbotsleigh (Gandel Metals)	29%

### Directors & Management

J. S. F. Dunlop	Chairman
D. I. Chalmers	Managing Director
I. R. Cornelius	Non-Executive Director
A. D. Lethlean	Non-Executive Director
I. J. Gandel	Non-Executive Director
L.A. Colless	CFO Joint Secretary
K.E. Brown	Joint Secretary
T W Ransted	Chief Geologist
M D Sutherland	General Manager NSW



## Business Strategy



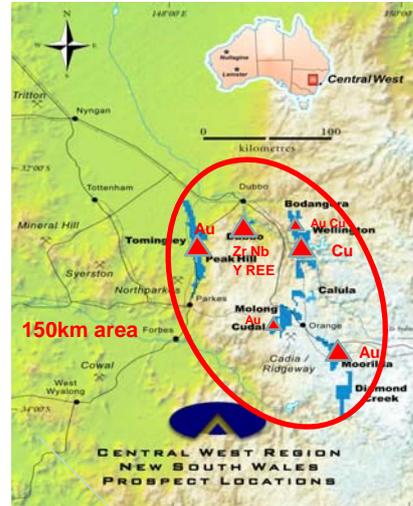
Multi commodity explorer and miner, focussed in the Central West of New South Wales, Australia

Dubbo Zirconia Project – world class resource of zirconium, hafnium, niobium, tantalum, yttrium and rare earths

Gold production from Peak Hill mine 1996 – 2005.  
New gold development planned at Tomingley based upon 800,000 oz resource

Major gold discovery at McPhillamys (~3 million oz)  
Joint Venture with Newmont

Develop multiple operations within tight geographic area over next five years



## Tomingley Project

Gold

Definitive Feasibility Study  
Mintrex Pty Ltd  
Study Manager: *Fiona Morgan*

Environmental Assessment  
R W Corkery & Co Pty Ltd

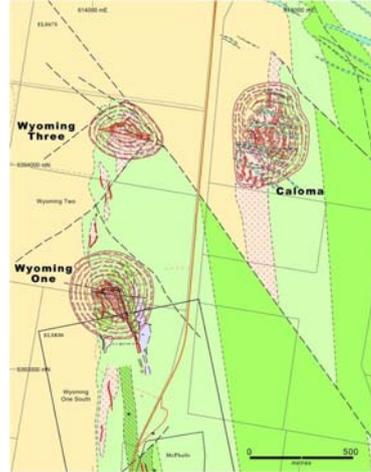


## Tomingley Gold Project, NSW

ALKANE RESOURCES: 100%



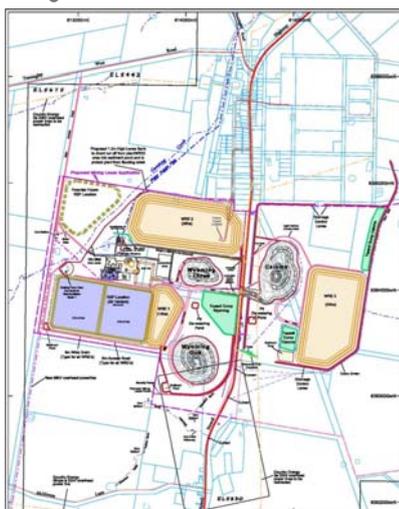
- **Three deposits under conceptual development:**
  - **Caloma** (3.86Mt @ 1.76g/t Au)
  - **Wyoming One** (6.59Mt @ 1.86g/t Au)
  - **Wyoming Three** (0.84Mt @ 1.75g/t Au)947 AC, RC and core holes totalling 109,114 metres
- **Total current combined resource (dil) +660,000oz**
  - Expansion potential
    - Deposits open at depth
    - Significant regional exploration potential
- **Minimum seven year mine life => +10yr target**
- **Initial open pit +underground operations (Yrs 1-7)**  
Additional open pit and ug (Yrs 7 -10)



*...advanced feasibility study*



## TGP Infrastructure

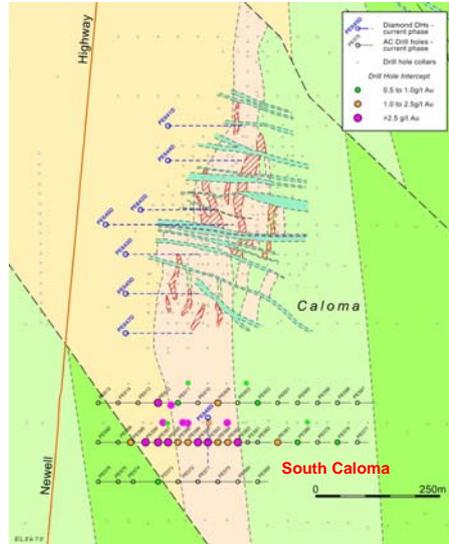


Proposed site layout

- **Infrastructure:**
  - **water** => 45km pipeline
  - **power** (State Grid) => 20km 66Kv power line
  - **roads** => primary & secondary access
- **Skilled local workforce**
  - population base of 150,000 within 120km diameter area
  - No FIFO, no accommodation required
- **Capital costs ~A\$90 Million**
  - CIL plant A\$43m
  - Infrastructure A\$22.6m
  - Owners costs A\$23m



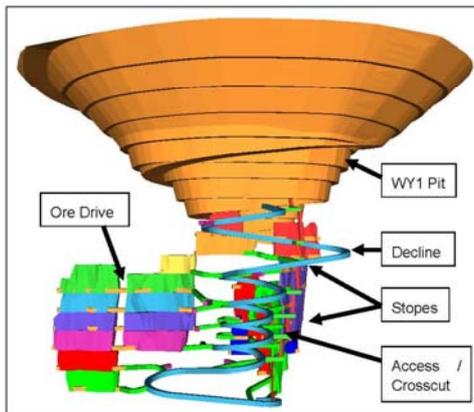
## TGP Current Resource Expansion



- **South Caloma Discovery:**
  - 3,000m aircore with several +3.0g/t intercepts
  - RC resource drill out planned
  - Potential 1Mt open pit resource
- **Caloma Underground**
  - Seven core holes 3,500m
  - Numerous mineralised intercepts
  - Geological modelling for resource potential



## TGP Wyoming One Underground



Conceptual underground development

- **Resource at 3.00g/t gold cut off:**
  - 690,000 tonnes @ 5.00g/t Au (121,000 oz)
- **Prefeasibility study:**
  - Decline development near base of pit
  - Sub level long hole open stoping
  - Only three ore bodies '376', '831' and 'Hangingwall' targetted
  - > 80,000 oz recovered



## TGP Economics



PRODUCTION OUTCOMES	BASE CASE	EXPANDED CASE
Mine Life	7 Years	8 - 10 Years
Throughput		
Open Pit	6.0 Million tonnes	1.0 million tonnes
Underground	0.6 million tonnes	1.0 Million tonnes
Production	400,000oz	150,000oz
Method	conventional CIL circuit	conventional CIL circuit
Recovery	>90%	>90%
Capex (+/- 10%)	A\$90 Million	+A\$10 Million
Estimated cash costs	A\$900/oz	A\$900/oz
Potential LOM cashflow	~A\$200 Million <sup>#</sup>	A\$275 Million <sup>#</sup>

<sup>#</sup> Based on A\$1350 per ounce gold price; 1 Mtpa mill throughput

*...targeting 10 year mine life*



## Advanced Exploration

Gold ODEJV - McPhillamys

### Newmont Australia Limited (NAL)

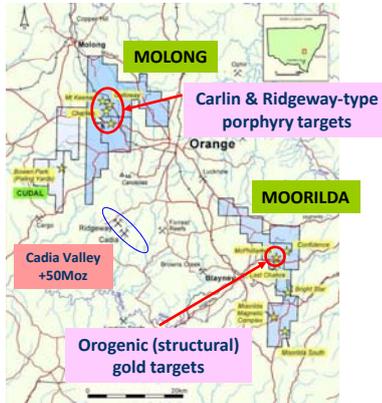
Subsidiary of US based Newmont Mining Corporation

NAL are the Managers and Operators



## ORANGE DISTRICT EXPLORATION JOINT VENTURE (ODEJV)

Gold, Copper – Orange, NSW | Alkane Resources: 49%, Newmont Australia: 51%



### TWO FOCUS AREAS:

- **Molong**
  - targeting copper-gold porphyry-style gold mineralisation (Ridgeway-type) and Carlin style
- **Moorilda**
  - drilling confirms a major gold system @ McPhillamy's
- Newmont have earned 51%, to go to 75% by carrying all expenditures through to completion of final BFS

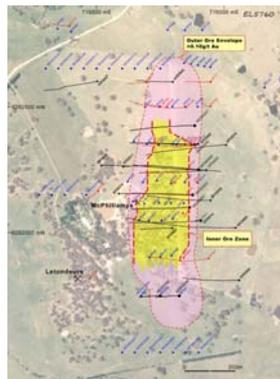
*...low risk with significant upside + 4moz system*



# ODEJV Moorilda | McPhillamys

### INITIAL RESOURCES

- **Indicated + Inferred** +0.3g/t gold  
92 Mt @ 1.00g/t Au 0.07% Cu  
2.96 Moz Au & 60,000t Cu
- **Indicated + Inferred** +0.5g/t gold  
61 Mt @ 1.32g/t Au 0.08% Cu  
2.57 Moz Au & 48,000t Cu
- Mineralisation open at depth  
Deep drilling in progress
- Conceptual studies for both open pit and block cave mining
- Preliminary metallurgical scoping indicates +90% gold recovery from CIL
- Likely low waste to ore ratio to significant depth for open pit

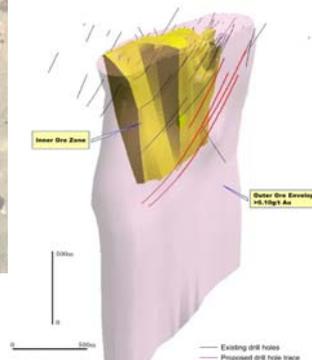


**BASE AREAS**

- Outer ore envelope 1,000m x 260m 0.3g/t Au
- Inner ore zone 600m x 200m to 450m depth
- Average 2.8 SG

**Compare Barricks Cowal Operation**

- 64Mt @ 1.22g/t Au at start up
- 8Mtpa for ~ 250,000ozpa



*... potential open cut or block caving operation*



## ODEJV Moorilda Regional Targets



### MULTIPLE TARGET AREAS:



#### • Exploration

- Detailed regional aeromagnetic survey
- Regional Induced Polarisation
- Regional gravity
- Regional soil sampling
- Detailed geological mapping
- Specific aircore, RC and limited core drilling

#### • Drill results

- Kings Plain 78m @ 1.04g/t Au
- Sherlock 3m @ 1.13g/t Au and 13m @ 0.51g/t Au
- Flanagans 3m @ 1.16g/t Au and 10m @ 0.99g/t Au
- Hodsons 39m @ 0.26g/t Au
- McPhillamys East 18m @ 0.27g/t Au
- Confidence 3m @ 1.45g/t Au

Mineralisation strike length over 6km; possibly up to 10km



## Dubbo Zirconia Project

Zirconium, niobium, yttrium, rare earth elements

### Definitive Feasibility Study

TZ Minerals International Pty Ltd

Study managers: *Steve Gilman and Gavin Diener*

Marketing: *Alister MacDonald (TCMS) and Dudley Kingsnorth (IMCOA)*

DPP Operations: *ANSTO Minerals Group*

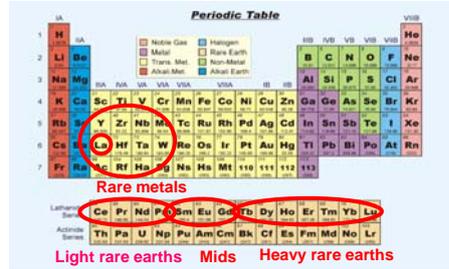


## Rare Metals - Rare Earths



### Rare Metals – Rare Earths

- China produces 90% of world downstream zirconium chemicals
- China is limiting the export of raw rare earths materials
- China currently produces 95% of world REE output
- Brazil produces 90% of world niobium



Yitium "powerlite" compact fluorescent light



- ◆ **Green technology** is dependant on *rare metals and rare earths*
- ◆ **Increased demand** also driven by **changes in legislation**
- ◆ China has dominant position

*...not so rare, but increasingly valuable*



## Dubbo Zirconia Project Location



Dubbo region pop 80,000

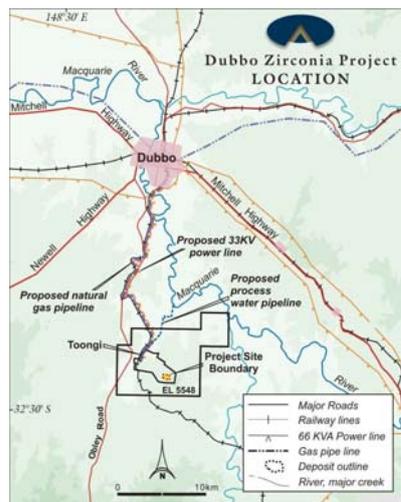
State power grid

State gas grid

Major mixed agriculture

Transport hub

Substantial light industry





# DZP Resources



<b>Measured Resource</b> 0 - 55 metres	:	35.7 million tonnes grading 1.96% ZrO <sub>2</sub> , 0.04% HfO <sub>2</sub> , 0.46% Nb <sub>2</sub> O <sub>5</sub> , 0.03% Ta <sub>2</sub> O <sub>5</sub> , 0.14% Y <sub>2</sub> O <sub>3</sub> , 0.75% REO and 0.014% U <sub>3</sub> O <sub>8</sub>
<b>Inferred Resource</b> 55 - 100 metres	:	37.5 million tonnes at similar grades
<b>TOTAL</b>	:	73.2 million tonnes

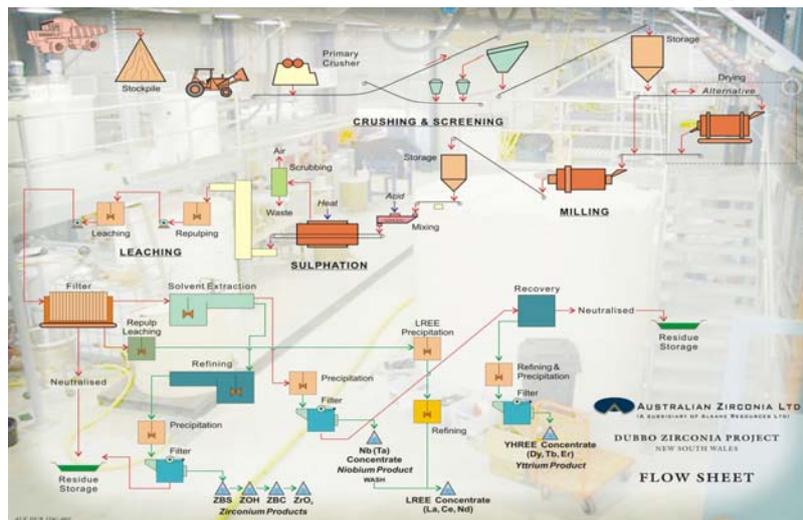
Major world resource of zirconium, hafnium, niobium, tantalum, yttrium and rare earth elements

Although the ore is not classified as a radioactive deposit, it contains 23 million lbs (10,200t) of uranium

Production of uranium is currently prohibited in NSW



# DZP Flow Sheet





## DZP Demonstration Pilot Plant



## Zirconium Applications

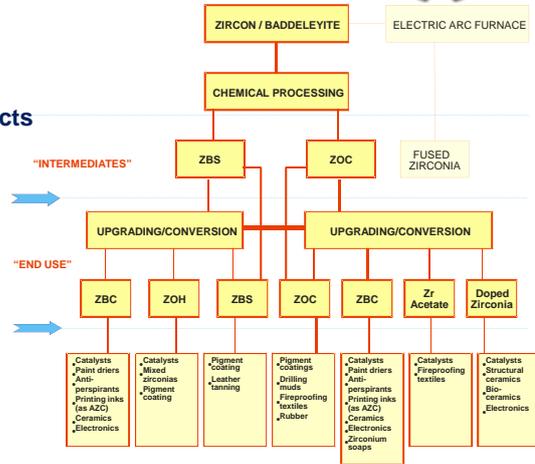




# Zirconium Chemicals Industry



2008 ~ 160,000t zircon converted to 96,000t of zirconia (equivalent) products and 10,000t Zr metal



ZOC = zirconium oxychloride  
 ZBS = zirconium basic sulphate  
 ZOH = zirconium hydroxide  
 ZBC = zirconium basic carbonate  
 ZrO<sub>2</sub> = zirconia

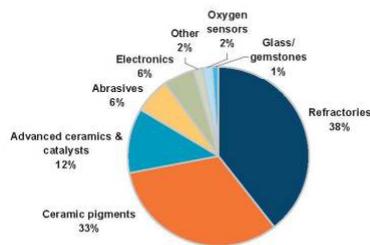
Source: TZMI



# Zirconium Chemicals



## Current Zirconia, Zirconium Chemical Uses



2015 Estimated 150,000 tonnes with industry growth rate of 4.5%pa

High growth areas: Advanced ceramics and catalysts 13.0%pa  
 Ceramic pigments 8.0%pa  
 Zirconium metal for nuclear applications ?

Products range from US\$4/kg to US\$20/kg Metal US\$200/kg



Source: TZMI



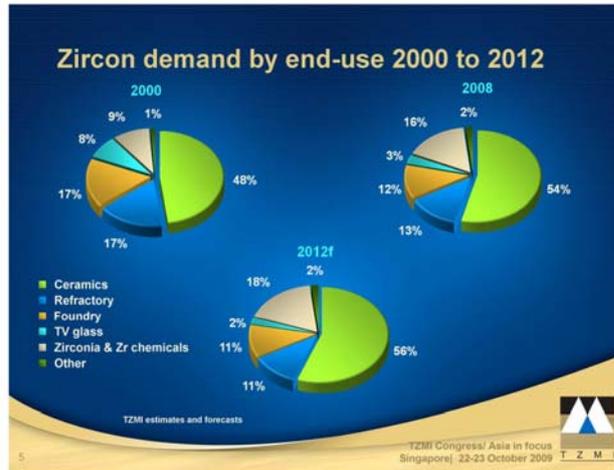
## Zircon Usage

Zircon provides the feedstock for the zirconium industry



**2012 Global consumption estimate 1,400,000tpa**

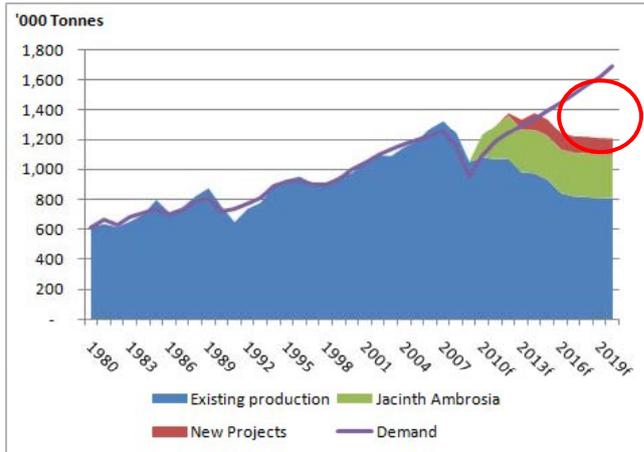
**18% = 250,000t zircon for zirconia and zirconium chemicals**



Source: TZMI



## Zircon Supply Demand Price



**Zircon price and supply will have a major impact on the cost and availability of zirconium chemicals, zirconia and zirconium metal**

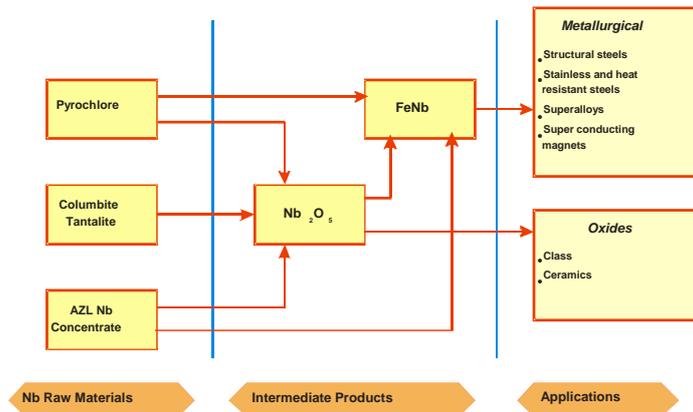
Source: TZMI



# Niobium Applications



# Structure of Niobium Industry



DZP process removes radioactive elements such as uranium and thorium, producing clean concentrate

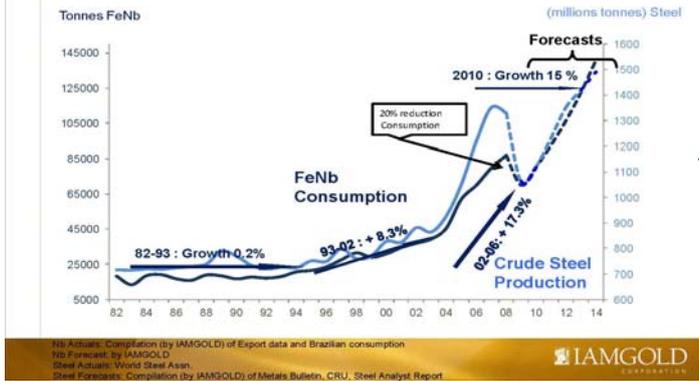
Source: TZMI



# Niobium Demand



## World Consumption Forecast (FeNb)



**Niobium 2008**  
(Ferroniobium units)  
consumption  
~85,000t – 90% Brazil  
Estimate for 2012  
~100,000t

Ferroniobium price spiralled to US\$60/kg in March 07 and is currently around US\$35 - 40/kg  
Long term expected to be in US\$25 - \$35/kg

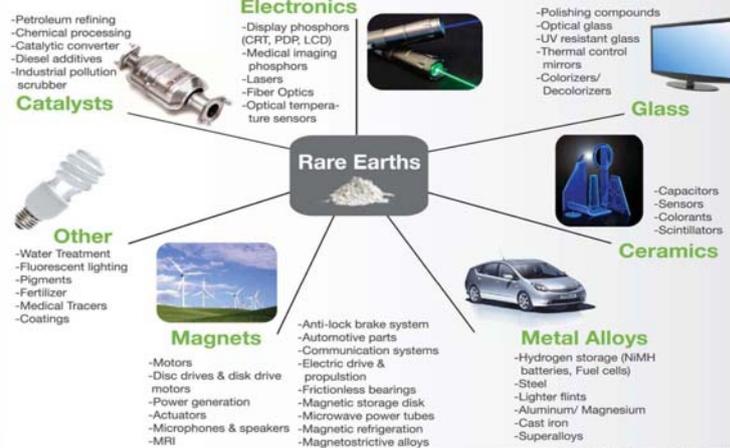
Sources: IAMGOLD / TZMI



# REE Applications



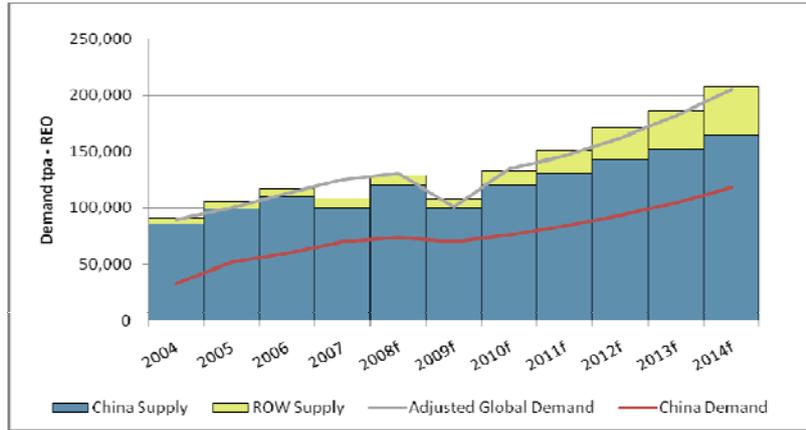
## Molycorp Minerals Applications For Rare Earth Elements



Source: Molycorp



## Rare Earth Supply - Demand



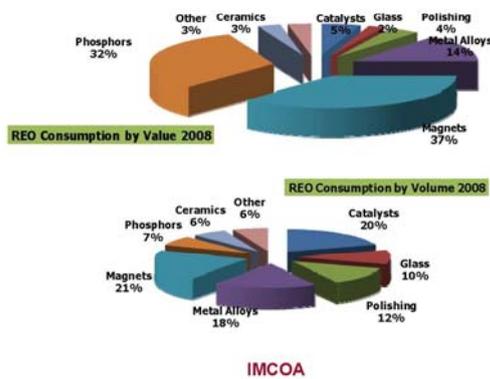
Source: IMCOA



## Rare Earth Consumption



### 2008 REO Consumption



Light Rare Earth  
Average as REOs  
~US\$15/kg

Yttrium Heavy REs  
Average as REOs  
~US\$25/kg

Total YREE demand 2014 estimated to be 200,000 tonnes

Source: IMCOA



## DZP Product Output



Base case model of 400,000 tonnes per year of ore processed

Ore processed	400,000tpa	1,000,000tpa "Blue sky"
ZBS, ZOH, ZBC, ZrO <sub>2</sub>	15ktpa (6ktpa ZrO <sub>2</sub> )	37ktpa (15ktpa ZrO <sub>2</sub> )
Nb-Ta concentrate	2ktpa (1.4ktpa Nb <sub>2</sub> O <sub>5</sub> )	5ktpa (3.5ktpa Nb <sub>2</sub> O <sub>5</sub> )
LREE concentrate	1,980tpa (REOs)	4,950tpa (REOs)
YHREE concentrate	600tpa (REOs)	1,500tpa (REOs)

**Base case revenues ~US\$100m**  
Open pit life 200 years

**Blue sky ~US\$250m**  
Open pit life 80 years

- ZBS = zirconium basic sulphate; ZOH = zirconium hydroxide; ZBC = zirconium carbonate Equivalent ~99% ZrO<sub>2</sub> + HfO<sub>2</sub>
- Nb-Ta concentrate = ~70% Nb<sub>2</sub>O<sub>5</sub> + Ta<sub>2</sub>O<sub>5</sub> calcined basis
- LREE = La, Ce, Nd
- YHREE = Y, Gd, Dy, Tb



## Development pathway



		-> 2009	2010	2011	2012	2013
DUBBO ZIRCONIA PROJECT	Resource definition 2001 -2002	✓				
	Flow sheet development 2002	✓				
	Laboratory Zr - Nb 1999 - 2002	✓				
	Pilot plant Zr - Nb 2002	✓				
	Mine Plan & Scheduling 2002	✓				
	Plant Design & Engineering 2002	✓				
	Laboratory Y & REE 2009 -					
	Demonstration Pilot Plant 2008 -					
	Zr - Nb Product Distribution	✓				
	Y - REE Product Distribution					
	Secure Offtake Agreements					
	Definitive Feasibility Study	2002				
	Environmental Impact (EA)	2000 ->				
	Detailed Design					
	Project Financing					
Construction						
Production						

**CAPEX base case estimated at approximately A\$150**



## DZP Strategic Significance



Majority of “downstream” zirconium products are derived from zircon, whose output is governed by ilmenite/rutile from mineral sands mining operations.

China dominates downstream zirconium business at ~90% but feed is zircon.

Niobium production dominated by one company, CBMM in Brazil with 90% of market.

Rare earth and yttrium production dominated by China (95%). DZP offers new source particularly for important Y and HREE.

Production costs are spread across the four metal outputs – zirconium (hafnium), niobium (tantalum), light rare earths and yttrium-heavy rare earths.

Project located in region with very favourable infrastructure and legislative framework, both at a State and Federal level.

Increased demand for many of the metals is driven by environmental legislation to ensure emissions minimisation and energy consumption efficiency

The DZP provides an alternative and strategic source for a number of important metals, and is capable of producing for hundreds of years from one ore body.



## Exploration



### Other Exploration Projects

**Copper** *Wellington - Galwadgere*

2Mt @ 1.0% copper and 0.3g/t gold. Open pitable, PFS completed nearby Christies gossan @ 1.15% Cu, 14.5% Pb, 8.5% Zn, 410g/t Ag, 7.5g/t Au and McDowells surface alteration and gold mineralisation

**Gold** *Cudal - Bowen Park 1*

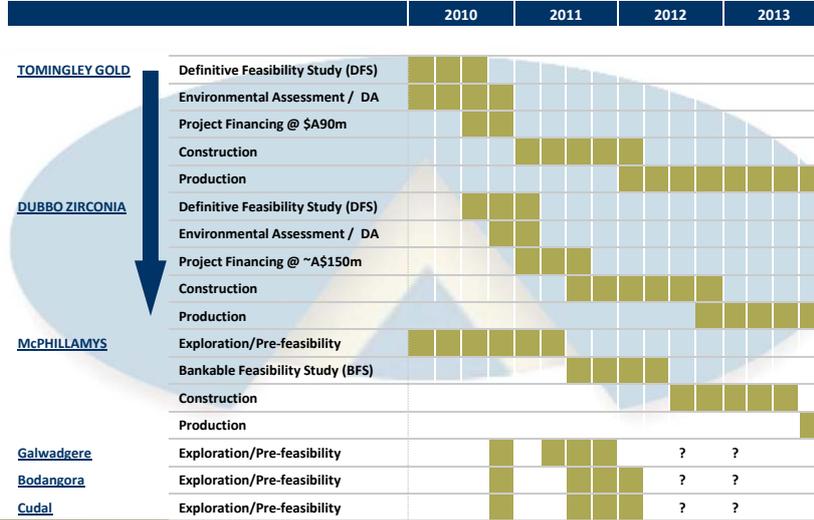
extensive surface alteration along major structures (750m x 100m)  
surface samples @ 17.2g/t Au, 196g/t Ag

**Gold -** *Bodangora - Comobella*

**Copper** 10km<sup>2</sup> monzonite intrusive complex with skarns and hydro breccias (cf Cadia)  
strong IP and magnetic anomalies  
surface samples @ 31.0g/t Au, 8.5% Cu



# Project Development Pipeline



*...a perfect fit*





## Disclaimer



### **Disclaimer**

This presentation contains certain forward looking statements and forecasts, including possible or assumed reserves and resources, production levels and rates, costs, prices, future performance or potential growth of Alkane Resources Ltd, industry growth or other trend projections. Such statements are not a guarantee of future performance and involve unknown risks and uncertainties, as well as other factors which are beyond the control of Alkane Resources Ltd. Actual results and developments may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors. Nothing in this presentation should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities.

### **Competent Person**

The information in this presentation that relates to mineral exploration, mineral resources and ore reserves is based on information compiled by Mr D I Chalmers, FAusIMM, FAIG, (director of the Company) 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 Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ian Chalmers consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.