



MULTI-COMMODITY MINER EXPLORER
www.alkane.com.au

ASX : ALK
OTCQX : ANLKY

Gold producer with world class Dubbo Zirconia Project

14 May 2015

 **SydneyResources**
Round-up

Mining the metals of the future.

Alkane Strategy



Focused on NSW Central West



Multi-commodity
company



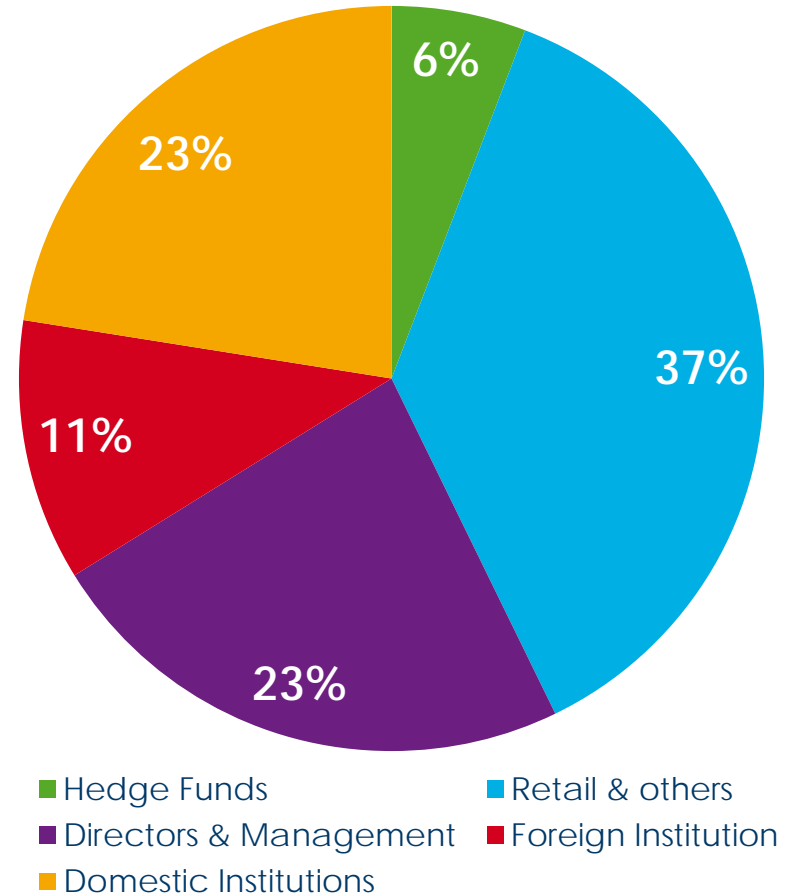
Strategic
relationships



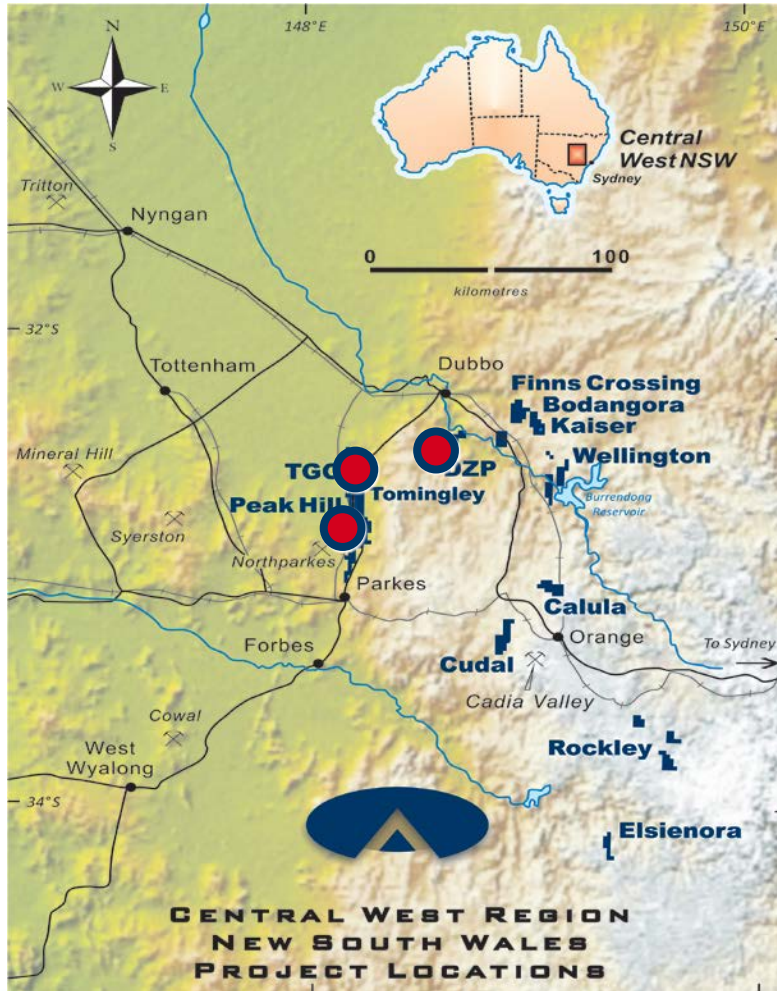
Community & environmentally
responsible

Corporate Snapshot

- **414.2 Million Shares**
- **A\$125M Market Cap**
 - **13 May 2015**
- **A\$24.2M Cash/Investments**
 - **31 March 2015**
- **A\$ 0 Debt**
- **A\$0.17/\$0.40**
 - **12 Month Low/High**
- **ALK (ASX) ANLKY (OTCQX)**



Major Shareholders: 22% Abbotsleigh (Gandel Metals)
10% Fidelity Group



- **Peak Hill Gold Mine**
1996 - 2005
- **Tomingley Gold Operations**
Production commenced 2014 – cash flow
- **Dubbo Zirconia Project**
Pre-construction
- *Active in region for more than 30 years*
- *Successful ongoing exploration programs*
- *World-class strategic polymetallic development*



ALKANE
RESOURCES LTD

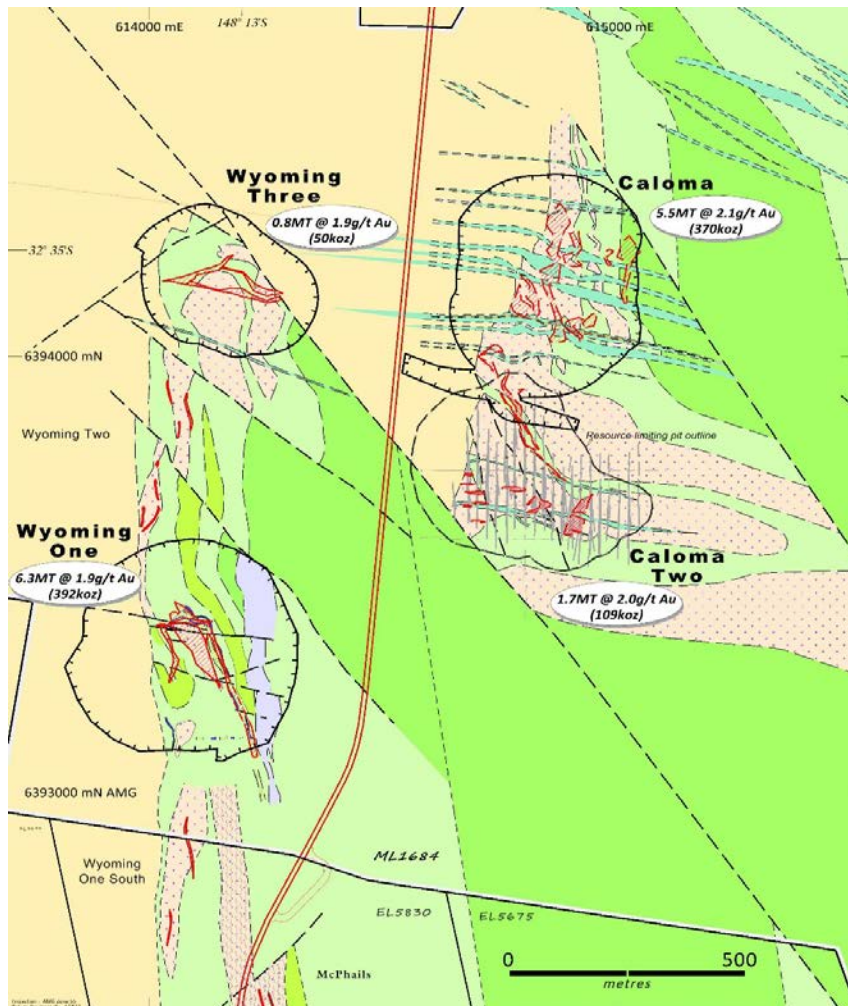
Tomingley Gold Operations

- Resource – 830,000oz of gold (30 June 2014)
 - Construction CAPEX – A\$116M
 - Mine Method – open cut & underground
 - Mine Life – 7.5 years (targeting 10+ years)
 - Processing plant throughput – 1.0Mtpa
 - 2.00g/t Au and 93% recovery standard CIL
 - Gold Production – ~400,000oz over base case life
 - Cash operating costs (AISC) estimated and averaged over base case life – ~A\$1,000 - \$1,100/oz
 - Gold production commenced February 2014
- FY15 at 31 March 2015:
- Produced 55,484oz
 - AISC A\$1,162/oz
 - Revenue A\$80.50M
 - Cash flow A\$21.5M
 - Hedge 27,500oz @ A\$1,540/oz





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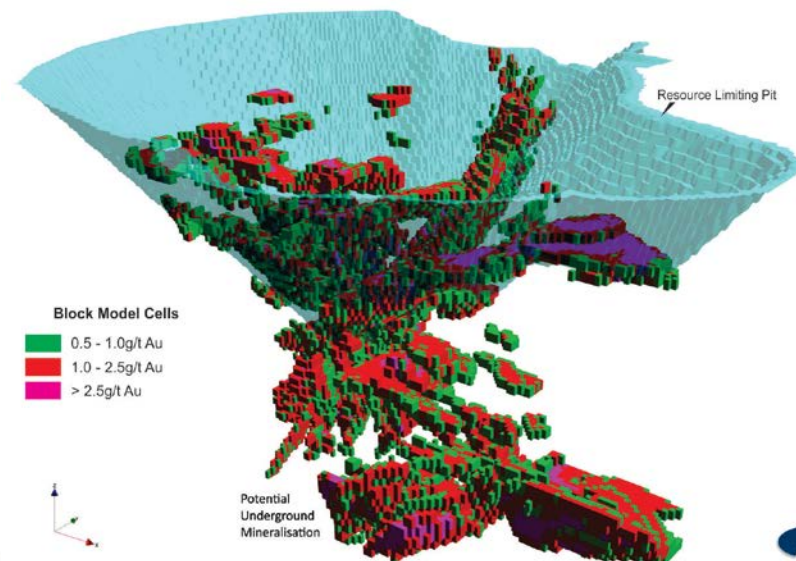


TGO Resource Expansion

Additional Resource Potential

Caloma Two open pit and underground
Expand Wyoming One underground
Caloma underground
Myalls underground (historic 70,000oz)
Wyoming Two and Three underground
McLeans

Caloma Two – Geological model





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RESOURCES LTD

Dubbo Zirconia Project

Hydrogen 1 H 1.008																	Helium 2 He 4.0026						
Lithium 3 Li 6.94	Beryllium 4 Be 9.012																	Boron 5 B 10.811	Carbon 6 C 12.011	Nitrogen 7 N 14.07	Oxygen 8 O 15.999	Fluorine 9 F 18.998	Neon 10 Ne 20.180
Sodium 11 Na 22.990	Magnesium 12 Mg 24.305																	Aluminium 13 Al 26.982	Silicon 14 Si 28.085	Phosphorus 15 P 30.974	Sulfur 16 S 32.06	Chlorine 17 Cl 35.45	Argon 18 Ar 39.948
Potassium 19 K 39.098	Calcium 20 Ca 40.078	Scandium 21 Sc 44.956	Titanium 22 Ti 47.867	Vanadium 23 V 50.9415	Chromium 24 Cr 51.996	Manganese 25 Mn 54.938	Iron 26 Fe 55.845	Cobalt 27 Co 58.933	Nickel 28 Ni 58.693	Copper 29 Cu 63.546	Zinc 30 Zn 65.38	Gallium 31 Ga 69.723	Germanium 32 Ge 72.63	Arsenic 33 As 74.922	Selenium 34 Se 78.96	Bromine 35 Br 79.904	Krypton 36 Kr 83.798						
Rubidium 37 Rb 85.468	Strontium 38 Sr 87.62	Yttrium 39 Y 88.906	Zirconium 40 Zr 91.224	Niobium 41 Nb 92.906	Molybdenum 42 Mo 95.95	Technetium 43 Tc 97.91	Ruthenium 44 Ru 101.07	Rhodium 45 Rh 102.91	Palladium 46 Pd 106.42	Silver 47 Ag 107.87	Cadmium 48 Cd 112.41	Indium 49 In 114.82	Tin 50 Sn 118.71	Antimony 51 Sb 121.760	Tellurium 52 Te 127.60	Iodine 53 I 126.90	Xenon 54 Xe 131.29						
Caesium 55 Cs 132.905	Barium 56 Ba 137.327	57 - 70 *	Lutetium 71 Lu 174.97	Hafnium 72 Hf 178.49	Tantalum 73 Ta 180.95	Tungsten 74 W 183.84	Rhenium 75 Re 186.207	Osmium 76 Os 190.23	Iridium 77 Ir 192.217	Platinum 78 Pt 195.08	Gold 79 Au 196.967	Mercury 80 Hg 200.59	Thallium 81 Tl 204.38	Lead 82 Pb 207.2	Bismuth 83 Bi 208.98	Polonium 84 Po 209	Astatine 85 At 210	Radon 86 Rn 222					
Francium 87 Fr 223.02	Radium 88 Ra 226.03	89 - 102 **	Lawrencium 103 Lr 262.11	Rutherfordium 104 Rf 261.12	Dubnium 105 Db 268.13	Seaborgium 106 Sg 271.13	Bohrium 107 Bh 272	Hassium 108 Hs 277.15	Mtnerium 109 Mt 276.15	Darmstadtium 110 Ds 281.16	Roentgenium 111 Rg 280.16	Copernicium 112 Cn 285.17			Flerovium 114 Fl 289	Ununquadium 115 UUp 289.19							

Alkane

Light Rare Earths

Heavy Rare Earths

Rare Metals

Lanthanum 57 La 138.91	Cerium 58 Ce 140.116	Praseodymium 59 Pr 140.907	Neodymium 60 Nd 144.242	Promethium 61 Pm 144.91	Samarium 62 Sm 150.36	Europium 63 Eu 151.96	Gadolinium 64 Gd 157.25	Terbium 65 Tb 158.92	Dysprosium 66 Dy 162.50	Holmium 67 Ho 164.93	Erbium 68 Er 167.259	Thulium 69 Tm 168.93	Ytterbium 70 Yb 173.05
Actinium 89 Ac 227.03	Thorium 90 Th 232.04	Protactinium 91 Pa 231.04	Uranium 92 U 238.03	Neptunium 93 Np 237.05	Plutonium 94 Pu 244.06	Americium 95 Am 243.06	Curium 96 Cm 247.07	Berkelium 97 Bk 247.07	Californium 98 Cf 251.08	Einsteinium 99 Es 252.08	Fermium 100 Fm 257.10	Mendelevium 101 Md 258.10	Nobelium 102 No 259.10

*Lanthanide series

**Actinide series

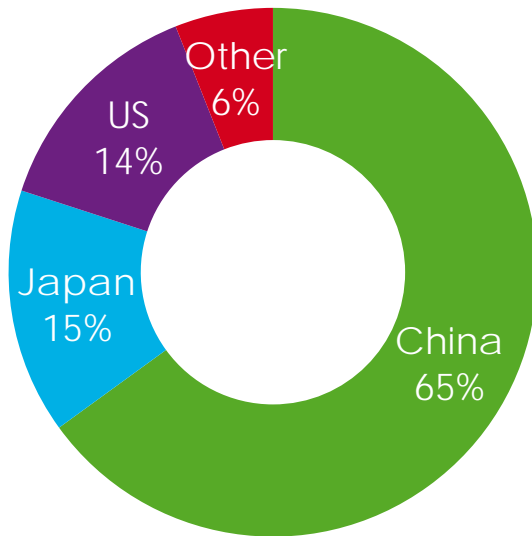
*Lanthanide series

**Actinide series

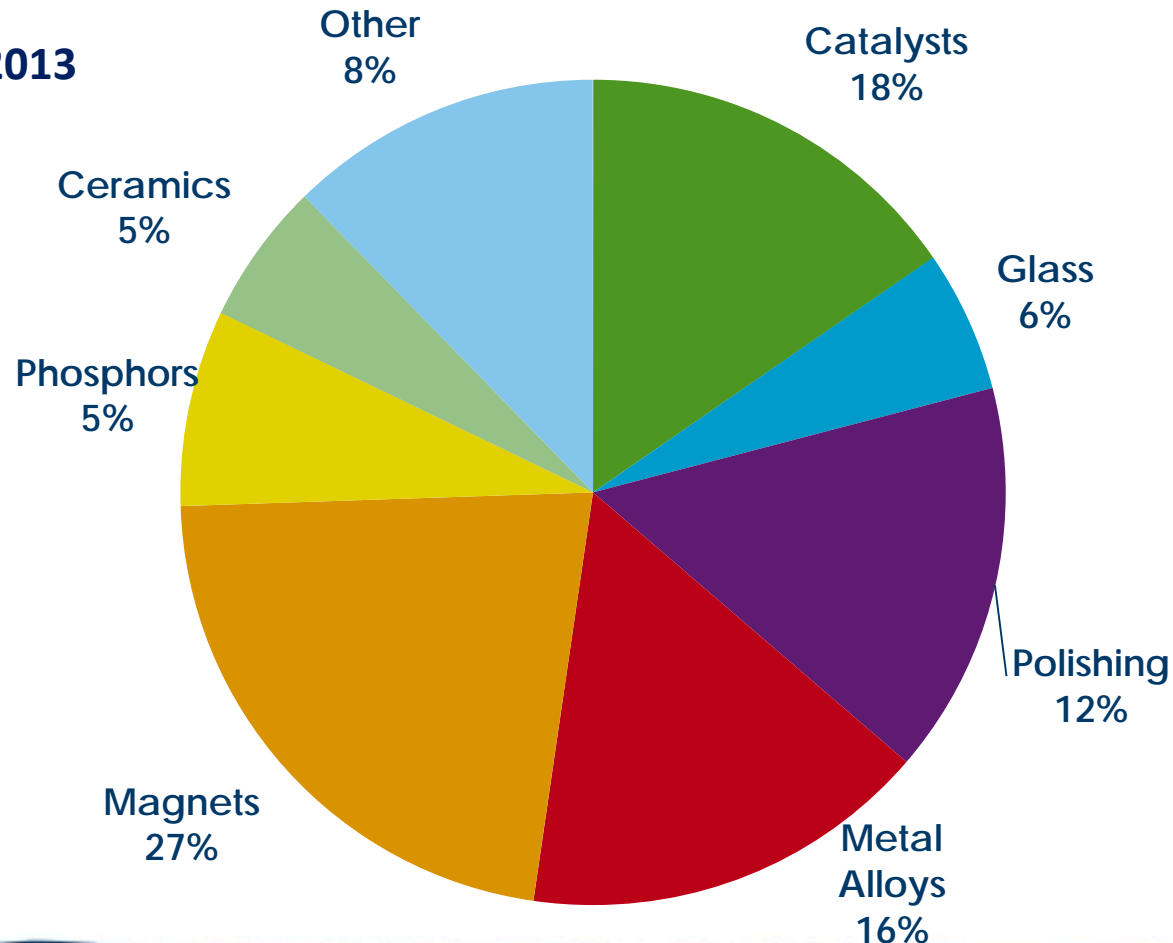
Rare Earth Industry

- **US\$3-5B Global market**
- **115,000t Annual Consumption 2013**
- **5-10% Annual growth estimates**

REE Demand 2013 by Country



REE Demand 2016 by Application



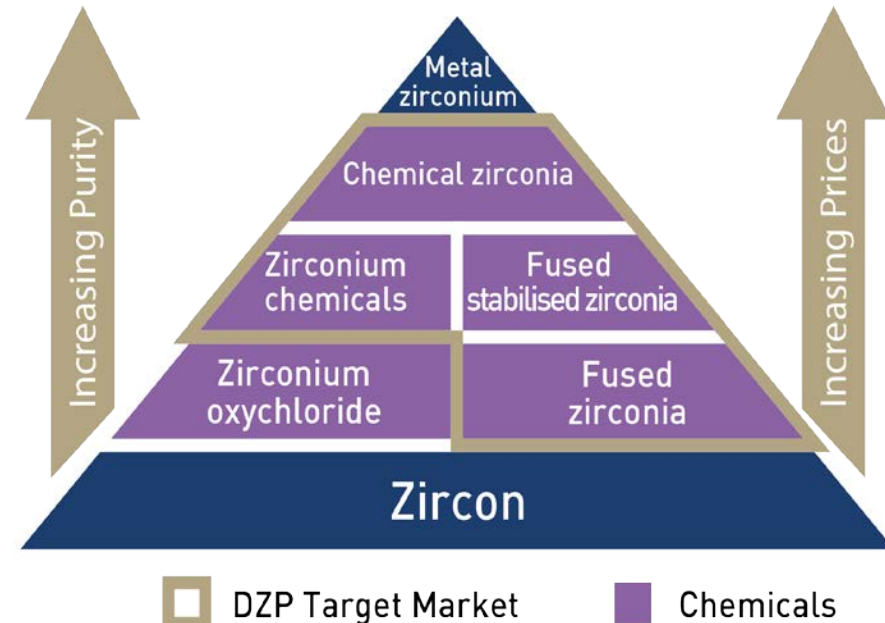
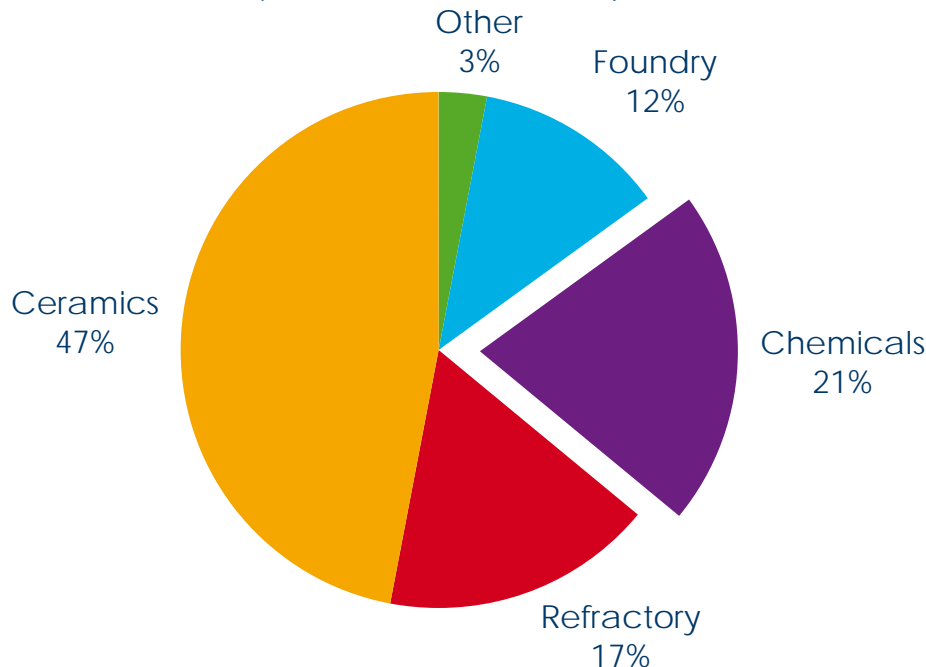
China's Rare Earths Industry

Did the WTO case make any difference? China's government actions to manage its rare earths industry.

Regulation	Consolidation	Quotas	Taxes	Policies
<ul style="list-style-type: none"> • Crackdown on Illegal mining – currently thought to be around 30% • Environmental controls • Production restricted to the six large state-owned rare earth enterprises 	<ul style="list-style-type: none"> • Rare earth separation capacity elimination • National stockpiles of rare earths • Baotou Rare Earth Exchange 	<ul style="list-style-type: none"> • Export licences and quotas removed as at 1 January 2015 but replaced by new mining and production regulations 	<ul style="list-style-type: none"> • Export taxes removed as from 1 May 2015 • A new internal resource tax implemented as from 1 May 2015 • Light REs from 11% - 15% and heavy REs 27% • Should positively impact on prices 	<ul style="list-style-type: none"> • Policies to attract foreign companies to transfer rare earth downstream production and technology to China

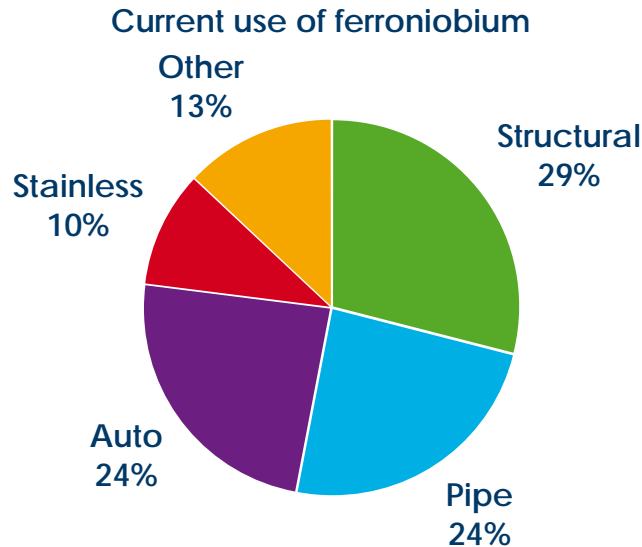
Zircon Demand by End Use

(2013 ~ 1 million tonnes)



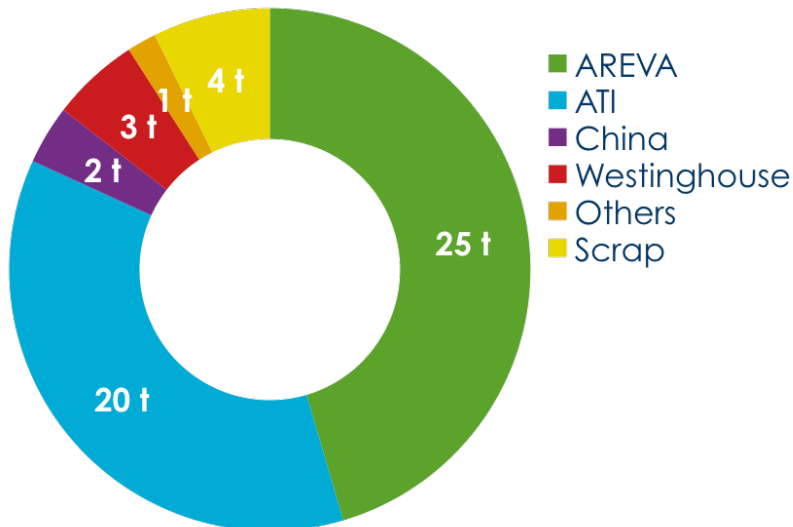
- **Global market US\$2-3B**
- **2014 consumer zircon inventories running down**
- **Market expected to stabilise through 2015 - 2016**
- **CAGR anticipated at 5% - 7% pa**

- 90% of Nb used in standard grade ferroniobium for the production of high strength low alloy (HSLA) steels.
- World production estimated at 80,000t Nb in 2012. CBMM in Brazil accounts for 85%.
- Global market US\$3-4B. Price stability since 2008, including GFC.
- CAGR anticipated at 10%. Demand expected to be driven by greater intensity of use in steels by BRIC producers.

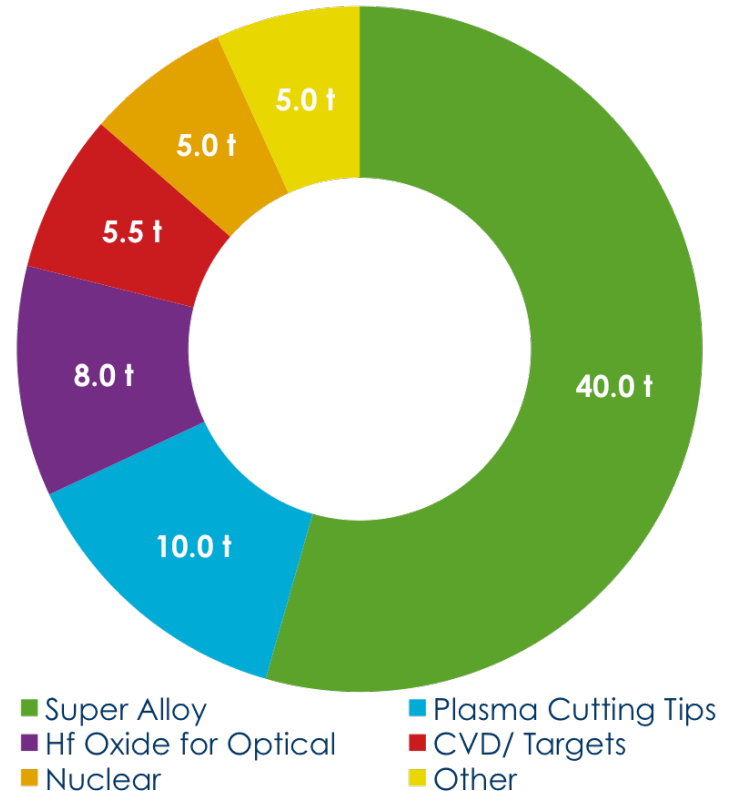


- **Super Alloys- 73% of 2015 supply**
- **By-product from zirconium metal**
 - Depends on nuclear industry
- **Prices escalating through demand by aerospace industries 2014 into 2015**

Hafnium Supply
2015 Estimated 50 - 60 tonnes



Hafnium Demand
2015 Estimated 70 - 80 tonnes



These products are everywhere..



Renewable energy



Energy efficient lighting



Auto - emissions



Auto – fuel efficiency



Health



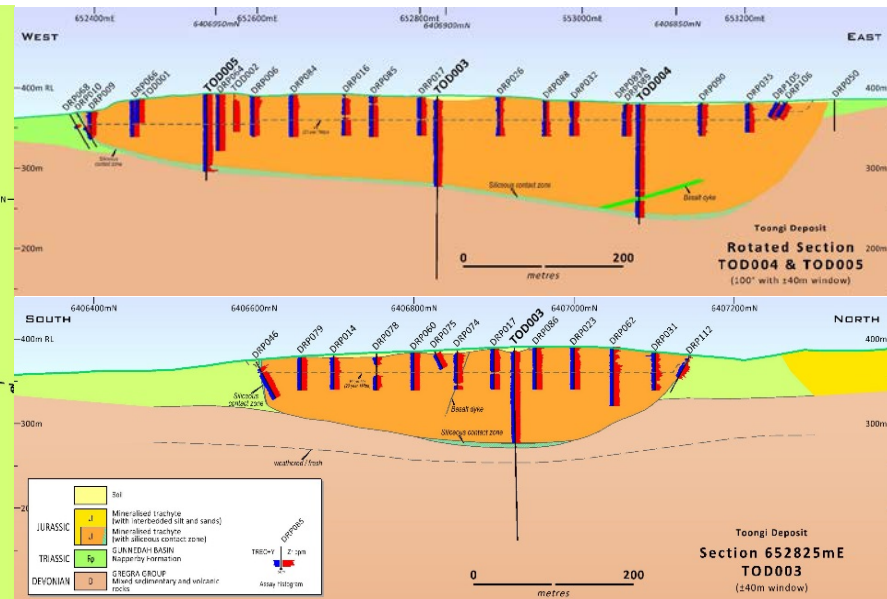
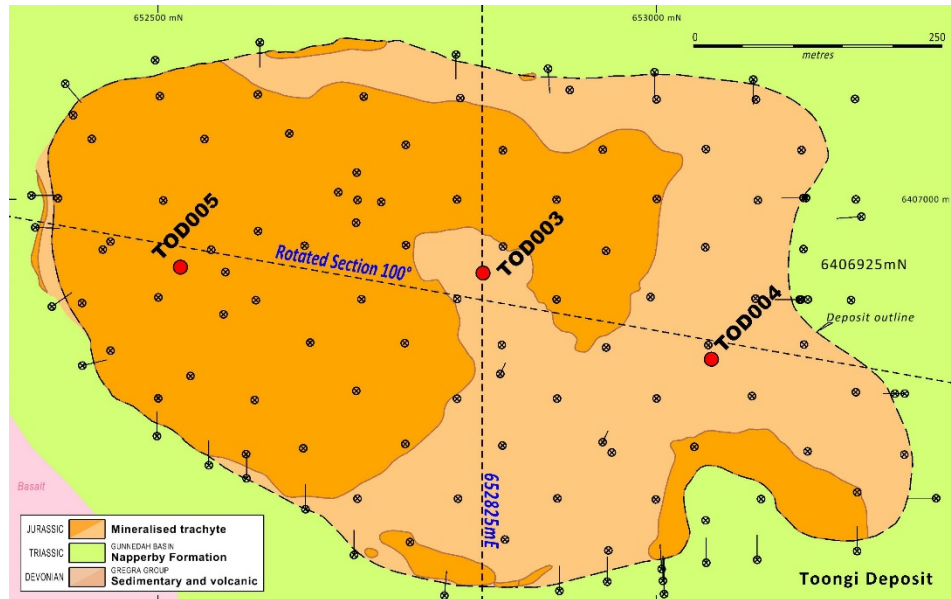
Electronics



Smart technologies

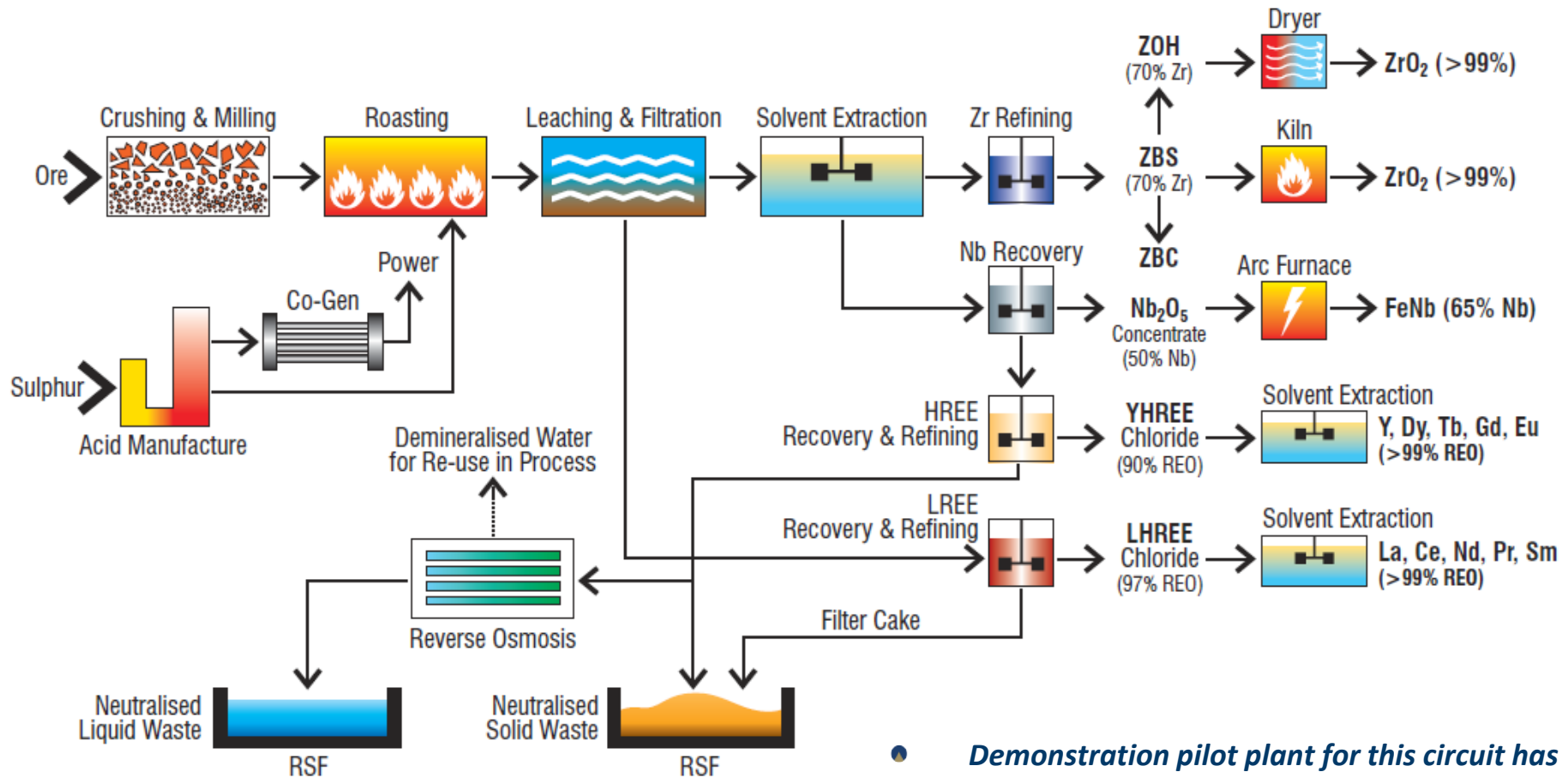


Aerospace



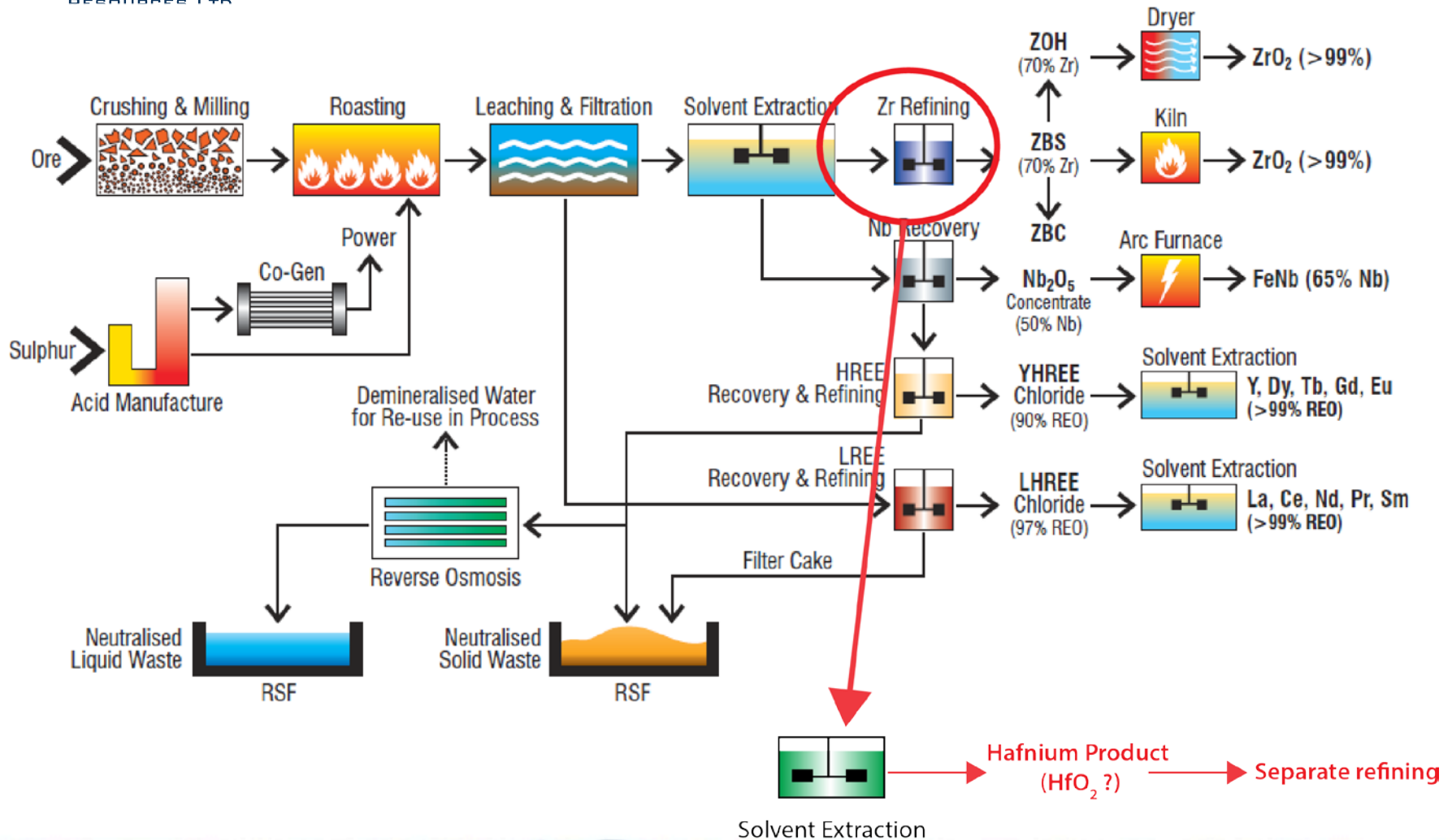
- Trachyte lava or sub-volcanic intrusive
- Largely homogeneous ore body
- Ore mineralogy:
 - eudialyte ("like" Zr silicate +Y and HRE)
 - natroniobite (Nb-Ta)
 - bastnaesite (LRE)
- All readily soluble in sulphuric acid forms basis of recovery process

Process Flowsheet



Demonstration pilot plant for this circuit has been operating at ANSTO since 2008

"New" Hafnium Recovery



Product Output

Light Rare Earths chemical concentrate (99%% REO)	4,665 tpa (LREO units)
Heavy rare earth chemical concentrate (95% REO)	1,309 tpa (HREO units)
Zirconium as ZBC (carbonate) and Zirconia (99% ZrO₂)	15,827tpa (ZrO ₂ units)
Hafnium as HfO₂ process being trialed – assumed 50% recovery	200 tpa (HfO ₂ units)
Niobium as ferro-niobium (65% Nb)	1,967 tpa (Nb units)
Tantalum – no process to date – potential 50% future output	150 tpa (Ta ₂ O ₅ units)

Tonnage based upon recoveries developed from mass balances of the demonstration pilot plant, and process optimisation to improve recoveries is continuing

Funding Strategy

Government Assistance Programs

- ECA Style Funding
- Lead coordinator: Sumitomo Mitsui Banking Corp
- Attractive Project
 - Long life, low cost
 - Long term off-take-agreements with international companies

Investment at Project Level

- Strategic Investment(s)
- Advisors: Credit Suisse & SMBC
- Strategic interest(s) in long term supply of critical metals
- Intro of cornerstone investor(s)

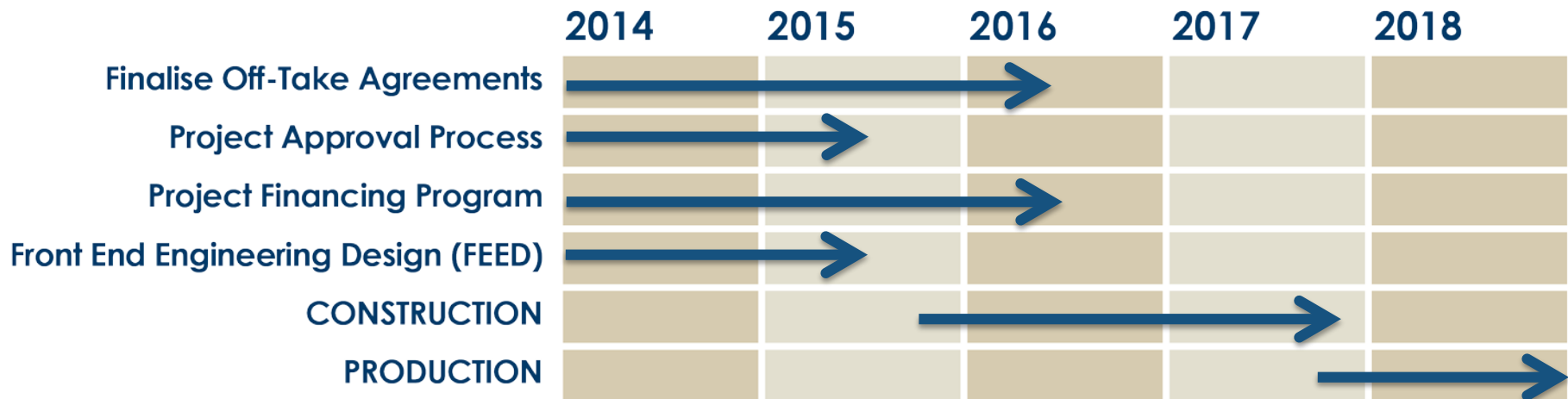
Commercial Bank Debt

- Advisors: SMBC & Credit Suisse
- Attractive Project
 - Strong operating cash flows
 - Diversified revenue stream
 - New markets

Equity Capital Markets (ALK)

- Advisors: Credit Suisse & Petra Capital

- **Total Project Capex ~A\$1B (including A\$166M contingency)**
- **Based on April 2013 DFS to +/-17%**
- **Current FEED program to achieve BFS standard @ +/-10%**
- **Capex, opex and revenue being reviewed**



**Project approval process currently at 23 months but is anticipated to be completed by June.
The process has added about 12 months to the schedule overall.**

Estimates of times are indicative only and are subject to change.
Alkane reserves the right to vary the timetable without notice.

- **Bodangora gold-copper prospect**

- Large monzonite intrusive complex with gold-copper mineralisation
- Similarities to Newcrest's Cadia-Ridgeway gold-copper mine
- Recent drill intercepts at new target (Kaiser) (ALK ASX 8 April 2014)
 - 41m @ 1.15g/t gold and 1.24% copper
 - 8m @ 0.34g/t gold and 1.06% copper

- **Galwadgere gold copper prospect**

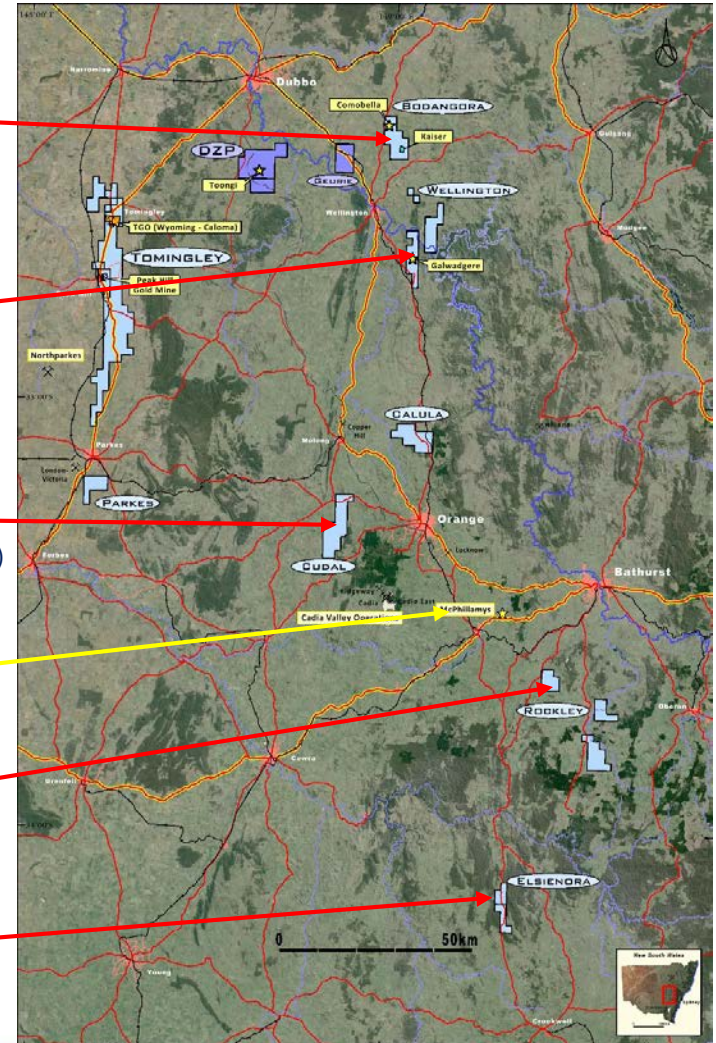
- Small VMS copper-gold deposit
- Drilling continues

- **Cudal gold-zinc prospect**

- Best drill intercept 17m @ 1.2 g/t gold and 2.8% zinc (ALK ASX 19 January 2011)
- Interesting targets, both porphyry style copper-gold and possibly sedimentary replacement (Carlin model)

- **McPhillamys gold project – Regis Resources Ltd**

- Discovered by Alkane in 2005 – JV with Newmont Australia
- 3Moz gold resource identified in 2010 (ALK ASX 5 July 2010)
- Sold to Regis in 2012 for \$150M, Alkane's share \$73.5M
- McPhillamys conceptual targets at:
 - Rockley
 - Elsenora recent drill intercepts 29m @ 1.53g/t Au, incl 4m @ 5.86g/t Au and 8m @ 3.14g/t Au (ALK ASX 23 March 2015)



- **Internationally strategic DZP with supply of several critical metals from non-Chinese sources**
- **Diversified DZP output gives robust revenues, even at current Chinese domestic RE prices**
- **Full spectrum of rare earth magnet materials – neodymium, praseodymium, dysprosium and terbium produced**
- **Potential to be the world's largest hafnium producer and supply long term stable production and pricing into the expanding aerospace industry**
- **Experienced management team, successfully completed TGO construction on time and budget. Transitioned into production**
- **Management team being expanded to commence DZP development**
- **Current TGO cash flow**

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.

This document has been prepared in accordance with the requirements of Australian securities laws, which may differ from the requirements of United States and other country securities laws. Unless otherwise indicated, all ore reserve and mineral resource estimates included or incorporated by reference in this document have been, and will be, prepared in accordance with the JORC classification system of the Australasian Institute of Mining, and Metallurgy and Australian Institute of Geosciences.

Competent Person

Unless otherwise stated, 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) who 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 2012 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.

Dubbo Zirconia Project – Mineral Resources

Toongi Deposit	Tonnage (Mt)	ZrO ₂ (%)	HfO ₂ (%)	Nb ₂ O ₅ (%)	Ta ₂ O ₅ (%)	Y ₂ O ₃ (%)	REO (%)
Measured	35.70	1.96	0.04	0.46	0.03	0.14	0.75
Inferred	37.50	1.96	0.04	0.46	0.03	0.14	0.75
Total	73.20	1.96	0.04	0.46	0.03	0.14	0.75

These Mineral Resources are based upon information compiled by Mr Terry Ransted MAusIMM (Alkane Chief Geologist) who is a competent person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Terry Ransted consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. The full details of methodology were given in the 2004 Annual Report.

Dubbo Zirconia Project – Ore Reserves

Toongi Deposit	Tonnage (Mt)	ZrO ₂ (%)	HfO ₂ (%)	Nb ₂ O ₅ (%)	Ta ₂ O ₅ (%)	Y ₂ O ₃ (%)	REO (%)
Proved	8.07	1.91	0.04	0.46	0.03	0.14	0.75
Probable	27.86	1.93	0.04	0.46	0.03	0.14	0.74
Total	35.93	1.93	0.04	0.46	0.03	0.14	0.74

These Ore Reserves are based upon information compiled by Mr Terry Ransted MAusIMM (Alkane Chief Geologist) who is a competent person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The reserves were calculated at a 1.5% combined ZrO₂+Nb₂O₅+Y₂O₃+REO cut off using costs and revenues defined in the notes in ASX Announcement of 16 November 2011. Terry Ransted consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Note: ASX announcements 16 November 2011, 11 April 2013 and 30 October 2013 - the Company confirms that all material assumptions and technical parameters underpinning the estimated Mineral Resources and Ore Reserves, and production targets and the forecast financial information as disclosed continue to apply and have not materially changed.

TOMINGLEY GOLD PROJECT MINERAL RESOURCES (as at 30 June 2014)									
DEPOSIT	MEASURED		INDICATED		INFERRED		TOTAL		Total Gold (Koz)
	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	
Open Pittable Resources (cut off 0.50g/t Au)									
Wyoming One	2,171	1.7	442	1.5	735	1.1	3,348	1.6	166.8
Wyoming Three	473	1.8	25	1.5	98	1.1	597	1.6	31.5
Caloma	2,556	2.0	649	1.7	2,464	1.4	5,669	1.7	316.9
Caloma Two	-	-	1,085	2.4	704	1.3	1,789	2.0	112.4
Sub Total	5,200	1.9	2,201	2.0	4,001	1.3	11,402	1.7	627.5
Underground Resources (cut off 1.75g/t Au)									
Wyoming One	229	4.1	296	3.7	869	2.9	1,394	3.3	147.3
Wyoming Three	29	2.6	15	2.4	8	2.5	52	2.5	4.2
Caloma	3	2.1	13	2.3	224	2.5	240	2.4	18.9
Caloma Two	-	-	215	2.7	165	2.5	380	2.6	32.0
Sub Total	261	3.9	539	3.2	1,266	2.8	2,066	3.0	202.4
TOTAL	5,461	2.0	2,740	2.3	5,267	1.7	13,468	1.9	829.8

TOMINGLEY GOLD PROJECT ORE RESERVES (as at 30 June 2014)							
DEPOSIT	PROVED		PROBABLE		TOTAL		Total Gold (Koz)
	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	
Wyoming One	1,662	1.7	202	1.4	1,864	1.6	98.4
Wyoming Three	379	1.7	10	1.8	389	1.7	21.4
Caloma	1,744	2.2	184	1.7	1,928	2.2	136.0
Caloma Two	-	-	239	3.6	239	3.6	27.4
TOTAL	3,785	1.9	635	2.3	4,420	2.0	283.2
Stockpiles	186	1.9			186	1.9	11.5
TOTAL					4,606	2.0	294.7

Full details are given in the ASX release of 5 September 2014