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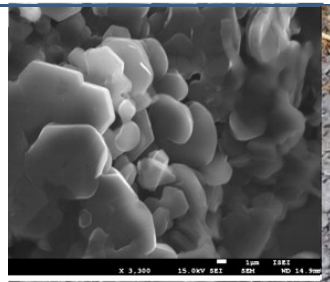

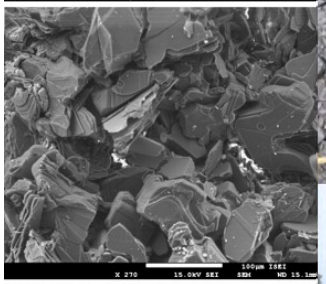

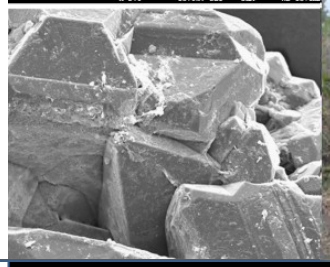

Kambale Graphite Deposit

July 2012

www.castleminerals.com

ASX: CDT

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Competent Person Statement

Information in this announcement that relates to Exploration Results is based on information compiled by Haydn Hadlow, Castle Minerals Limited Exploration Manager, who is a Member of The Australasian Institute of Mining and Metallurgy. Haydn Hadlow is a permanent employee of Castle Minerals Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 JORC Code. Haydn Hadlow consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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Graphite

- Graphite is one of two naturally occurring allotropes of crystalline carbon, the other being diamond. Graphite is soft, greasy to the touch, and soils fingers and paper.

- Graphite generally occurs in one of three forms, amorphous; crystalline lump or vein; and crystalline flake

- Traditional uses are in the refractories industry as well as friction materials, lubricants, foundry core and mould washes.

- **Battery technology is driving graphite demand.** Extremely resistant to heat and highly conductive, graphite is a key component of lithium batteries. Li-ion batteries are used widely in electronics and the electric and hybrid vehicle market.

- **Nuclear reactors and fuel cells have the potential to add significantly to future graphite demand**

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Geological Occurrence and Background

- Flake Graphite generally occurs as the result of metamorphism of organic matter in sediments. Flake graphite is assumed to be derived from fine grained sediments rich in organic matter.
- Positive vanadium and nickel anomalies and negative boron anomalies are possible signatures for graphite if geochemical data are available.

	Flake	Vein	Amorphous
Description	Crystalline flakes	Coarse crystals Mostly >4cm	Microcrystalline <70 micron
Origin	Syngenetic; regional metamorphism	Epigenetic; regional metamorphism	Syngenetic; contact and/or regional metamorphism
Ore	5-30% graphite; strata-bound, tabular or lenses	98%+ graphite; veins and fractures	Seams, often folded and faulted
Product grade	75-97% graphite	98-99.9% graphite	60-90% graphite
Major Producers	China, Brazil, India, Madagascar, Germany	Sri Lanka	China, South Korea, Austria

Adapted from Fogg and Boyle (1987)
British Geological Survey Technical Report WG/92/30, Mitchell , C J 1993

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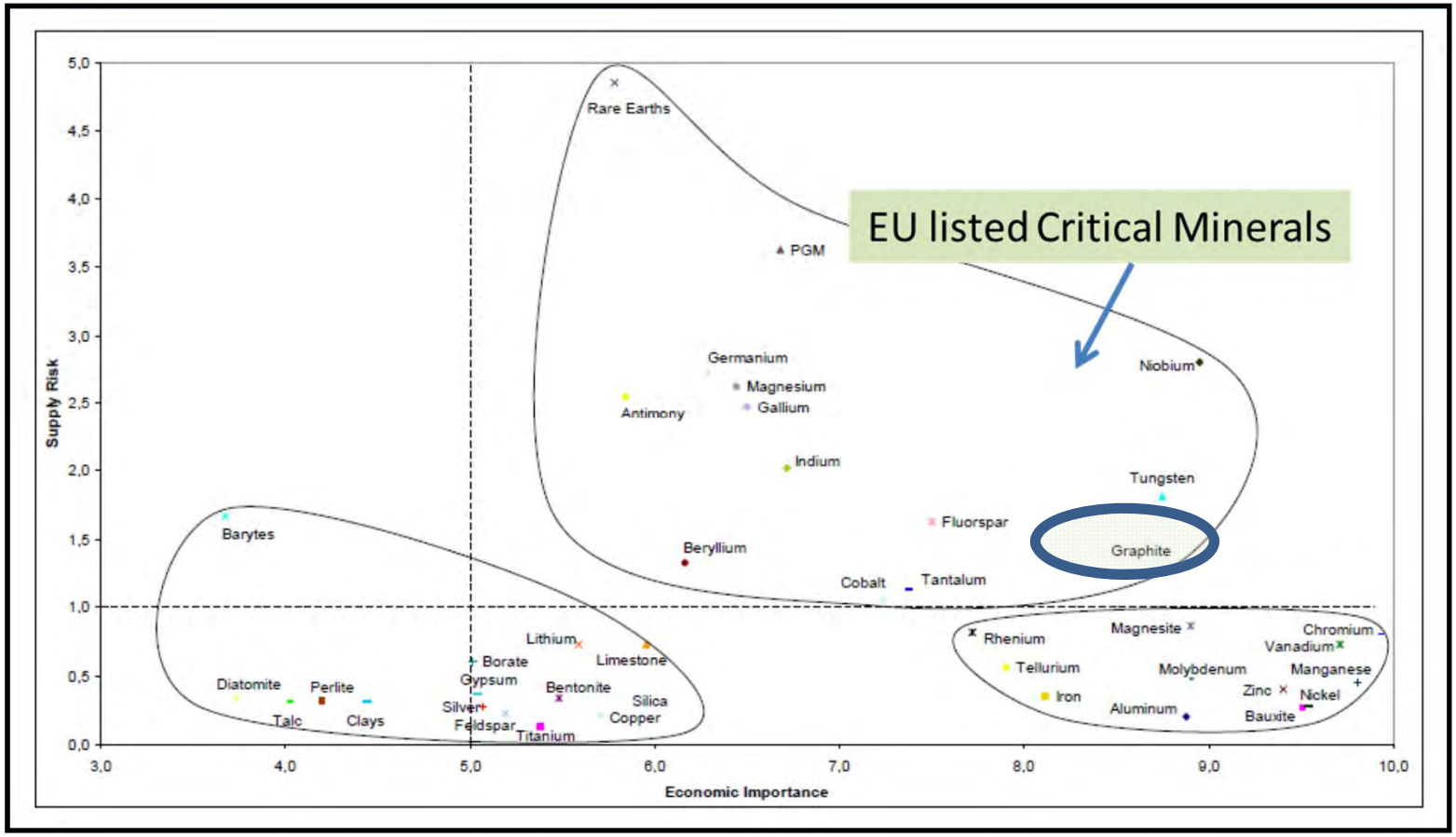
Graphite Critical

- The **British Geological Survey** has listed graphite as one of the materials to most likely be in **short supply** globally
- The **US Government** has declared **graphite a critical material**
- The **European Commission** has listed **graphite as a critical raw material for the EU**



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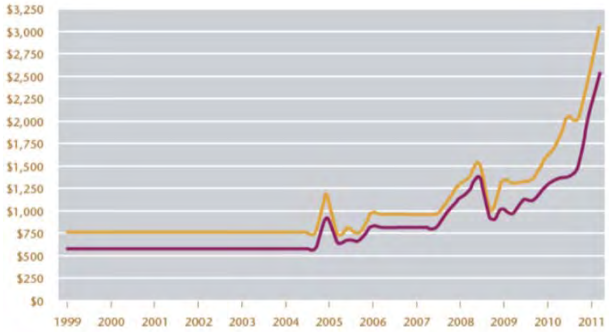
Source: European Commission 2010, Critical Raw Material for the EU

Graphite Price

2012 Industrial Minerals Graphite Prices per Tonne				
FCL CIF main European port				
Purity % and mesh size	**Price range US$/tonne**		**Mesh Size equivalent microns**	
99% to 99.9% C, +50 mesh	$4,500	$6,000	+300	Coarse
94% to 97% C, +80 mesh CIF	$2,500	$3,000	+180	
90% C, +80 mesh	$2,000	$2,500	+180	
94% to 97% C, +100-80 mesh	$2,200	$2,500	+150-180	Medium
90% C, +100-80 mesh	$1,500	$2,000	+150-180	
85% to 87% C, +100-80 mesh	$1,500	$1,900	+150-180	
94% to 97% C, -100 mesh	$2,000	$2,400	-150	Fine
90% C, -100 mesh	$1,400	$1,800	-150	
Amorphous powder 80% to 85C	$600	$800	-75	
Synthetic 99.95% C2	$7,000	$20,000		

source www.Indmin.com



Price range for +80mesh (+0.18mm), 94-97%C graphite US$/t

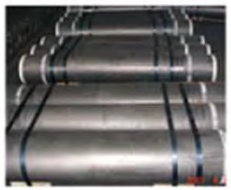
Source: Industrial Minerals Magazine

Mobile Electronics

Electric Vehicles

Refractory

Foundry Industry



Graphite Electrode

Sealing Material

Pencil Core

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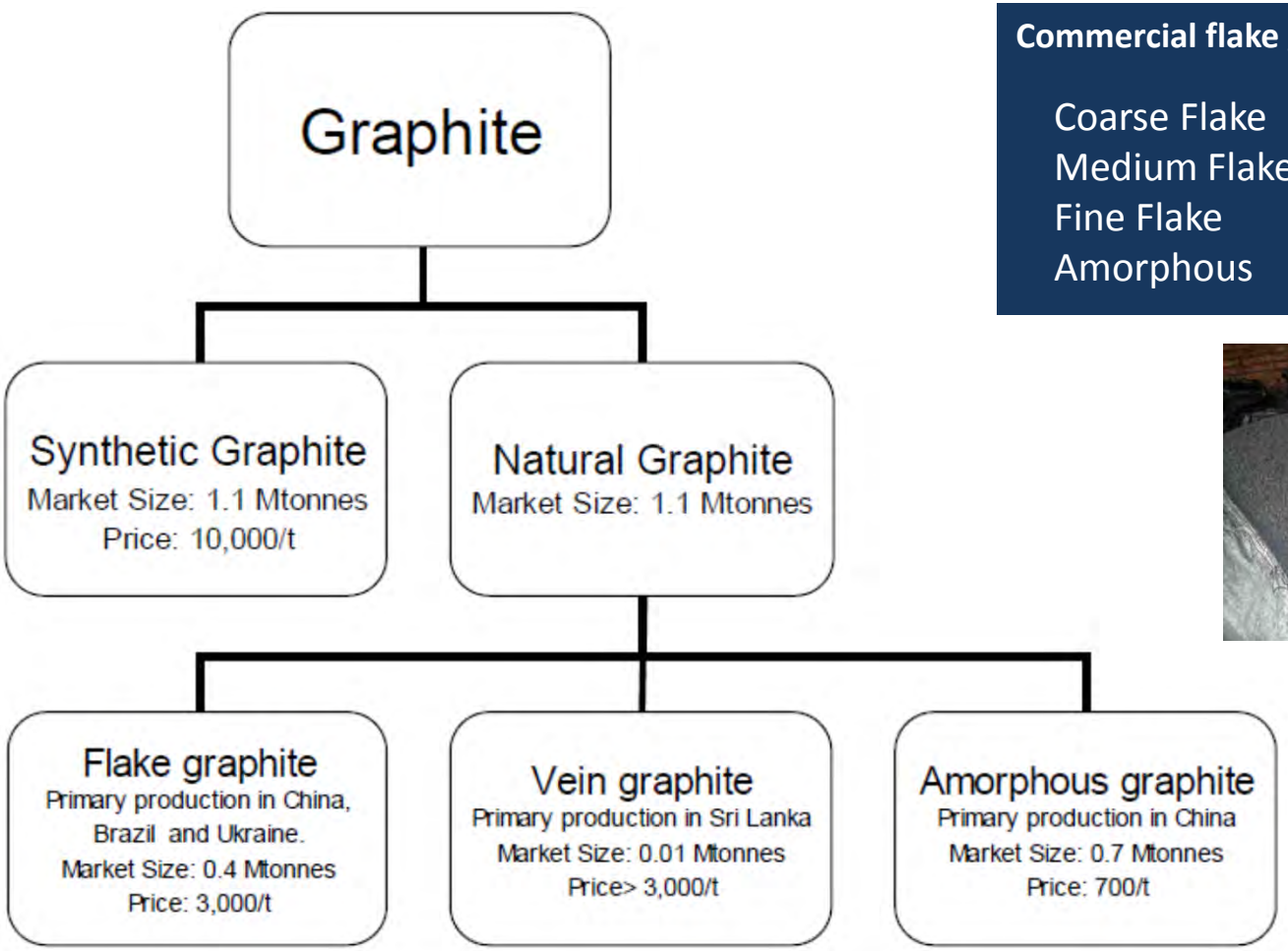
Global Graphite Demand



Commercial flake graphite is divided into:

Coarse Flake	180-850 micron
Medium Flake	150-180 micron
Fine Flake	75-150 micron
Amorphous	<75 micron

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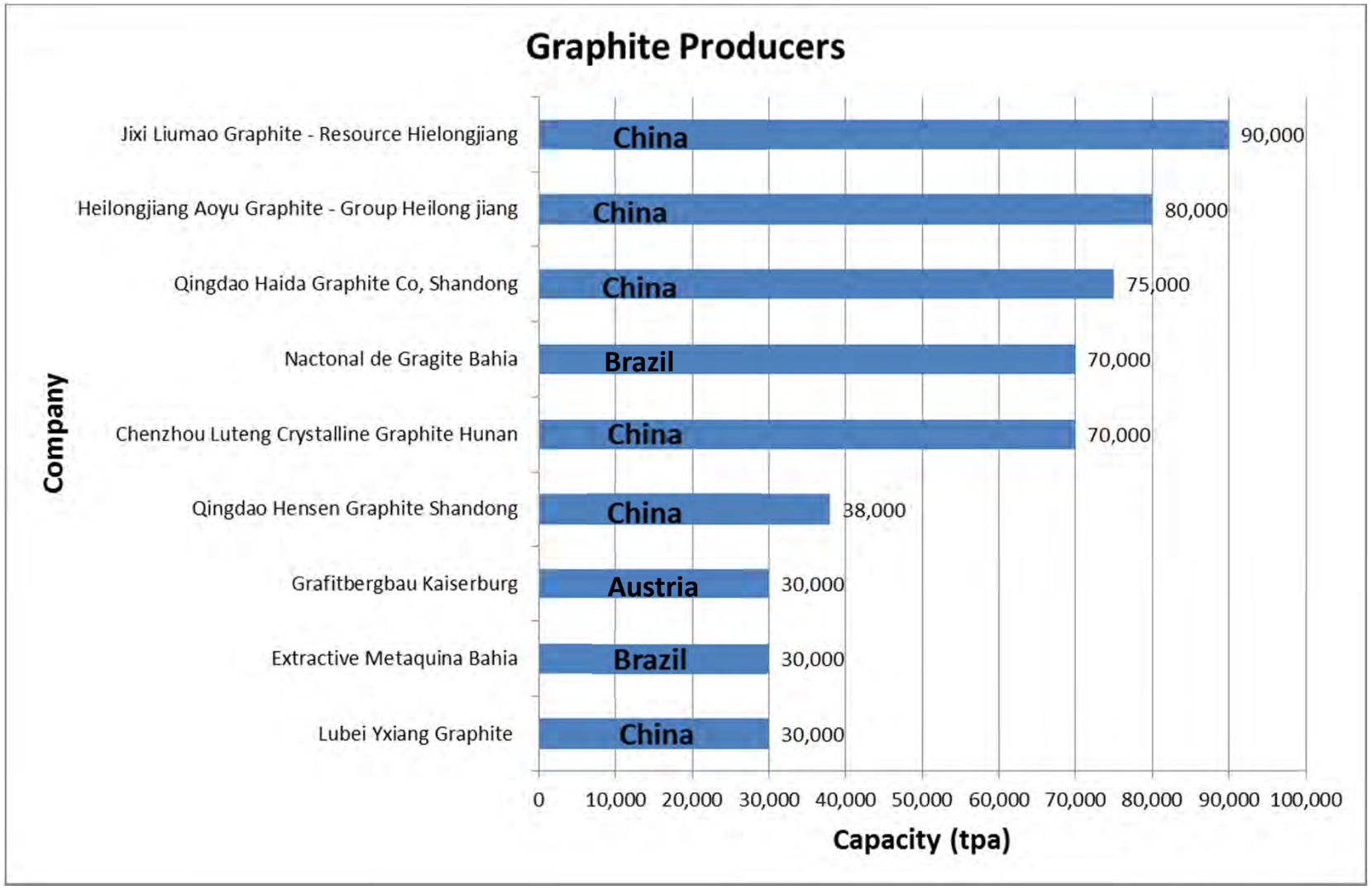
Graphite Producers



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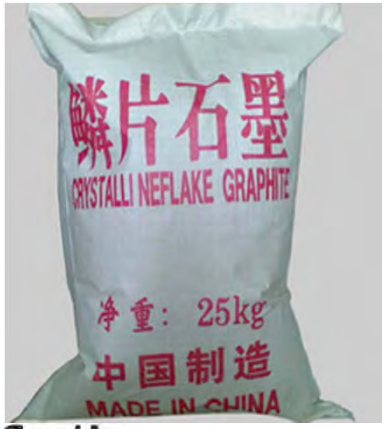
Driving Demand - Spherical Graphite

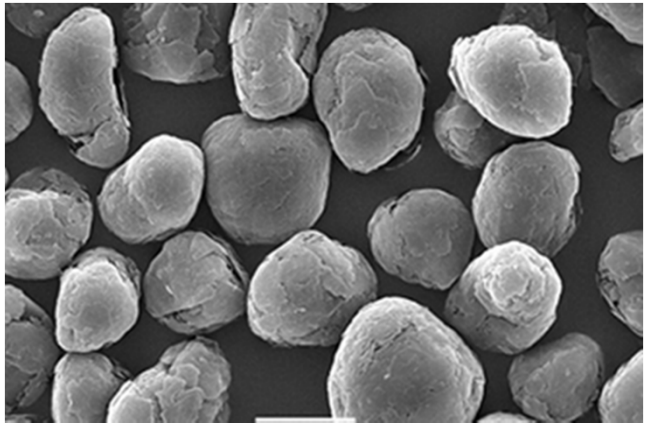
- **Lithium-ion batteries** require **spherical graphite** which is manufactured from high quality natural flake graphite. The upgrading process consists of micronizing the graphite flakes and rounding them to create a spherical or "potato" shape.

- **The production of spherical graphite for Lithium-ion batteries destroys around 60-70% of the feedstock flake graphite.** It is estimated that up to 100,000 tonnes of flake graphite (or 25% of total current world production) is already dedicated to Lithium-ion batteries.

- Exponential growth is predicted for electric cars as the world's economies drive towards green power initiatives.

It takes three tonnes of flake graphite to make one tonne of spherical graphite. These losses are the single largest cost in the manufacturing of spherical graphite.





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Driving Demand - Lithium-ion Batteries

- **Each 1kWh of Li-ion battery** capacity contains approximately 0.7kg lithium carbonate and **1.4kg graphite.** Graphite can be either natural or synthetic (>$10,000t). **Natural flake is better and cheaper**

- The Li ion battery in the fully electric **Nissan Leaf car contains nearly 40kg of graphite**

- The Li ion battery in the Chevrolet Volt contains **~ 22kg of graphite**

- Byron Capital Markets expects to see **graphite production to increase to 2.6 million tonnes by 2020** as more graphite is used to produce lithium-ion batteries and other applications

- The Li-ion battery industry is growing at **30-40% annually**

The automotive industry projects that by 2025**, 400,000 t of flake graphite (100% of 2011 production) would be required to manufacture spherical graphite for Li-ion batteries/fuel cells**

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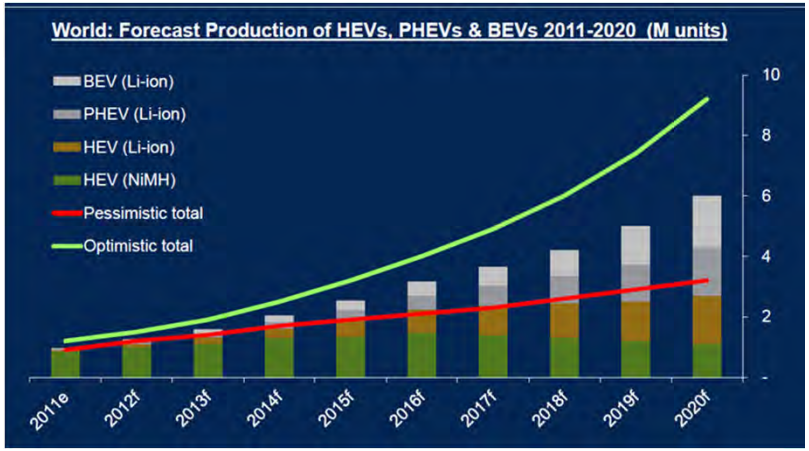
Source: Roskill Information Services Limited, Minelife 2012; Mackie Research

Driving Demand - Electric and Hybrid Vehicles

- 1 Billion passenger vehicles in use today with **60M produced annually**
- Global leaders want to have **20 million electric vehicles (EVs) on the road worldwide by 2020**. Last year, some 40,000 EVs and plug-in hybrid electric vehicles (PHEVs) were sold around the world. Forbes Magazine May 2012
- **China** wants **5m electric cars by 2020** Critical Metals Research May 2012
- Gartner, the largest technology market research firm, is forecasting 100,000 electric car sales in 2012 in the United States. Gartner Jan 2012
- Roskill forecasts Electric Vehicle sales will grow to **6M units by 2020**



2012 EV/PHEV and HEV passenger vehicle models

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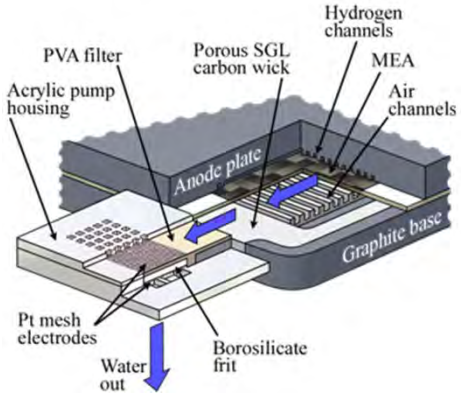
Driving Demand - Fuel Cells

- Fuel cells are electrochemical devices that convert a fuel's chemical energy directly to electrical energy with high efficiency. **Fuel cell technologies rely heavily on graphite**

- **The proton exchange fuels cell requires 40-50kg of graphite per vehicle**

- The PAFC (Phosphoric acid fuel cell and the proto electrolyte fuel cell (PEMFC) **rely heavily on graphitized carbon**

- **Large scale fuel cell applications are being developed that could consume as much graphite as all other uses combined.**
(United States Geological Survey)



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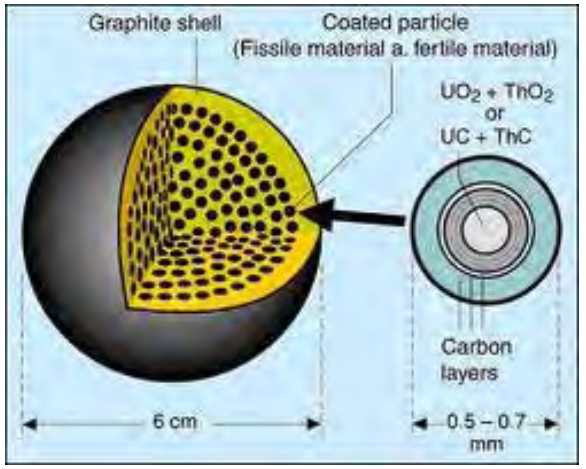
Driving Demand - Pebble Bed Nuclear Reactors (PBR's)

- Graphite is ideal for use in nuclear reactors according to the European Carbon and Graphite Assoc. No other material is able to meet the extremely high requirements with respect to chemical and thermal stability, and conductivity.

- PBR's contain ~**3,000t of billiard size graphite** spheres that contain fissile material. Once operating up to **1,000t graphite spheres are replaced each year**

- China plans to have 30PBR reactors in operation by 2020. (GHGI)

- **Mackie Research estimates that 50,000tpa will be required** assuming two nuclear reactors and five pebble reactors come online annually after 2015



Source: Minelife; Mackie Research

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2020 Natural Flake Forecast Demand (excludes Amporphous)

Tonnes

	Lower	Mid	Upper
EV and HEV Battery	250,000	600,000	1,000,000
Batteries (non vehicle)	60,000	80,000	150,000
Nuclear Graphite	15,000	25,000	50,000
Fuel Cells	15,000	20,000	100,000
Traditional Uses	470,000	600,000	700,000
Total	810,000	1,325,000	2,000,000

2012 Natural Flake Production Estimate (excludes Amporphous)	400,000t

Castle Minerals Estimate

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Kambale Graphite Deposit - North West Ghana

- Graphite first noted by Russian geologists in the 1960's.
- Russians reported that the graphite is the fine flakey variety
- Drilling by Castle March 2012 intersected a number of wide graphite rich horizons

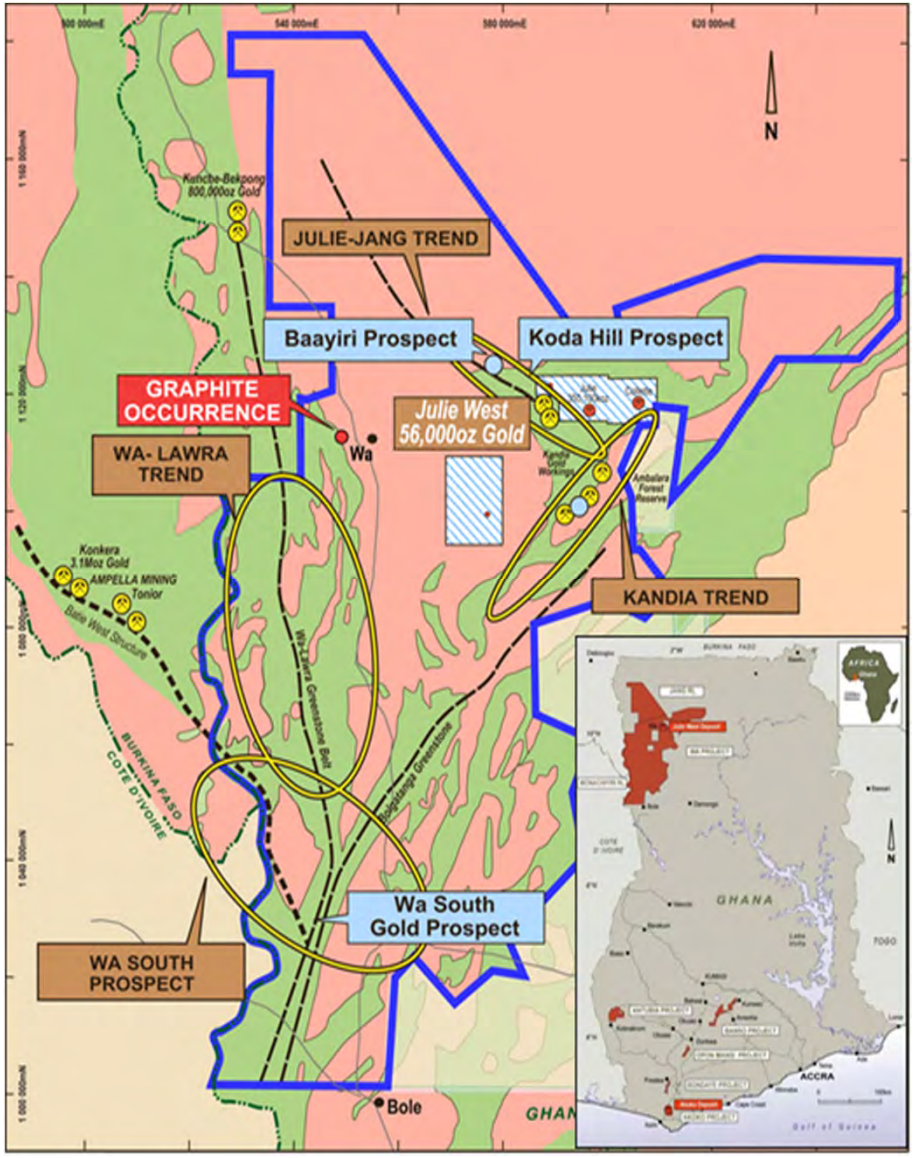
26m @ 10.4%C from 9m

48m @ 9.83%C from surface

22m @ 11.4%C from surface

27m @ 10.1%C from 9m

34m @11.29%C from 7m



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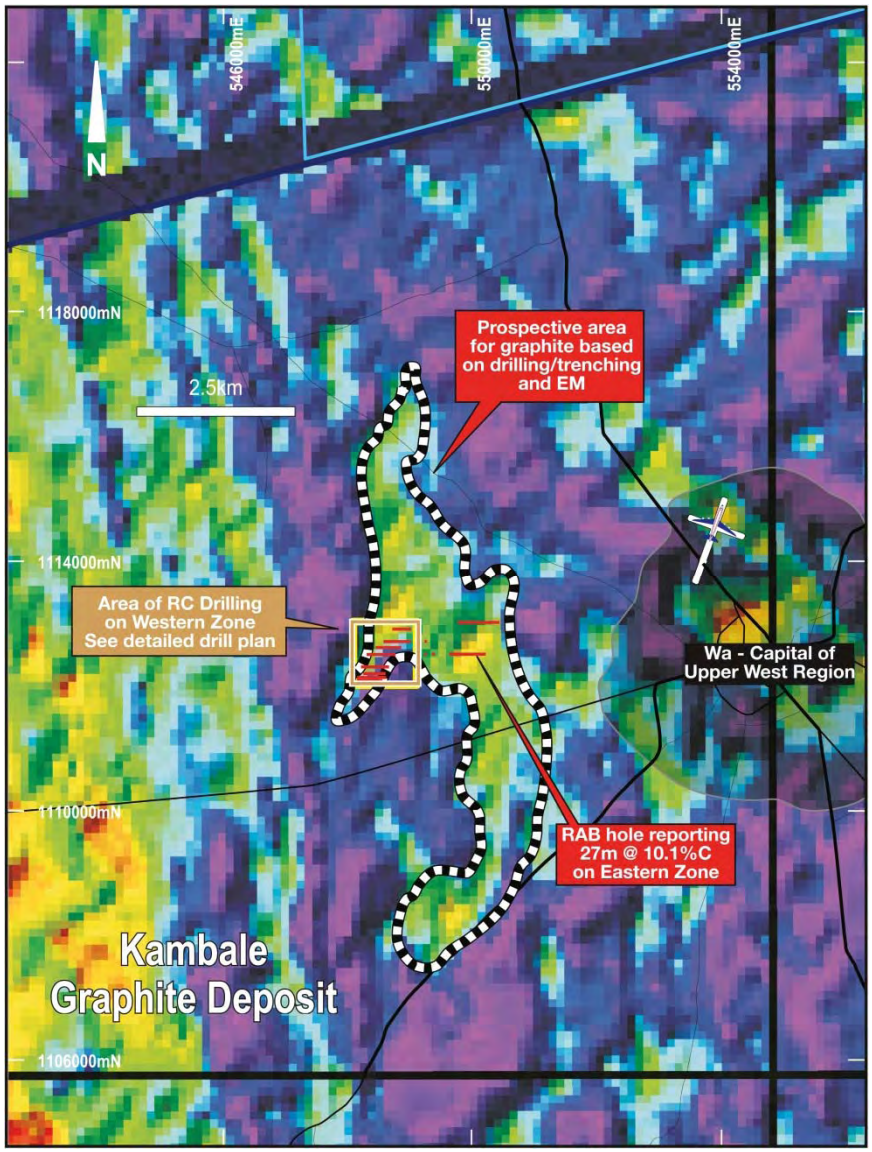
Kambale Graphite Deposit - North West Ghana

- up to **50m true width** graphite zones reported
- Only tested 1km out of >5km strike target horizon
- 3000m RC program July 2012 reported:

KBAC 09	**30m**	**@ 9.12%C**	**from 24m**
KBAC 13	**46m**	**@ 8.09%C**	**from surface**
inc.	**19m**	**@ 10.56%C**	**from surface**
KBAC 35	**9m**	**@ 10.81%C**	**from surface**
KBAC 41	**19m**	**@ 10.74%C**	**from 21m**
KBAC 44	**24m**	**@ 8.46%C**	**from 2m**
inc.	**10m**	**@ 11.07%C**	**from 5m**
KBAC 46	**26m**	**@ 10.85%C**	**from 30m**
inc.	**16m**	**@ 12.25%C**	**from 40m**
KBAC 84	**19m**	**@ 9.56%C**	**from 3m**
KBRC 01	**52m**	**@ 7.60%C**	**from 40m**
inc.	**30m**	**@ 8.37%C**	**from 40m**
and	**9m**	**@ 10.46 %C**	**from 52m**



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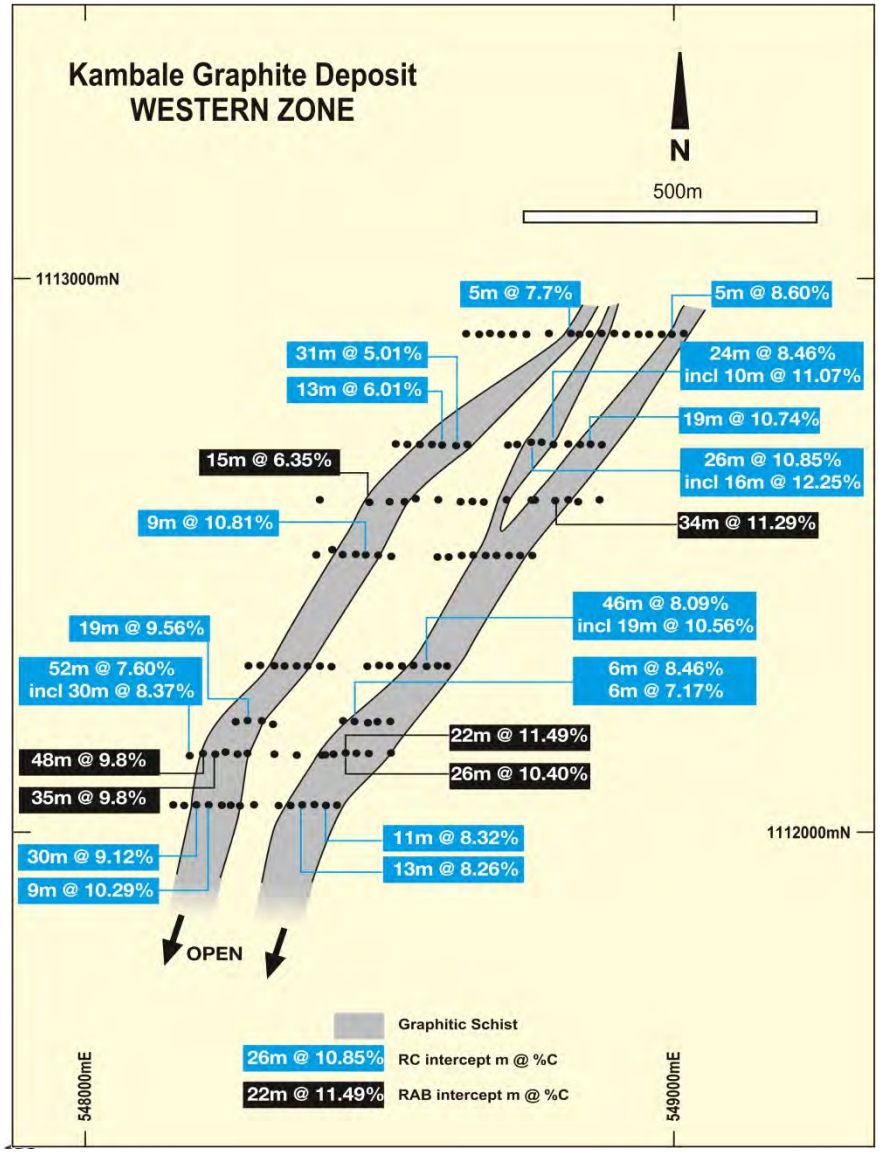
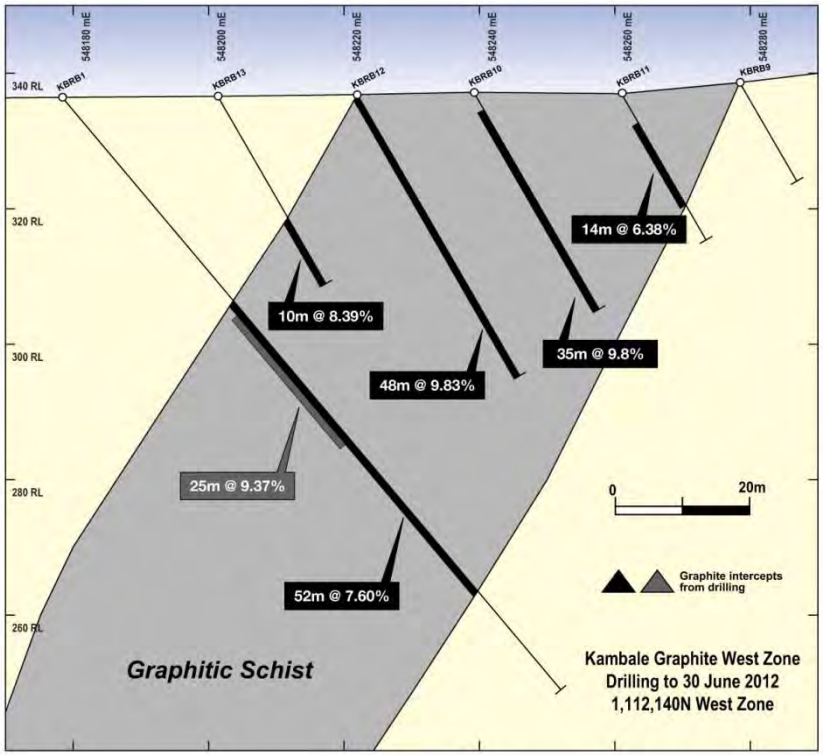
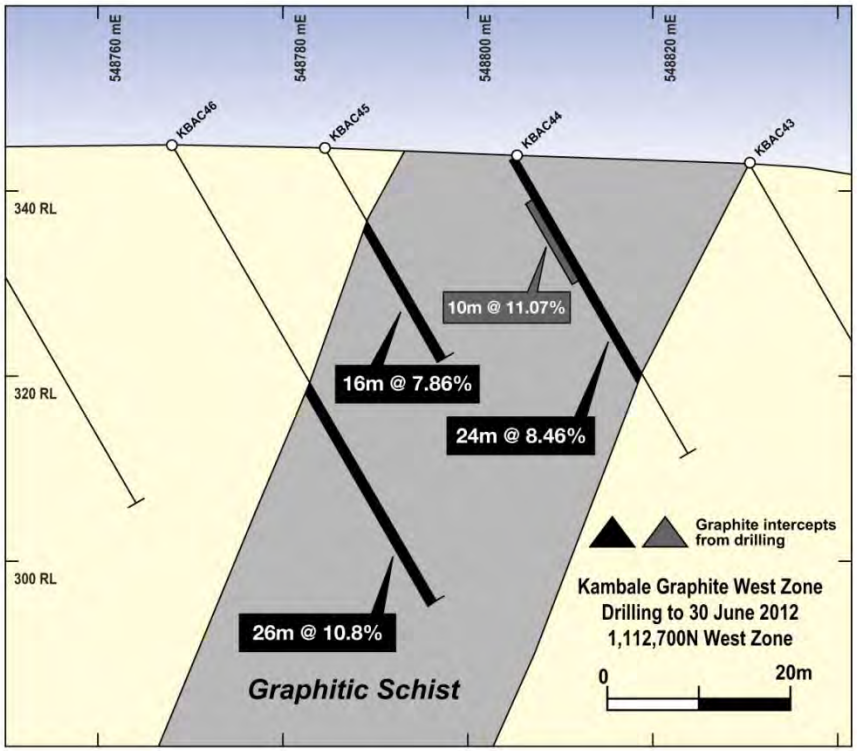
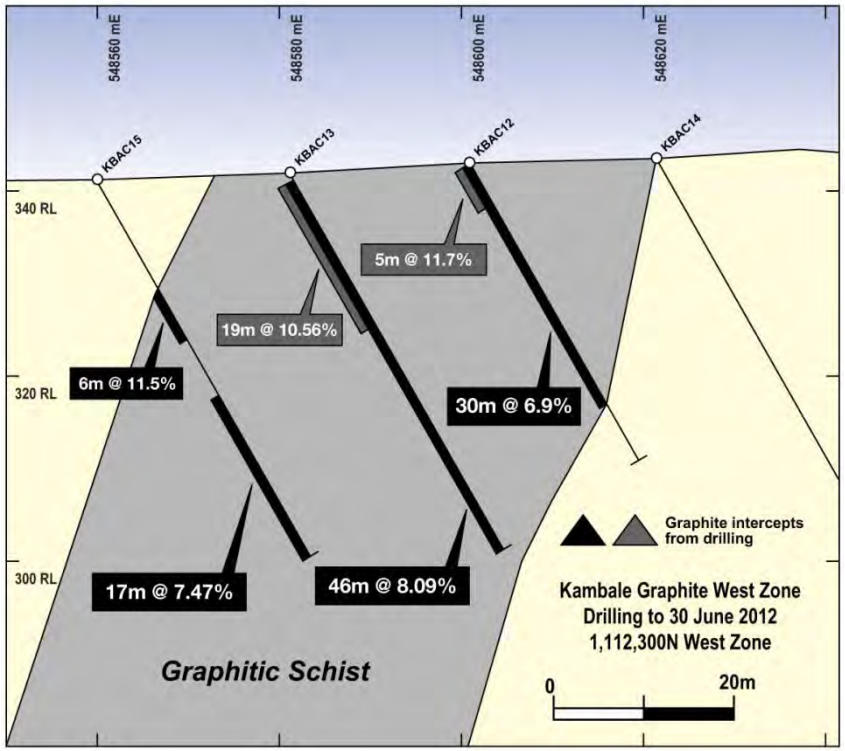
Kambale Graphite Deposit - North West Ghana





Kambale Graphite Deposit - North West Ghana





High Grade Graphite zones up to **50m true width**

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Kambale Graphite Deposit - North West Ghana

- Located in NW Ghana 8km from regional town of Wa (~50,000 people).
- Good infrastructure, water, power, sealed airstrip
- 500km sealed road to Takoradi Port
- **Potential to outline a world class graphite resource**
- Metallurgical samples submitted to Perth laboratory (AMMTEC)
- **Initial JORC resource for first 1km of strike of the western zone targeted for Q3 2012**

Kambale RC drilling May 2012

Takoradi Port

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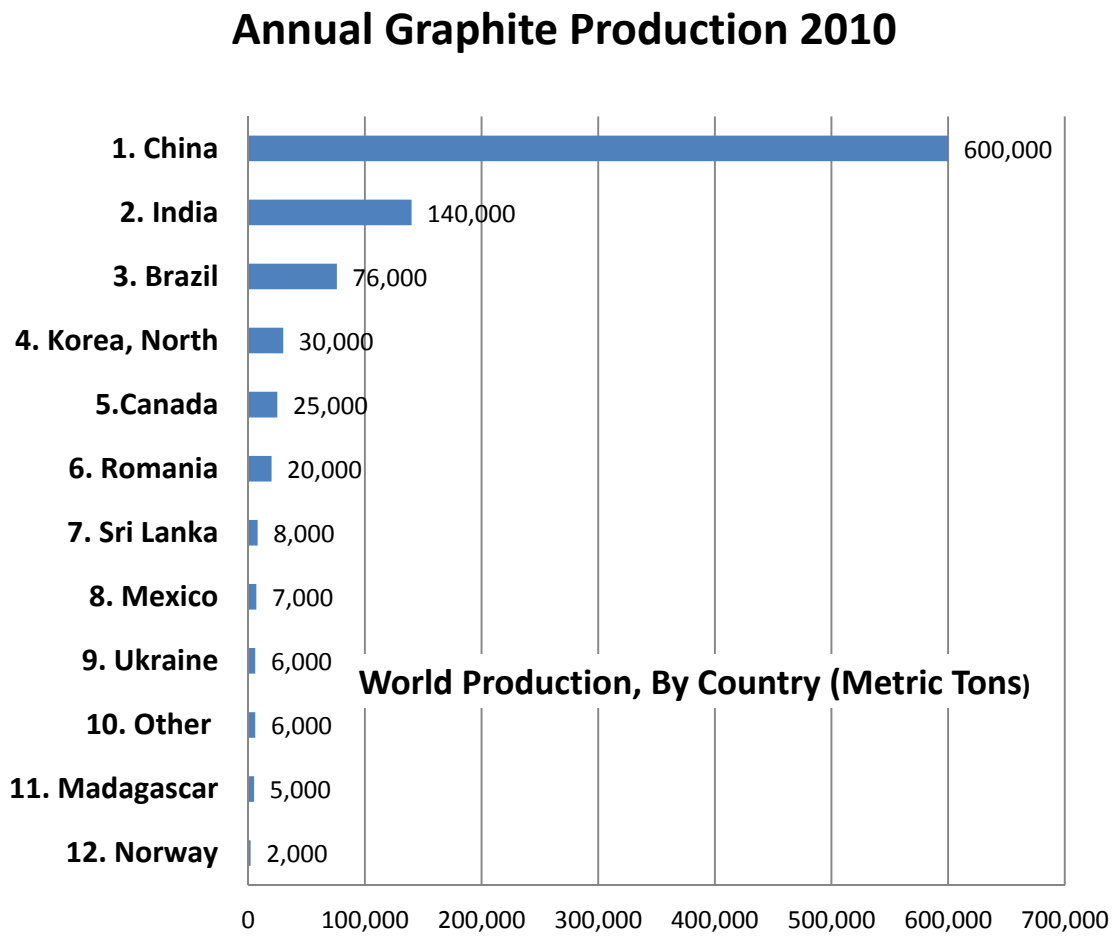
Graphite Peer Review (ASX: TSX) June 2012

Company	Code	Exchange	Share Price	Market Capitalisation	Quoted Graphite Resource/Exploration Target/Intercept
Syrah	SYR	ASX	2.32	290	Balama Mozambique 7km strike +10% zones, ~280m core intercepts of visually high grade graphite
Flinders Resources	FDR	TSXV	1.8	90	Former producing mine Kringel Project Sweden 9Mt @ 8.85%
Northern Graphite	NGC	TSXV	1.68	78	26Mt @ 2.5% Bissett Creek Ontario
Focus Graphite	FMS	TSXV	0.73	61	Lac Knife deposit Quebec 8Mt @ 16%. Old producing mine
Energizer	EGZ	TO	0.34	53	Madagascar advanced exploration: 118.6 metres of 6.24% C, resource Q3 2012
Castle	CDT	ASX	0.26	29	Drill intercepts of 48m @ 9.8%, 34m @ 11.3%, 26m @ 10.4% shallow and free dig. Maiden Resource Q3 2012. CDT aslo has substantial gold assets
Talga Gold	TLG	ASX	0.37	17	Swedish Graphite Resource 3.6mt @23%
Archer	AXE	ASX	0.23	15	Sugarloaf Hill deep target 40-70Mt @10-12%, Campoona drilling 15m @ 10%
Malagasy	MGY	ASX	0.09	14	Sold 75% Madagascar graphite rights to EGZ (TSV) for $2.25M plus 7.5M EGZ shares

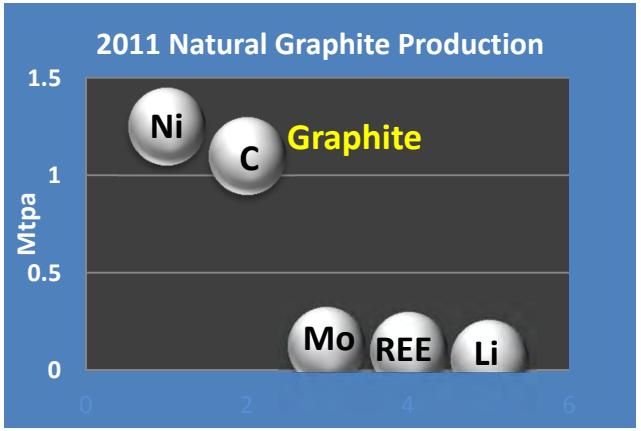
Graphite Production – 1.2Mtpa



Source: USGS

China has introduced a 20% export duty, a 17% VAT, new regulatory measures and the consolidation of existing graphite mines, China has clearly indicated that it is trying to preserve its graphite resources.

Industrial Alliance Securities 2012



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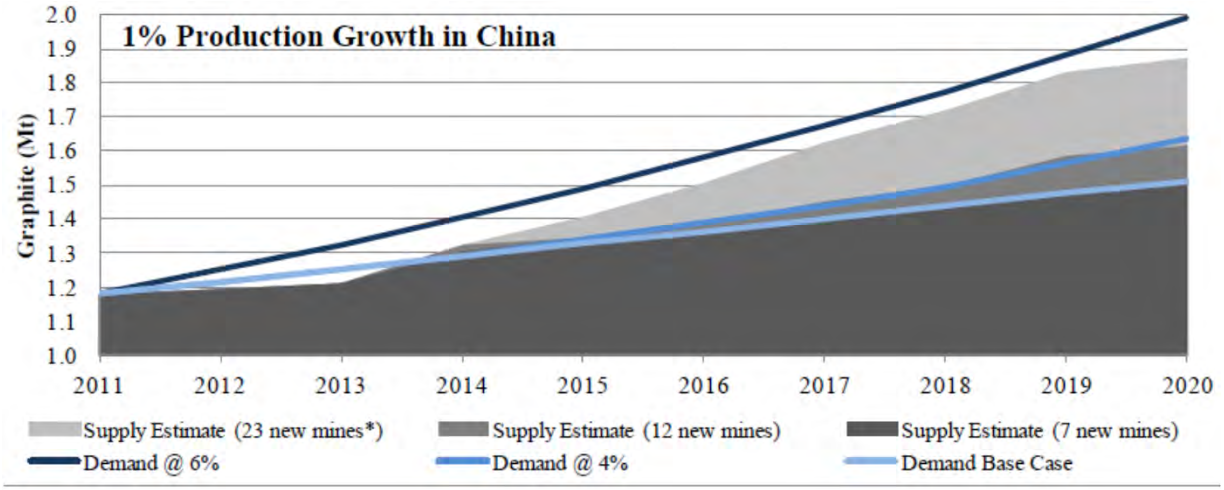
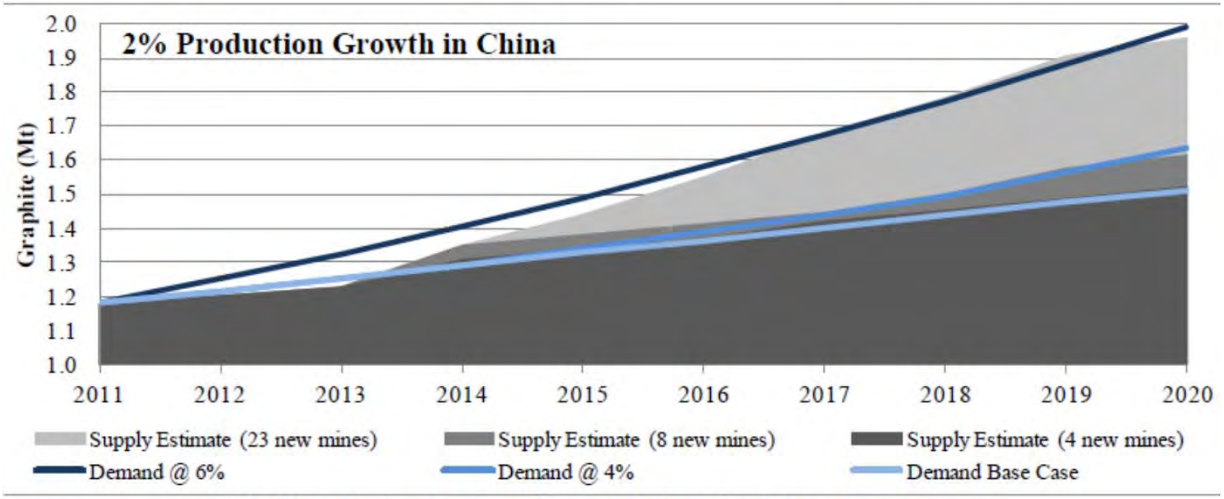
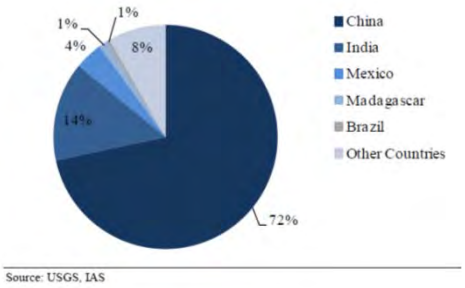
Serious Undersupply Concerns





*23 additional mines are not enough to meet the demand in that specific case

Industrial Alliance Securities has estimated that **23 new mines (@15-20ktpa) will be required by 2020** to satisfy global demand



Global Graphite Reserves

Source: Industrial Alliance Securities May 2012