



ASX Announcement

8 September 2017

PRESENTATION TO LIB SUPPLY CHAIN SEMINAR; TOKYO

Shareholders in Hexagon Resources (ASX: HXG) are advised that the company's Managing Director, Mike Rosenstreich, is giving the attached presentation at a seminar in Tokyo today examining the supply chain issues for lithium-ion battery production.

Hexagon is an example of an emerging "upstream" graphite producer which is a core constituent of lithium ion batteries. The Company plans to diversify its planned primary product mix to comprise high-grade flake concentrate for the battery industry and a large flake concentrate for the expandable graphite sector. It is also looking at a second development stage to move production downstream, or up the value-chain, as reflected by the highly encouraging battery test work results of spheroidised material reported recently.

The Company also highlights its own developing marketing strategy and makes the case that end-users should also consider diversifying their procurement sources, to consider its project in Australia as a range of environmental and political factors potentially threaten traditional graphite sources and new emerging projects in developing countries.

Whilst in Japan, Mr Rosenstreich is also taking the opportunity to meet with a range of end-user groups to further broaden discussions around offtake and strategic technical relationships.

For further information, please contact:

Mike Rosenstreich

Managing Director

Hexagon Resources Limited

MikeR@hexagonresources.com

+61 8 6244 0349

David Ikin

Senior Account Director

Professional Public Relations

David.ikin@ppr.com.au

+ 61 408 438 772



HEXAGON
resources limited

McIntosh Graphite “Made in Australia”

An important diversification of the
graphite supply chain.

Mike Rosenstreich
8 September, 2017 Tokyo, Japan
Benchmark World Tour – LIB Supply Chain

Natural Flake Graphite

Lets get it right!

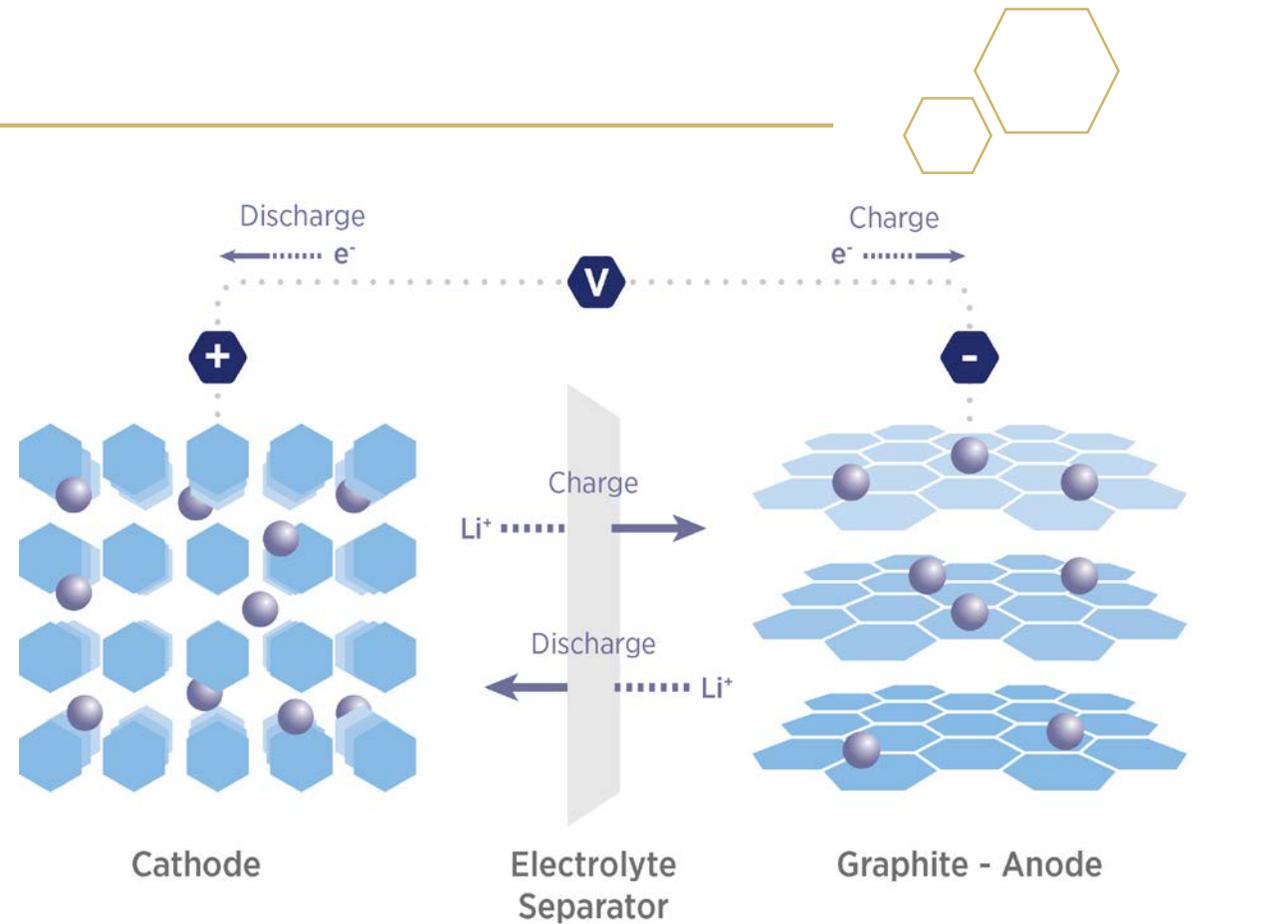
LIB, GLIB or NGLIB!

- Graphite-Lithium Ion or Nickel-Graphite-Lithium Batteries!
- Anode is Graphite - c.7x more graphite in a GLIB than Li & Co.
- Cathode is Nickel – with a “sprinkling” of Li & Co.

Anode graphite is an approximately, 30:70 mixture of natural flake graphite to synthetic, respectively.

Spherical graphite from natural flake graphite is cheaper than synthetic graphite and as quality issues are overcome the proportion of natural in battery anodes is increasing.

100% of natural spherical graphite for batteries currently supplied from China.



- Cathode is c.40-50% of the cell cost.
- Anode is c.30% of cell cost;
- Graphite is c.50% of Anode Cost
- Graphite is c.15% of the cell cost.

Hexagon in Japan



Why?

HXG is “Upstream” and a critical part of the Supply Chain;

- Developing a large scale, high-quality flake concentrate project in Western Australia
- Test work in progress to refine and diversify its flake concentrates for spherical & expandable graphite end use.
- Down stream processing – purified spherical product.

Japan – long standing & trusted partner; there is a close and long standing trading partnership with shared values; human rights, democracy and rule of law;

- FY2016 – Japan was Australia’s 3rd largest trading partner (A\$60 billion of trade)
- Japan in 2016 was Australia's 2nd largest source of FDI at A\$91 billion)
- Continuing process of strengthening the relationship – e.g. Japan Australia Economic Partnership Agreement signed in 2015.

Resources focus and deep experience;

- Japanese investment in the early 1960’s “catalyzed” the iron ore industry in WA to become the 750Mtpa scale industry it is today.
- Japan is still 2nd largest buyer of WA iron ore at 75-100mtpa.

Hexagon is seeking to meet with the “downstream” in the battery industry and develop offtake and technical partnering relationships

The Path to Commercialisation

The Customer (starting at the end of the Path);



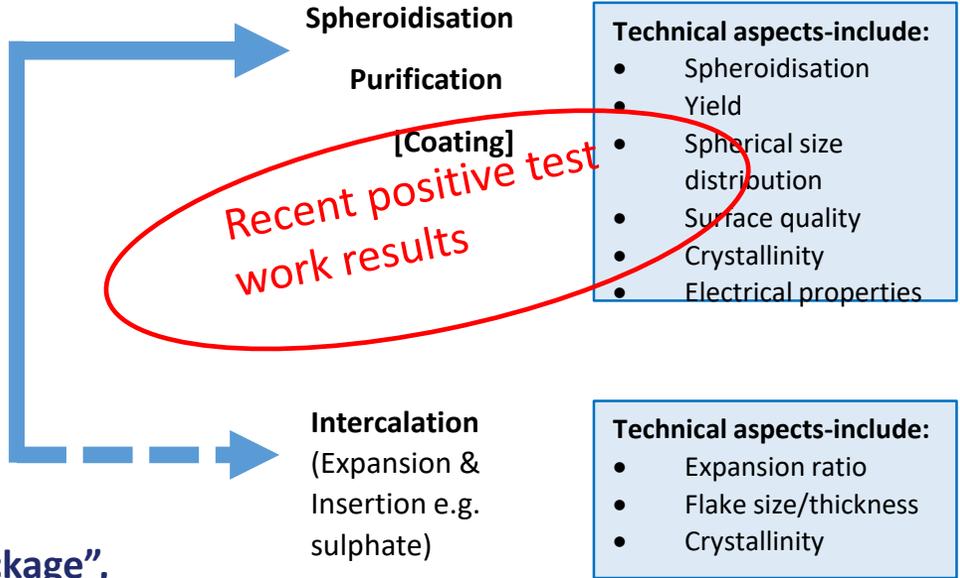
McIntosh Flake Graphite Concentrate

Product Spec's

1. 98% total graphitic carbon¹
2. No notable deleterious elements
3. Excellent flake morphology
4. Maximum Reversible Capacity of ~370 mAh/g –across the entire flake size range.
5. Conductivity: 99.82-126.8 ($\Omega.cm$)⁻¹

Promising for the battery, expandable & graphene markets

¹ TGC assay by double LOI method



- Technical aspects-include:**
- Spheroidisation
 - Yield
 - Spherical size distribution
 - Surface quality
 - Crystallinity
 - Electrical properties

- Technical aspects-include:**
- Expansion ratio
 - Flake size/thickness
 - Crystallinity

Battery Industry

HXG Aim – 99.99% spherical graphite product.

(for Li-ion Battery production)

Expandable Graphite Manufacturing

HXG Aim: High purity, med-large flake expanded Graphite.

(for high-performance gaskets, conductive fillers, electrical shielding)

Stage 1 Processing
(Concentrate production)

Stage 2 Processing
(Intermediate Customer)

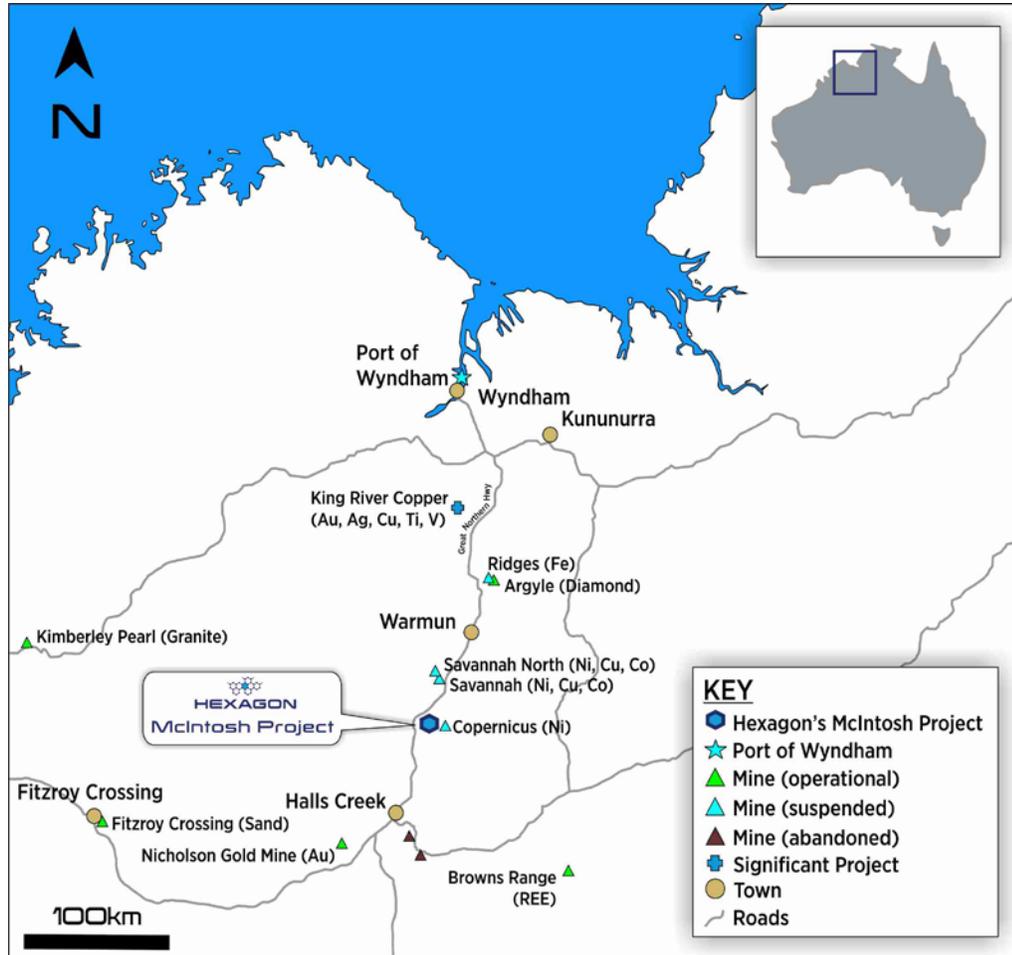
TARGET- End-User Customer



McIntosh flake Concentrate; the “complete package”, ultra pure, high-grade with peak electrical properties from simple, clean, onsite processing.

Upstream in Western Australia

The McIntosh Project.....



McIntosh Flake Graphite Project - is well located “politically” & geographically:

- Western Australia is ranked 3rd on the Fraser Institute’s (FI) 2016 global Investment Attractiveness Index.
- Western Australia is in the top ten for FI’s Policy Perception Index.
- Project & Port access is well positioned to key customer groups – gateway to Asia and shipping routes to Europe, Middle East and USA.

Customers are attracted by “supply” from stable, reputable countries with good environmental practices.

Upstream in Western Australia

The McIntosh Project - infrastructure



McIntosh Project – Main Access Road – excellent access across Project.



Great Northern Highway (only 12 km from Project area)



Wyndham Port – with loading and storage facilities-295km north along Highway

Upstream in Western Australia

Geology & Resources-Large Scale.....

Scale is important – it demonstrates long-term supply capability.

JORC Classification	Tonnes (Mt)	TGC (%)	Contained Graphite (kt)
Total Indicated & Inferred	21.3	4.5%	964

ASX Report 25 May, 2017; Cut-off is 3%TGC and rounding errors may occur.

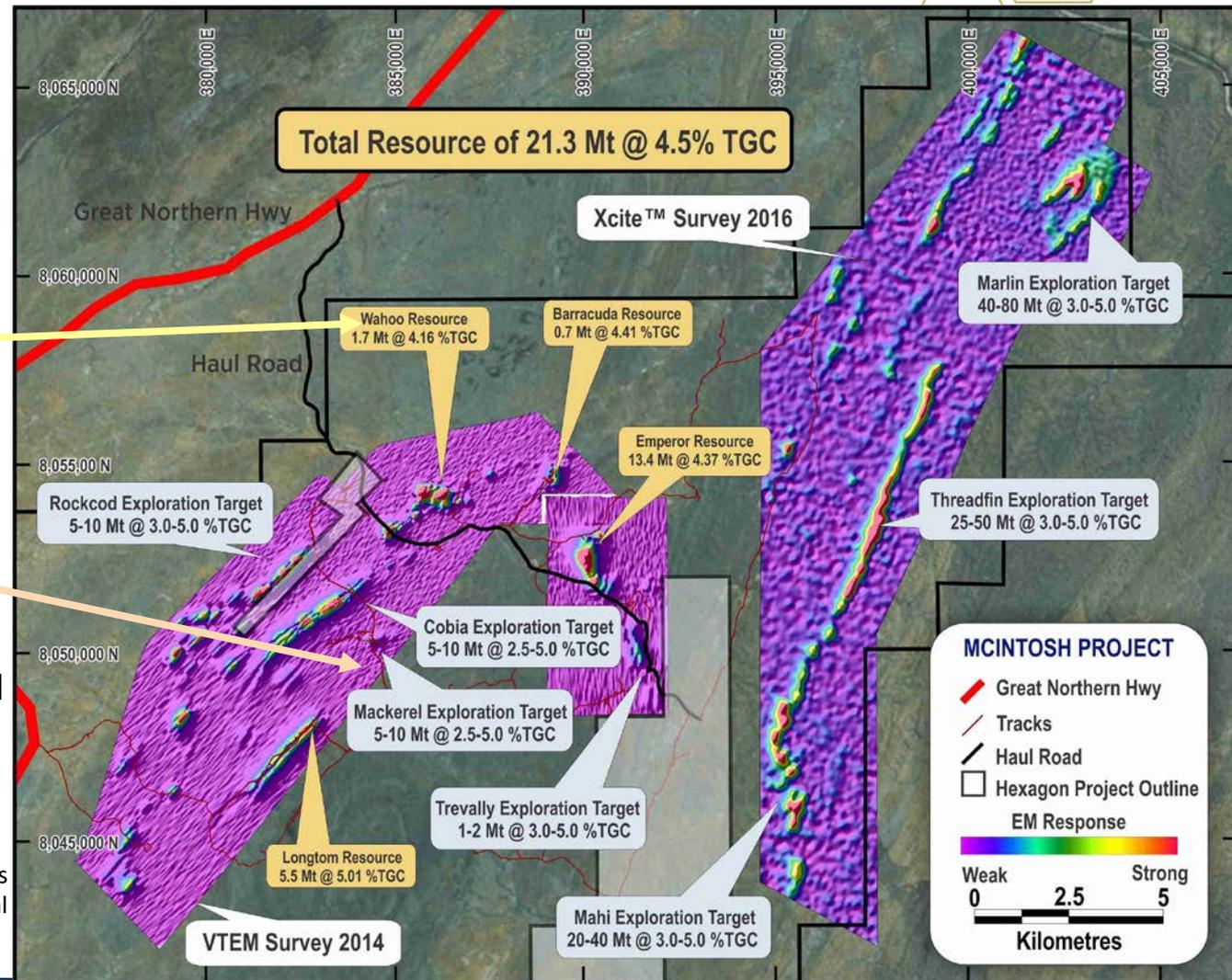
Exploration Target* (additional to JORC Resources)

Prospect	Tonnage Range (Mt)	Grade Range TGC (%)
Total	110 - 220	2.5 – 5.0

ASX Report 12 April, 2017

- Excellent correlation between EM “highs” and drilled mineralisation.
- Drilling has excellent potential to increase existing resources and convert “targets” into resources.

***Cautionary Statement:** The potential quantity and grade of the Exploration Targets is conceptual in nature, there has been insufficient exploration work to estimate a mineral resource and it is uncertain if further exploration will result in defining a mineral resource.



Upstream in Western Australia



High-Grade Flake Concentrate

PFS - Processing:

- Throughput of 2.4Mtpa to produce ~88ktpa of 98% TGC flake graphite concentrate.
- Current design has little consideration for flake size preservation – hence design $P_{80} < 106$ microns to give flake size distribution in table.

	Fine	Small	Medium	Large	Jumbo
Size -Microns	< 75	+75 - 150	+150 - 180	+180 - 300	+300 - 500
Weight %	27	44	10	17	2

FS – Outlook & Aims:

- Focus is to lower costs and improve flake size distributions with simple and realistic measures:
 - ✓ New reagent regime (preliminary test work already positive);
 - ✓ Review of grinding regimes to reduce energy consumption and preserve flake size; and
 - ✓ 30% of Flake is > 150 microns – look to recover separate large flake concentrate for Expandable Graphite market.

Scale & Quality – makes Hexagon relevant in a customer’s supply chain; it’s a relationship where each side invests significant time and funds with a view to a long-term relationship.

Upstream in Western Australia



Positive Pre-Feasibility Outcomes...

PHYSICALS	Unit	Annual Average	Life of Mine (LOM)
Ore Mined	Mt	2.4	14.3
Strip Ratio	W:O	4.3	4.5
Total Mined	Mt	11.3	79.3
Total Mined	Mbcm	4.1	28.7
Head Grade	% TGC	4.25	4.25
Plant Recovery	%	87-93	93
Concentrate	Kt	82.0	573.7
Concentrate Grade	% TGC	98	98

PFS FINANCIAL OUTCOMES	Unit	Life of Mine (LOM)
Site Operating Costs	AUD/t Conc	987
Realisation Costs (FOB)	AUD/t Conc	51
Total Operating Costs	AUD/t Conc	1,038
Start-up Capital (Incl 15% Contingency)	AUD Millions	148
Sustaining Capital	AUD Millions	24.9
Revenue	AUD Millions	1,197
Revenue	AUD/t Conc	2,087
EBITDA	AUD Millions	654
EBITDA Margin	%	51
Pre-tax NPV (Discount rate:8%)	AUD Millions	261
Post-tax NPV (Discount rate:8%)	AUD Millions	175
Pre-tax IRR	%	46
Post-tax IRR	%	36
Payback Period	Years	3

PFS – Initial development scenario

- **PFS Outcomes** - are positive and provide significant encouragement to explore important opportunities to improve and enhance project economics and margins.
- Platform to complete Feasibility Study and downstream processing test work (Stage 2 Project).

Moving Downstream – Stage 2 Developments



Value adding with additional processing of flake concentrate

- Pre-Feasibility - examined only production of a high-purity flake concentrate for the lithium ion battery market.
- Recent battery test work results for spheroidised material are highly encouraging – the sample “passed” on all the key preliminary assessment criteria.

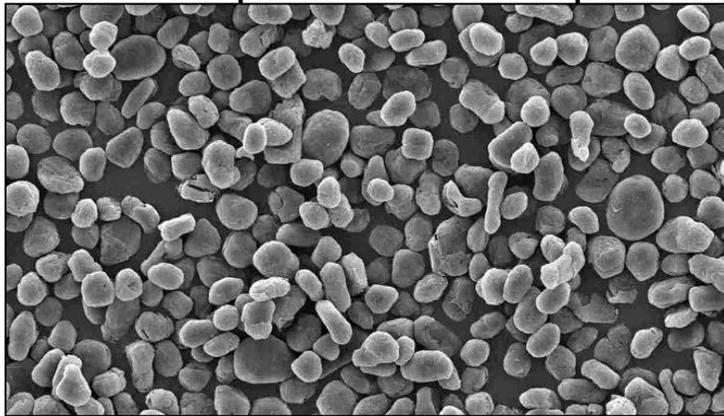
Parameter Tested	Units	McIntosh Sample (average)	Reference Material	
Yield	%	58	c.50%	✓
Particle Size (D50)	Microns (µm)	15.3	15.1	✓
Particle Size Distribution (D90/D10)	Ratio	2.2	2.4	✓
Tap Density	g/cm ³	0.92	1.07	✓
Surface Area	m ² /g	8.9 ¹	2 - 5	✓
Reversible Capacity ²	mAh/g	370	>360	✓

- Further work planned to include optimisation of Surface Area (BET) and demonstrate cycle efficiencies.

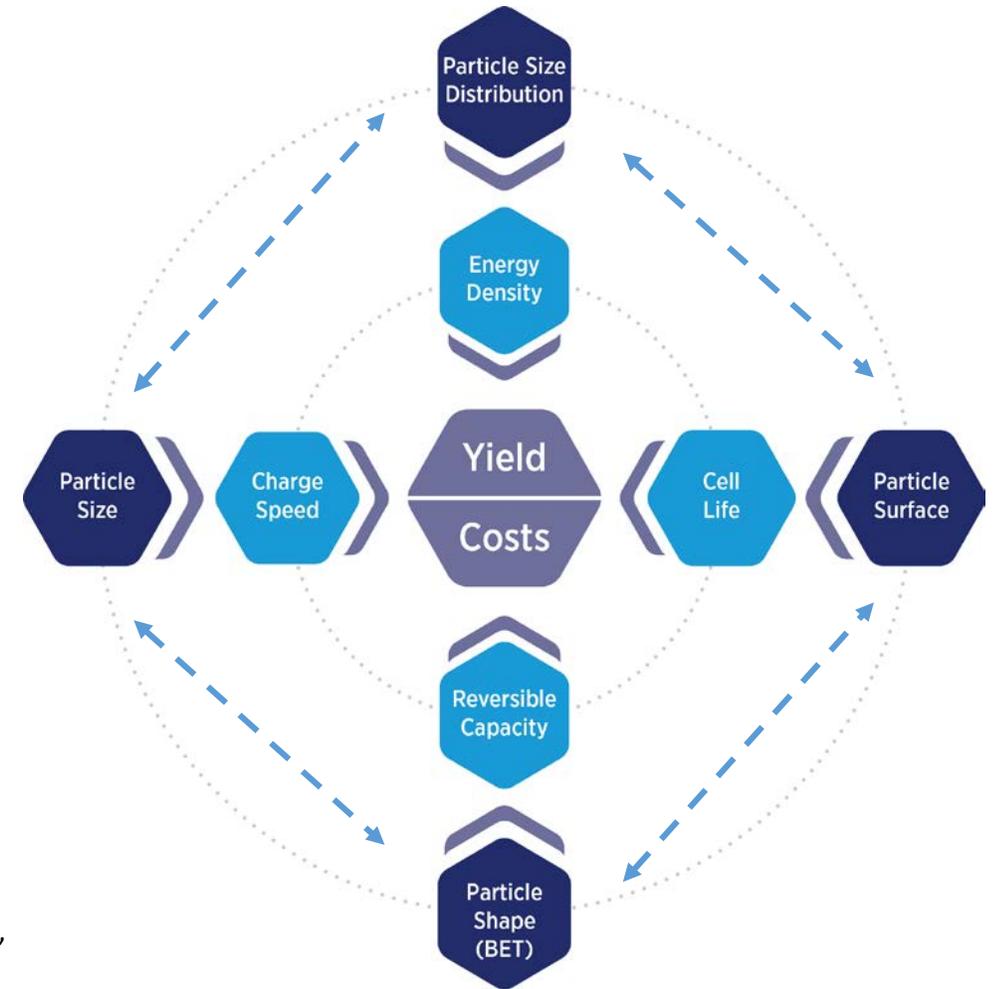
Moving Downstream

Value adding with additional processing

- Complicated interrelationships, so vital to assess (and report) all key criteria and then optimise.
- Excellent outlook to make further improvements to more closely conform to likely specifications required for (*graphite*) lithium ion batteries.
- Critical to understand Customer's requirements and tailor the Anode product to suit specific purpose.



Example of spheroidised graphite highlighting the elongate or "potato" shapes



Marketing Strategy



Product diversification and price enhancement

Stage1: Project in WA

Objective – produce c. 100ktpa of high grade flake graphite concentrates comprising:

- 60-70% Small-Medium (c.100 microns) sized flake concentrate for the (G)LIB market; and
- 30-40% Medium-Large (>150 microns) sized flake concentrate for expandable graphite sector, *a premium priced product*.

Aim is to “cornerstone” the procurement chain of 2 to 4 battery manufacturers, enabling them to diversify their supply chain. As well as sell large flake concentrate directly.

Stage 2: Downstream

Pilot plant to produce purified spherical graphite (not coated). Also possible expandable graphite operation – to foil for electronic applications.



Development Outlook



The Next Steps...

Stage1 Project in WA:

1. Complete Feasibility study including:

- Enhanced process flow sheet to reduce OpEx and enhance flake size;
- Review CapEx – look at the real likely numbers; and
- Verify two product streams suitable for 2 different market segments.

2. Finance and offtake – in progress; looking at equity e.g. in Project, off-take related finance and JV/Technical partnerships.

3. Production planned – within 24 months.

Stage 2: Downstream Processing

1. Further battery test work - moving to pilot plant for spheroidisation and purification; and
2. Possible production of Expandable Graphite.

Hexagon Resources Ltd



Meet the Board - focussed on marketing and production

Charles Whitfield - Chairman

Mr. Whitfield is the Principal Investment Officer at Drumrock Capital, an investment firm providing capital and advisory services to start-up and early round companies. He has undertaken board and supporting roles in several companies in the specialty resource and new energy space. He was formerly a Managing Director with Citigroup where he held the position of head of the corporate equity solutions group (Asia Pacific). Prior to this, he worked for Deutsche Bank where he was head of the strategic equity transactions group (Asia Pacific). Mr. Whitfield received his Masters in Business Administration (majoring in Finance and Strategy) from Columbia Business School (New York) in 1998 and his Bachelor of Economics from The University of Exeter (U.K).

Mike Rosenstreich - Managing Director

Mr Rosenstreich joined Hexagon as Managing Director on 17 March, 2017. He is an international mining executive offering 30 years' experience as a geologist, corporate and technical manager and merchant banker. He has extensive experience in bringing mining projects from exploration into operations including organising financing and offtake agreements. Prior to joining hexagon he ran Keystone Resource Development a resources focussed corporate advisory business. From 2004 to 2013 he was founding Managing Director of Bass Metals Ltd which he led from IPO, through new discoveries of polymetallic (Cu-Pb-Zn-Ag-Au) deposits, feasibility studies, financing, development and mining – selling zinc, lead and precious metals concentrates. This followed 6 years with NM Rothschild & Sons as a resources banker and 13 years as an exploration and mining geologist.

Garry Plowright - Non-Executive Director

Mr Plowright has extensive experience in the resource sector, with a background in mining law and administration, as well as regulatory process and mine development. Mr Plowright has held board and senior management positions in both Australia and South Korea. More recently, Mr Plowright has specialised in land access strategies and negotiations with Native Title and Traditional Owner groups in Western Australia.

Shares on Issue	246.3M
Options on issue (unlisted)	17.9M
Share price (6/9/17)	A\$0.09
12 Month high/low	A\$0.31/A\$0.08
Market Capitalisation	A\$22M
Top Twenty	43.4%
Cash (30/6/17)	A\$1.9M
Investments (2M BMR shares)	A\$1.3M

Macintosh Graphite – “Made in Australia”



Compelling reasons to secure upstream supply

Sound Project Fundamentals:

1. Quality product - purity and no deleterious elements suitability for (G)LIB verified:
2. Scale – in terms of annual production rates and long-term supply
3. Sound financial returns as shown by PFS numbers with significant scope to improve.

Safe Reliable Jurisdiction

1. Western Australia is ranked 3rd on the Fraser Institutes 2016 Global Investment Attractiveness Index
2. Sound environmental and social responsibility management credentials

On the door-step of SE Asia

1. Easily accessible shipping logistics from Northern Australian port.

Diversification

Increasing supply concerns from traditional suppliers especially in regard to OH&S and environmental issues.

Important Notices



Competent Person

The information within this report that relates to exploration results, Exploration Target Estimates, geological data and Mineral Resources at the McIntosh Project is based on information compiled by Mr Shane Tomlinson and Mr Mike Rosenstreich who are both employees of the Company. Mr Rosenstreich is a Fellow of The Australasian Institute of Mining and Metallurgy and Mr Tomlinson is a Member of the Australian Institute of Geoscientists. They both, individually have sufficient experience relevant to the styles of mineralisation and types of deposits under consideration and to the activities currently being undertaken to qualify as a Competent Person(s) as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves and they consent to the inclusion of this information in the form and context in which it appears in this report.

Technical Detail

This Report aims to provide a high level summary of various technical aspects of the Company's projects. For more details on the underlying technical parameters the reader is referred to the ASX Reports on the Hexagon Resources Limited website, www.hexagonresources.com.

Forward-Looking Statements

This document includes forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Hexagon Resources Limited's planned development and exploration programmes and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may," "potential," "should," and similar expressions are forward-looking statements. Although Hexagon Resources Ltd believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.



Hexagon Resources Limited
www.hexagonresources.com

Contact
Mike Rosenstreich
Managing Director
miker@hexagonresources.com
+61 (08) 6244 0349