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## SYRAH RELEASES NEW YORK PRESENTATION

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Syrah Resources (ASX:SYR) is pleased to announce that the Executive Chairman Jim Askew, and Non-Executive Director, Dr Christina Lampe-Onnured, will be making presentations to investors in New York today.

Jim will be providing an overview of Syrah's progress at the Balama Project and the Company's downstream strategy to produce spherical graphite for use in lithium ion battery anodes. Christina will provide her perspective on global energy storage opportunities.

Please find attached a copy of the presentation pack.

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**About Syrah Resources**

*Syrah Resources Limited (ASX code: SYR) is an Australian-based industrial minerals and technology company. Syrah is currently constructing the Balama graphite project (Balama) in Mozambique, with commissioning scheduled to commence in Q2 2017. Balama will be the leading global producer of high purity graphite. Balama production is targeted to supply traditional industrial graphite markets and emerging technology markets. Syrah has successfully completed extensive product certification test work with several major battery producers for the use of Balama spherical graphite in the anode of lithium ion batteries.*



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## **The Emerging Giant of Graphite Supply into the Renewable Energy Industry**

New York, December 2016

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## **A Perspective on Global Energy Storage Opportunities**

**Dr. Christina Lampe-Onnured**  
Non-Executive Director

# Significant technology and system development for the next 10 years in multiple market segments world wide

## Mobility Revolution

- Technology Innovations

## Change in the Economy

- Energy Security
- Oil Independence
- Government Support

## Portable Power

- Lithium-ion cell demand growing to \$16Bn by 2018
- Requirements: dependable run time, fast charge, safe

## Transportation

- EV market for lithium-ion batteries expanding to \$30Bn by 2020; \$175B 2025
- Requirements: Extended range, safe, affordable

## Utility

- Lithium-ion batteries will be one technology with a clear and possibly astronomical growth trajectory estimating \$30B by 2020 to \$400B by 2030
- Requirements: Compact & modular, reliable, safe, affordable

## Military

- Lithium-ion battery demand driven by growing need for transport, surveillance & communications
- Requirements: lightweight, safe, long-life, rugged, green

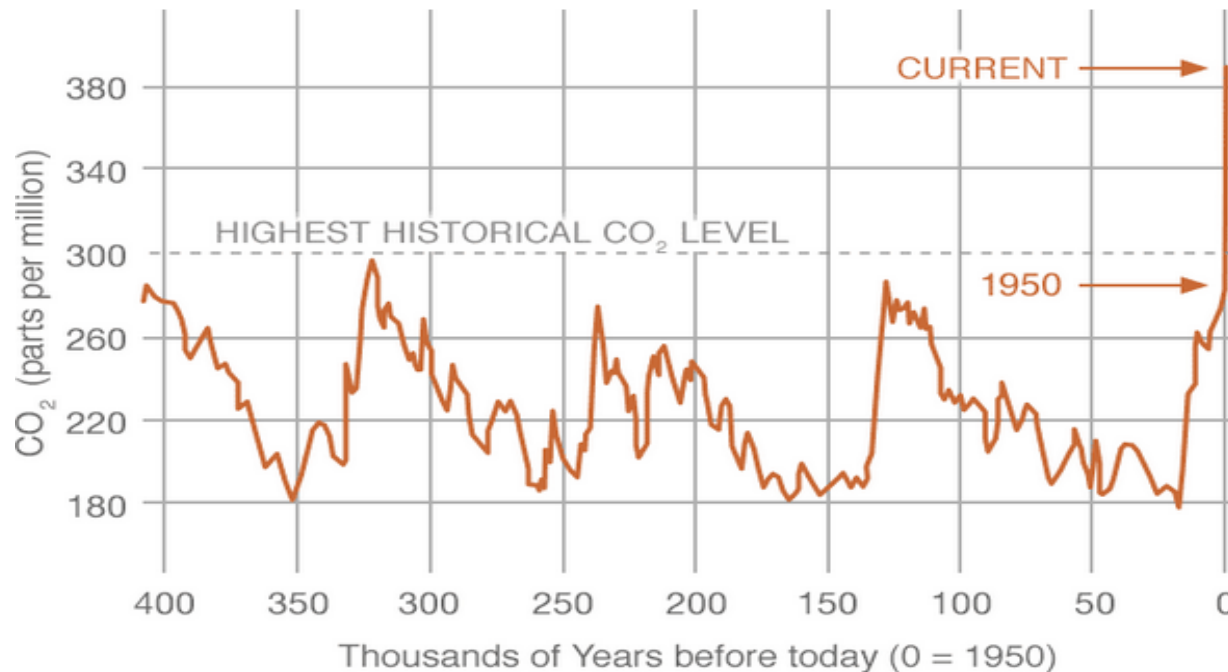


# Measurable climate change is calling for action – an opportunity to do good and do well!

## PROXY (INDIRECT) MEASUREMENTS

Data source: Reconstruction from ice cores.

Credit: NOAA



NASA reports:

- Increased levels of CO<sub>x</sub>, NO<sub>x</sub>, SO<sub>x</sub>
- Earth continuing to increase after having reached the 1°C increase in 2015 since 1880



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# The US national agenda involves energy security at the highest level, with innovation and time to market as levers

## Department of Energy:

- To reduce U.S dependence on imported oil and increase national energy security
- To save money by cutting fuel costs for American families and businesses
- To protect US health and safety by mitigating the impact of energy production and use on climate change
- To spur innovation to build U.S. industry and jobs

## Department of Defence/Pentagon:

Integrating plans for climate change risks across all of its operations, from war games and strategic military planning situations to a rethinking of the movement of supplies.

With rising sea levels, more violent storms and widespread droughts: asserting decisively that climate change poses an immediate threat to national security through:

- terrorism
- infectious disease
- global poverty and
- food shortages

Predicting increased demand for military disaster responses as extreme weather creates more global humanitarian crises.

## ***US Energy Information Administration Perspective: China's Population and Fast-growing Economy has led it to be the Largest Energy Consumer and Producer in the World***

- China is the world's second-largest oil consumer behind the United States and became the largest global energy consumer in 2010.
- China is the largest producer and consumer of coal in the world and accounts for almost half of the world's coal consumption.
- In the energy sector, China's Government is moving toward more market-based pricing schemes, energy efficiency measures, and competition among energy firms, as well as making greater investments in upstream hydrocarbon plays and renewable energy projects.
- China has a goal to produce at least 15% of its overall energy output by 2020 from renewable energy sources as the government aims to address environmental issues. China is encouraging investment in renewable energy and accompanying transmission infrastructure through a variety of integrated financial and economic incentives.



# Problem

In spite of strong market need for energy storage, which is a critical part of the climate change solution, deployment has been limited due to:

1. **Energy Density - compact battery pack greater than 300 Wh per litre**

- allowing long range in existing vehicle designs; and
- viable peak-shaving in urban areas

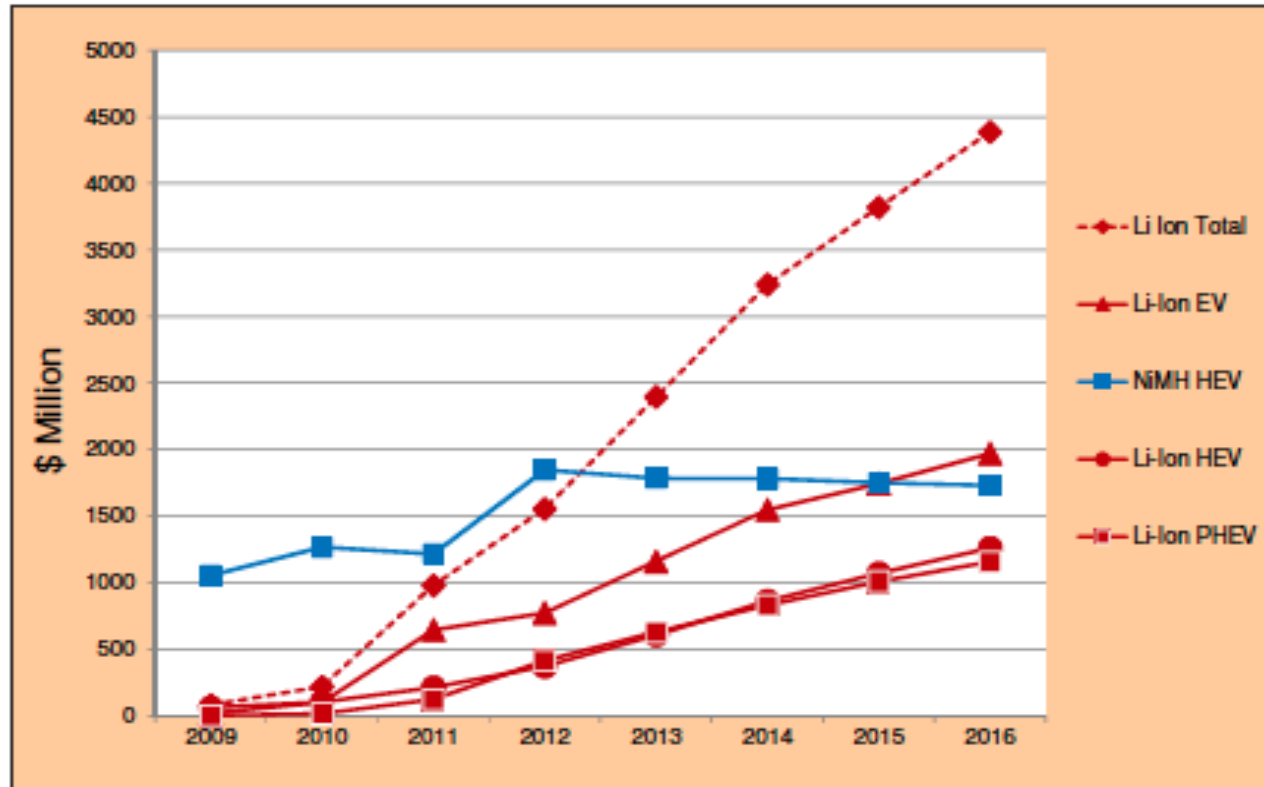
2. **Cost - battery pack below \$125 per kWh**

- approaching price neutral paradigm to fossil fuels

3. **Safety - reliable battery technology**

- to admit batteries in residential and consumer products

***A technology perspective: Li-ion battery technology invented in 1975, first commercialized in 1991, took over portable applications by 2000, heading for dominance in electrified automotive markets and entering strongly into battery storage for the grid markets globally***



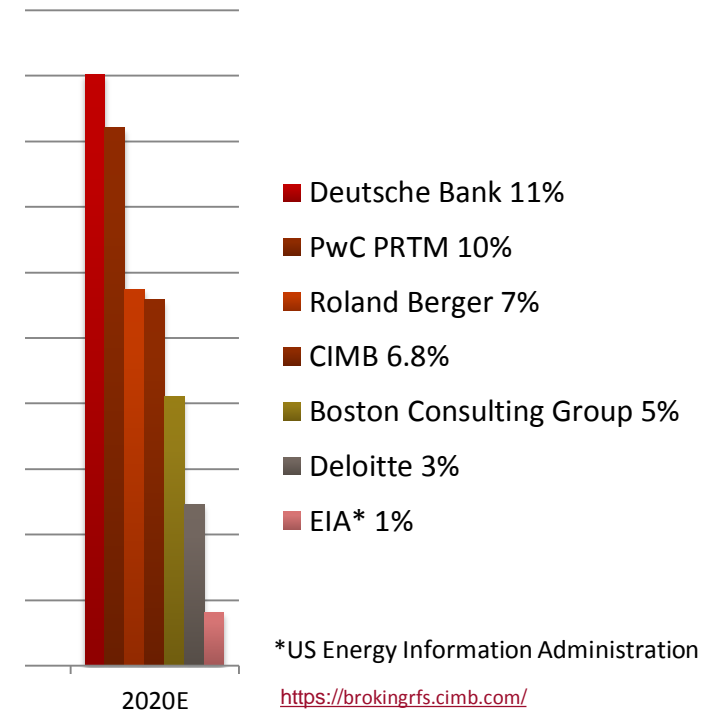
The 2014 xEV Industry Insider Report, Advanced Automotive Batteries, M. Anderman, PhD, December 2013

# The automotive market will help drive cost out and add experience for larger packs and systems

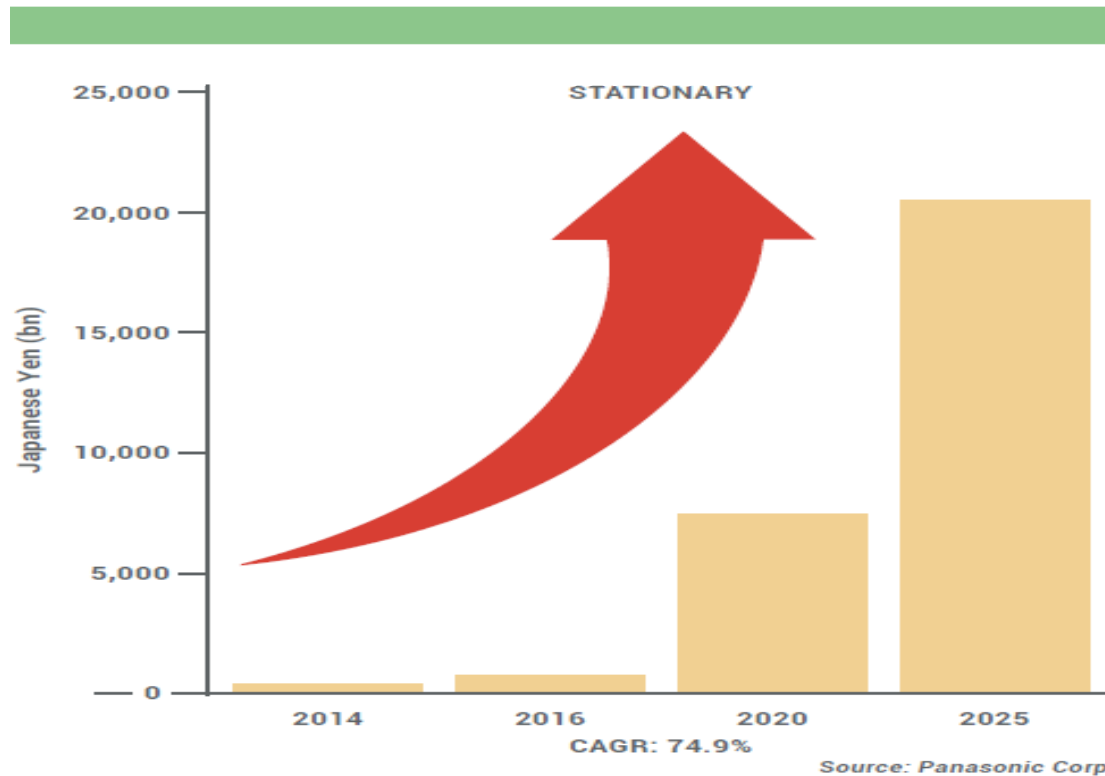
## Expecting to reach 100M in new car sales by 2020

- weighted average of 8.2% penetration in 2020 for PHEV and EV
- 35% of all new car sales will be EVs by 2040 (Bloomberg)

Median Forecast of US EV and PHEV in Percent of New Vehicle Sales 2020



# Panasonic forecasts the 2025 lithium-ion market to grow to \$160B for the electric utility/grid (stationary) market



2015-08-10 Benchmark Mineral Intelligence <http://benchmarkminerals.com/blog/chart-panasonic-predicts-lithium-ion-utility-storage-surge/>

# From the largest recall in US history (2006), the lithium-ion market solved safety issues for portable power products

## Example from the global Laptop Market 2004-2006



### Customer dissatisfaction

- Batteries are No. 1 customer complaint
- Fear about product safety
- Marketed run-times are not real due to fast degradation

### Original Equipment Manufacturer (OEM) dissatisfaction

- Concerns around current 18650 cells featuring high capacity, sacrificing safety
- Customer complaints lead to high replacement and service costs
- Fear about product safety and costly recalls
- Brand damage in commoditized market with no opportunity for differentiation

**Sandia Study: Expecting fail safe battery systems at high energy density and low cost to win in grid storage markets.....and that safety will enable the high performance/low cost paradigm**

**2006 – US CPCS largest recall in history  
4.1M Sanyo laptop batteries in Dell  
computers**



**Where are the lessons learned?**



**2015 – Recalling 500k Hoverboards**



**2016 – Samsung Galaxy S7... now with  
follow-on on Note7 ... discontinued  
product lines**



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# Solutions must address a three vector problem – the grid market will be able to leverage the EV markets

**Higher Energy Density**

**Lowest Cost**

**Highest Safety**

## **EV MARKET**

**Enables longer range in smaller pack footprint**

**Enabling price parity with ICE vehicles**

**Elimination of EV battery pack fires**

## **GRID MARKET**

**Smaller footprint opens up more placement options**

**Generates higher ROI, wider range of use - cases**

**Critical for entry into dense urban markets with strict safety codes**



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# Enter multiple high growth markets while managing risk

- 1) Determine access points for electric transport and grid applications (residential, commercial and utility)
- 2) Consider whole product planning from cell through pack demos and leverage existing designs and partnerships
- 3) Establish Pilot and Low Volume Manufacturing
- 4) Begin low volume sales in multiple markets
- 5) Establish high volume manufacturing capacity and ramp sales

# Good technology, price, safety and product considerations will accelerate global growth

- **World-leading safe high energy density in large prismatic cell**

- Ability to pack more energy more densely in a cell
  - For Grid; smaller footprint, ease of operation
  - For Auto: smaller, flatter, cells inside crash zone



- **Lowest cost platform for EV, PHEV and grid storage**

- Taking cost out of the traditional system in a simplified design
- Inventing and enabling low cost components and systems (with partners)
- Use of readily available and known components



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## The Future of Graphite

Jim Askew

Executive Chairman



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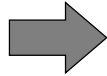


— Flake Graphite  
— Battery Anode Material

# Mine to markets

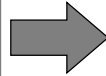


**Balama ore**

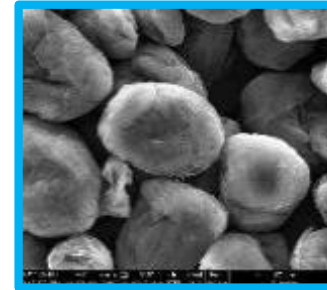


**Processing**

- Grinding
- Flotation
- Screening
- Bagging

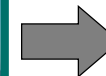


**Export**

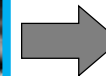


**BAM Commercial Facility**

- Spheroidisation
- Purification
- Coating



**Traditional markets**



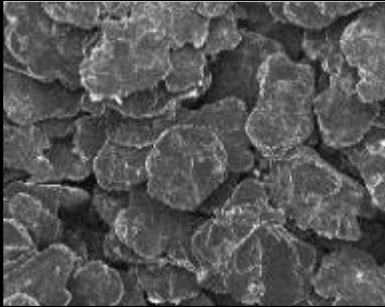
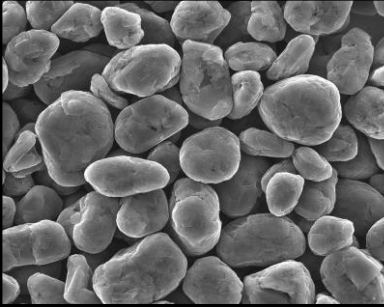
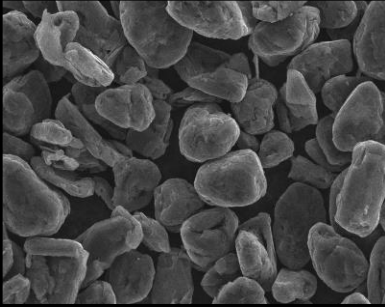
**Lithium ion battery**

- Electric vehicles
- Grid storage



**SYRAH RESOURCES**

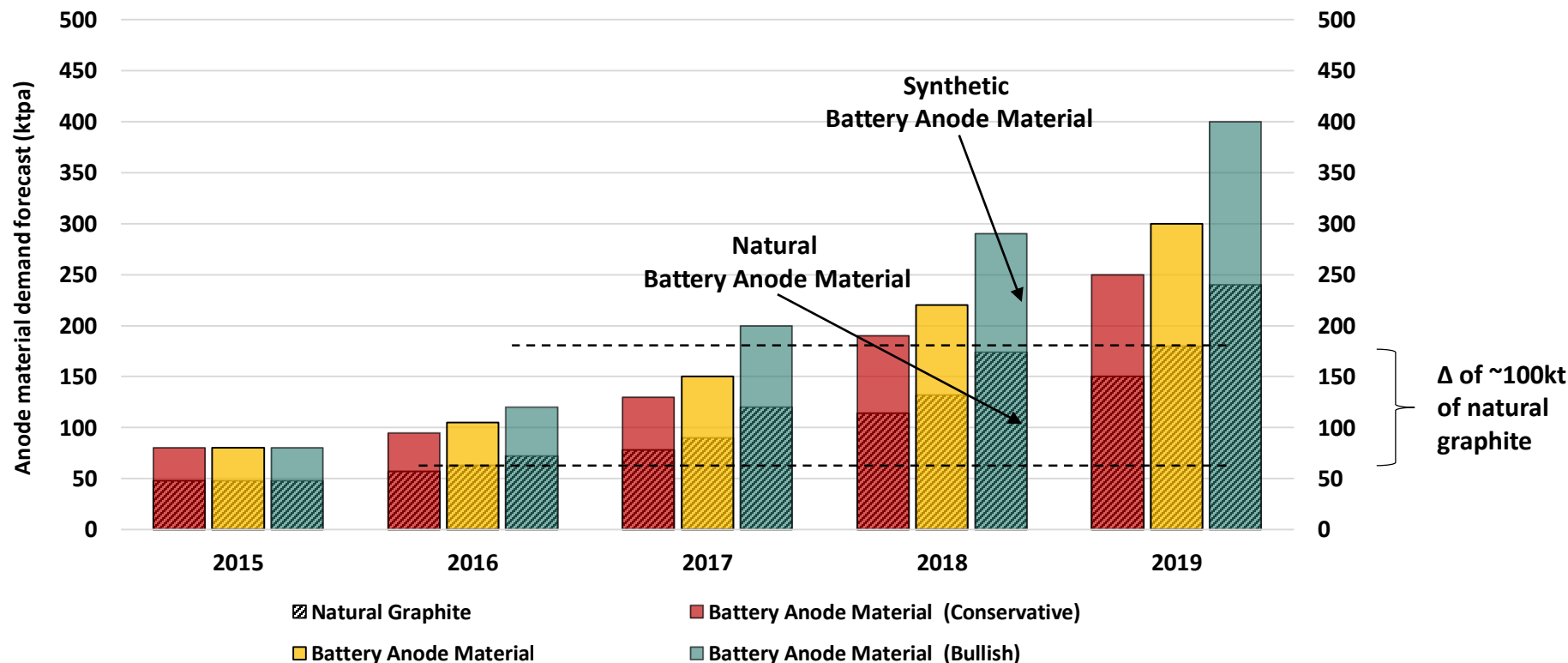
# Opportunity to participate in and grow the entire graphite value chain as a consistent, high quality supplier

	Flake Graphite	Uncoated Spherical	Coated Spherical
<b>Products</b>			
<b>Cost</b>	US\$300/t	US\$2,300/t <sup>(1)</sup>	US\$3,200/t <sup>(2)</sup>
<b>Price</b>	US\$600/t - US\$1,200/t <sup>(3)</sup>	US\$3,000/t - US\$4,500/t <sup>(3)</sup>	US\$7,000/t - US\$10,000/t <sup>(1)</sup>
	<b>Mozambique</b>	<b>Louisiana</b>	

Syrah's strategy is to **capture enhanced value** by positioning itself as a **leading, high quality and consistent** supplier to the **high growth technology markets**.



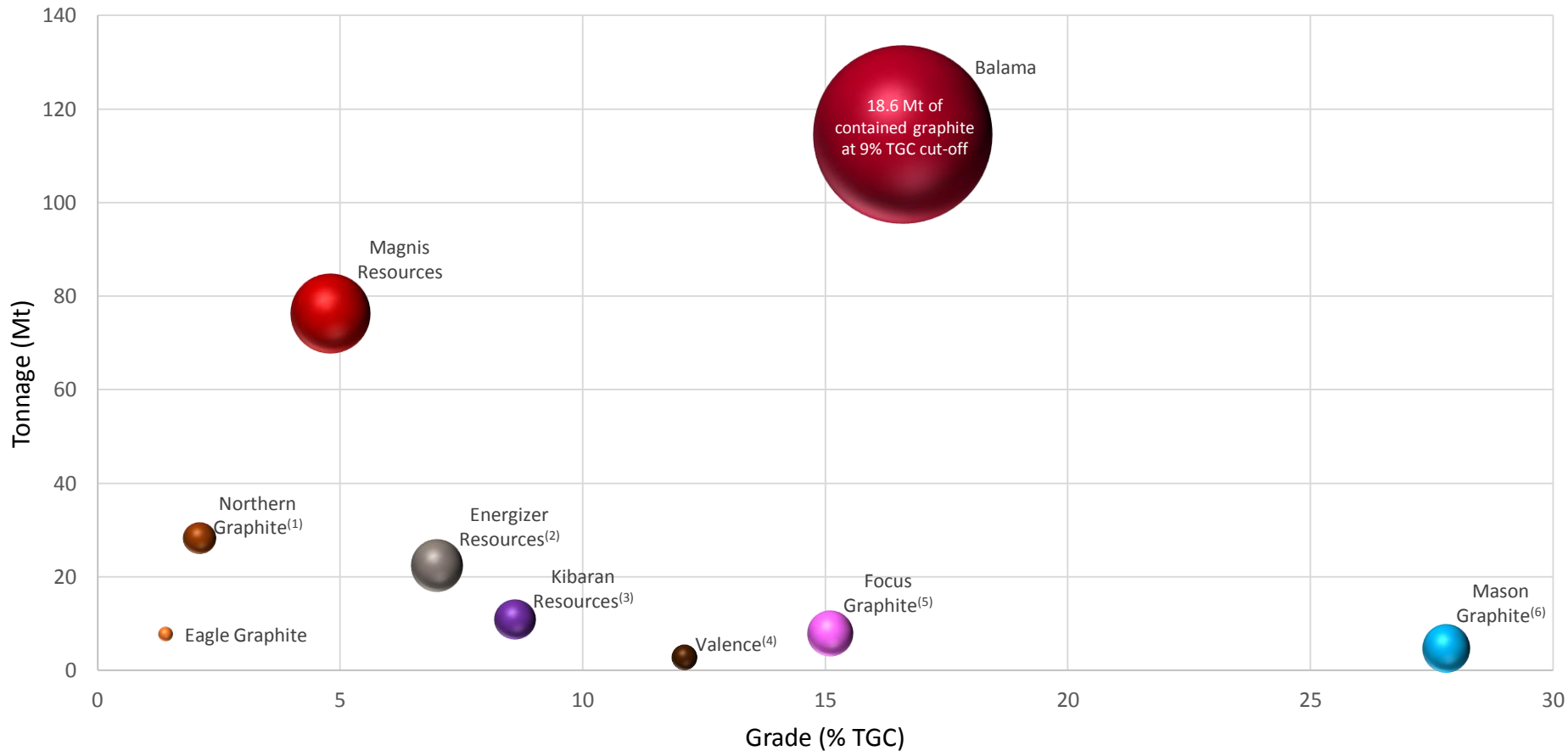
# Battery anode material (BAM) demand projections far exceed supply; 117kt shortfall by 2019 when the Commercial Plant is in full production



- (1) Benchmark Minerals, September 2016
- (2) 1 tonne of anode material = 1 tonne of spherical graphite
- (3) 2 tonnes of flake graphite is required to produce 1 tonne of spherical graphite



# Balama Ore Reserves compared to Australian and Canadian listed companies



- (1) Cut-off grade for Northern Graphite is 1% TGC
- (2) Cut-off grade for Energizer Resources is 4.5% TGC
- (3) Cut-off grade for Kibaran Resources is 5% TGC
- (4) Cut-off grade for Valence is 3.5% TGC
- (5) Cut-off grade for Focus Graphite is 3.1% TGC
- (6) Cut-off grade for Mason Graphite is 6% TGC
- (7) TGC = Total graphitic carbon



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# Balama Project



50m

*Balama processing plant site looking South*

# Balama Project update

	2016	2017					2018				
	Q4	Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4	
<b>Balama Graphite Project, Mozambique</b>											
Balama Plant Construction											
Commissioning											
First Ore & Production Ramp Up											
Full Production											

- ❑ Rapidly developing the **world class** Balama Project located in **Mozambique**
- ❑ Balama Project remains **on schedule** for **commissioning** in **Q2 2017**

*Balama will be the **solution** for end users demanding a **consistent** and **high quality** source of supply.*



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# Balama Project Construction

- ❑ Some **1,400** personnel are currently working on site
- ❑ **Detailed engineering and design** of the process plant complete
- ❑ **Key** items of **plant** and **equipment** for the processing plant, as well as **significant quantities** of **plate** and **steel work** have been delivered or are on-route to site
- ❑ **Mining fleet** required for full operations have **mobilised** and **construction** of the **ROM ore storage pad** is underway
- ❑ **Plans** are in place to **mitigate potential interruptions** to the construction with the upcoming **wet season**
- ❑ **Tailings Storage Facility** is under construction; **surface preparation** and **embankment works** are underway

*Significant progress in the development of the Balama Project has **materially de-risked** the construction of this asset, positioning Syrah to deliver on its **advantage** as one of the **early movers** in the sector.*



# Balama Project enhancements

- ❑ Balama Project budget has been increased from **US\$175 million** to **US\$185 million** due to certain enhancements, principally the introduction of **attrition cells** and additional **on-stream analysis**
- ❑ **Attrition cells** have been added to the Balama process flow sheet:
  - **96.5% to 98.8% TGC concentrate** to be produced across a **range of flake sizes**
  - A **higher** concentrate grade **reduces** the downstream **processing costs** of **battery anode material production** by **simplifying purification**
- ❑ **On-stream analysis:**
  - Monitors the **TGC content** of the graphite slurry and assists in ensuring that the **final graphite concentrate** produced will be to the **required TGC specifications**

*Recent **extensive piloting program** has **increased** the average flake graphite **concentrate grade**, which will **increase** the **selling price** of Balama graphite with **minimal** estimated **incremental capital** and **operating costs**.*



# Balama offtake agreements (excluding BAM)

- ❑ First year of production **90%** covered with industrial demand
- ❑ Offtake agreement with **Chalieco** for 80ktpa of flake graphite over 3 years
- ❑ Offtake agreement with **Marubeni** for 20ktpa of flake graphite over 3 years
- ❑ Statement of Sales Intent with a **major global refractory producer** for 15ktpa of flake graphite
- ❑ Statement of Sales Intent with **Hiller Carbon** for 25ktpa to 35ktpa of natural graphite recarburisers



# BAM strategy



# A vertically integrated strategy to capture and shape the market opportunity quickly

- ❑ Syrah will pursue a **multi-channel sales strategy** with a presence in **flake** and **battery anode material** markets
- ❑ Develop a **Commercial BAM Plant** to supply the battery anode market:
  - Initial 20ktpa Louisiana, **Commercial Plant** with approvals and permits for a **60ktpa** capacity, using **proven technology** and **processes**
  - **Advanced discussions** with a **leading Engineering Firm** to provide technical and engineering support for a **Product Qualification Plant** in **Louisiana** to accelerate sales and cash flows from the Commercial Plant
- ❑ Currently conducting **test work** and generating **BAM product samples** at a **Pilot Plant** in China

- ❑ **Technology Centre** being established in **Perth** for process training, product optimisation and R&D
- ❑ **Commercial discussions** with customers underway regarding **sales** into the **spherical graphite** and **by-product markets** for Balama -100 mesh graphite prior to production commencement at the Commercial Plant
- ❑ Medium term outlook to establish an **additional Commercial Plant** in **Asia** that meets demand requirements and optimises profitability

*This strategy **accelerates cash flows** and **profitability** from downstream processing whilst **minimising risk**.*

# Establishing an initial large scale Commercial Plant in Louisiana has a number of advantages

	2016	2017					2018			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
BAM - Commercial Plant, Louisiana USA	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></d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- ❑ **Proximity** to customers based in the Americas
- ❑ **Fast approval and permitting** process
- ❑ **Strong** government support and **incentives**
- ❑ **Availability** and **cost** of **key inputs** such as acids and a low cost, reliable source of water and power
- ❑ Access to a **skilled workforce**, experienced in operating industrial plants
- ❑ **Ample space** for **expansion** of the Commercial Facility
- ❑ Proximity to **excellent infrastructure** (rail, road, river and port)

# Commercial Plant buildout strategy

- ❑ **Approvals** and **permits** for **60ktpa** capacity:
  - Initial capacity of  $\geq 20\text{ktpa}$  of uncoated spherical graphite
  - Rapid, low risk, incremental modular capacity increases of  $10\text{ktpa}$ , up to  $60\text{ktpa}$
- ❑ **Close collaboration** with relevant authorities and leading engineering expertise, currently shortlisting optimal **site locations**
- ❑ **Bankable Feasibility Study (BFS)** will commence in **H1 2017**
- ❑ **Debt finance** will be sought in parallel with the **BFS**
- ❑ **Commissioning** scheduled for **Q3 2018**



# Establishing a Louisiana Product Qualification Plant will accelerate commerciality

	2016	2017					2018													
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4											
BAM - Qualification Plant, Louisiana USA																				
Development																				
Customer Product Qualification																				

- ❑ Currently in **advanced discussions** with a **US Engineering Firm** to provide technical and engineering support for a **Product Qualification Plant**
- ❑ The plant will consist of a **single full scale production line**
- ❑ **Necessity** for a Qualification Plant:
  - Satisfies customers' **timing** requirement for **commercial scale product qualification** (minimum 6 month period) prior to issuing Product Purchase Orders
  - **Accelerates sales and cash flows** from the **Commercial Plant** by allowing product qualification to occur **prior** to the commencement of **full production**
  - Pathway to early **cash flows** through **sales** to **Hairong Morgan** for coating Louisiana product in China

*USA based **Product Qualification** will **accelerate sales** and **cash flows** from the Commercial Plant by **fast tracking product qualification** by customers*

# A Perth based Technology Centre to provide sales and marketing data and optimise process development

	2016	2017					2018				
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
<b>BAM - China / Perth</b>											
China Pilot Plant											
Perth Technology Centre											

- ❑ Currently specifying **design**, coordinating **spheroidisation** of material and **purification tests**
- ❑ Syrah's **spherical graphite milling machines** in **China** will be relocated to **Perth** in **mid-2017**:
  - **Process training** – early training and manual preparation for future operators of the Commercial Plant
  - **Optimisation development** – ongoing test work to optimise product yields, quality and consistency
- ❑ Building out our **proprietary data-bank** which aids our **marketing** and **product development** efforts

*Perth based **Technology Centre** focused on process training and optimisation development.*

# Timetable recap

	2016	2017					2018			
	Q4	Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4
<b>Balama Graphite Project, Mozambique</b>										
Balama Plant Construction										
Commissioning										
First Ore & Production Ramp Up										
Full Production										
<b>BAM - Commercial Plant, Louisiana USA</b>										
Development										
Production										
<b>BAM - Qualification Plant, Louisiana USA</b>										
Development										
Customer Product Qualification										
<b>BAM - China / Perth</b>										
China Pilot Plant										
Perth Technology Centre										





# Summary

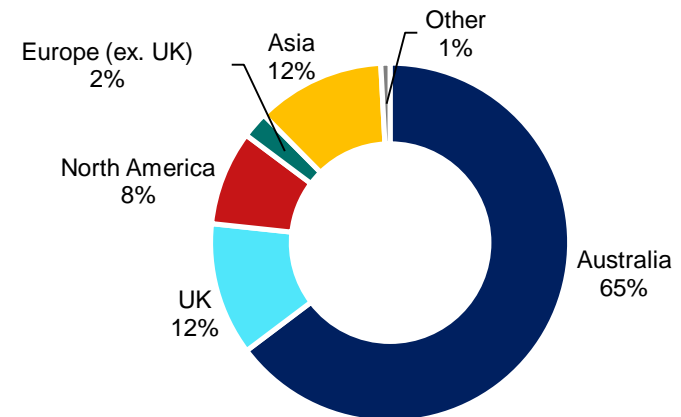
- ❑ Balama Project remains **on schedule** for **commissioning** in **Q2 2017**
- ❑ Significant potential for **higher concentrate grades** from Balama to **reduce downstream processing costs**
- ❑ Solid Balance Sheet with **no debt, fully funded** to deliver the Balama Project
- ❑ Focussed on the development of an initial **Commercial Plant** in Louisiana, with approvals and permits for a **60ktpa capacity**
- ❑ A **Product Qualification Plant** will **accelerate** the pathway to **sales** and **cash flows** by allowing product qualification to occur prior to production from the Commercial Plant
- ❑ Ongoing **development** and **test work** at the Perth-based **Technology Centre**
- ❑ **Commercial discussions** with customers underway regarding **sales** into the **spherical graphite** and **by-product markets** for Balama -100 mesh graphite prior to production commencement at the Commercial Plant

# Capital structure

## Key details

Shares on issue (as at 30 September 2016)	263.8m
Options on issue (as at 2 December 2016)	8.7m
Unlisted performance rights (as at 2 December 2016)	0.3m
<b>Undiuted market capitalisation</b> <b>(Share price of US\$1.95 as at 2 December 2016)</b>	<b>US\$515.3m</b>
Cash as at 30 September 2016	US\$195.2m
Debt as at 30 September 2016	Nil
<b>Enterprise value</b>	<b>US\$320.1m</b>

## Geographic analysis of investors<sup>(1)</sup>



Source: Company filings, IRESS

(1) As at 11 November 2016

# Key contacts

## Office

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ASX: SYR

ABN 77 125 242 284

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[www.syrahresources.com.au](http://www.syrahresources.com.au)

John Knowles

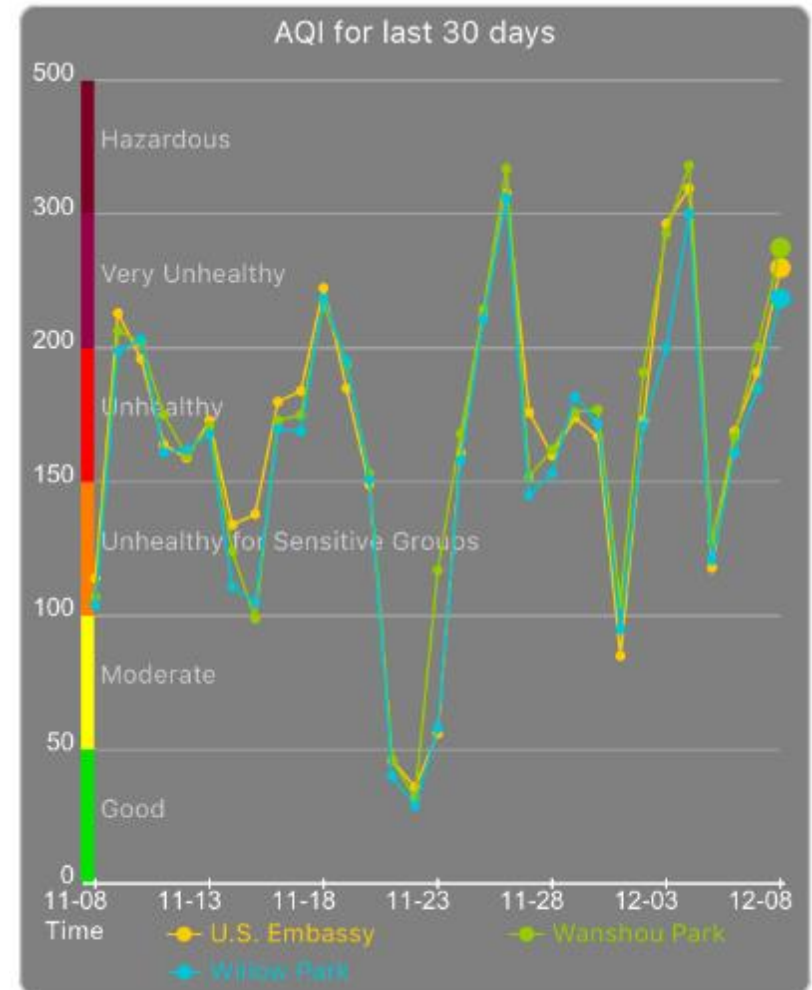
General Manager – Investor Relations

Contact: +61 419 893 491

Email: [ljknowles@optusnet.com.au](mailto:ljknowles@optusnet.com.au)



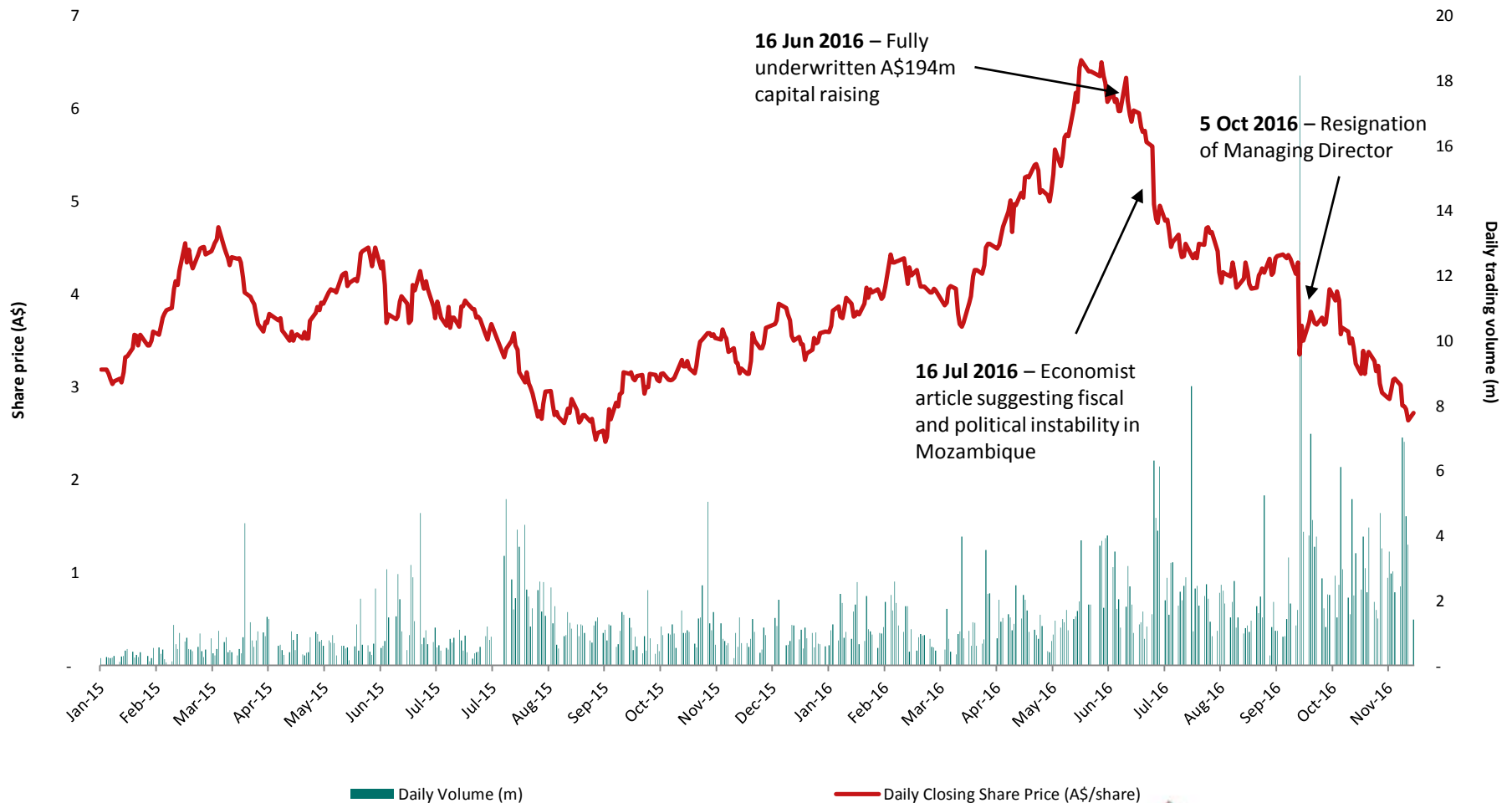
Health effects: Health alert: everyone may experience more serious health effects.





# Appendices

# Share price and volume



Source: Bloomberg



**SYRAH RESOURCES**

# Mozambique debt restructure

- ❑ On 25 October 2016, the **Mozambique government** officially acknowledged their inability to pay the next instalments of their debts (~US\$10b), and have called for a **restructuring** of **payments** and new financial aid from the International Monetary Fund (IMF).
- ❑ This was driven by:
  - **Depreciation** of the **metical** by approximately 70% against the USD over the course of 2016, having already depreciated by 36% in 2015
  - **Inability** to provide **sufficient FX resources** for the economy to limit inflationary pressure and volatility
  - **Substantial decline** in **foreign reserves** due to an increase in external debt payments in a depreciating currency environment, combined with lower foreign direct investment inflows and weaker export growth
- ❑ Lazard Ltd and White & Case LLP has been hired to oversee **meetings** with **creditors** to **restructure terms** on its debt to qualify for a resumption of IMF aid.
- ❑ **Targeting** implementation of an agreed **debt resolution strategy** by **January 2017**



- ❑ Mozambique's **long-term growth prospects** are still **promising** on the back of progress in the development of its nascent energy sector
- ❑ The Mozambique's government **payment capacity** is therefore **expected** to **significantly increase** after **2021**, subject to a **timely implementation** of the **offshore gas projects**
- ❑ **No impact** on the development of the **Balama Project**; **Mozambique government** remains **fully supportive**



# Construction progress – November 2016



***Clockwise from top left:***

- 1. Ore bin construction
- 2. Recycle crusher
- 3. Primary milling – scrubber installation
- 4. Thickener



**SYRAH RESOURCES**

# Construction progress – November 2016



***Clockwise from top left:***

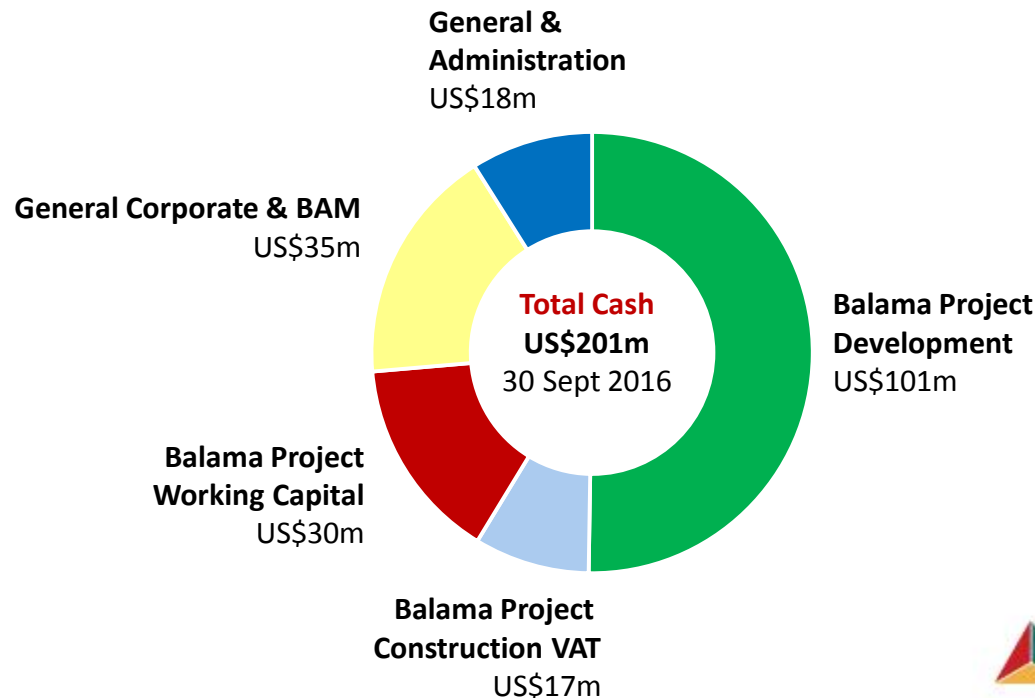
1. Filtration
2. Flake drying area
3. Plant workshop
4. Plant and equipment lay down area



**SYRAH RESOURCES**

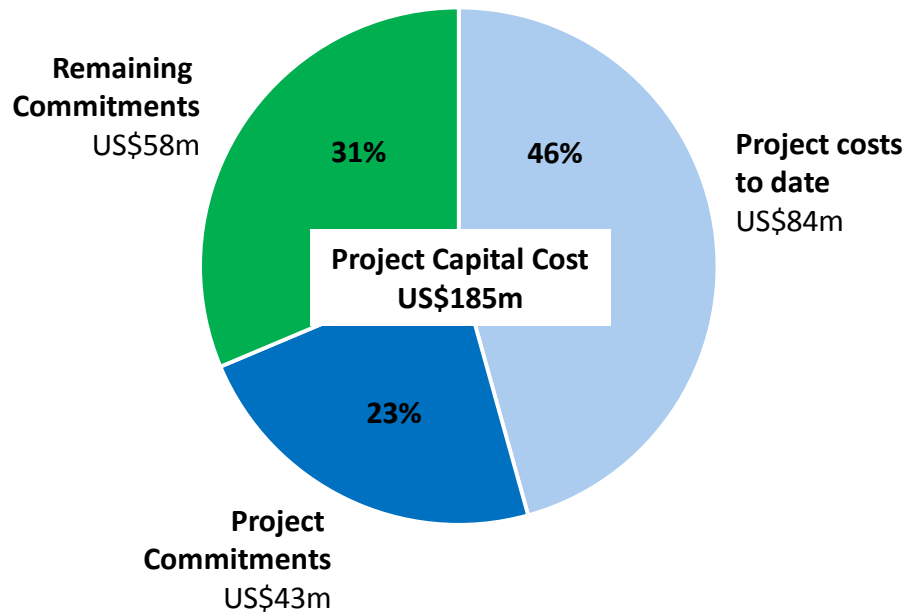
# Solid balance sheet with no debt

- ❑ **Fully funded** to deliver the development of the **Balama Project**
- ❑ **US\$30 million** to fund **working capital** requirements for the Balama Project through to positive cash flows across a range of reasonable assumptions
- ❑ Cash reserves of **US\$35 million** to fund progression of the group's **General Corporate and BAM**



# Balama Project development

## Balama Project Capital Expenditure<sup>(1)</sup>



- ❑ Remains on schedule to commence **commissioning** in **Q2 CY2017**
- ❑ **Detailed design** and major **procurement** activities **completed**
- ❑ Major **construction packages awarded** and now well underway
- ❑ Project **enhancements** implemented to **improve product quality** for traditional graphite and downstream BAM markets

(1) As at 30 September 2016

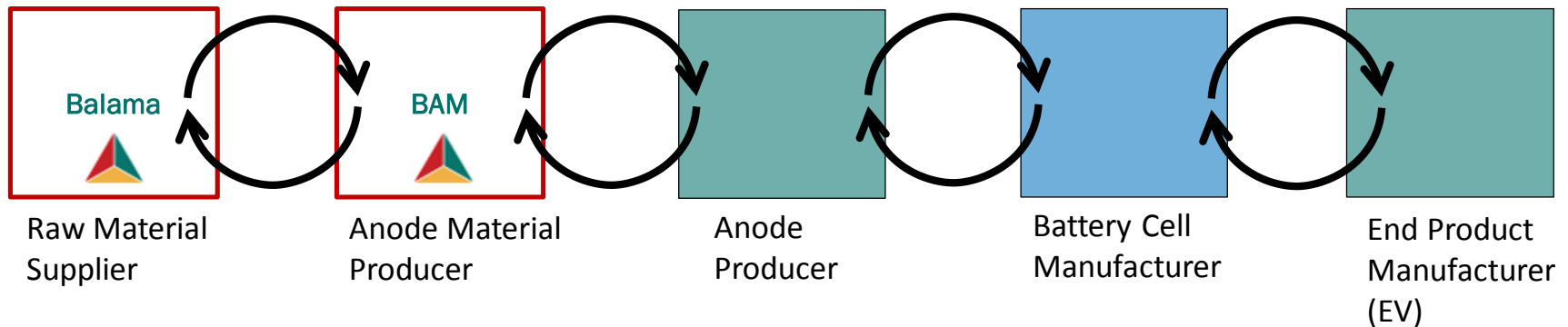


# Additional contingency funding

Work has commenced on arranging a **revolving debt facility** provisionally between **US\$30m** and **US\$50m** for the Balama Project purely as a **conservative contingency** measure during **commissioning** and **production ramp-up**.

# Why does product qualification take time?

- ❑ **Demonstrating consistency** in product across the qualification period places Syrah in a **strong position**
- ❑ Observed **demand pressure on raw material supply** is assisting in building relationships and facilitating collaboration with key customers



Circa 6 months

Vertically integrated qualification is core to placing product into the supply stream