



Q4 2020 Quarterly Activities Report

21 January 2021

Shaun Verner – Managing Director & CEO



SYRAH RESOURCES

Important notice and disclaimer

This presentation is for information purposes only. Neither this presentation nor the information contained in it constitutes an offer, invitation, solicitation or recommendation in relation to the purchase or sale of shares in any jurisdiction. This presentation may not be distributed in any jurisdiction except in accordance with the legal requirements applicable in such jurisdiction. Recipients should inform themselves of the restrictions that apply in their own jurisdiction. A failure to do so may result in a violation of securities laws in such jurisdiction. This presentation does not constitute financial product advice and has been prepared without taking into account the recipient's investment objectives, financial circumstances or particular needs and the opinions and recommendations in this presentation are not intended to represent recommendations of particular investments to particular persons. Recipients should seek professional advice when deciding if an investment is appropriate. All securities transactions involve risks, which include (among others) the risk of adverse or unanticipated market, financial or political developments.

Certain statements contained in this presentation, including information as to the future financial or operating performance of Syrah Resources Limited (Syrah Resources) and its projects, are forward-looking statements. Such forward-looking statements: are necessarily based upon a number of estimates and assumptions that, whilst considered reasonable by Syrah Resources, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies; involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements; and may include, among other things, Statements regarding targets, estimates and assumptions in respect of metal production and prices, operating costs and results, capital expenditures, ore reserves and mineral resources and anticipated grades and recovery rates, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions. Syrah Resources disclaims any intent or obligation to update publicly any forward looking statements, whether as a result of new information, future events or results or otherwise. The words “believe”, “expect”, “anticipate”, “indicate”, “contemplate”, “target”, “plan”, “intends”, “continue”, “budget”, “estimate”, “may”, “will”, “schedule” and other similar expressions identify forward-looking statements. All forward-looking statements made in this presentation are qualified by the foregoing cautionary statements. Investors are cautioned that forward-looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein.

Syrah Resources has prepared this presentation based on information available to it at the time of preparation. No representation or warranty, express or implied, is made as to the fairness, accuracy or completeness of the information, opinions and conclusions contained in the presentation. To the maximum extent permitted by law, Syrah Resources, its related bodies corporate (as that term is defined in the *Corporations Act 2001 (Cth)*) and the officers, directors, employees, advisers and agents of those entities do not accept any responsibility or liability including, without limitation, any liability arising from fault or negligence on the part of any person, for any loss arising from the use of the Presentation Materials or its contents or otherwise arising in connection with it.

Syrah's Value Proposition



Electric Vehicles require graphite

- Electric Vehicle (EV) adoption is gaining momentum
- Anodes in lithium-ion batteries used in EVs are made of graphite



Graphite is a strategic critical mineral

- Global anode supply chain is currently 100% reliant on China
- Graphite is designated as a strategic critical mineral in USA, EU & Japan



Syrah's Balama Graphite Operation is a Tier 1 asset

- Long life (>50 years¹) and high grade (16% TGC²)
- Largest integrated natural graphite mine and processing plant globally



Vertical Integration in USA

- Balama to be vertically integrated with an anode production plant in USA
- Syrah to provide an ex-Asia & ESG verifiable source of anode supply

1. Life of mine based on current 108Mt Graphite Ore Reserves being depleted at 2Mt throughput per annum. Refer to 2019 Annual report released to ASX 31 March 2020 for Reserve as at 31 December 2019. All material assumptions underpinning the Reserves and Resource statement in this announcement continue to apply, other than as updated in subsequent ASX announcements.

2. TGC = Total Graphitic Carbon

Syrah's positive ESG profile



Leading health and safety standards

- ✓ ISO:45001 and ISO:14001 certification at Balama
- ✓ Vidalia battery anode project being developed to ISO operating standards



Best practice sustainability frameworks

- Sustainability frameworks based on:
- ✓ Global Reporting Initiative (GRI)
 - ✓ United Nations Sustainable Development Goals
 - ✓ ICMM 10 Principles for Sustainable Development



Low carbon footprint

- ✓ Lower carbon footprint (Life Cycle) of natural versus synthetic graphite⁽¹⁾
- ✓ Investigating opportunities to lower carbon footprint further



Auditable back to source

- ✓ Fully integrated by Syrah from mine to customer
- ✓ Anode material from Vidalia will have a single chain of custody back to the source

(1) Benchmark Minerals Intelligence

Q4 2020: Key Points

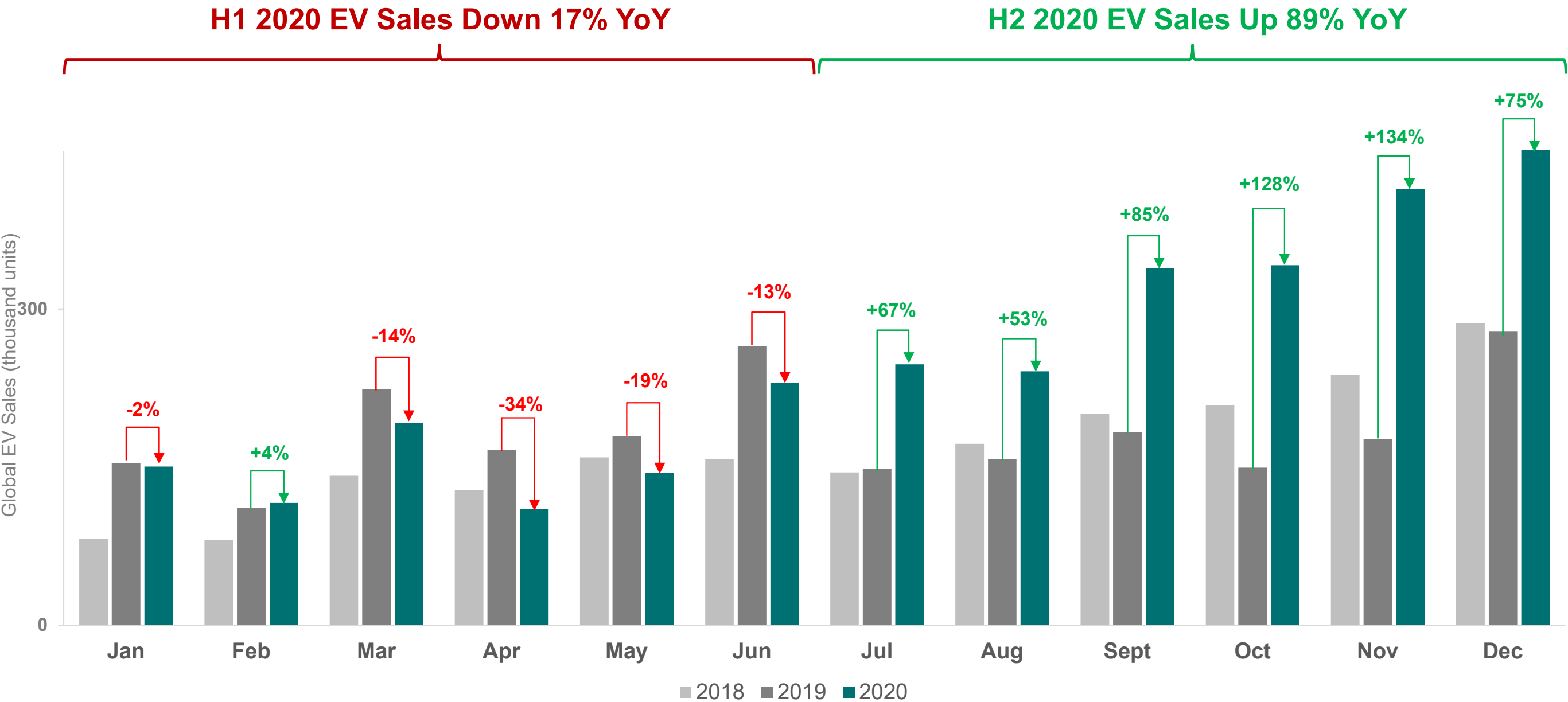
Vidalia Battery Anode Material Project	<ul style="list-style-type: none"> • Bankable Feasibility Study (“BFS”) confirmed robust economics for anode production in the USA • Active Anode Material (“AAM”) produced using Vidalia precursor, product qualification underway with potential customers • Syrah remains on track to become the first vertically integrated producer of natural graphite AAM outside of China
Balama Graphite Operation	<ul style="list-style-type: none"> • MoU signed for solar and battery project at Balama to lower costs and improve environmental credentials of production • Balama preserving cash during temporary suspension; retains operating / marketing capability to rapidly restart production • Restart lead time of ~2-3 months once decision is made
Market	<ul style="list-style-type: none"> • EV sales continued to grow during the quarter, with 89%¹ growth in Q4 versus prior year • Improved natural graphite market conditions during the quarter – higher prices observed, increased customer enquiry
Health and Safety	<ul style="list-style-type: none"> • Balama quarter end Total Recordable Injury Frequency Rate (“TRIFR”) was 0.7 • Ongoing focus on compliance with government directives and internal COVID 19 protocols
Corporate	<ul style="list-style-type: none"> • Equity capital raising and proposed convertible notes to raise A\$124m² • Syrah ends quarter with strong cash balance of US\$75 million³

1. Based on data from EV Sales (<http://ev-sales.blogspot.com/>) for October and November. Syrah estimates for December.

2. See ASX announcement dated 10 December 2020.

3. Includes nett proceeds from institutional placement as per ASX announcement dated 10 December 2020. Proceeds from the Share Purchase Plan (SPP) not yet received and proposed convertible notes remain subject to shareholder approval. Announcement of SPP results is planned for 25 January 2021. Strong demand has been noted through the SPP process, with applications received beyond A\$12 million. Syrah may decide to raise a higher amount or scale back applications under the SPP at its discretion.

Global EV sales recovery indicates increased natural graphite demand



Source: All data except Dec 2020 from EV Sales (<http://ev-sales.blogspot.com/>). Dec 2020 data Syrah Resources estimate

Vidalia expansion significantly de-risked

Date	De-risking Milestones
Dec 2020	BFS confirms robust economics for large scale AAM production at Vidalia
Oct 2020	First production of AAM (toll treated) using anode precursor from Vidalia
Jul 2020	First production of purified spherical graphite to battery specification from Vidalia
Dec 2018	First production of unpurified spherical graphite at Vidalia
Sep 2018	Phase 1 study completed for large scale AAM production at Vidalia
Aug 2018	Vidalia site purchase completed
Mar 2018	Benchmarking of AAM produced from Balama graphite completed
Nov 2016	Syrah announces plans to establish commercial scale facility in Louisiana
Apr 2016	Pilot test work program initiated in China (milling and purification)

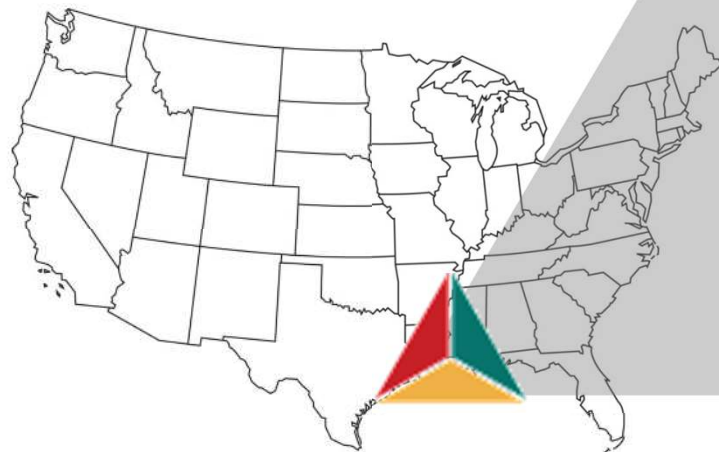


SYRAH RESOURCES



Vidalia has key requirements for large-scale AAM production

- ✓ Proximity to potential customers
- ✓ Access to key utilities
- ✓ Options to expand facility size
- ✓ Direct barge/port access to Mississippi river
- ✓ Supportive government relations
- ✓ Access to key consumables (HF, HCL, Caustic)
- ✓ Capable workforce



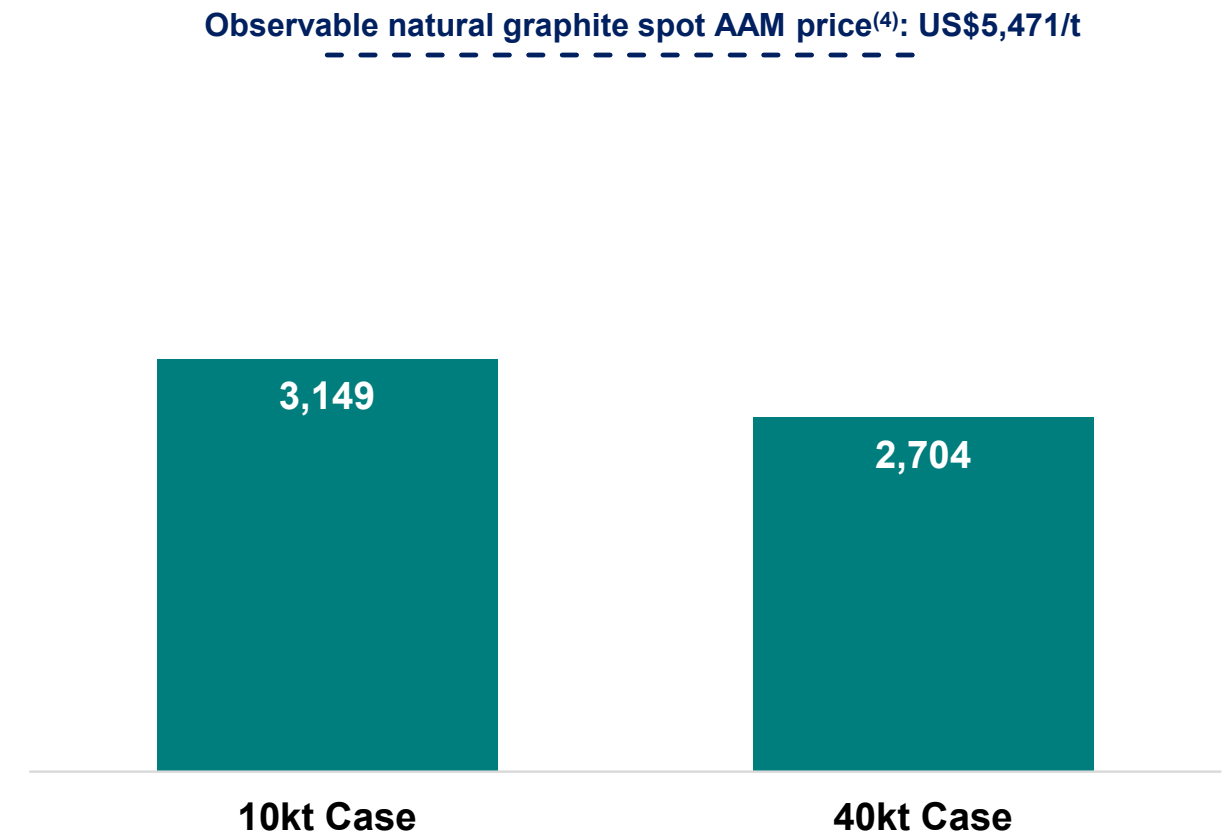
Images clockwise from left: Overview of Syrah's Vidalia property and surrounds; Syrah's Vidalia facility Northeast looking southwest; Syrah's Vidalia facility south looking north

BFS confirms attractive margins at current AAM prices

BFS key outcomes:

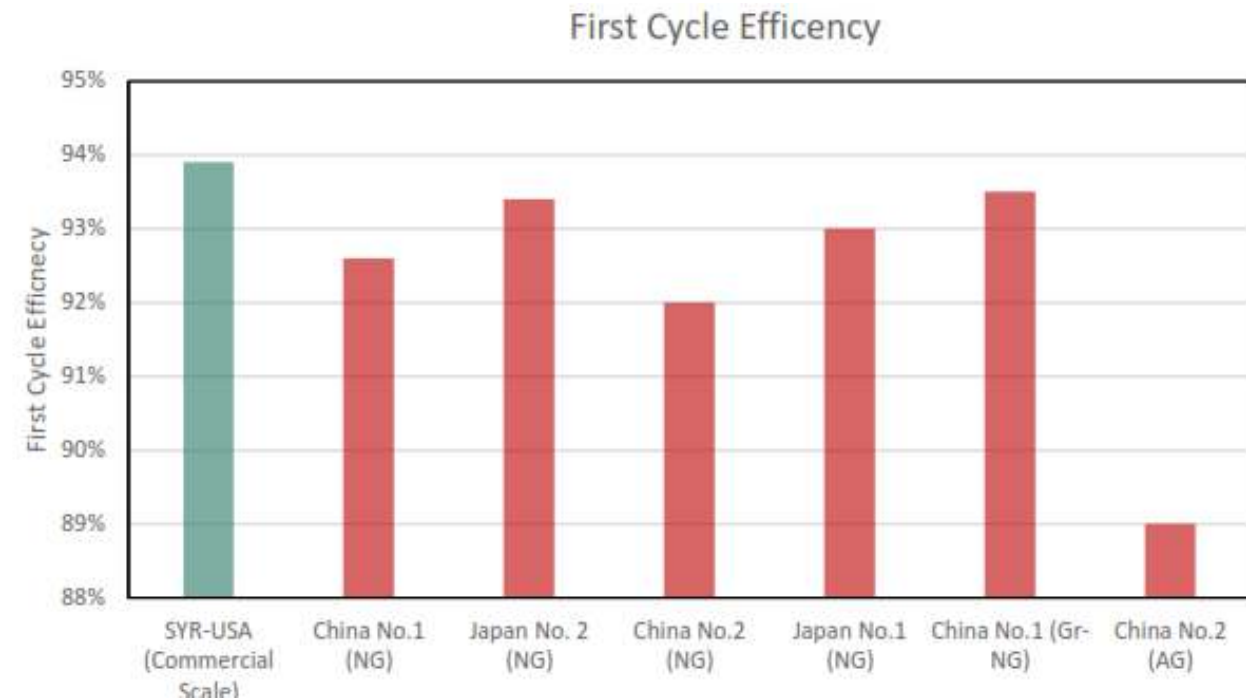
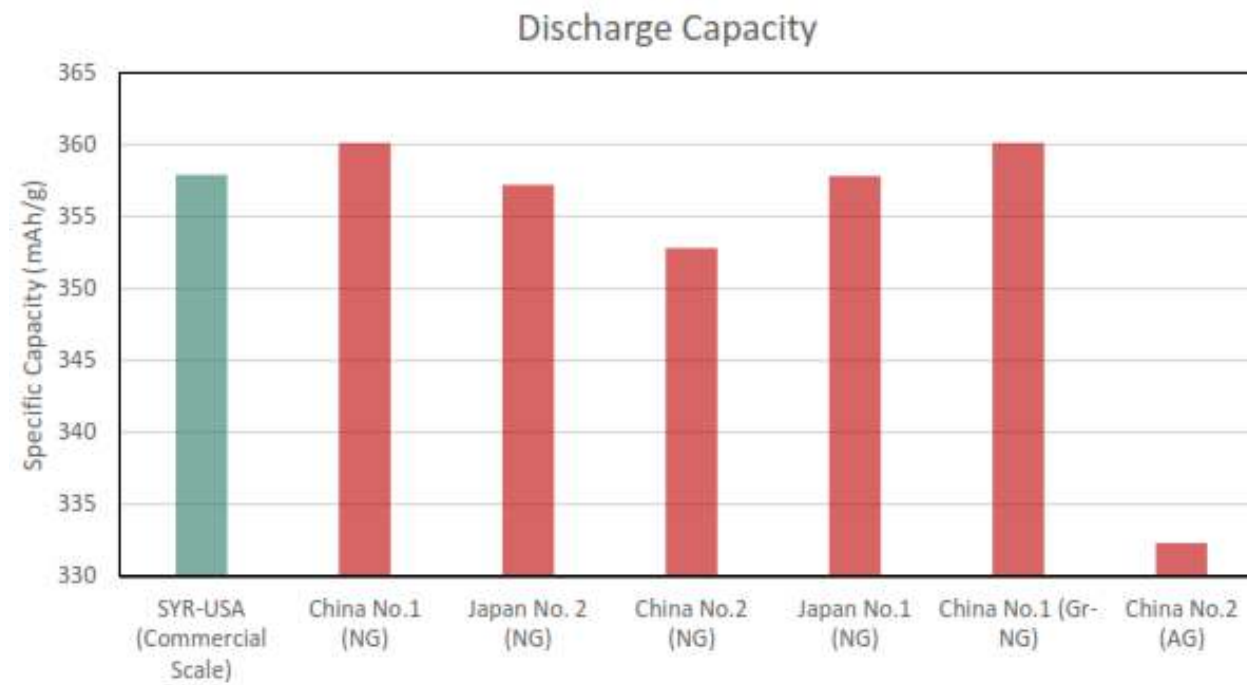
Metric	Units	10ktpa Facility	40 ktpa Facility
Annual processed graphite	ktpa	18	73
AAM production	ktpa	10	40
By-product production	ktpa	8	33
By-product price	US\$/t	250	250
Capital cost estimate ⁽¹⁾⁽²⁾	US\$m	138	477
Operating cost estimate (all-in) ⁽²⁾⁽³⁾	US\$/t AAM	3,149	2,704

Operating Cost – US\$/t AAM



- (1) Exclusive of: owners' costs associated with the expansion to 10ktpa, estimated at approx. US\$4m to first production for 10ktpa facility; working capital; and, ongoing cost associated with product qualification and technical product development activities
- (2) Capital and operating cost estimates to accuracy of $\pm 15\%$ and $\pm 30\%$ for 10ktpa and 40ktpa respectively
- (3) The operating cost is an estimate delivered all-in cost. The operating cost estimates assume natural graphite cost of US\$400/t (FOB Nacala), which reflects an approximate all-in cost of production at Balama at full plant utilisation. All-in cost of Balama production (FOB Nacala) an approximation based on next 30 years of the mine plan at Balama and full utilisation of the processing plant at design capacity.
- (4) Price is the midpoint of "domestic/mid-range" natural graphite anode material price reported by China Industrial Association of Power Sources as of 27 November 2020 - <http://www.ciaps.org.cn/>. Prices converted at 6.58 USDCNY as of 27 November 2020

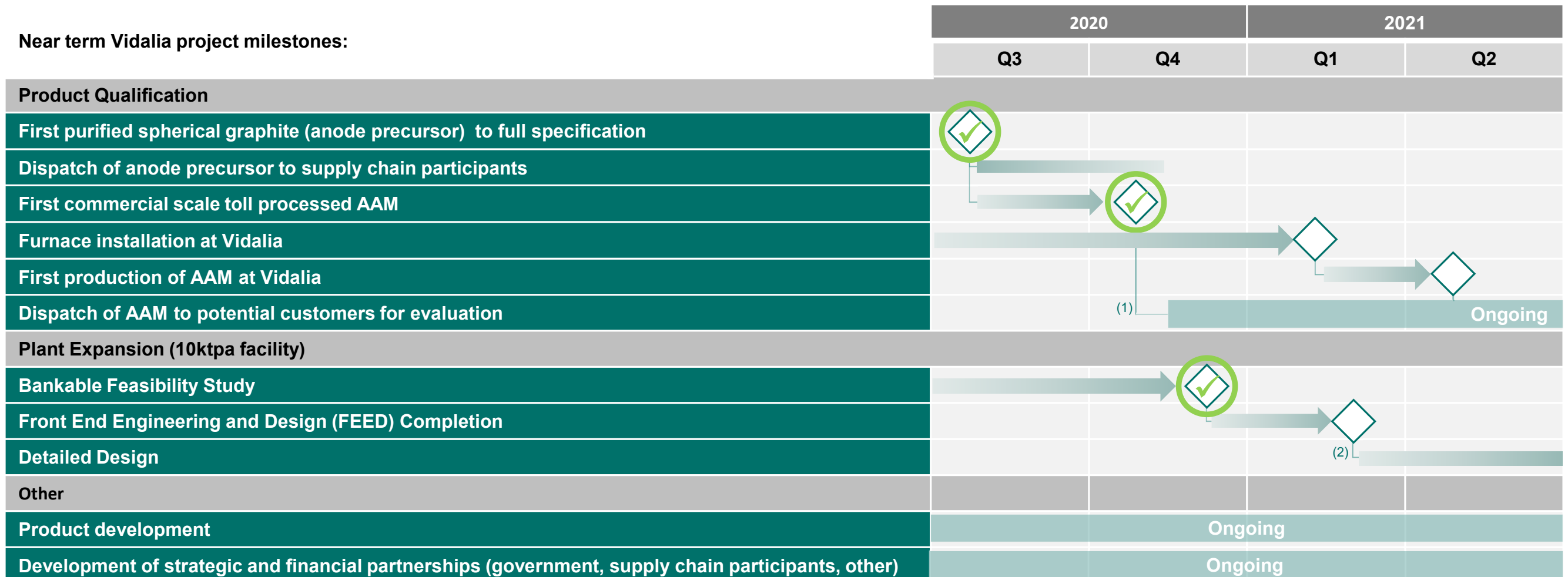
Syrah on track to become an integrated graphite AAM producer ex-Asia



Source: Syrah product testing & benchmarking

Progressing to become an integrated natural graphite AAM producer ex-Asia

- Syrah to complete Front End Engineering and Design (FEED) and commence Detailed Design for 10ktpa AAM facility in Q1 2021
- Project development pathway beyond Detailed Design will be informed by strategic/financial partnerships and end customer commitments



(1) : Evaluation by potential customers is an iterative process of product quality and performance assurance. Production of AAM samples will be ongoing post initial production volumes to support this process

(2): Project development pathway beyond detailed design to be informed by strategic/financial partnerships and end customer commitments

Balama Graphite Operation

- Balama sold 163,000 tonnes of natural graphite into the global market in 2019
- Production at Balama was temporarily suspended in March 2020 due to COVID 19 impacts⁽¹⁾:
 - Travel restrictions
 - Lower end user demand
- Travel restrictions are easing – reducing impediment to restart
- Cost restructure implemented at Balama to preserve cash during period of temporary production suspension
- Operating and marketing capability retained to restart within 2 to 3 months once a restart decision is made⁽²⁾
- Strong EV sales growth in H2 a positive leading indicator for Balama restart
- Significant vanadium resource at Balama presents a potential value add option⁽³⁾

(1) See ASX release 27 March 2020

(2) See ASX release 23 July 2020

(3) See ASX release 30 July 2014



Syrah progressing to be a vertically integrated natural graphite anode supplier

ESG auditable with anode material from Vidalia to have a single chain of custody back to the source

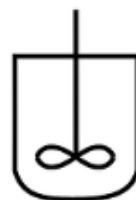
Balama Natural Graphite Operation⁽¹⁾



Vidalia Battery Anode Material Project⁽²⁾



MINING



CONCENTRATION



MILLING/
SHAPING



PURIFICATION



CARBON
COATING



THERMAL
TREATMENT

(1) See slide 17 for summary of Balama Graphite Operation

(2) Syrah's Vidalia facility installed plant can produce 5,000 metric tonnes per annum (5ktpa) of unpurified spherical graphite and 0.2ktpa of purified spherical graphite to battery specification. Installation of a furnace in Q1 2021 will enable the capability to produce 0.2ktpa of natural graphite AAM. Bankable Feasibility Study (ASX release dated 1 December 2020) assessed option to expand the current asset base to 10ktpa and 40ktpa AAM production capability



Summary and Outlook

Vidalia Battery Anode Material Project

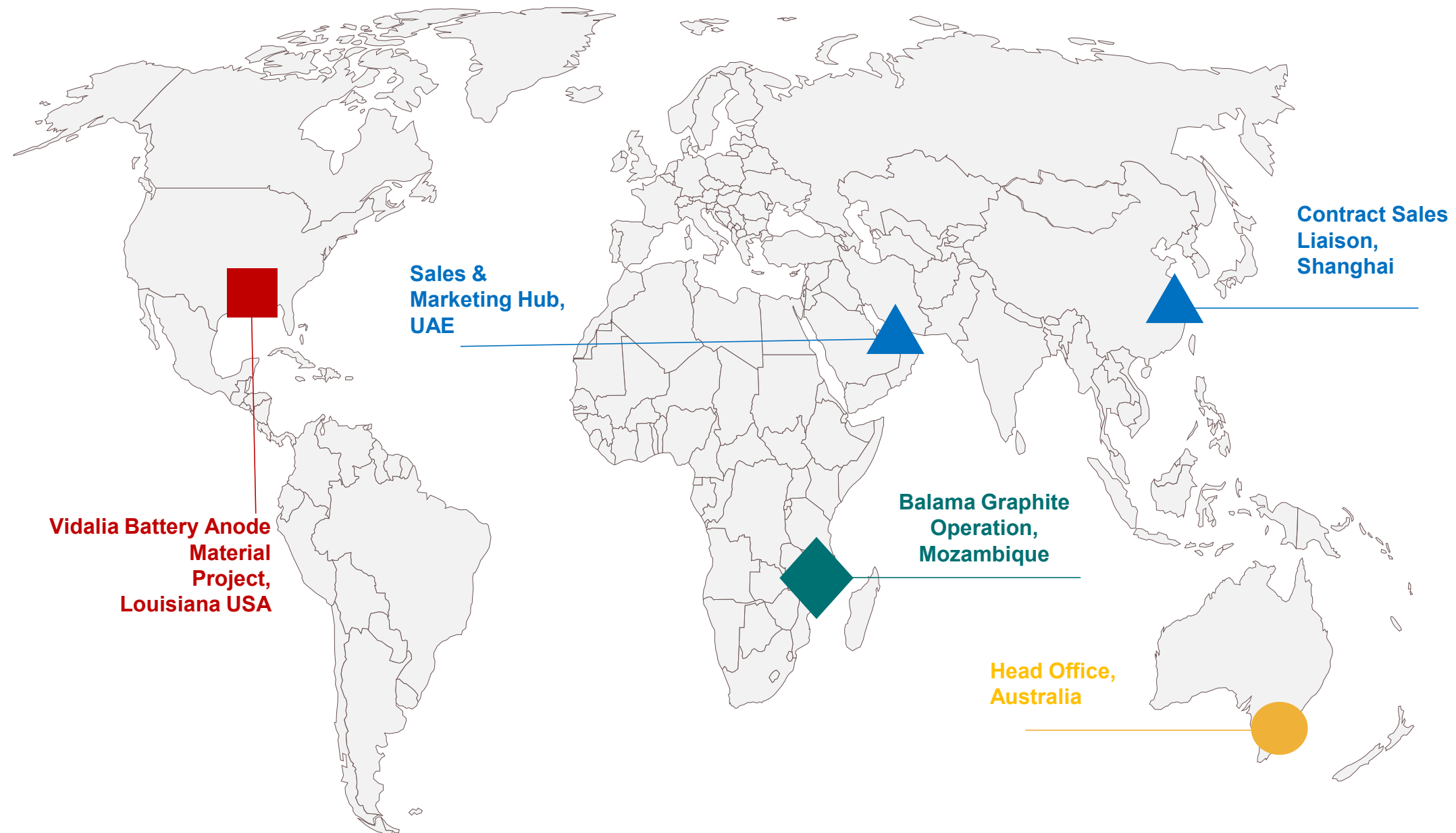
- Syrah remains on track to become a vertically integrated producer of natural graphite AAM to supply ex-Asia markets
- In Q1 2021, Syrah plans to:
 - Complete Frontend Engineering and Design (FEED) for expansion to 10ktpa
 - Commence Detailed Design for expansion to 10ktpa
 - Install a furnace for qualification scale AAM production at Vidalia
- Progression of AAM qualification activities with potential customers will be ongoing through 2021

Balama Graphite Operation

- Balama preserving cash during temporary suspension; retains operating / marketing capability to promptly restart production
- Restart lead time of ~2 to 3 months post decision
- Improvement in natural graphite market conditions expected to continue during the quarter

Appendix

Syrah's global business to supply growing battery anode demand



Balama Graphite Operation asset summary

Overviews

Location	Cabo Delgado Province, Mozambique
Life of Mine⁽¹⁾	~50 years
Mining	Simple open pit mining, low strip ratio
Processing	Conventional – includes crushing, grinding, flotation, filtration, drying, screening and bagging
Plant Capacity	2Mtpa ore throughput. ~350ktpa
Product	94% to 98% fixed carbon graphite concentrate
C1 Cost⁽²⁾	Forecast ~ US\$330/t as plant optimised and at full capacity

Key Dates

Mar 2020	Temporary suspension of production at Balama Graphite Operation
Sep 2019	In response to drop in flake graphite prices, production reduced
Mar 2019	Graphite Mineral Resources and Ore Reserves Update
Jan 2019	Commercial production declared, with quarterly production of 33kt
Dec 2018	Balama produced >100kt in 2018
Sep 2018	Mining Agreement finalised with Government of Mozambique
Jan 2018	Balama transitioned to operations, global sales commenced
Nov 2017	First production of natural graphite
Jul 2016	Balama process plant construction commenced
May 2015	Feasibility study completed

(1) Life of Mine based on 107.54Mt Graphite Ore Reserves being depleted at 2Mt of mill throughput per annum

(2) Cash operating cost Free on Board (FOB) Nacala, excluding government royalties and taxes

Graphite Mineral Resources and Ore Reserves

Classification	Tonnes (Mt)	TGC (%)
Total Reserves	107.54	15.73
- Proved	-	-
- Probable	107.54	15.73
Total Resources	1,422	10.0
- Measured	23.5	17.5
- Indicated	378	11.2
- Inferred	1,020	9.8

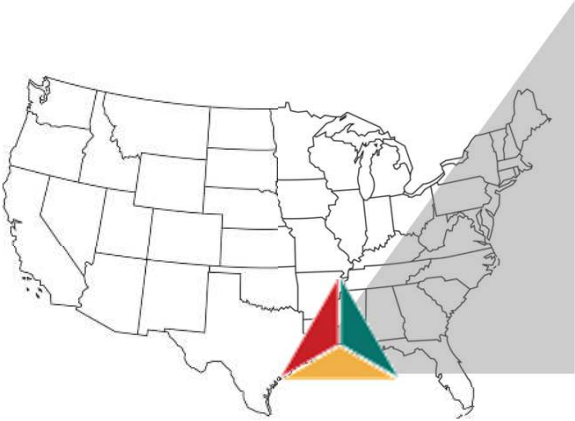
Balama Open Pit



Vidalia Battery Anode Material Project

Project History	
Date	De-risking Milestones
Dec 2020	BFS confirms robust economics for large scale AAM production at Vidalia
Oct 2020	First production of AAM (toll treated) using anode precursor from Vidalia
Jul 2020	First production of purified spherical graphite to battery specification from Vidalia
Dec 2018	First production of unpurified spherical graphite at Vidalia
Sep 2018	Phase 1 study completed for large scale AAM production at Vidalia
Aug 2018	Vidalia site purchase completed
Mar 2018	Benchmarking of AAM produced from Balama graphite completed
Nov 2016	Syrah announces plans to establish commercial scale facility in Louisiana
Apr 2016	Pilot test work program initiated in China (milling and purification)

Project Location: Vidalia (Louisiana, USA)



- ✓ Proximity to potential customers
- ✓ Access to key utilities
- ✓ Options to expand facility size
- ✓ Direct barge/port access to Mississippi river
- ✓ Supportive government relations
- ✓ Access to key consumables (HF, HCL, Caustic)
- ✓ Capable workforce

Vidalia commercial scale plant for qualification (2020)

