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RESEARCH



## Blencowe Resources plc

5<sup>th</sup> November 2020

### Potential to play a big role in supplying flake graphite for energy storage – one of the biggest trends of the 21st century

Blencowe Resources plc (“Blencowe”) listed on the LSE at 4p per share as a cash shell in April 2019, backed by some well-known movers and shakers in the junior natural resources market. Shortly thereafter Blencowe identified the Orom Cross Jumbo Graphite Project (“Orom Cross” or “the Project”) in Uganda and subsequently completed a Reverse Takeover (RTO) of Orom Cross in April 2020 at 6p per share, alongside an oversubscribed capital raise for £2M at the same level. Orom Cross has all the makings of being a large-scale project with scope to produce an impressive quantity of high value jumbo and large graphite flakes.

#### ■ Potential world class graphite project with 21-year mining licence

Orom Cross provides a highly compelling combination of a large scale, shallow, low-cost mining operation, coupled with a high value product. Risks will be reduced with the publication of a PFS, expected in 1H 2021 following the recent drilling which will allow a JORC-resource to be defined in early Q1 2021.

#### ■ Fulfilling long term demand for high quality flake graphite

The graphite market is estimated to be in deficit by over 500,000tpa by 2025. This is particularly relevant when considering current global production is circa 1Mtpa. Blencowe is targeting the commencement of production from Orom Cross in early 2024 and the already attractive economics should therefore further improve, especially since few other large-scale projects are expected to come online in the next 5 years. Of these, fewer still have a high proportion of the higher value jumbo/large flakes, which Blencowe is fortunately well endowed with. Orom Cross also benefits from a lower risk location compared to other graphite projects looking to be brought online.

#### ■ Proven management team that knows how to keep investors in touch

Healthy newsflow looks assured with drill sample assays to come which are planned to result in a maiden JORC resource. Plus, samples sent to Canada for Phase 2 metallurgical testing, all go into the PEA and PFS.

#### ■ Peer group comparisons suggests significant upside ahead

Analysis of the peer group shows the potential. We update coverage of Blencowe with an increased target price of **19.1p** and **Conviction Buy** stance.

Source: Company accounts & Align Research

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## CONVICTION BUY

- Target price 19.1p



#### Key data

EPIC	BRES
Share price	5.7p
52 week high/low	4.00p/8.75p
Listing	LSE
Shares in issue	101.6m
Market Cap	£5.79m
Sector	Mining

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**IMPORTANT:** Blencowe is a research client of Align Research. Align Research and a director of Align Research hold an interest in the shares of Blencowe. For full disclaimer information please refer to the last page of this document.

## Business Overview

### Blencowe Operations

Blencowe is a mineral resources company focused on fast-tracking its 100% owned Orom Cross Jumbo Graphite Project in Uganda to production.

- **Orom Cross Jumbo Graphite Project** – Orom Cross is an advanced exploration stage project in Northern Uganda which was awarded a 21-year mining licence in October 2019. The overall size and scale from exploration work that has already been completed in the licence area has clearly demonstrated that Orom Cross has the potential to become one of the largest graphite projects in the world based on both size and the quality of the end product. The project is blessed with a large component of the high value jumbo and large flake products which are in strong demand. This shallow deposit looks ideal to be mined by open pit methods and will likely have a low strip ratio, which is a strong catalyst for low cost mining. The management team is fast tracking the project through to defining a maiden JORC-compliant resource, completing further metallurgical test work with a plan to deliver a Preliminary Economic Assessment (PEA) in Q1 2021 followed shortly after by a Pre-Feasibility Study (PFS).



*High-grade graphite outcrop. Source: CPR October 2019 from Minrom Report 2015*



*Exploration drilling at Orom Cross. Source: CPR October 2019 from Minrom Report 2015*

## GRAPHITE

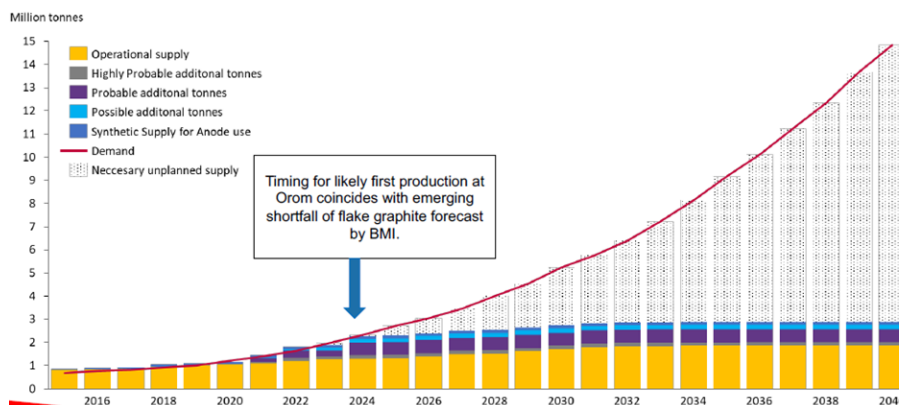
Graphite is a naturally occurring form of crystalline carbon that is made up of stacked sheets of carbon atoms which have a hexagonal crystal structure. Graphite forms within the earth’s crust when carbon becomes compressed at temperatures in excess of 750°C. Graphite is light, feels soft to the touch and easily breaks into thin flexible sheets. This crystalline form of carbon has a number of interesting properties in that it has high electrical and thermal conductivity as well as being highly resistant to heat and corrosion.

Natural graphite comes in three main types - flake, amorphous and vein - but natural flake has the widest range of uses and is thought to account for almost half the natural graphite that is consumed by industry today. The largest producers of flake graphite are China, Mozambique and Brazil.

Demand for flake graphite stood at 710,000t in 2017. Out of this total 560,000t (79%) was consumed by steel mills. Due to its heat resistance and other properties, graphite is the key component of the electrode and is seen as a consumable as with electric arc furnace (EAF) steelmaking as these graphite electrodes need replacing every 8-10 hours. Graphite is also used within the anode for lithium-ion batteries which are used for electric vehicles (EVs) plus other renewable energy storage, and this market is seen as having the greatest likelihood for significant demand increases ahead. Out of global demand in 2017 just 120,000tpa (17%) went into electric vehicles (EVs) but this demand is already 750,000tpa and is forecast to grow rapidly ahead.

### Supply deficit

Flake graphite demand, specifically for the lithium-ion battery market (anode production), is forecast to expand from current 750ktpa to 1.75Mtpa by 2025, a move which market commentators believe will result in a significant supply deficit. Thereafter, some forecasts have the flake graphite market reaching 5Mtpa of demand by the early 2030s and continuing an exponential growth thereafter as EVs start to replace petrol and diesel engines.



*Demand-supply forecast. Source: Benchmark Minerals Intelligence (July 2019)*

In 2025, total supply of natural flake graphite has been forecast at 1.15Mt (Source: Argus Graphite White Paper 2019) with 400kt expected from China and 350Kt expected from Mozambique. Back in 2016, China produced 490kt but production has dropped by 20% due to tightening environmental regulations. With heightened risk in southern Africa in particular the supply of graphite ahead is considered highly speculative and the largest



producer of graphite worldwide (Syrah Resources/Mozambique) temporarily ceased all production in 2020 due to ongoing country risk and high operating costs in relation to prices. Not all graphite flakes are the same - they have various uses and prices (see overleaf and page 18). China might be the biggest global supplier, but it does not produce substantial quantities of jumbo and X-large flake graphite, which it must import.

A supply deficit looks likely as there are no new large-scale projects (i.e. >200ktpa) expected to come on stream over the next five years. Orom Cross will look to reach a stabilised rate of production in 2025, producing a substantial quantity of highly sought after flake graphite at a time when the market most needs a significant new producer.

### Flake size is critical

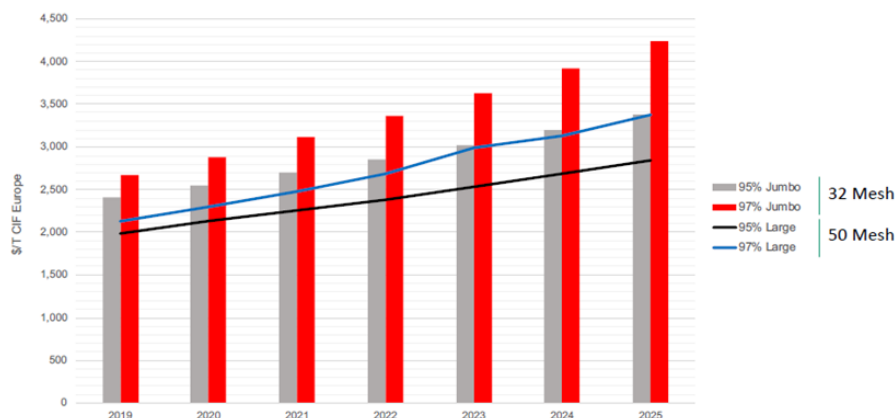
It must be pointed out that the larger flakes in a deposit come with a higher purity and fetch higher prices. For an exploration/mining company the lower the percentage of fine flakes the better as these represent the most abundant product in the market and the lowest selling price. Demand for jumbo/large flakes largely comes from manufacturers of speciality product which require the highest quality graphite and hence a premium price.

Jumbo/Large (20-80 mesh)	Medium (80 – 150 mesh)	Small (+150 mesh)	
Gaskets and seals	Basic refractory	Paints and coats	Foundry
Flame retardants	Magnesia carbon	Pencils	Composites
Thermal sheets	Alumina carbon	Dry and Ni MH	LiB batteries
Fuel cells	Unshaped refractory	batteries	Space technology
Plugging agents	Flame retardants	Lubrication	
Expandable graphite		Friction materials	
Thermal management			

**Sizes and uses of natural graphite flakes. Source: Company**

One of the fastest growing markets is expandable graphite (Jumbo/XL) which has been forecast to be worth US \$4.7billion by 2024. Due to the layered structure of graphite, atoms or small molecules can be introduced between the carbon layers and under heat the layers separate like an accordion and the graphite flakes expand.

Thermal management in consumer electronic uses expandable graphite and there are industrial applications such as growing demand for high powered laser machines for cutting and welding. Expandable graphite flakes are also used as a fire-retardant additive to materials to improve fire-protection including wood, foams, plastics, roofing and other construction materials. Flame retardant products seem to be increasingly covered by the expansion of regulations in various Asian countries and in particular China. Also, potentially large new markets exist for expandable graphite in fuel cell and flow batteries. Given this speciality demand and limited supply, this special type of graphite attracts high prices.

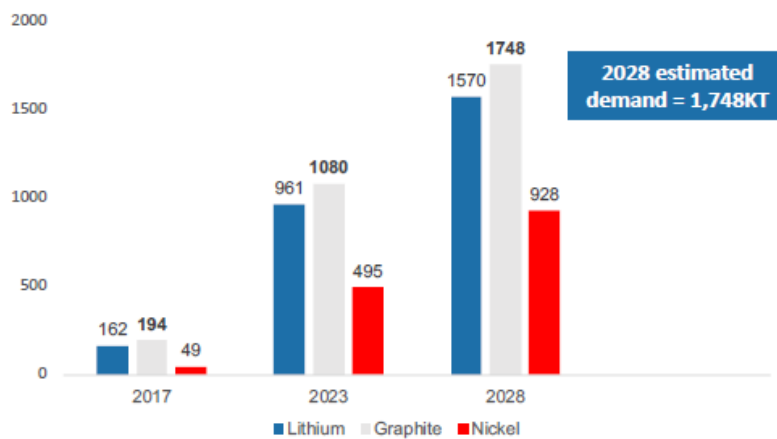


**Graphite pricing forecast. Source: Fast Markets Graphite Report (March 2019)**

### Lithium ion batteries

Graphite is an important battery metal as it represents around 50% of Li-ion batteries by mass, which uses the smaller sized flakes. In recent years there have been some racy growth rates suggested for graphite demand for lithium ion batteries. These were based on forecasts as global cell production surged on the back of the maturing demand for pure electric vehicles (EVs) and the birth of the utility renewables storage market.

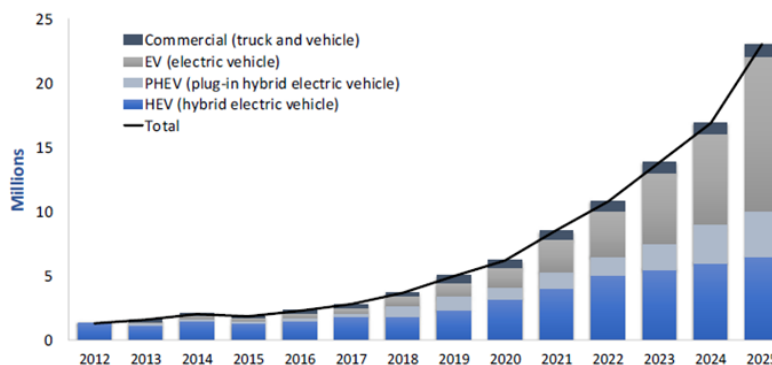
Researcher Battery University estimates that a large EV battery requires about 40kg of graphite on average for the Li-ion anode. Figures from leading battery metals research house Benchmark Mineral Intelligence show that the global market demand was 165ktpa graphite specifically for anode material in 2017 and they estimate this demand to rise to ~1.7Mtpa by 2028.



*Lithium-ion battery raw materials – forecast demand (000's tonnes per annum) 2017-28. Source: Benchmark Minerals Intelligence testimony to US Senate Committee on Energy & Natural Resources February 2019.*

### Electric Vehicles

EV demand is rising on the back of green legislation being adopted by the UK, India, Germany, France, Norway and China, which is expected to lead to an increasing demand for Li-ion batteries and in turn for graphite. There is currently a massive global shift towards EV manufacturing by the big motor groups led by BMW which is looking to have 15-25% of their fleet electric by 2025, whilst in the same time frame Volkswagen is seeking to have 2-3 million EVs globally (which includes a joint venture with Ford for EVs in the US). All leading vehicle manufacturers have aggressive EV targets ahead, which will substantially push up demand for graphite as a key ingredient of the Li-ion battery.





*Forecast growth in global EV sales. Source: Roskill & UBS estimates via Hastings Tech Metals.* EV demand is shifting up worldwide and set to grow exponentially over the next 10-20 years, with graphite a key component of the lithium-ion batteries that power these EVs. As on-the-ground evidence of this shift taking place, Tesla recently announced record last quarter production of EVs, which has led to the company now being the most valuable market cap auto firm on the planet by a significant margin.

In addition, European auto manufacturers are currently building alliances with European battery manufacturers to reduce their reliance on Chinese imports ahead for this key sector. The obvious next step would seem to be their moving downstream into anode manufacturing, and then into securing key materials within the supply chain (such as flake graphite). As a potentially large-scale producer of high-quality graphite in a low risk location, Blencowe/Orom-Cross represents a strong supply chain diversification opportunity.

## Uganda

Uganda is a landlocked English-speaking country in East Africa which covers an area of 93,070 square miles (about the same size as the UK), with a population of 43 million. Uganda has a reputation of being one of the more stable countries in Africa as it has a long-standing democracy with a stable government. Yoweri Museveni (75) has been President of Uganda since 1986 and is seen as likely to continue in this role after next elections (2021).

The USD GDP annual growth rate of the country has averaged 5.6% over the last ten years and in 2018 it grew by 6.6%. Uganda is one of the countries that attracts the most foreign direct investment in East Africa and in 2018 received US\$1.3 billion (up from US\$803 million in 2017). The economy of Uganda does have great potential and this whole region of East Africa is viewed as a key African growth platform by the World Bank.



Map of Uganda. Source: Beulah Africa

Uganda is endowed with significant natural resources including copper, cobalt, gold, nickel and platinum. It sits at the northern end of the Great Rift Valley, which runs from Uganda down through DRC, Tanzania, Zambia, Zimbabwe and into South Africa, and which hosts some of the most significant deposits of all minerals/metals in history. The country has transparent UK style mining laws and the new Mining and Minerals Policy (2018) was devised to encourage external investment to help further develop the resources sector. There is a 5% government net smelter royalty on mining revenues and 30% corporate tax rate.

Currently, there are a number of significant resource projects under way in Uganda. The Osokuru phosphate is a large-scale project with six exploration licences covering 26.6km<sup>2</sup> which is backed by the China Development Bank. Meanwhile, Carnavale Resources' (ASX: CAV) Isingiro tin project saw huge tin deposits announced in mid-2019. In addition, there is M2 Cobalt's (TSXV: MC) Kilembe copper-cobalt where new anomalies have recently been discovered showing 37.8% Cu. Also, there is Sipa Resources' (ASX: SRI) Kigum-Pader Base



Metals Project where Rio Tinto can earn a 75% interest by funding exploration to the tune of US\$57 million. At the same time, Anglo American is active in gold exploration within the country.

## Company Background

Blencowe was incorporated in September 2017 as a shell company to undertake the acquisition of a target company, project or business. Blencowe was admitted to trading on the London Stock Exchange's Main Market in April 2019 having raised £340,000 in a placing of 8.5 million shares at 4p per share which gave the company an initial market capitalisation of £1.27 million.

At the timing of the listing, it was pointed out that the prospective target company or business was likely to be either in exploration or production in the natural resources sector in South East Asia, Africa or the Middle East. There were a number of key guiding factors in selecting a suitable target. Firstly, the existence of production and/or potential production which will over time provide considerable positive cash flow for the business. Secondly, strong exploration potential in known natural resources producing areas. Thirdly, quality management team with an established track record in the development of natural resources assets.

In May 2019, Blencowe announced that it has entered into Heads of Agreement with Consolidated Africa Limited (CRA) and New Energy Minerals Africa Pty Ltd for the company to gain an option to acquire a 100% interest in CRA's Ugandan subsidiary (CRAU) which owns the Orom Cross Graphite Project in northern Uganda. At that stage the deal was subject to diligence, but exercising this option required a payment of £2.0 million to be satisfied by issuing 33.33 million new ordinary shares in Blencowe. Completion of the transaction also required Blencowe to raise the necessary working capital to develop the Orom Cross Graphite project ahead, which at that stage had yet to be determined. The Company requested the shares were suspended from trading pending due diligence on the project ahead of the RTO.

In October 2019, the company announced that subject to successful placing of new shares for working capital, the acquisition of the Orom Cross Graphite Project would be completed. Blencowe would, also subject to a successful placing, acquire the entire share capital of CRAU (local Ugandan subsidiary that holds all licenses for Orom Cross) with the total aggregate consideration payable being £2 million to the two vendors CRA and New Energy. This amount was to be paid in full by issuing a total of 33.333 million new ordinary shares at 6p a share, representing a 50% increment to the 4p IPO price in April 2019. In addition, there was a cash payment of A\$50,000 payable to CRA. The acquisition included all licences, data and historical work to date, and it is also worth pointing out that there are no future royalty payments to come or any other progress or milestones payments to vendors. Equally important, all vendor shares issued have a hard lock (escrow) for 12 months and a further soft lock for another 12 months, which substantially limits the amount of Blencowe shares available for trade over that period.

On 28<sup>th</sup> April 2020, the stock returned to the market following the RTO and a placing raised £2 million at 6p per share with a 1-for-2 warrant at 8p with a five-year life. The net proceeds to cover a work programme which is outlined in the table below.

Use of proceeds	£
Drilling (JORC Resource)	500,000
Preliminary Operational Studies	300,000
Tenement costs and compensation	200,000
Corporate expenses and working capital (incl cap raising fees)	753,000
Total	1,753,000

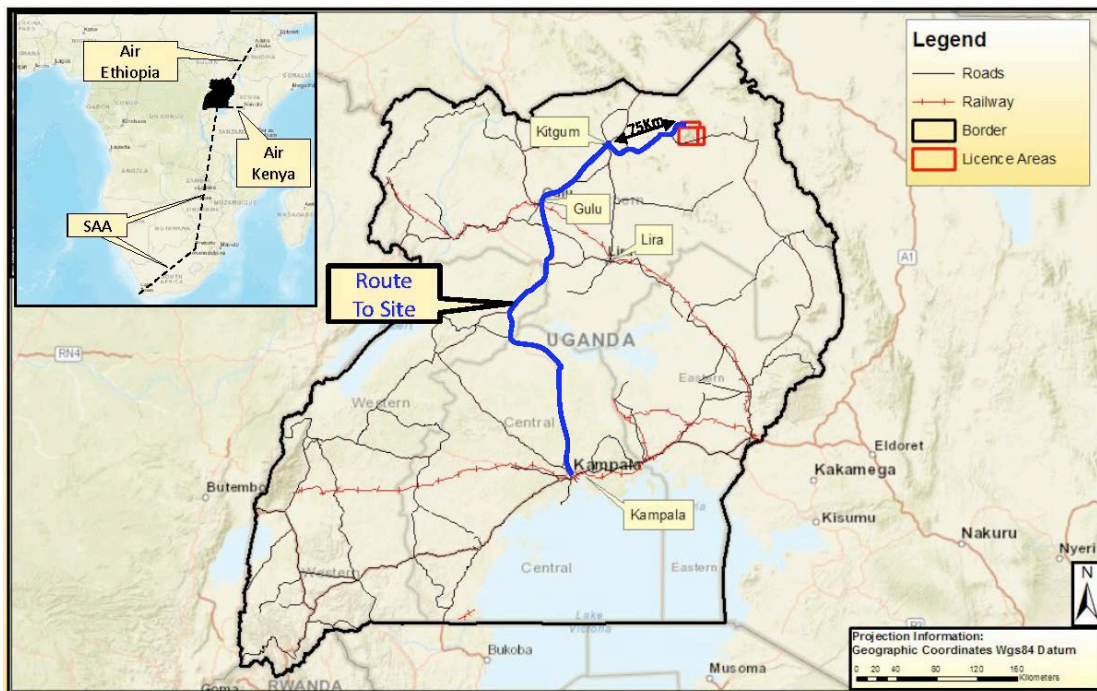


Exercising of 4p, 6p and 8p warrants can deliver an additional	2,000,000
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*Use of proceeds. Source: Company*

## Operations

The Orom Cross Jumbo Graphite Project is an advanced exploration stage project in Northern Uganda. The project lies within the Orom District in Northern Uganda approximately 75km from the town of Kitgum and 6km from the village of Orom. The project can be accessed from the southwest along 104km of road from Gulu to Kitgum followed by 87km of gravel roads. Currently the project is at the Scoping Study stage although it does not yet have a JORC-complaint resource – the company has recently completed a significant drill programme in 1H 2020 to deliver this JORC resource. Importantly, the Orom Graphite Project has a 21-year Mining licence over the area it intends to mine for first ten years (minimum), which was awarded in August 2019.



Location of Orom Graphite project licence area. Source Company

Licence type <sup>1</sup>	Licence number	Area (km <sup>2</sup> )	Registered Holder	Granted	Expiry	District	Comment
RL	1025	321	CARL <sup>2</sup>			Kitgum, Kaabong	Residual area outside ML1959 being secured by RL
EL	1173	96	CARL <sup>2</sup>	08-07-15	07-08-20	Kitgum, Kaabong	Can be converted into a ML
EL	1612	101	CARL <sup>2</sup>	14-11-16	13-11-19	Kitgum, Kotido, Kaabong	Converted from TN2390, can extend for 2 years
ML	1959	~21	CARL <sup>2</sup>	20-06-19	19-06-40	Kitgum	Active

<sup>1</sup> - Exploration Licence (EL), Retention Licence (RL) and Mining Lease (ML)

<sup>2</sup> - CARU – Consolidated African Resources (Uganda) Limited, which is a 100%-owned subsidiary of Blencowe.

*Tenement Schedule. Source: CPR October 2019*

The overall size and scale from exploration work already completed in the licence area does suggest that Orom Cross has the potential to become one of the largest graphite projects in the world. The £2 million purchase looks to be a bit of a steal in our view, but the vendors (CRA) were unable to raise any money to progress the project and were in danger of losing it.



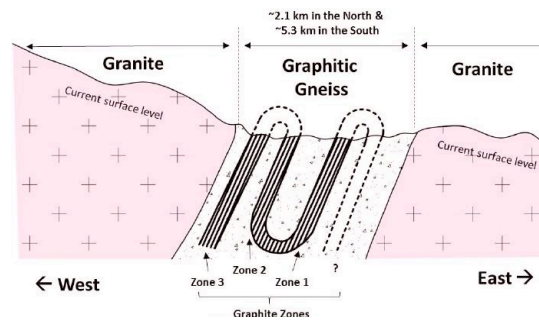
## History

The earliest known exploration commenced in 1964 where a number of anomalies (zinc and to a lesser extent cobalt, nickel, copper and chromium) were detected from soil sampling. In 1969, this work was followed by more mapping, pitting, trenching, channel sampling and the drilling of a single hole to test the anomalies by the Ugandan Geological Survey. The anomalous areas covered the main areas of graphite occurrence. Observed flakes of graphite were described as occurring within granitic gneisses with the inferred graphite zones found to be generally dipping around 70° towards the west.

More recent exploration kicked off in 2013 which has seen mapping, diamond drilling, geophysical survey and trenching which was undertaken by a series of companies beginning with Discovery Africa and followed by TMT Mining and Consolidated Africa (CAR). Early 2014 saw Discovery Africa and TMT Mining excavate 36 pits and sampling 26 of them to a depth of 2.5m. These pits were dug to sample across the strike of graphitic lodes and the results highlighted prospective granitic zones about 1.5km wide that extended 3.5km along strike to the north.

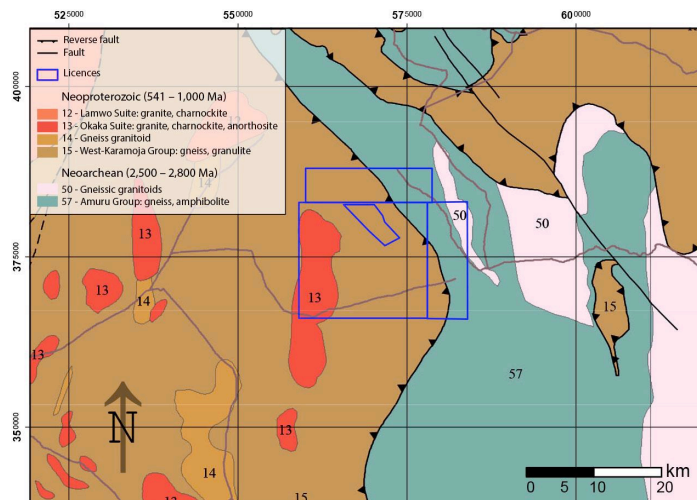
## Geology

The Orom Cross Project lies in rocks of the Neoproterozoic age. The graphite mineralisation is hosted in the granulite facies rock of the West-Karamoja Group which comprise of metamorphosed mafic igneous and sedimentary sequences of banded granulites, gneiss, schist, charnockite, calc-silicate and sericitic quartzites.



*Schematic illustration of the interpreted geology. Source: CPR October 2019*

Over many millions of years, the geology of the area has experienced a series of compressional events which have resulted in tight folding with the dominant structures lying upright and trending in a NS direction. These are actually double plunging structures as the dominant folds have been re-folded creating a dome and basin geology.



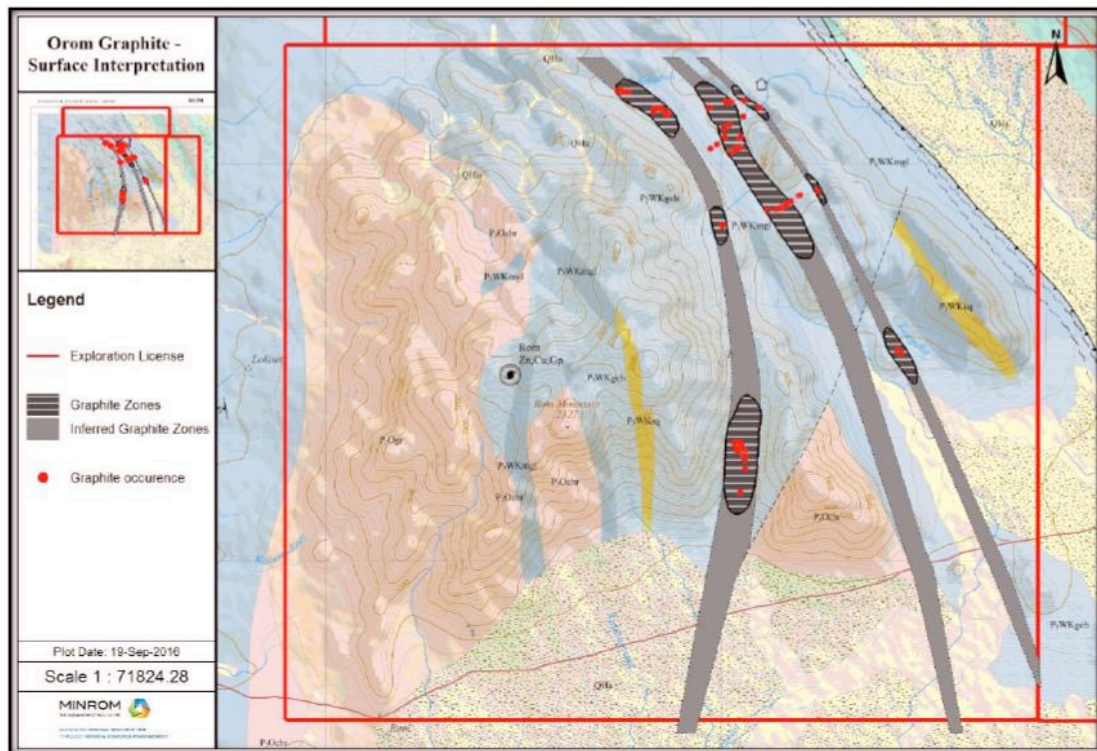
*Regional geology. Source: CPR October 2019*

The graphite mineralisation occurs as tabular shaped deposits. Individual graphite-bearing units within the zones have a true thickness in a range of 5 - 36m, which have been discovered by drilling. The graphite-bearing units within these zones have a general dip of 70°, and a dip direction of 225° (southwest). These zones are founded to lie beneath 0-15m of alluvial cover.

**Exploration**

So far, there has been four phases of modern exploration carried out on the property (prior to recent JORC drilling program) which are: mapping, diamond drilling, geophysical survey and trenching. Mapping saw a total of 218 samples taken which were analysed for total graphitic carbon (TGC) with 184 showing greater than 5% TGC, 68% of those were above 7% TGC with the best sample assaying 15.9% TGC.

Independent geological expert Minrom, in its report on Phase 1 mapping and exploration drilling on the project published in 2015, showed that graphite occurrences were more predominant in the NE part of the licence area. Phase 2 saw a total of 600m of diamond drilling to a depth of 20-30m which involved a number of holes. A significant volume of graphite was discovered along a 19km strike length running North-South with a width of 1-1.5km.



*Plan depicting the graphite mineralisation.  
Source CPR October 2019 from Minrom Report 2015*

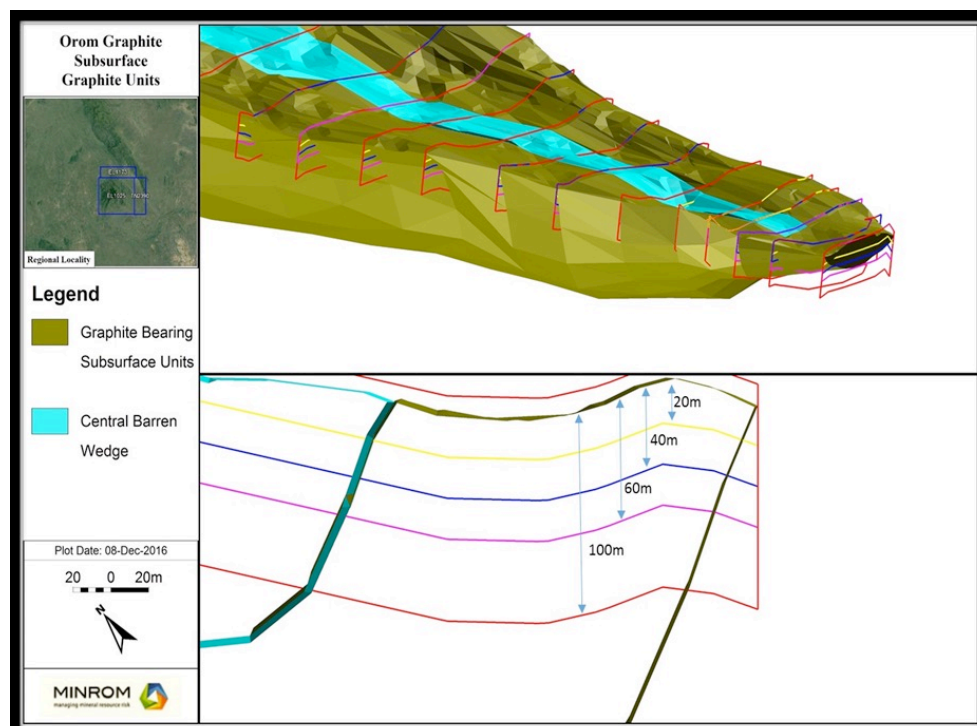
This was followed up by Phase 3 which involved aeromagnetic and versatile time-domain electromagnetic (VTEM) geophysical surveys which led to anomalies being discovered. Phase 4 saw 4,200m of trenching of the anomalies two years ago when a total five hundred kgs of samples were sent down to South Africa for testing. The VTEM anomalies and graphite mineralisation demonstrated a strong correlation. As a result, the high-level exploration potential assessment of the area identified three zones. Zones 1, 2 and 3 which have a combined thickness of approximately 1,085 m and a combined strike length of approximately 55km.

### CPR (Competent Persons Report)

The CPR dated October 2019 seemed highly positive, concluding that whilst although no formal JORC compliant mineral resource had been estimated to-date, based on similar but more advanced graphite projects in the neighbouring countries of Tanzania and Mozambique it is likely that the project's graphite mineralisation is hosted within abundant weathered surface material, which should be mined using free-dig at depths of 0-20m, requiring zero drill and blasting. The CPR also concluded that the mining of the near surface material should result in easily liberated flake graphite, which can be separated from the gangue by conventional crush, grind and flotation processes, resulting in an end-product of high purity graphite concentrate.

### Target size and scale

The company has prepared an exploration target based on the existing exploration data. The exploration target is located at the northern end of the project, where graphitic units form an interpreted syncline fold. The Orom Cross graphite project is comprised of abundant jumbo size graphite flake and the mineralisation occurs near surface. Based on similar styles of graphite mineralisation, it is expected that the deposit may easily be mined by open pit mining.



*Subsurface graphite units at Orom. Source: Company*



Case	Depth m	SG	Tonnage Mt	Graphite % graphite carbon	Cumulative total tonnage (Mt)	Cumulative tonnes of graphite (Mt)
Free Dig	0-20	2.02	680	6.00%	680	40.8
Minimum	20-40	2.69	800	8.00%	1,480	104.8
Moderate	40-60	2.69	800	8.00%	2,280	168.8
Maximum	60-100	2.69	1,500	8.00%	3,700	288.8

**Potential tonnage estimates provided by Minrom. Source: Company**

An idea of the potential tonnage estimates was provided via work completed by technical consultants Minrom which is shown in the table (shown at the bottom of the previous page) – although it has to be pointed out that more work is required before the management team can properly understand how much graphite can be recovered. As per this table, a substantial part of the Orom Cross deposit is hosted near to surface (0-20m) which has been weathered to create a soft clay type material (saprolite). This provides the company with some big advantages. Firstly, it is free digging with a low stripping ratio which means that mining costs will be low. Secondly, this soft material is unlikely to require any primary crushing and grinding circuit hence lower capital expenditure to get into production and lower operating costs through the circuit. Finally the need for less processing also points to better preservation of large flakes through the processing circuit.

In May 2020 Blencowe reported the discovery of the High Grade ‘Camp Lode’, a high-grade graphite zone which was identified just 250m from camp and the proposed site of the processing facility. In the JORC resource drilling programme, some six holes were drilled in this zone to assess its merits. The first drill hole was completed to a depth of 30m to test both the weathered zone and possible graphite mineralisation. This hole returned visible high-grade graphite over 28m of 30m of intersection, with weathering extending to the base of the hole. Based on prior samples taken in this area, it is thought that there is the real expectation for grades of double the 6-8% average Orom-Cross grade. Subsequently, logging by the company’s geologists has also identified zones of large to jumbo flakes in the core. This additional high-grade zone could provide additional material value to the overall project.

The company will be targeting Orom Cross to become one of the lowest cost graphite mines in the world, which would provide the opportunity for considerable operating margins based on a higher weighted average selling price for a high-quality end product. Because of the ease of mining it is also considered as a low capital cost operation, although this needs to be further demonstrated during PFS stage.

It is clear that there is considerable quantity of graphite at Orom Cross, and the limitation on what volume Blencowe can ultimately produce will not be dictated by what is in the ground, but by what the overall market can absorb for each type of end product it ultimately produces. This means that only a very small percentage of (total available) Orom Cross graphite will be mined per annum, which in turn means that there will be a very long expected mine life, with an ability to ramp up production considerably at any stage if the market required. Currently Blencowe is considering mining around 1.0-1.5mtpa graphite initially, which is a very small percentage of the overall (billions of) tonnes at Orom Cross.

## Metallurgy and Processing

The first phase of flotation test work was conducted at SGS laboratory in South Africa which showed that the flotation process of Orom Cross material generated a 95% graphite recovery into a rougher concentrate with a grade of 57% graphite. Cleaner flotation test work results indicated a product grade of 86% with an 89% recovery without regrind or the need to add flotation depressants (used to depress gangue materials to increasing recovery and selectivity). The first phase of test work indicated that the Orom Cross graphite is chiefly jumbo and large flakes with low impurities and can be upgraded to a TGC concentrate of 93.2%, although with only limited test work the graphite recovery stood at just 31.7%.

The second phase of flotation test work was undertaken on behalf of Blencowe and was carried out at Metanza laboratory in South Africa in 2H 2019 on a composite trench sample with a grade of 5.6% TGC, with the aim of generating a concentrate of >94% TGC. The company did not like the previous met test results as they were carried out on material from the 600m of diamond drill holes and was not a representative sample of the material that Blencowe is seeking to mine during the life of the project, which is the free digging weathered and saprolite clay material 0-20m deep, which had been sampled by the trenching programme.

Flake size	Category	% <sup>1</sup>
<75µm	Jumbo/Large	74%
75µm - 150µm	Medium	13%
150µm - 180µm	Small	2%
180µm - 300µm	Small	5%
300µm - 500µm	Small	4%
>500µm	Fines	2%
Total		100%

<sup>1</sup> - per head grade of samples from Orom from previous drilling

*Flake size of graphite at Orom. Source: Company*

Those 93.2% TCG with a TGC recovery of 31.7% results were derived from test work which involved crushing to 1mm and then grinding the crushed sample followed by desliming at 38µm, then rougher flotation and 4 stages of cleaning. The graphite mineralisation can be upgraded via floatation, additional cleaner stages and regrind stages to a greater than 94% TGC concentrate.

Mineralogical investigations suggest that a significant portion of the contained graphite is coarse. Flake analysis showed that 80 percent of graphite in three samples was in the +212µm flake length class. This analysis also showed that the smaller flakes were better liberated from the gangue minerals than the larger flakes. Analysis has revealed that 10-20% of Blencowe production is of a small flake size with a large percentage in the jumbo or large flake size which attracts far higher prices as such graphite has a wide range of thermal management and fire retardant uses.

In August 2020, the company announced that further metallurgical test work will commence shortly on its Orom-Cross graphite project in Northern Uganda. Following the closure of previous metallurgy partner Metzana, Blencowe has appointed SGS Lakefield (Canada), to conduct further metallurgical assessment of the project. SGS Lakefield has extensive experience in graphite assessment with contributions to over 25 major projects in recent years. Several of these have been in East Africa and in similar oxide environments to Orom-Cross.

SGS Lakefield has been commissioned to undertake a metallurgical test work program to confirm TGC of +95%, highest possible recoveries, concentrate grade and maximising flake sizing. The aim of the additional test work is to confirm the liberation pathway for increased recoveries and higher grade within the concentrate. One objective is to confirm recoveries around 80% as well as low impurities and predominantly large/jumbo flakes. If this product can be achieved, then Blencowe has a highly sought-after product that will fetch a considerable weighted average price per tonne in the market.

### **End users for Orom Cross production**

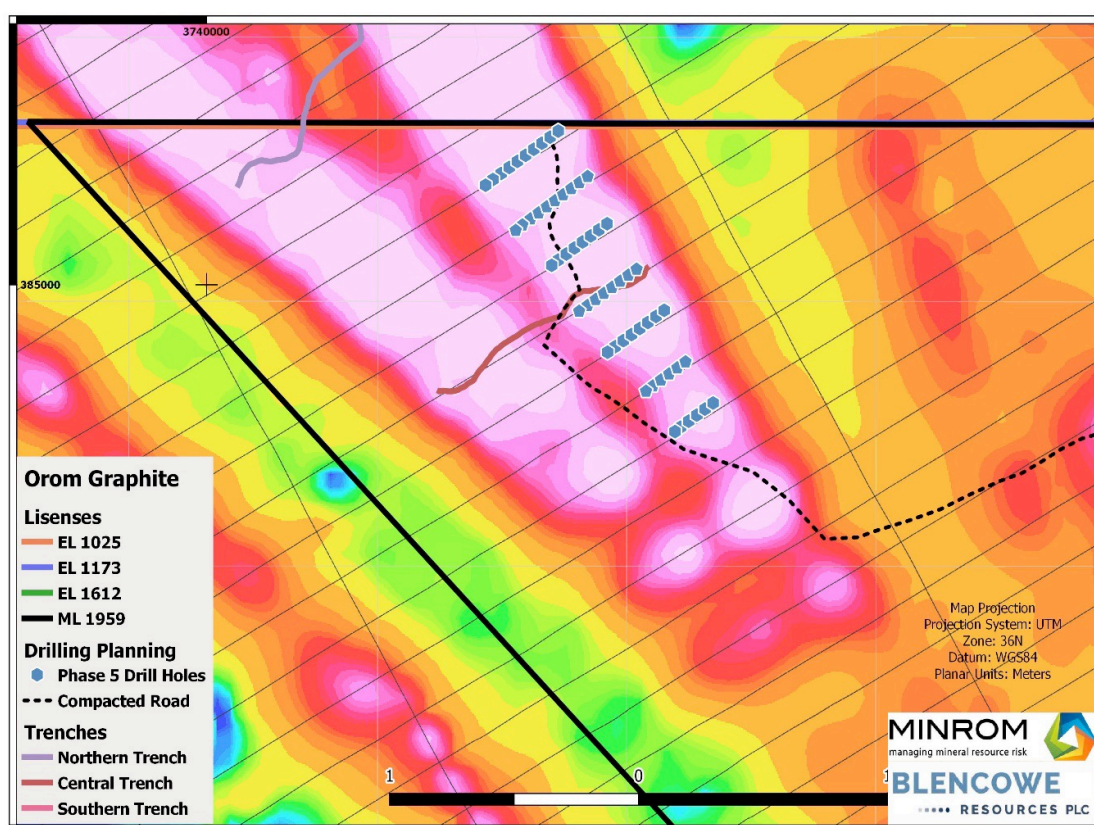
Once Phase 2 metallurgical tests are completed and the composition of the end product as concentrate (i.e. TCG%, flake sizes, etc) is known, then the management team and their consultants will be moving ahead with determining potential end users for the Orom-Cross product. The most likely result will be that Blencowe sells a variety of end products into several markets. Firstly, the smaller flakes are more than likely to be sold into China (potentially also into Europe ahead) for production of upgraded material for the anode, for use in lithium-ion batteries. Secondly, the larger flakes would be expected to go into Asia/Europe for the expandables market, for use in fire retardants, steel foundries and other heat resistant products.



## Strategy for Growth

The Orom Cross Jumbo Graphite Project has the potential to become a significant global player in the supply of jumbo/large flake graphite where projected demand looks good, with top prices being paid. The company has big plans for continued development of this project over the coming twelve months. The recently completed 69-hole diamond drill programme (for 1,950m) was designed to provide infill drilling between existing holes in order to allow the definition of the company's maiden JORC Resource (8-10Mt is expected) which will form the basis of both the Preliminary Economic Assessment (PEA – also known as a Scoping Study) and a Pre-feasibility Study (PFS).

The management team envisage an initial 800,000tpa project producing circa 25,000t of concentrate per annum and such a resource would provide a 10-year life of mine. The new holes were planned to be drilled to target the free-dig weathered and saprolite material so each hole will be ~30m deep.



*JORC resource drilling programme. Source: Company*

Drill cores have recently been delivered to the laboratories in Tanzania and sample preparation work is underway. The next steps are sending the samples onto a South African laboratory to assay them and finally the determination of a maiden JORC resource. At the same time further samples will be sent to Canada/Toronto for Phase 2 metallurgical test work, targeting 96-97% TGC, low impurities, high recoveries and maintenance of substantial Large/Jumbo flakes. Both JORC Resource and met test results are due in Q1 2021 with the PEA (also known as a Scoping Study) also due in Q1 2021 followed by the PFS.

The graphite market is characterised by large and jumbo flake sizes with both high grade and purity that is in short supply and attract a premium price. Given higher concentrate and a higher flake size with 50-60% jumbo/large, the company is hoping that it can achieve an overall weighted average selling price for all materials of US\$1,200 – 1,300/t (based on current prices). However, the determining factor is how much can be sold. So far, the exhaustive met tests have not yet been completed and so the final product has yet to be determined which would allow management to test the market. Battery metal market researchers Benchmark International have some fairly lofty price forecasts for the size of the jumbo/large market based on an estimated market growth rate of 10% per annum. It is noted that these prices below are from 2019 and prices can fluctuate over time.

Mesh Size	Carbon Content % TGC	2019 CIF Europe \$/t	2020 CIF Europe \$/t	2021 CIF Europe \$/t	2022 CIF Europe \$/t	2023 CIF Europe \$/t	2024 CIF Europe \$/t	2025 CIF Europe \$/t	
Jumbo	+32	92	2,174	2,282	2,378	2,478	2,582	2,690	2,803
	+32	95	2,406	2,551	2,699	2,855	3,021	3,196	3,381
	+32	97	2,668	2,881	3,111	3,360	3,629	3,920	4,233
Large	+48	92	1,770	1,876	1,980	2,088	2,203	2,325	2,452
	+48	95	1,985	2,124	2,251	2,386	2,529	2,681	2,842
	+48	97	2,128	2,298	2,482	2,680	2,985	3,126	3,376
Large	+80	92	927	955	983	1,013	1,043	1,075	1,107
	+80	95	1,102	1,179	1,262	1,350	1,445	1,546	1,654
	+80	97	1,363	1,485	1,619	1,764	1,923	2,096	2,285
Medium	+100	92	893	901	906	910	915	920	924
	+100	95	979	999	1,009	1,019	1,029	1,039	1,050
	+100	97	1,097	1,130	1,164	1,193	1,223	1,253	1,285
Small	+200	92	816	832	849	866	883	901	919
	+200	95	862	879	897	915	933	952	971
	+200	97	989	1,009	1,029	1,050	1,071	1,092	1,114

Price trends – prices are formulated on flake size and carbon content (purity). Source: Flake Graphite Price Estimates. Fast Markets Graphite Report March 2019

Mesh Size	2020 CIF China US\$ 95% TGC	2020 CIF China US\$ 97% TGC
Jumbo +32	1,850	2,200
X-Large +48	1,400	1,750
Large +80	880	1,100
Medium +100	730	875
Small -100	600	725

Blencowe is targeting >50% of Jumbo and X-Large flakes at 95-97% TGC

April 2020 prices: Source: Benchmark Minerals Intelligence and the Company

All this will be evaluated during the PFS. At this stage, given the low strip ratio and the free digging material (it is clay not hard rock), it has been suggested that costs are expected to be low, with total operating costs targeting US\$300-350/t range. This would include the cost of trucking the concentrate to Mombasa port in Kenya. Mining saprolite negates the need for primary crushing and a grinding circuit hence lower capital expenditure to get into production. An 800,000tpa plant and all associated infrastructure to complete a working mine of this initial size have been estimated at a ballpark capex figure of US\$30 million.

Numerous anomalies have been indicated across the licence area, which have subsequently been tested and proven by trenching programme. The Orom Cross Project is based on a potentially large-scale resource and the currently envisaged 25,000tpa graphite operation could easily be scaled up by multiples as met tests have shown high value production. It does look as though Orom has the makings of being an exceptional project with high value graphite concentrate which is likely to be produced at a low cost.

We believe the board has achieved a cracking deal in acquiring such an advanced project with a mining licence in the stable country for just £2 million (paid fully in shares), for the benefit of all shareholders. Blencowe was the ideal vehicle to acquire Orom Cross via an RTO as it was a clean shell company. Vendors of Orom have taken equity at 6p per share, with the stock escrowed for twelve months. In addition, Blencowe is seeking to achieve its goals without a bloated management team as there is likely to be only one full time employee for the current time, which is the Chief Operating Officer, with consultants looking after the geology and the met testing. As the project develops the team will grow and will probably need in-country project managers, but the focus is on keeping costs cut to the bone.

Blencowe comes with the promise of a healthy news flow. The completion of the drilling programmes is expected to be followed in short order by assay results with further met test taking place in parallel where the goal is to be able to demonstrate an optimal end product that can be delivered to market. The plan is to have delineated a maiden JORC-compliant resource which will go into a PEA and then the PFS, which now looks on course to be completed in 1H 2021. Covid restrictions temporarily halted drilling and other activities in Uganda around mid-2020 but Blencowe quickly re-mobilized and delivered on the 2,000m JORC drilling program, which indicates a strong dedication by management to deliver.

The vendors of Orom Cross had been working hard to get the project into production as well as funding the environmental studies which paved the way to CARU being granted the 21-year Mining Licence, and this has removed a lot of potential risk. The vendors had begun work on a number of the elements that go into the Pre-Feasibility Study (PFS) especially as concerns infrastructure, power and logistics. This means that Blencowe can complete this detailed analysis and planning, which will provide some savings both in terms of time and financial resources.

The Orom Cross Graphite Project seems well-placed to be able to fulfil long term demand for high quality flake graphite. It is worth investigating the sort of numbers that the PFS could suggest. We already know that the graphite is characterised by large and jumbo flake size with both high grade and purity that is in short supply and demands a premium price. Producing 25,000tpa of high margin graphite on the sorts of low-cost numbers mentioned above looks as though it could generate US\$30 million cash flow per year (at weighted average US\$1,250/t), or US\$300 million over the first ten years life of the project. If the total operating cost of US\$350/t can be achieved this considers an operating margin of US\$900/t or US\$ 22.5m pa. If prices rise over the next decade due to flake graphite shortages as forecast this could have a significant incremental impact to the positive. If the market can absorb more than 25,000tpa then the plant can be up scaled quickly to accommodate this, again with substantial upside potential. Hence the PFS could suggest an initial NPV (10) of ~US\$100 million, with opportunity for this to grow over time, but the key to achieving such a figure is good flake size, high recoveries and low operating costs – all of which the company will be working towards throughout 2020.

## Financials & current trading

The company was incorporated on 18<sup>th</sup> September 2017 and changed its name to Blencowe Resources plc on 26<sup>th</sup> September 2017 and so there is limited trading history. Since flotation in April 2018, the company has been a cash shell seeking an RTO.

Y/E 30 September	£'000	2018A <sup>1</sup>	2019A
Revenue		-	-
Pre-tax profit/loss		-164	-243
Net profit/loss		-164	-243

<sup>1</sup> - 13 months to 30 September 2018

*Blencowe two-year trading history. Source: Company accounts*

### 2019 results

Results for the 12 months to 30<sup>th</sup> September 2019 showed administrative fees and other expenses of £243,119 and an operating loss of £243,119. After no finance costs, the loss before tax was £243,119. With no tax paid the loss for the period was £243,119 which gave a loss per share of 0.93p.

### 2020 interims

Results for the six months to 31<sup>st</sup> March 2020 saw an operating loss totalling £0.482 million which was due to administration fees and other expenses. The loss before tax and the loss for the period came out at £0.482 million which equated to a loss per share of 1.52p.

### Recent developments

In June 2020 Blencowe provided an update on the newly identified high-grade graphite zone. A single diamond drill hole has been completed to a depth of 30m to test both the weathered zone and possible graphite mineralisation. The hole returned visible high grade graphite over 28m of 30m of intersection, with weathering extending to the base of the hole. Based on prior samples taken in this particular area the expectation is for grades of up to double the 6-8% average Orom-Cross grade. Subsequent logging by company geologists has also identified zones of large to jumbo flakes in the core.

In late-July 2020, the JORC resource drilling programme at the Orom-Cross Graphite Project was completed. Apart from the 59 holes targeting the western anomaly, an additional 6 holes had been focused on newly discovered High Grade Camp Lode. In total, 65 holes with a combined total meterage of 1,950m were drilled. The geological logging of the holes and core sample delineation have been completed on this latest drilling and the samples are being transported to the SGS (JORC accredited) lab in Tanzania for sample preparation. The final data from this recent drilling is to be combined with existing results and studies to deliver a maiden JORC resource in Q1 2021.

In August 2020, the board was able to inform investors that the first stage value-add had been completed at Orom-Cross. At the same time as the drilling work was going on, the company has completed further metallurgical test work using samples from this drilling programme, along with the land acquisition and social responsibility programmes. This all sets the scene for the team to deliver a first commercial model.



Late September 2020 brought the news that samples from the company's recently completed 69-hole diamond drill program had been dispatched to an accredited SGS laboratory in Tanzania. Here the samples are prepared before being forwarded to SGS in South Africa to enable completion of the studies and verification by SGS ahead of inclusion in the company's maiden JORC Resource at Orom-Cross which is expected in Q1 2021.

Additional samples were reported to be sent to SGS in Toronto, one of the leading technical experts in graphite processing, to complete Phase Two metallurgical test work and identify optimal concentrate figures for a high quality, large flake product – with these results expected in Q1 2021. Blencowe intends to incorporate these results to present a PEA (Preliminary Economic Assessment) and then Feasibility Study in 1H 2021, which will deliver first commercial outcomes for the project.

## Risks

### Geological risks

There are a series of risk factors concerning the amount of understanding of the geology of the project areas, the mineralisation being targeted and the distribution and concentration of graphite that has been identified in exploration work.

### Political risk

There are political risks involved in companies operating in Uganda.

### Graphite price risks

Metal prices are highly cyclical and changes in the prices of graphite could have a negative or positive impact on the valuation of the company's projects and revenue from the sales.

### Exchange rate risks

The company's accounts are in sterling and graphite metal prices are in US dollars. However, the company's costs are both in US dollars and the Ugandan shilling. Fluctuations in the value of the Ugandan shilling against the US dollar and also the US dollar against the pound may well have an effect on the valuation that Blencowe is awarded by the UK stock market.

### Future funds

The market for raising funds for small cap resources companies have not been easy over the last 24 months. Some recent fundraisings in the resources sector have seen share prices being undermined by incoming investors demanding substantial discounts to provide the necessary capital.

## **Board of Directors**

### **Cameron Pearce – Executive Chairman**

Cameron is a Chartered Accountant with extensive professional experience in the finance sector in Australia and the UK. His particular focus and experience are in the setting up, listing and development stage of public companies, specifically in the junior resources market, and he has been instrumental in raising capital for various listed companies over the past decade. Cameron has had previous experience managing the transitional stage of several UK-listed companies, including most recently Emmerson Plc.

### **Sam Quinn – Non-Executive Director**

Sam is an experienced corporate lawyer based in UK who focusses primarily on the setup and development of junior resource companies. He has been involved in several junior listed exploration companies in UK over the past decade, with emphasis on legal, administrative, corporate and strategic advice and capital raising. Sam is currently a Non-Executive Director of Red Rock Resources Plc.

### **Alex Passmore – Non-Executive Director**

Alex is a geologist with significant technical experience developing early stage mining projects worldwide. He has been involved in a number of junior resource companies, working in both technical and corporate positions. Alex brings a range of knowledge in the battery metals sector having been a Director of Cobalt One Ltd, which merged with First Cobalt in 2017 to form the largest Canadian cobalt exploration company. He is currently Managing Director of ASX-listed Rox Resources, a gold exploration company in Australia.

## **Key Management**

### **Mike Ralston**

Mike is a Chartered Accountant with 25 years' experience in successfully developing businesses worldwide, including within Africa. He has been a senior executive and board member for several junior listed Australian resource companies over the past 15 years and he has raised ~A\$300m in debt and equity over that period.

Mike brings a wealth of corporate and management experience and has been involved in developing at least three mining companies from start-up through to production. He was previously MD of Balamara Resources Ltd (2011-2017), which developed two large scale coal projects in Poland. Previously Mike was the CFO of Kangaroo Resources Ltd, which developed several coal projects in Indonesia into production, before a trade sale to a major Indonesian coal producer for ~A\$600m in 2010.

He is a founder and Non-Executive Chairman of ASX-listed Trigg Mining Limited which is developing potash resources through to production in Western Australia.

## **Key Management (continued)**

### **Ian Wearing**

Ian is a Mining Engineer with 30 years' experience in the resource industry, including significant project experience in Africa. He has been involved in the technical management of African projects for several companies, including Resolute Mining and Barrick Gold. Ian has also managed studies for several major projects in Africa, including the Kibali Gold Project for Moto Gold, Syama Project in Mali, and Golden Pride in Tanzania.

He brings a wealth of technical expertise to the team. Ian's knowledge in study management, operations planning and costing, as well as operations management, will be critical to Orom as the project moves towards first production.

## **Key Advisors**

### **Oscar Van Antwerpen – Technical**

Oscar is a geologist and a Member of the Geological Society of South Africa and a registered professional scientist at the South African Council of Natural Scientific Professions. He is the founder and Managing Director of Minrom Consulting (South Africa), which is a specialist service provider to resource companies working assets within the African continent.

Minrom has been the technical advisor to CRA on the Orom Cross Project for the majority of the exploration work conducted there over the past five years. Oscar is a resource expert within the African market, and he has advised successful international mining companies such as BHP Billiton, Goldfields, Samancor, and DRA International. He will remain in a consulting position with Blencowe to ensure that the knowledge gained at Orom over the past five years is brought forward and utilised. Oscar will be a key part of the planning and execution team going forward.



## Forecasts

We update coverage of Blencowe with forecasts for the years ending 30<sup>th</sup> September 2020 and 2021. In 2020, the RTO and the acquisition of the project is expected to be followed by the process of drilling to define a maiden JORC-compliant resource to provide data for the PFS. Corporate expenses and working capital are estimated to be £0.375 million with further estimates of £0.25 million for fees associated with the RTO, £0.500 million for drilling, £0.3 million for operational studies and £0.07 million for tenement costs and compensation which result in an operating loss of £1.495 million. With no tax payable, the loss for the period also comes out at £1.495 million which equates to a loss per share of 2.41p.

For the year ending 30<sup>th</sup> September 2021, we have assumed we will see the completion of the PFS and work beginning on the Bankable Feasibility Study (BFS). Further we have assumed that work on the BFS in the company's 2021 FY will be funded with the remaining proceeds of the RTO placing and subscription. For 2021 we forecast a pre-tax loss of £0.163 million which is also the loss for the period as no tax is deemed to be payable, giving a loss per share of 1.60p.

Year End 30 September (£'000s)	FY 2018a <sup>1</sup>	FY 2019a	FY 2020e	FY 2021e
Corporate expenses and working capital	(164)	(243)	(375)	(500)
RTO fees			(250)	-
Drilling	-	-	(500)	(500)
Operational Studies	-	-	(300)	(500)
Tenement costs and compensation	-	-	(70)	(130)
<b>Operating loss</b>	<b>(164)</b>	<b>(243)</b>	<b>(1,495)</b>	<b>(1,630)</b>
Finance costs	-	-	-	-
<b>Profit/(loss) before tax</b>	<b>(164)</b>	<b>(243)</b>	<b>(1,495)</b>	<b>(1,630)</b>
<b>Income tax expenses</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Loss for the period and total comprehensive loss for the period	(164)	(243)	(1,495)	(1,630)
Earnings per share (p)	(1.28)	(0.93)	(2.41)	(1.60)
Weighted average number of shares	12,720,424	26,378,993	61,986,297	101,627,381
Total shares plus options and warrants	32,500,000	45,858,333	140,708,327	144,048,133

<sup>1</sup> - 13 month period

Source: Company/Align Research

## Valuation

In our view, Blencowe looks to have pulled off a value-enhancing deal to acquire the Orom Cross Jumbo Graphite Project for just £2 million in shares given its vast potential, in terms of size and scale as well as product quality. Impressively, this deal involves the acquisition of the project in its entirety and comes with no future royalty payments or deferred consideration based on future performance. In the Strategy for Growth section of this report we have looked at a ballpark NPV figure that the project might potentially attract investors moving forward.

However, to look at the sort of market valuation that Blencowe may be awarded over the next 12-24 months, we believe that peer group comparisons provide the best guide. We have chosen to look at the sort of valuation that is currently awarded to **Armada Capital (LON: ACP)**, **Sovereign Metals (ASX: SVM)** and **Walkabout Resources (ASX: WKT)**, peers in the African graphite market which are all at a more advanced stage, to give us an idea on the valuation that Blencowe is likely to attract as it makes progress through various feasibility studies.

Sovereign Metals has a 100% interest in the Malingunde Project in Malawi where the PFS (February 2019) highlighted the potential for a simple and highly profitable flake graphite operation. Malingunde's soft saprolite-hosted deposit is expected to be delivered at a very low-cost production with high value concentrates with an average EBITDA of US\$42 million over a 16-year Life of Mine (LoM) at a basket price of US\$1,216/t. The advantage with saprolite is that it makes for a very simple operation with significant operating cost advantages compared with its hard rock peers. The project is targeting sales into existing traditional markets as well as emerging Li-ion battery markets. The deposit looks smaller than that of Orom Cross, but Malawi is a fairly similar jurisdiction.

Sovereign has also identified a potential new rutile province in Malawi. With a JORC resource and a PFS completed, Sovereign is probably 18 months ahead of Blencowe. Since we initiated coverage on Blencowe the share price of Sovereign Metals has risen which, coupled with an enlarged share capital, has greatly increased the market cap and EV due to its impressive graphite project but also to its strategy to focus on becoming a new force in rutile. Sovereign's Kasia Rutile Discovery has been seized on by the management as an emerging company maker with a large high-grade rutile mineralisation being discovered at surface which is open along strike in both directions and open laterally to the south east. This change in corporate strategy has led us to search for another cleaner peer comparison.

Armada Capital has a 100% interest in the Mahenge Liandu Graphite Project in Tanzania. This is a low cost, high grade and high purity (97%+) project which seems to have low technical risk as it is a large, high-grade, open cut resource. The Definitive Feasibility Study (DFS) was announced in March 2020 which confirmed that Mahenge was a long-life low-cost graphite project. Since then, in June 2020, the company announced an updated DFS based upon a revised mine schedule using a higher-grade cut off of 9% TGC, a higher strip ratio of 1.95:1, and a rescheduled Stage 2 expansion. This has resulted in the production profile increasing average annual output from 80ktpa to 109ktpa of concentrate over the life of mine, which is a significant 30% increase on the DFS to US\$430m NPV(10).

Company	Planned annual production ktpa	Head grade %	Graphite produced ktpa	Costs			Returns		
				Opex US\$/t	Capex US\$m	Capital intensity US\$/t	IRR %	NPV(10) US\$m	Payback years
<b>DEFINITIVE FEASIBILITY STUDY</b>									
Walkabout Resources (ASX:WKT)	230	17.9	40	347	27.8	121	119	197	<2
Armadale Capital (LON:ACP)	109	12.5	14	369	39.7	364	91	430	1.6
<b>PRE-FEASIBILITY STUDY</b>									
Sovereign Metals (ASX:SVM)	600	9.5	52	323	49	82	56	201	<2

*Costs and returns of peer comparisons. Source: Align Research*

Walkabout Resources is an innovative African focused energy minerals developer with its flagship Lindi Jumbo Graphite project in south east Tanzania, a large near surface deposit which is high grade with low costs. An updated DFS was announced in March 2019 as a result of a substantial upgrade to the ore reserve (2018). The revised project has a 24-year LoM, with an average annual EBITDA of US\$36.9 million and a forecasted weighted average basket price of US\$1,515/t. Walkabout is probably 12-18 months ahead of Sovereign, and hence 18 -36 months ahead of Blencowe.

Company	Share price	52 week range	MCap £m	EV £m	JORC Resource		Flake size distribution		
					Tonnage & grade % TGC	Contained graphite Mt	Size	Mass Dist %	TGC grade %
<b>DEFINITIVE FEASIBILITY STUDY</b>									
Walkabout Resources (ASX:WKT)	A\$0.175	A\$0.35 – 0.11	32.3	30.7	41.8Mt @10.8%	4.51	S Jumbo Jumbo Large Rest	14.8 34.5 25.0 25.7	>95 >95 >95 >95
Armadale Capital (LON:ACP)	3.99p	5.64p – 1.64p	18.8	19.0	59.48Mt @ 9.8%	5.82	Jumbo Large Medium Small Fine	6.10 15.36 18.60 31.64 28.29	97.3 97.5 97.5 97.5 91.1
<b>PRE-FEASIBILITY STUDY</b>									
Sovereign Metals (ASX:SVM)	A\$0.39	A\$0.45 – 0.08	83.8	82.6	65.0Mt @ 7.2%  (4.0% cut-off grade)	4.68	S Jumbo Jumbo Large Medium Small Amorphous	5 19 26 9 26 16	98 97 97 97 97 94

*Enterprise value and flake size distribution. Source: Align Research*

Walkabout and Armadale were chosen as the closest matches as these are both well run companies with projects are in a similar area in Africa (Tanzania) to Blencowe's Orom Cross Project in Uganda. Once you go further south in Africa it is harder to get things done, there is more inherent sovereign risk, and there are additional costs in getting a project into production. Sovereign Metals' move into rutile muddies the waters a little and makes it difficult to rely on for reliable peer comparisons given the move to refocus the business on rutile. Given the lack of valid peer comparisons we have extended the time horizon of our target price to a two-year period.

Blencowe’s drilling programme at Orom Cross has been designed to provide infill drilling between existing holes to allow the definition of a maiden JORC-compliant resource of 8-10Mt for use in the PFS. The management team envisage an 800,000tpa project producing about 25,000tpa net of concentrate per annum and such a resource will therefore provide an initial 10-year life of mine. There is considerably more near surface graphite that can be drilled out as required over this period to deliver either incremental tonnage to 25,000tpa or further mine life beyond these ten years. The new holes being drilled will target the weathered free digging saprolite material and so each will be 30m deep for the Indicated Resource.

It needs to be pointed out that a deposit of this sort of scale, resources and reserves can be purely dependent on the drilling spend. Blencowe, at this stage of its development, is keen to establish an initial 800,000tpa operation that can then be escalated in size as the market allows. The determining factor of the future size of this project is how much graphite can be sold. Yet, the team has not tested the market, as the phase two met test work has not been done to determine the true identity of the final product.

With all this in mind, we are content to suggest that Blencowe, when the Orom Cross Jumbo Graphite Project gets to the DFS stage, could be worth the average Enterprise Value that is currently awarded to Armadale Capital (£18.8 million) and Walkabout Resources (£32.1million). On the current timetable, with the PFS planned to be completed by early 2021, the DFS stage could be achieved in 24 months or so and this is a valuation which we have chosen to carry through to our SOTP table. It has to be pointed out that both Armadale and Walkabout have enjoyed substantial share price rises over the past 12 months.

	<b>£ million</b>
<b>Orom Cross Jumbo Graphite Project – current stage valuation (see below)</b>	25.5
<b>Per share (101,673,132)</b>	25.1p
<b>Funds raised from warrants being exercised</b>	2.00
<b>Total</b>	27.5
<b>On a fully diluted basis (144,048,133)</b>	19.1p

*Sum-of-the-parts valuations. Source: Align Research*

We take the valuation of the Orom Cross Jumbo Graphite Project determined by peer comparisons when the project advances to the DFS stage of £25.5 million. This works out at a valuation per share of 25.1p based on the number of shares in issue (101,673,132). On a fully diluted basis, we have added in the £2.0 million which would be raised on exercising the current warrants, which gives a total of £27.5 million equating to a per share valuation of 19.1p based on the number of shares on a fully diluted basis (144,048,133), which we have adopted as our target price.



## Conclusion

The Orom Cross Jumbo Graphite Project scores heavily on many factors. The project is potentially vast as there is thought to be some 2-3 billion tonnes of graphite. The overall average head grade may be 7-8% but there are significant pockets of high grade (10-15%) material which are available in sufficient quantity to target higher grade production for a substantial part of any initial production scenario. Thus mining at >10% average head grade for first ten years life of mine is entirely possible. Near to surface mineralisation presents a good opportunity for low mining costs as Blencowe is seeking to prove Orom-Cross to be one of the lowest cost graphite producers in the market. At the same time, 75% in situ graphite presents as Large/Jumbo flakes, which really serves to separate out this project from its peers.

On top of those points, there is an ability to transport end product to market via the Mombasa Port (Kenya). That is not to mention a 21-year mining licence that has already been awarded, along with critical government support concerning key infrastructure (extension of tarred road and electricity to site) as Orom-Cross moves into production. Already, land compensation agreements with local landowners have been completed and payments made which ensures strong local support. This is all in a location which is deemed to have low sovereign risk. It does not get much better than that.

The graphite at Orom Cross is characterised by large and jumbo flake sizes with both high grade and purity, which are in short supply worldwide and demand a premium price. The team is targeting greater than 95% TGC, ~80% recovery, low impurities and retention of significant quantity of jumbo, XL and large flakes. The focus is sensibly on good flake size and high recoveries, which is highly important as with graphite size matters.

Apart from large size of the target resource size and the grade, the most important attributes are product flake distribution and purity. From high value end uses, graphite purity is critically important, and it also affects the cost of production. Early work is suggesting something like 50% of the final product could be in the jumbo, XL and large flakes size fractions. This has the makings of being an ideal project in today's market as there is now a growing inequality between the premium and traditional markets

Graphite looks to be assured a strong future over the next twenty years and beyond, with compelling demand forecast for the jumbo, XL and large flakes. China has been the world's major source of global graphite supply, but Chinese production of large flake graphite is threatened by lower grades, higher costs, diminishing flake size and environmental concerns. It is for these reasons China's suppliers are increasingly looking to import high purity, large flake graphite and so these supply issues present a significant opportunity for Orom's large flake and high purity graphite.

The graphite market is estimated to be c.500,000t in deficit by 2025, mainly due to exponential growth of EVs, just as Orom gets into full production. No other large-scale graphite producer is expected to come on stream within five years with access to jumbo and large flakes. With this in mind, the Orom Cross Jumbo Graphite Project seems to have the potential to become a globally significant player due to the sheer scale of the project, decent grade, shallow deposit, stable jurisdiction, and the quality of the end product which is only just starting to be unveiled. **Given all these positive attributes, we update our coverage of Blencowe with a Conviction Buy stance and a target price of 19.1p.**

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