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ASX ANNOUNCEMENT / MEDIA RELEASE
2 September 2022

Annual Mineral Resource & Ore Reserve Statement as at 30 June 2022

Key Highlights

- **0.7Mt growth in reported Ore Reserves for the BBM Project to 23.8Mt, representing an increase of 3% year-on-year.**
- **No change to BBM's large 260Mt metallurgical coal Mineral Resource estimate from 2021.**
- **Highly attractive financial metrics with a Net Present Value (NPV) for the BBM Project estimated at US$529.7m (A$770.0m)[a] and average annual EBITDA of US$94.1m (A$136.8m).[a]**
- **Lucrative opportunity to continue converting BBM's large 260Mt coking coal Mineral Resource to Ore Reserves, translating to anticipated future increases in forecast annual production and/or mine-life extensions.**
- **The upcoming drilling programme at the TBAR Project, contiguous to BBM and prospective for large-scale coking coal deposits, is anticipated to result in a maiden JORC Resource in 2023.**

Cokal Limited (**Cokal** or the **Company**) (ASX: **CKA**) is pleased to release its annual statement of Mineral Resources and Ore Reserves as at 30 June 2022.

This statement demonstrates the continued execution of Cokal's strategy of achieving low-cost, high-margin metallurgical coal production, with saleable production from Bumi Barito Mineral (**BBM**) (Cokal 60%) commencing Q3 2022.

Changes in Mineral Resources & Ore Reserves are driven by the continuing technical work undertaken at BBM, updated long-term coal price assumptions, and refinement of life-of-mine operating assumptions, including operating costs and development capital expenditure.

[a] AUD : USD 0.688

Cokal notes the significant and comprehensive technical work previously completed at BBM, including the A Feasibility Study undertaken by Resindo Resources & Energy Indonesia (Resindo), announced on 13 February 2014; and an Updated Feasibility Study, indicating significant reductions in BBM operating costs and capital costs, undertaken by Resindo, and announced 2 November 2016.

Ore Reserves as at 30 June 2022

	2022 Reserves (in-situ) - Mt			2021 Reserves (in-situ) - Mt			Annual change	
Project	**Proven**	**Probable**	**Total**	**Proven**	**Probable**	**Total**	**Mt**	**%**
BBM	13.8	10.0	**23.8**	13.8	9.3	**23.1**	**+ 0.7**	**+ 3%**

Note: The reported Ore Reserves Total are approximately 42% PCI coal and 58% Coking coal by coal type. The reported Ore Reserves and Mineral Resources represent the total tonnages for BBM, of which Cokal has a 60% interest. The reported Mineral Resources and Ore Reserves were calculated using a price of US$170/t for coking coal and US$160/t for PCI. Totals may not add due to rounding. Cut-off grade: minimum coal seam thickness of 0.30m.

Mineral Resources as at 30 June 2022

	2022 Resources - Mt				2021 Resources - Mt				Annual change	
Project	**Measured**	**Indicated**	**Inferred**	**Total**	**Measured**	**Indicated**	**Inferred**	**Total**	**Mt**	**%**
BBM	18.8	22.9	218.5	**260.2**	18.8	22.9	218.5	**260.2**	-	-

Note: There is no change in the Mineral Resource Estimate from 2021 for 2022. The reported Ore Reserves and Mineral Resources represent the total tonnages for BBM, of which Cokal has a 60% interest. The reported Mineral Resources and Ore Reserves were calculated using a price of US$170/t for coking coal and US$160/t for PCI. Totals may not add due to rounding. Mineral Resources are reported inclusive of Ore Reserves. Cut-off grade: minimum coal seam thickness of 0.30m.

BBM Coking Coal Project

BBM is a high-quality metallurgical coal project located in the Central Province, Kalimantan, Indonesia with an area of approximately 14,980ha. BBM is currently under development with first production scheduled for Q3 2022.

Table 3: BBM Reserves & Resources

	Reserves (in-situ) - Mt			Resources - Mt			
Project	**Proven**	**Probable**	**Total**	**Measured**	**Indicated**	**Inferred**	**Total**
BBM	13.8	10.0	**23.8**	18.8	22.9	218.5	**260.2**

Note: The reported Ore Reserves and Mineral Resources represent the total tonnages for BBM, of which Cokal has a 60% interest. The reported Mineral Resources and Ore Reserves were calculated using a price of US$170/t for coking coal and US$160/t for PCI. Totals may not add due to rounding. Mineral Resources are reported inclusive of Ore Reserves. Cut-off grade: minimum coal seam thickness of 0.30m

Estimation Methodology and Assumptions

The reported Mineral Resources and Ore Reserves in this Announcement have been prepared in accordance with the 2012 Edition of the "Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves" (the **JORC Code 2012**) and the ASX Listing Rules.

In accordance with the requirements for reporting an Ore Reserve under the JORC Code 2012, Cokal has determined a mine plan and production schedule that is technically achievable and economically viable.

Proved and Probable Coal Reserves are derived from the respective Coal Resource classifications in accordance with the JORC Code 2012. Ore Reserves were estimated only on the Measured and Indicated portions of the Mineral Resource Estimate. The Ore Reserves are reported to a coal seam thickness cut-off of 0.3m in line with the reporting of the Resources.

Based on guidelines specified in the JORC Code 2012 Measured Resources falling within the practical pit designs have been mostly classified as Proved Ore Reserves (depending on relevant modifying factors) and all Indicated Resources falling within the practical pit designs have been classified as Probable Ore Reserves.

The Mineral Resources in the report are reported inclusive of Ore Reserves.

The mining loss and dilution applied to the resource model in the estimation of the Ore Reserves:

Item		PCI
Minimum mineable coal thickness	(m)	0.3m
Minimum mineable parting	(m)	0.3m
Mining loss	(m)	0.05m
Dilution thickness	(m)	0.05m
Waste ash	% adb	80
Waste density	t/bcm	2.2

Coal testing indicates no deleterious elements exist which would have a material impact on the marketability of the coal products.

The relevant material assumptions are detailed below:

Key Financial Metrics [b]

Coking coal price - Realised Life-of-mine (**LOM**) Avg	US$/t FOB	170
PCI price - Realised LOM Avg	US$/t FOB	160
EBITDA – LOM	$m	US$940.9m / A$1,367.5m
EBITDA – Avg. Annual	$m p.a.	US$94.1m / A$136.8m
NPV	**$m**	**US$529.7m / A$770.0m**
Pay-back-period	years	< 1 year

Key Operating Metrics

Saleable production capacity – Annual	Mtpa	2.0
Saleable production – LOM	Mt	18.8
Product mix - Coking / PCI	%	58 : 42
Coal processing	method	Dry screening
Recovery (estimated)	%	85%
Mine life	years	10
Mine type / method		Open-cut, truck & shovel
Mining loss	%	2%

Operating Costs – Life of Mine

Item		**Coking**	**PCI**
Strip Ratio	bcm/t	24.9	16.7
Overburden Removal	US$/bcm	2.2	2.3
	US$/ROM t	54.4	38.5
Coal mining & haul to jetty	US$/prod. t	19.5	19.6
Loading on Barge	US$/prod. t	1.5	1.5
Barging to port	US$/prod. t	10.0	10.0
Ship loading	US$/prod. t	2.0	2.0
Corporate overheads / Royalties	US$/prod. t	20.1	20.1
Total Operating Cost – FOB inc. Royalties	**US$/prod. t**	**107.5**	**91.7**

[b] AUD : USD 0.688

Life-of-Mine Capital Expenditure (inclusive of development and sustaining capital) [c]

Item	US$m	A$m
Pre-Mining Cost	0.9	1.3
Working Capital	4.5	6.3
Road upgrade (2 years)	7.5	10.6
BBM Infrastructure (breaker/dry screen processing, jetty, and ISP)	14.2	20.0
Contractor Infrastructure (camp, workshops, and magazine)	4.7	6.6
Total	**US$31.8m**	**A$44.9m**

Note: Cokal has to spend US$0.9m (out of $4.6m total) in pre-production capex before mining commences in Sept 2022

Other relevant assumptions and information

Item	
Approvals / Permitting	• All approvals and permits in place for full mining operations and production. • The initial production licence IUP (Operation and Production) has been issued for a period of 20 years.
Mining Method and Assumptions	• Waste removal is a major cost in open cut coal mining, particularly at BBM where, because of the relatively high value of the coal, the volume of waste which can be economically removed for each tonne of coal is quite high. • To minimise waste haulage cost it is normal practice to dump waste into the previously mined out strips. Wherever possible this will be done when mining at BBM. Where the dip is too steep waste will be hauled to ex-pit dumps. This is reflected in the already contracted waste removal costs. • The mining contractor will use 100t class excavators to load 100t trucks to haul to dumps. • Coal mining will be by smaller excavators loading 30t trucks which haul to the nearby ROM facility. • Mining will proceed by removal of waste in strips uncovering the coal with all waste dumped in ex-pit dumps or along strike up to but not covering the mined out highwall. • Mining loss will be 2% with minimal coal dilution.
Processing method and assumptions	• The BBM PCI product will not require processing, it will be direct shipped. • BBM Coking coal mined from the pits will be fed via a ROM hopper to a relocatable feeder-breaker and dry screen located in the pit as close to the current mining operation as possible to facilitate the handling of rejects from the screen. • The feeder-breaker and dry screen will reduce the ash content of the ROM coal from 10% to 13% ash to sub 9% ash with 85% recovery. • By the end of Year 2 a coal processing plant based on a jig process will be considered which would replace the dry screen and further reduce the product ash of the coking coal to approximately 7%.
Infrastructure	• A full infrastructure solution is in place. • Cokal will access the lucrative coking coal seaborne export market through a logistics chain of: 1. **Trucking** from the BBM mine site 98km to a barge loading Stockpile facility on the Barito River 2. **Barging** to an Intermediate Stockpile at Buntok for domestic sales and/or trans-shipment to larger barges for transport to the common-user shiploading facility at Taboneo at the mouth of the Barito River 3. **Shiploading** at the common-user shiploading facility onto seafaring vessels.

[c] AUD : USD 0.688

Work completed during the period

During the 12-months to 30 June 2022, the following work has been completed at BBM:

1. **Construction of Hauling Road from Km52 to Pit-3, Km94**
   i. The 1st section from Km52 to Sg. Mohing, Km70 completed except for minor improvements
   ii. The 2nd section from Km70 to Km84 in progress - done up to Km78
   iii. Breaking of rock cliff/hill in progress. about 7,500-m3 done (Total = 17,700 m3)

2. **Construction of Krajan (Sg. Barito) to Pit-3, Km97 Hauling Road and Krajan Coal Loading Jetty**
   i. Construction of hauling road from Krajan to Pit-3 completed up to Km98 (7 km done)
   ii. Krajan stockpile completed except for final levelling and the sediment ponds
   iii. Coal loading jetty in progress - loading using the Grab Crane onto barge method
   iv. Land acquisition of Pit-3 area = 347 ha completed and ready for land clearing.

3. **Batu Tuhup Coal Loading Jetty**
   i. Earthwork in progress and about 47% as of 30 June 2022
   ii. Tendering for the construction of the Coal Loading Facilities in progress - tenderers selected.

Coal quality analysis

BBM coking and PCI coal products have attractive attributes with low ash, low volatiles, low sulphur, high vitrinite and ultra-low phosphorus.

Coking Coal Specifications

Yield	Moisture	Ash	VM	Fixed Carbon	Total Sulphur	Calorific Value	CSN	Relative Density	Phos.
84.2%	8.0%	9.0%	18%	76.1%	0.44%	8,287 Kcal/kg	9.0	1.32	0.007%

PCI Coal Specifications – ADB

Seam	Inherent Moisture	Ash	VM	Fixed Carbon	Total Sulphur	Calorific Value	Relative Density	Phos.
D	2.0%	3.0%	9%	85%	0.48%	8,150 Kcal/kg	1.36	0.001%
C	1.5%	3.5%	9%	85%	0.44%	8,250 Kcal/kg	1.36	0.002%
B	1.5%	7.0%	9%	80%	0.47%	7,750 Kcal/kg	1.38	0.005%

BBM Coal Marketing & Sales Price

BBM will market two coal products, being coking coal and PCI coal. The Ore Reserves contain the coal types in the following quantities:

	2021 Reserves (in-situ) - Mt		
Product	**Proven**	**Probable**	**Total**
Coking	7.2	5.8	**13.0**
PCI	6.6	4.2	**10.8**
Total	**13.8**	**10.0**	**23.8**

Note: The reported Ore Reserves and Mineral Resources represent the total tonnages for BBM, of which Cokal has a 60% interest. The reported Mineral Resources and Ore Reserves were calculated using a price of US$170/t for coking coal and US$160/t for PCI. Totals may not add due to rounding. Cut-off grade: minimum coal seam thickness of 0.30m.

The increase in estimated Ore Reserves this year has come from PCI coal.

As discussed in the 2021 Annual Mineral Resource & Ore Reserve Statement (announced to the ASX on 28 September 2021), a marketing study for BBM coal was undertaken by Platts in early 2021. The marketing study, based on the BBM's coal quality specifications for coking and PCI coal products, determined the Platts category applicable for BBM coals, and therefore the prices expected from the market at that time. Prices used were US$170/t for coking coal and US$145/t for PCI coal. Although the quality specifications and Platts categories remain unchanged this year, since then there have been a number of developments in the world seaborne coal market. In particular PCI coal prices have risen (and closed the gap between PCI and coking coal prices). The influencing factors include i. Russia's invasion of the Ukraine, which resulted in restricted trade imposed in PCI coals from Russia sold to European steelmakers, and ii. China lifting restrictions on domestic coal mining, and re-stocking after the COVID pandemic. Other market shocks have the potential to increase or decrease future seaborne coal prices, however, Cokal is of the belief that there is an underlying long term trend (at least for the next 3 to 5 years) that will see PCI coal prices remaining elevated.

Cokal has concluded that for the 2022 reserves update:

i. an appropriate life-of-mine average selling price for BBM coking coal remains at US$170/t. This is the same as the 2021 estimate and is quite conservative given the Platts Premium Low Vol price in August 2022 stands at US$200/t; and

ii. an appropriate life-of-mine average selling price for BBM PCI coal is increased to US$160/t. This differs from the 2021 estimate of US$145/t. This is also quite conservative given that the Platts Low Vol PCI price in August 2022 also stands at US$200/t as well as understanding the expectation that BBM PCI coal will also attract a 10% premium above indexed prices.

This increase in the projected PCI coal price for 2022 has contributed to an increase in the tonnage of economically mineable PCI coal from BBM. Economically mineable coking coal tonnage remains unchanged compared to 2021.

Future Growth Opportunity:

Tambang Benua Alam Raya ("TBAR") (CKA 75%)

TBAR is contiguous to BBM and prospective for large-scale coking coal deposits:

- JORC Resource anticipated in 2023, subsequent to upcoming drill programme
- Material future development and operational synergies with BBM

Project Overview

- Located in Central Kalimantan, Indonesia; adjacent to BBM
- Cokal holds a 75% interest and is the project manager
- Large 18,850 ha. project area holding potential for extensive coal resources
- The coal haul road from BBM traverses the TBAR tenement

Prospectivity

- Contiguous to BBM and prospective for another "BBM-style" major coal deposit
- Geological mapping has identified 58 outcrops
- 11 outcrops mapped and sampled
- 4 outcropping seams appear to correlate with the B, C, D and J seams from BBM
- Analyses indicate coal quality similar to BBM

Drilling Programme

- Deposit resource delineation drilling to commence in Q4 2022 and completed by H2 2023
- Comprises open hole drilling, coring and geophysical logging
- Cores will be sampled and analysed to determine coal quality and geotechnical parameters
- All holes suitable as points of measurement for JORC Resource estimation

JORC 2012 and ASX Listing Rules Requirements

The Mineral Resource and Ore Reserve statement included with this announcement has been prepared in accordance with the 2012 Edition of the "Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves" (the **JORC Code 2012**) and the ASX Listing Rules.

For this 2022 Ore Reserve estimate update, a summary of assumptions and considerations in accordance with the JORC Code 2012 and ASX Listing Rules 5.8 and 5.9 is tabulated on the following pages. A Table 1 Section 4 information summary is provided to support this new Ore Reserve estimate update. The BBM 2022 Mineral Resource estimation update is unchanged from 2021.

Mineral Resource and Ore Reserve Governance & Internal Controls

Cokal has governance arrangements and internal controls in place with respect to its estimates of Mineral Resources and Ore Reserves and the estimation process within BBM and evaluation of future projects, such as the TBAR Project, including:

- oversight and approval of each annual statement by the Technical Director;
- establishment of internal procedures and controls to meet JORC Code 2012 compliance in all
- external reporting;

- independent and/or internal review of estimates;
- annual reconciliation with internal planning to validate reserve estimates for near-term production mines; and
- Cokal Board approval of new and materially changed estimates.

Competent Persons Statement

This Annual Ore Reserves Estimate in respect of the BBM Project, is based on, and fairly represents, information and supporting documentation prepared by a competent person. The Ore Reserves Estimate as a whole has, as to the form and content in which it appears, been approved by Mr David (Allen Clive) Delbridge. Mr Delbridge is a Competent Person and a member of the Australasian Institute of Mining and Metallurgy and an employee of the Company. Mr Delbridge is employed by Cokal (60% owner of the BBM project) in the role/position of non-executive Director. Mr Delbridge has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Delbridge consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The reporting of Coal Resources for the BBM Project has been carried out in accordance with the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code), prepared by the Joint Ore Reserves Committee, December 2012. The information in the report to which this statement is attached, that relates to the Coal Resources of BBM, is based on information reviewed by Mr Luki Wilianto, who is a Member of The Australian Institute Mining and Metallurgy (AusIMM) and is a full-time employee of Cokal. Mr Wilianto has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Wilianto consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Approval

This release has been approved by the Board of Directors of Cokal.

ENDS

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This ASX announcement was authorised for release by the Board of Cokal Limited.

About Cokal Limited

Cokal Limited (ASX:CKA) is an Australian listed company with the objective of becoming a metallurgical coal producer with a global presence. Cokal has interests in four projects in Central Kalimantan, Indonesia considered prospective for metallurgical coal.

Forward Looking Statements

This release includes forward looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as “may”, “will”, “expect”, “intend”, “plan”, “estimate”, “anticipate”, “continue”, and “guidance”, or other similar words and may include, without limitation statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the company’s actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of resources or reserves, political and social risks, changes to the regulatory framework within which the company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward looking statements are based on the company and its management’s good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the company’s business and operations in the future. The company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the company’s business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the company or management or beyond the company’s control.

Although the company attempts to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be anticipated, estimated or intended, and many events are beyond the reasonable control of the company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements.

Forward looking statements in this release are given as at the date of issue only. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the company does not undertake any obligation to publicly update or revise any of the forward looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

APPENDIX 1: JORC CODE 2012 ASSESMENT AND REPORTING CRITERIA

Section 1: Sampling Techniques And Data

Criteria	JORC Code Explanation
Sampling techniques	• Core samples of the coal seams were drilled using standard triple tube diamond core barrels of HQ (62mm) size. • The cores were logged by a geologist whilst they remained in the core barrel splits, so that there was minimal disturbance to the core. After the geological logging, a photograph of the core in the core barrel splits was taken to provide a permanent record of the condition of the core. • Subsequently, the core is wrapped and sealed in plastic to retain the moisture of the coal for the determination of Total Moisture content. It takes on average about 30 minutes for the geologist to log and photograph the core before sealing it in plastic wrap. The core is placed in the core boxes until the borehole is completed and a geophysical log of the borehole has been recorded. • Once the core recovery has been confirmed as acceptable to the JORC Code requirements, the coal cores are placed into thick sample bags together with the plastic wrapping to ensure all moisture is captured and measured to determine Total Moisture content. A sample identification tag is placed inside the sample bag and the sample bag is sealed by either tie-wire of masking tape, again to ensure no moisture loss. • Once the sample is sealed, it is immediately transported to Australian laboratories for analytical testing. It takes about 4 to 5 days for the core samples to be transported from the drill site to the Australian laboratory. The laboratory has commented that the core samples arrive in peak condition for testing, especially for testing coking properties. Outcrops of coal seams were also sampled for analysis. Coal outcrops were cleared such that a square channel sample could be taken, to ensure a true representation of the full seam (from roof to floor) had been sampled. • The outcrops samples were immediately sealed in plastic sample bags and sent to a local laboratory, CCIC in South Kalimantan for analyses within 2 to 3 days of the samples been acquired. Recently the coal samples were sent to Anindya Lab in South Kalimantan. • The actual coal product samples that have been taken from the “The Mine Initial Start-up BBM Anak Project”, which was held during on the mine period of July 2017 to March 2018, indicated that the B, C, and D seam quality are within the range of coal quality model data which is described in the previous model of 2020. Accordingly, the previous coal quality exploration data and quality model could be used for the current updated model in 2021.
Drilling techniques	• As mentioned in the previous JORC Coal Resources Report 2016, since BBM was a green-field project, and to ensure satisfactory core recovery, Cokal drilled a Pilot Borehole on each site which was open-holed to the target coal seams. A PCD drill bit was used to drill the open-hole using water circulation to remove the chips from the borehole. These Pilot Boreholes were subsequently logged using geophysical sondes to determine the depth, thickness and correlation of the coal seams. • This information was used to plan a cored borehole on the same drill site. The drill rig would open-hole down to a few metres above each coal seam, then proceed to core the roof, coal seam and floor using a triple-tube HQ core barrel. • A suite of geophysical logs would be recorded for the partially cored borehole to ensure an accurate seam thickness is determined for core recovery estimation.
Drill sample recovery	• All boreholes were geophysically logged with a suite of sondes including Gamma- Gamma, Long Spaced Density, Short Spaced Density, Caliper, and Sonic. These logs provided an accurate delineation of each coal seam in terms of depth and thickness, as well as providing a vital tool to determine the correct seam correlation from borehole to borehole. • Upon removal from the triple-tubed core barrel, the core remains in the core barrel inner split tube which is handed over to the site geologist. The geologist removes the upper split and proceeds to measure, marked up and photograph the core with a photo board signage. The measurement of the coal core is recorded for subsequent reconciliation with the geophysical log estimate of seam thickness. • The core was generally recovered as complete sticks of core. However, if the core was broken, it was compressed in the core splits so as to form a close resemblance to a solid stick of core.

Criteria	JORC Code Explanation
	The core recovery measurement would be conducted on the solid sticks and compressed broken core pieces to determine a true core recovery result. • All core samples were measured to ensure they achieved a minimum recovery of 90% or greater. Failure to do so would invoke the redrill clause in the drill contract whereby the driller would re-drill the partially cored borehole at their expense until they achieved a recovery of 90% or greater. The overall average core recovery achieved was 95%. • Upon further review and comparison of coal quality analytical results between recent outcrop channel samples and nearby earlier borehole core sample results, it is now believed that these early core samples were significantly contaminated with drill mud and non-coal material which collapsed in the borehole from above the seams. These earlier borehole samples are considered by the Competent Person as anomalous. • Consequently, appropriate ash cut-offs have been applied to exclude borehole core sample analyses from the estimation of Coal Resource quality attributes. For Seams B, C and D, an Ash cut-off of greater than 16% was applied, whilst for Seam J an Ash cut-off of greater than 20% Ash was applied.
Borehole Geophysical Logging	• Core samples have been geologically (full lithological description) and geotechnically (visual defect) logged to a standard appropriate for mineral resource estimation and mining studies. Cokal's rig supervising geologists conducted the logging and adopted the new Australasian CoalLog standard as supplied by AusIMM. • For openhole sections of the boreholes, 1m chip samples were recorded and sampled. The lithological description of the chips was conducted at the appropriate level for this type of sample. During openhole drilling, chip samples were collected at 1m intervals and core samples were collected in 1.5m core barrels. All chip and non-coal core samples are held in storage and all core samples have been photographed. Coal core samples have been dispatched for analysis. • The geological logs were recorded over the entire borehole including both openhole and cored sections of the boreholes.
Sub-sampling techniques and sample preparation	• Where non-coal partings within a coal seam exceed 0.3m in thickness, the coal seam is sampled into separate plies Each ply (whether it is coal or non-coal) is sampled in individual sample bags and analysed separately. The core is wrapped and sealed in plastic to retain the moisture of the coal for the determination of Total Moisture content. It takes on average about 30 minutes for the geologist to log and photograph the core before sealing it in plastic wrap. The core is placed in the core boxes until the borehole is completed and a geophysical log of the borehole has been recorded. • Once the core recovery has been confirmed as acceptable to the JORC Code requirements, the coal cores are placed into thick sample bags together with the plastic wrapping to ensure all moisture is captured and measured to determine Total Moisture content. A sample identification tag is placed inside the sample bag and the sample bag is sealed by either tie-wire of masking tape, again to ensure no moisture loss. • Once the sample is sealed, it is immediately transported to Australian laboratories for analytical testing. It takes about 4 to 5 days for the core samples to be transported from the drill site to the Australian laboratory. The laboratory has commented that the core samples arrive in peak condition for testing, especially for testing coking properties. • Sample preparation is conducted by ALS Laboratory in Richlands, Queensland. Splitting and reserving of samples is conducted in accordance with the procedure sheet, enabling retesting/duplication of results if required. Reserved sample material is kept in refrigerated storage for at least 4 months. • All actual coal product samples from "The Mine Initial Start-up BBM Anak Project" mine operation during the period of July 2017 to March 2018, have been taken by the "trucks' incremental methods" under supervision by Yoga Suryanegara. These samples were taken from 3 (three) types of coal products, which are coal samples from weathered zone, coal samples from slightly weathered zone and coal samples from fresh condition. Coal samples from weathered zone have high dillution material content and from coal samples from slightly weathered zone have moderate dillution, whereas coal samples from fresh condition have low dillution material content.
Quality of assay data and laboratory tests	• The coal quality analysis procedures were devised by Pat Hanna (Coal Resources Competent Person - Fellow AusIMM; Peer Review: Updated Coal Resources of BBM Project Central Kalimantan Indonesia – April 2016), an experienced consultant, in conjunction with A&B Mylec, specialist in managing coking coal analytical testing and interpretation of the results.

Criteria	JORC Code Explanation
	These procedures were presented to the ALS coal laboratory at Richland where the coking coal analyses were conducted. ALS conducted the analytical testing in accordance with the Australian standards and the laboratory is NATA accredited ensuring a high quality of analysis and data management. The laboratory and its accreditation documentation were inspected by Pat Hanna prior to sending samples to ALS. • For coal outcrop channel samples, analyses were conducted by the CCIC laboratory in Banjarbaru, South Kalimantan. Duplicate samples were sent to ALS and CCIC and the results were shown to be very close. The accreditation documentation for the CCIC laboratory was inspected by Pat Hanna. Recently, the coal samples were analyses at Anindya Lab in Banjarbaru, South Kalimantan. • All actual coal product samples from "The Mine Initial Start-up BBM Anak Project" mine operation during the period of July 2017 to March 2018 have been analysed by the IOL Bureau Veritas laboratory in Banjarbaru, South Kalimantan. The accreditation documentation for the IOL laboratory was inspected by Yoga Suryanegara prior to sending samples to this laboratory.
Verification of sampling and assaying	• Each borehole is geophysically logged with a suit of sondes appropriate for the coal industry. These geophysical logs are used to determine the appropriate ply sampling of coal seam cores. These ply sample intervals are correlated using geophysical logs of nearby boreholes to ensure continuity of ply sampling throughout the tenement. • The geophysical logs are also used to correct the seam/ply depth intervals including any core loss intervals. These corrected intervals from the geophysical logs are used to correct the geologist's lithological logs as well as the sampling seam/ply intervals. • Upon receiving the samples, the laboratory sends a verification notice of the date received to Cokal and the sample weight and identification number is verified by Cokal. • Coal samples acquired from coal outcrops were sampled using channel sampling technology. This ensured a true representative of the entire coal seam, from the roof to the floor, was adequately sampled and analysed. • Coal samples acquired from actual composite coal product of B, C, and D seam were sampled using the ASTM "trucks' incremental methods" standard, where a total of 35 tons sample incremental were taken from every 1,000 tons of coal products which were loaded by truck. The composite of incremental coal sample products were represented by the composition of each coal seam product. This ensured a true representation of the entire coal seam composite from the actual blending coal product of B, C, and D seam, which was adequately sampled and analysed.
Location of Data Points	• Shallow boreholes are positioned near coal seam outcrops to verify the seam correlation and to take a fresh sample for analysis of coking properties. Deep stratigraphic boreholes are generally spaced 2km apart in order to determine the sequence of the coal seams. • Seam outcrops and borehole collar coordinates were surveyed using a Handheld GPS system with an X, Y coordinate accuracy of ±5m. The accuracy of elevation of these data points was found to be ±50m and were subsequently adjusted to the topographic model derived from the LIDAR survey data which has an elevation accuracy of ±0.15m in clear areas and ±1m in heavily vegetated areas.

Data spacing and distribution	• Borehole spacing was planned to provide confidence to facilitate Coal Resource estimation in accordance with the JORC Code.
	• Shallow boreholes are positioned near coal seam outcrops to verify the seam correlation and to take a fresh sample for analysis of coking properties. Deep stratigraphic boreholes are generally spaced 2km apart in order to determine the sequence of the coal seams.
	• With the recent borehole data, the detail correlation of seam across the eastern part of BBM tenement has demonstrated a consistency and continuity of coal attributes on a seam basis. Based on this consistency of coal seam geology, the categorisation of the Resources is based upon the following observations:
	  ○ Measured Coal Resources are based on boreholes and coal seam outcrops spaced up to 500m apart
	  ○ Indicated Coal Resources are based on boreholes and coal seam outcrops spaced up to 1,000m apart
	  ○ Inferred Coal Resources are based on boreholes and coal seam outcrops spaced up to 4,000m apart.
	• The BBM project area consists of all categories of resources, with Measured, Indicated and Inferred Resources attributed to the B, C, D and J Seams. The Inferred Resources have been estimated to extend up to 1km from the outermost boreholes. This extension beyond the

Criteria	JORC Code Explanation
	borehole data is supported by the extensive continuation of coal outcrops observed in the surface mapping of the BBM project area.
Orientation of data in relation to geological structure	• In accordance with coal industry best practices for shallow dipping coal seams, all boreholes were orientated and levelled to produce vertical (90 degree) holes. The seams are known to dip at shallow angles between 5 and 20 degrees. • A few major structural discontinuities (vertical displacement >50m) have been delineated by the current drilling results. However, further drilling is required to determine the position of these features more accurately. • Smaller structural features have not been detected in outcrop mapping or from drilling results to date. Further close spaced drilling is required to confirm whether or not they exist in BBM.
Sample security	• All non-coal samples are stored on Cokal premises. All coal core samples are packaged in two thick plastic sample bags and labelled both externally and with a sample label tag placed inside the bags before sealing. Samples are dispatched to the Balikpapan by a courier on contract to Cokal. The samples are presented to international courier, DHL, with the appropriate documentation required to be verified and permitted to cross international borders in order to deliver the samples to ALS Laboratories in Brisbane, Australia. • Any sample material remaining after analytical testing is preserved by ALS in sealed bags and stored in refrigerated containers until analyses have been finalised to Cokal's satisfaction.
Audits or reviews	• The processes and procedures followed by the laboratory are reviewed by both Pat Hanna as well as independent coal quality consultants, A&B Mylec. • All analytical results are also reviewed and validated by both Cokal and A&B Mylec.

Section 2: Reporting of Exploration Results

Criteria	JORC Code Explanation
Mineral tenement and land tenure status	• Exploration License IUP 188.45/232/2012 was awarded by the Head of the Murung Raya Regency Government of Central Kalimantan Province (Bupati) to PT BBM (Indonesia) on 18 July 2012 for a period of 2 years, covering an area of 19,400ha in the Seribu Riam and Sumber Barito District, Central Kalimantan Province. This exploration licence is an extension of the previous licence IUP 188.45/273/2010 which was awarded on 1 September 2010. • On 30 May 2012, the BBM IUP was listed on the Central Government's Clean and Clear List. On 23 April 2013, BBM's IUP was converted to Produksi status 188.45/149/2013, equivalent to a mining license, for a period of 20 years, with an option to extend for two 10-year periods subsequently.
Exploration done by other parties	• Until Cokal started exploration activities on BBM in January 2011, no other exploration had ever been conducted within the BBM tenement. Cokal is currently responsible for all exploration activities on BBM and no other party has been involved in exploring BBM.
Geology	• The geology of BBM is typical for coal geology deposits comprising sedimentary strata dipping 5 to 20 degrees and minimal structural disturbance, The dominant formation is the Haloq Sandstone Formation (of Late Eocene age) which consists of 9 coal seams. Four of these seams are the primary target of the exploration activities and this JORC Resource report. • Government geological maps are believed to have been compiled from aerial photography without any on-the-ground verification. Based on the recent drilling program and an extensive field geological mapping survey, Cokal has proven some of the information on the Government maps to be incorrect and misleading. • To date, there has no evidence of igneous intrusions intersecting the coal seams.
Drill Hole Information	• A summary of the borehole collar surveys and seam intersections are listed in the Mineral Resource Report. Further information is provided throughout the Mineral Resource Report including core size, drilling methods etc. • All boreholes have been logged using a suite of downhole geophysical sondes typical for coal exploration. This information is essential in determining the corrected coal seam intersections and correlations, and thus the borehole data used in determining the Coal Resources in the Mineral Resource Report is considered to be reliable information.
Data aggregation methods	• Coal seam cores were sampled and analysed in plies (sub-samples). • The coal quality data is subsequently reported on a seam basis (i.e. where multiple ply samples from within a seam are composited together) and weighted by default using thickness and density of each ply (except for the variable Relative Density itself).

Criteria	JORC Code Explanation
Relationship between mineralisation widths and intercept lengths	• The coal seams were deposited horizontally, and due to minimal post depositional tectonic activity, these seams dip between 5 and 20 degrees and subcrop on or near the surface. The thickness of these seams is also directly related to the depositional environment. • All seam intercepts reported in boreholes are reported on a 'down-hole basis', and given the slight dips of the seams, it is considered appropriate to do so. Down-hole geophysical logs are used to confirm the true thickness of the coal seams. • The roof and floor contacts of each seam are in general quite sharp with the immediate lithology either siltstone or fine sandstone.
Diagrams	• Geological plans and sections are generated from the geological model. These reflect both the raw and modelled borehole data. • Sections and maps have been included in the Mineral Resource Report, particularly in the Appendices.

Balanced reporting	• The nature of the coal deposit in BBM is typical of a Maruwai Basin coal deposit in Central Kalimantan, Indonesia.
	• The seams are continuous over tens of kilometres with minimal structural deformation, enabling the economic extraction of coal by both open pit and underground coal mining methods.
	• Consequently, a drilling program has been designed to achieve two objects:
	  ○ The delineation of Measured and indicated Coal Resources over the immediate area of initial open pit mining to enable early cash flow for the project.
	  ○ The delineation of the continuity and potential (Inferred Coal Resource) of vast tonnages of coal which will be the target of infill drilling programs to increase the Measured and Indicated coal tonnages for future mining.
	• It is therefore deemed by Cokal that a balance report has been produced which demonstrates the initial economic viability of the coal project and the future sustainability of the deposit to provide a significant return for Cokal's shareholders and investors.

Other substantive exploration data	• There is no other substantive exploration data available for BBM at this stage.

Further work	• Further exploration work is planned for the following purposes:
	  ○ To increase the categorisation of Inferred Coal Resources to Measured and Indicated Resources. BBM note the area between pit 3 and pit 4 has been potentially to be open pit area is currently in the Inferred Resources category.
	  ○ To more accurately delineate and assess the nature of the structural features and assess their impact (if any) on the mining methods to be adopted at BBM.
	  ○ Further analytical work focussing on coking coal attributes, in particular coke strength index, and ash liberation.

Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code Explanation
Database Integrity	• Drilling data were supplied as a excel files which were validated before upload to the database and geological modeling.
Site Visits	• Yoga Suryanegara (Competent Person – who managed and supervised the previous exploration program and also the author of the previous BBM JORC Resources Report in 2016) and Pat Hanna (who was Peer Reviewer on the previous BBM JORC Resources Report in 2016) have conducted various site visits to BBM tenement, usually once every two months since January 2011. Luki Wilianto (Competent Person - who is the current author of this updated BBM JORC Resources Report 2021) have also conducted site visits since joining Cokal since July 2019. These visits included the verification of exploration field procedures including geological logging and sampling, geophysical logging, the condition of the core recovery and the inspection of coal seam outcrops.
Geological Interpretation	• The level of confidence in the interpretations of coal is reflected by the coal resources classification. Alternative geological interpretations may be developed with further drilling. Competent person believes that in this stage the potential coal is feasible for open pit mining. For underground mining there is a need for further study and additional data. The coal deposit resources for the proposed underground mining method is predominantly reported as Inferred Resources.

Criteria	JORC Code Explanation
	• Faults were interpreted based on drillhole data. It is possible to update when the interpretation continued to getting the higher confidence level. • Validation and adjustment of coal seam / ply nomenclature and correlations, as well as fault interpretations, through iterative modelling runs and examination of resulting contour plans and cross sections was completed.
Dimensions	• This area is in the order of 4,500ha representing about 30% of the entire BBM tenement. The coal resources estimate up to depth 500 m. Which open pit resources estimates up to depth 150 m, then more than 150 m depth estimated for potential of underground mining.
Estimation and modelling techniques	• The structural model was validated by inspection of the floor and thickness contours, subcrop limits and pinch out of each seam in relation to the drillhole logged intervals, as well as numerous cross sections. • The quality model was validated by inspection of raw data quality and statistics of composite quality.
Moisture	• Moisture has been recorded in the coal quality analyses of the composite samples for "Total Moisture" as well as for "Air Dried Moisture". Resource estimates were conducted and reported using Air Dried Relative Density (RD).
Cut off Parameters	• The minimum coal seam thickness used for Coal Resource estimation is 0.30m for open pit potential area and 0.5m for underground potential area.The seams have been constrained by the base of weathering. Coal within the weathering zone is excluded from the Resource estimates. • Cut-offs have been applied to analytical results because it has been determined that some of the earlier borehole core samples may have been contaminated with drilling mud and non-coal material which collapsed in the borehole from above the seams, as the ash content from this initial drilling is significantly higher (e.g. Seam D in borehole BBM004 has 32.5% Ash) than adjacent outcrop channel samples and other boreholes (e.g. Seam D in borehole BBM002 has 4.0% Ash and out crop samples range from 1.0% to 3.2% Ash) estimates. • Consequently, it is the opinion of the Competent Person that the very high (greater than 16%) Ash results for any coal core samples for Seams B, C and D should be eliminated from the estimation of coal quality of the Resources. • The absence of C seam in borehole BBM-110 or the absence of D seam in boreholes BBM-108, BBM-110, BBM-111, and BBM-112 had been interpreted as caused by the washed-out process. Therefore, the isopach thickness of both C and D seams were interpreted as the thining process to become zero thickness within those boreholes, accordingly. Thus, referring in the previous 2016 BBM JORC Report, the coal resources estimated of both C and D seams within those boreholes and the surrounding area has been included on inferred resources boundary. However, seams with a thickness of less than 0.5m will excluded by cut off 0.5 m thickness. The thinning to zero value of the C and D coal seam thickness interpretation which was caused by a washed-out process has also been applied in the current updated BBM JORC Coal Resources Model 2021.
Mining factors or assumptions	• No evaluation of mining methods was conducted in this Coal Resource report. However, Coal Resources were reported to depths up to 500m below topography. • Open pit mining methods will be used initially where the economics prove favourable. The study for the financial Break Even Strip Ratio estimation and pit optimization exercise to generate the various strip ratios has been undertaken. Based on the study, the coal resources for potential open pit has been estimated up to depth 150m below topography. • Referring to the previous BBM JORC Resources Report "Updated Coal Resources of BBM Project Central Kalimantan Indonesia – April 2016", The coal seams are generally thicker than 1m and the roof predominantly consists of very hard sandstone (up to 95MPa) while the immediate 1 m to 2m of roof consists generally of a competent siltstone. This combination is ideal for extraction of the deeper Coal Resources using underground methods such as thin-seam longwall mining. Underground coal mining in Borneo of similar coal seams in similar geological conditions can be found at depths of 500m using longwall mining methods. Consequently, Coal Resources were reported to depths up to 500m below topography.
Environmental factors or assumptions	• BBM received its AMDAL permit (environment assessment and planning approval) April 2013, granted by the Governor of the Province of Central Kalimantan in accordance with the laws of Indonesia. This permit allows Cokal to conduct open pit and underground coal mining as well as the construction of and coal haulage along a 52km haul road.

Criteria	JORC Code Explanation
	• However, based on the new current BBM Coal Project assessment, especially on technical, economic, environmental, and government legalpermit, the proposed coal terminal has been changed from Purnama to Bumban location which is located about 60kms southeast IUP tenement. Due to this new port location plan, the proposed coal haulage road change to become a total of 98kms distance, accordingly.
Bulk density	• No bulk density data has been collected at this time. The density used for the Resource estimates is the modelled RD for each coal seam as determined from the Laboratory coal quality analyses of the HQ core samples. Where the RD model did not cover the entire Coal Resource, a default density of 1.35 was used in the estimation of the resources.
Classification	• With the recent borehole data, the detail correlation of seam across the eastern part of BBM tenement has demonstrated a consistency and continuity of coal attributes on a seam basis. Based on this consistency of coal seam geology, the categorisation of the Resources is based upon the following observations: ○ Measured Coal Resources are based on boreholes and coal seam outcrops spaced up to 500m apart. Radius of influence 250 m from point of observations. ○ Indicated Coal Resources are based on boreholes and coal seam outcrops spaced up to 1,000m apart. Radius of influence greater than 250 until 500 m from point of observations. ○ Inferred Coal Resources are based on boreholes and coal seam outcrops spaced up to 4,000m apart. Radius of influence greater than 500 until 1000 m from point of observations. • The BBM project area consists of all categories of resources, with Measured, Indicated and Inferred Resources attributed to the B, C, D and J Seams. The Inferred Resources have been estimated to extend up to 1km from the outermost boreholes. • This extension beyond the borehole data is supported by the extensive continuation of coal outcrops observed in the surface mapping of the BBM project area.
Audits or reviews	• Yoga Suryanegara has peer reviewed this report. Yoga is previously work as Exploration manager at Cokal and now Yoga is a Principal Consultant at PARA Consulting.
Discussion of relative accuracy/confidence	• The borehole data is considered to be reliable for the purpose of reporting Coal Resources in accordance with the JORC Code. The current topographic data has been determined to be accurate to 1 m in elevation. This level of accuracy in the topographic surface and borehole data is considered to be within the accuracy of all Coal Resource categories reported.

Section 4 – Estimation and Reporting of Ore Reserves

Criteria	JORC Code Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. • Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of the Ore Reserves.	• Details of coal resources are presented above • The reported Coal Resources are inclusive of the Coal Reserves • Only measured and indicated resources were converted to the proved and probable reserves
Site Visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• Site visit has been made to this specific location and already familiar with the access, regional infrastructure and topography.
Study status	• The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. • The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically	• This study by BBM was done to the level of a Feasibility Study standard. • This Feasibility Study includes consideration of all Modifying Factors.

Criteria	JORC Code Explanation	Commentary
	viable, and that material Modifying Factors have been considered.	
Cut-off parameter	• The basis of the cut-off grade(s) or quality parameters applied.	• Seam B,C,D were classified as a PCI product and Seam J was classified as a coking product. Seam thickness was limited to a minimum of 0.30m.
Mining factors or assumptions	• The method and assumptions used as reported in the Pre- Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). • The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. • The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. • The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). • The mining dilution factors used. • The mining recovery factors used. • Any minimum mining widths used. • The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. • The infrastructure requirements of the selected mining methods.	• The Coal Reserves were estimated through the pit optimisation process, selection on the economic pit-shell and detailed practical final pit generation. • The pit optimisation shells were used as a basis for conversion to the practical pit designs. • Only open pit methods have been considered in this reserves study • The open cut coal mining method using shovel and trucks will be used. • Geotechnical studies for BBM by Australian Mining Engineering Consultant had been undertaken for the pit slope stability and the values reported have been used as a basis of design parameters. • Major assumptions used in the pit optimisation are total waste mining cost, total coal mining cost, overall slope, and also coal sales price. • Mining dilution of 0.05 m and coal loss of 0.075 m thickness for roof and floor are applied • The global recovery factor applied was 98% (ie global losses of 2%) • 20m was the minimum mining widths in the practical pit designs. Minimum coal thickness was set at 0.3m. • Any Inferred Resources were not included in this analysis. • All infrastructure requirements for the open cut mine operations have been taken into account such as stockpile, offices, maintenance workshops, power generation requirements, etc.
Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. • Whether the metallurgical process is well-tested technology or novel in nature. • The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. • Any assumptions or allowances made for deleterious elements. • The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	• The ROM coking coal produced at BBM is planned to be processed. The processing method selected is a standard industry approach, noting that the start up process will be simple dry screening potentially followed by a more fully developed, well-established washplant technology. . • A coal preparation study was undertaken by A&B Mylec in 2013. • This study examined the washability of Seam J coking coal. Cokal reports that the other PCI seams only require crushing prior to sale. The overall processing recovery is estimated at 85%. However this estimation will be updated by actual data upon commencement of operations and during LOM mining progress.

Criteria	JORC Code Explanation	Commentary
	• For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	• Coal testing indicates no deleterious elements exist which would have a material impact on the marketability of the coal products. • A channel sample was taken from the PCI Seams B,C,D and Coking J Seam in February 2021 and tested. These samples were taken beneath the weathering profile showed that the seams exhibited better properties. Within each seam the consistency of the quality variables from hole to hole suggest that the sampling is representative of the deposit as a whole. • The sampling and testing of the coal supports the planned marketing of the coal.
Environmental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	• All environmental approvals are currently in place to operate the mine. • The project status has been confirmed as "Clean and Clear" by the regional government with certificate No. 26/13b/03/2013 • There is a Permanent Production Forest covering most of the BBM project area, however the company has obtained a "Borrowing Use" (Pinjam Pakai) permit which allows mining to proceed. There is also a Limited Production Forest located in the far east of the project area which, because it is well outside the proposed mining areas will have no impact on the estimation of Reserves within the BBM project area. There are no other known environmental issues that would influence the estimation of Reserves within the BBM project area.
Infrastructure	• The existence of appropriate infrastructure: availability of /and for plant development, power, water; transportation (particularly for bulk commodities), labour; accommodation; or the ease with which the infrastructure can be provided, or accessed.	• Current existing infrastructure includes 52km of pre-existing logging road and the additional road development from KM52 to KM78 to access the barge loading port at the lower Barito river. Another 7km access road to the upper Barito river has been completed where barge loading using the Grab Crane method is planned. These haul roads and the Barito River will be used for coal transport to POS. Appropriate capital investment for development of the remaining required infrastructure has been allocated. • Details of the infrastructure are provided in this Announcement
Costs	• The derivation of, or assumptions made, regarding projected capital costs in the study. • The methodology used to estimate operating costs. • Allowances made for the content of deleterious elements. • The source of exchange rates used in the study. • Derivation of transportation charges.	• The projected capital costs were derived from the previous Definitive Feasibility Study and updated with more recent information as well as aligning with the company's corporate strategy. • The operating cost were based on the recent cost estimation which are in line with actual contracts where-ever possible.

Criteria	JORC Code Explanation	Commentary
	• The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. • The allowances made for royalties payable, both Government and private.	• Mining rates were based on awarded contracts while the other suppporting costs were based on independent and detailed studies, benchmarking similar operations. • The background analysis done by ALS related coal preparation was undertaken in order to demonstrate that the quality characteristics are in line with the target market specifications . • Details of operating costs are included in this Announcement • The report assumes that the product quality will meet market requirements. • The financial calculation in this report is inclusive of government royalties subject to the current legislation and may change in future depending on Indonesian Mining Regulation Law.
Revenue Factors	• The derivation of or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. • The derivation of assumptions made of metal/ or commodity price(s), for the principal metals, minerals and co-products.	• The sales price was nominally taken as $170 per tonne FOB for the coking product and $160 per tonne FOB for the PCI product. The coal sale price assumptions is based on the product quality noted in the report, market projections and corporate strategy. • Same assumptions made as in cost factors above. • Details of the sale price are presented in this Announcement
Market assessment	• The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. • A customer and competitor analysis along with the identification of likely market windows for the product. • Price and volume forecasts and the basis for these forecasts. • For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	• All pit production will target both the local and export markets, where BBM will get best value for the product at that time. The early start-up years are planned to be mostly pre-sold. • Although through agreement all sales must be marketed through ICT, BBM believe this even more guarantee the best price. • An initial market analysis study has now been completed. • No other studies have been undertaken for testing and acceptance of customer specification requirements prior to a supply contract. It is assumed that the coal production will meet the required specification in the market.
Economic	• The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. • NPV ranges and sensitivity to variations in the significant assumptions and inputs.	• The discount rate, coal price, operating cost and capital cost were included in the deterministic discounted cashflow in order to produce NPV and IRR. • A detailed economic evaluation was presented in the 2021 Ore Reserve Report and has been updated for the 2022 ore reserve estimation.
Social	• The status of agreements with key stakeholders and matters leading to social licence to operate	• Details of socialisation are presented in Cokal's Annual Report and other reports.
Other	• To the extent relevant, the impact of the following on the project and/or on the	• There are no identified risks that are material in nature.

Criteria	JORC Code Explanation	Commentary
	estimation and classification of the Ore Reserves: • Any identified material naturally occurring risks. • The status of material legal agreements and marketing arrangements. • The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	• BBM has a material legal marketing arrangements with ICT on 14th July 2021. • All necessary government approvals are in place. • During the mining progress land compensation will need to be negotiated with the traditional owners for either of these solutions. It is common practice in Indonesia to seek to construct roads across land which is not owned by the mining company and to pay the traditional owners compensation for the use of this land. This is not considered to be a material issue.
Classification	• The basis for the classification of the Ore Reserves into varying confidence categories. • Whether the result appropriately reflects the Competent Person's view of the deposit. • The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• The Reserves have been classified based on confidence and the classification of the coal Resources, the level of detail in mine planning, and the level of risk associated with the project. • In general, Indicated Resources have been classified as Probable Reserves and Measured Resources within the pit shell have been classified as Proved Reserves.
Audits or reviews	• The results of any audits of reviews of Ore Reserves estimates	• An internal review of the report has been undertaken.
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. • It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• The accuracy of the Reserves is highly dependent on the accuracy of the resource model. However, since it was considered that none of the Modifying Factors materially changed the risk in this project the Measured Resources which fall within the practical pit were mostly converted to Proved Reserves and the Indicated Resources which fall within the practical pit were converted to Probable Reserves. • Details of the methodology and Modifying Factors included in the 2021 Ore Reserve Report have not changed.