Quarterly Report



27 July 2020

Cobalt Blue Holdings Limited A Green Energy Exploration Company



ASX Code:

COB

Commodity Exposure:

Cobalt & Sulphur

Directors & Management:

Robert Biancardi Non-Exec Chairman Non-Exec Director **Hugh Keller** Non-Exec Director **Robert McDonald** Joe Kaderavek CEO & Exec Director **Robert Waring** Company Secretary

Capital Structure:

Ordinary Shares at 27/07/2020: 159.9m Options (ASX Code: COBO): 5.6m Market Cap (undiluted): \$21.6m

Share Price at 27/07/2020: \$0.135



Cobalt Blue Holdings Limited

614 466 607 Suite 17.03, 100 Miller Street North Sydney NSW 2060 (02) 8287 0660

www.cobaltblueholdings.com info@cobaltblueholdings.com f Cobalt.Blue.Energy cobalt-blue-holdings

Highlights

Cobalt Blue June Quarterly Report

BROKEN HILL COBALT PROJECT

- Mixed Hydroxide Product (MHP)
- Testwork update
- Pilot Plant update
- Ore Reserve Statement
- Cobalt Product Sample Program

COBALT PARTNERSHIPS

- Millennium Project (Queensland)
- Carrapateena Testwork (South Australia)

COBALT TRENDS

How will COVID-19 affect long-term EV demand trends?

CORPORATE

- COVID-19 pandemic
- Cash Position

Broken Hill Cobalt Project (BHCP)

Mixed Hydroxide Product (MHP)

In preparation for the planned Pilot Plant trials, COB has been advancing laboratory-scale testwork at ALS Metallurgy. As previously announced, a 45 tonne pilot concentrate trial was completed in early 2019, producing a 7.7 tonne concentrate sample (Concentrate Circuit (Pilot Trial) program successfully completed – 24 June 2019). A 200kg sub-sample of concentrate was taken for the laboratory-scale process development testwork program.

COB has been actively optimising the processing unit operations to reduce iron, copper, zinc, manganese and calcium in the cobalt-nickel hydroxide intermediate precipitate. The current elemental specification of the hydroxide intermediate, which will then be refined into high-purity cobalt sulphate, is set out below.

Figure 1 - Broken Hill Cobalt Project MHP - assay results

Ca	Co	Cu	Fe	M n	Ni	Zn	CI
%	%	%	%	%	%	%	%
2.22	37.00	0.01	0.07	0.85	6.94	0.12	7.10





The Hydroxide precipitate was readily filtered from the chloride mother liquor, with residual moisture at 10-15%. This contrasts with hydroxides precipitated from sulphate mother liquors, which are typically sticky and often contain 50-60% moisture, necessitating a dedicated dryer unit in addition to the filter.

Hydroxide intermediates represent approximately 75% of total global cobalt trade. The supply side of hydroxides is dominated by production from the Democratic Republic of Congo (DRC) whose contribution is expected to increase over the near term. Hydroxide intermediaries are typically purchased by specialist refining companies.

Cobalt hydroxide intermediate is sold on a pricing formula with two components, prior to adjustment for penalty elements (impurities). The first is the floating payables, which are relative to the underlying cobalt metal price. The second is the cobalt content.

Fastmarkets quote prices for 30% minimum content cobalt intermediate hydroxide, with typical cobalt content of hydroxide from the DRC being 25-40%. Strong expected nickel credits will likely command a further payable metal for the COB MHP product. Overall, the extremely low levels of impurities in the COB MHP are considered attractive.

In order to take advantage of prospective cobalt market conditions, the BHCP will have a flexible production strategy. By adopting a metallurgical process that produces a commercially saleable intermediate product, the project will be able to optimise its suite of products to suit varying market conditions, taking advantage of MHP (50-80% cobalt payable) vs cobalt sulphate (90-110% cobalt payable) pricing.

The BHCP refinery is planned to produce:

- An intermediate MHP nominally containing 37% Co and 7% Ni. This high cobalt to nickel ratio is unique and is likely to command a premium sale price.
- A final cobalt sulphate, which will be produced from further refining of the MHP. The target product specification is >20.5% Co content sulphate crystal, suitable for use in cathode precursor manufacture.

Figure 2 - MHP vs Cobalt Sulphate Markets

BHCP Product	Payable % Co metal price	Purity	End Use Typical	Customers
Cobalt Sulphate	90–110%	Very High	Li ion batteries	Precursor/Cathode Makers
Mixed Hydroxide Product	50–80%	Low	Metallic cobalt & Li ion batteries	Commodity Trading Houses Mining Companies

Testwork update

A BHCP sample concentrate (7.5 tonnes) has been prepared for calcine (furnace) testwork. After thermal decomposition, the calcined material will be transported to COB's planned Pilot Plant at Broken Hill. The calcined material will be used for leaching and metal recovery trials, whilst providing approximately 1 tonne of elemental sulphur for assessment by Mitsubishi Corporation.

Pilot Plant update

During the quarter COB announced it expected the Pilot Plant to be commissioned in Q4 2020. The proposed Pilot Plant is a key stepping stone on the Company's development path to build a metallurgical testing centre in Broken Hill. The centre is proposed to scale from an initial Pilot Plant Operation to a larger scale fully integrated Demonstration Plant (producing 1-2 tonnes of cobalt sulphate using up to 2,000 tonnes of ore). The results will form the evidentiary basis for the engineering designs and cost estimates for the BHCP Feasibility Study. Pilot Plant equipment arrived on site during the quarter. The commissioning date is subject to the impacts of COVID-19.

Ore Reserve Statement

During the quarter, work continued on an updated Ore Reserve Statement. COB announced an updated Ore Reserve on 16 July 2020 as part of a Project Update. The Project Update 2020 also identified key optimisation opportunities, including potential:

- Capital cost reductions
- Higher metal recoveries
- Lower energy costs
- Project life extensions
- Inclusion of other minor metals





Cobalt Product Sample Program

COB's cobalt product sample program aims to provide mixed hydroxide and cobalt sulphate samples for technical and market assessments to top-tier companies in the cobalt-for-battery supply chain. From late-2020 COB expects to ship samples to over ten partners, including cobalt trading companies and battery precursor manufacturers.

During the quarter Sojitz Corporation became a partner in the Cobalt Product Program. Sojitz is a leading Japanese general trading company, who have also taken active investments in operating mines around the world.

COB Partnerships

Millennium Project (Queensland)

During the quarter, COB announced a progress report on testwork for GEMC's Millennium Project. COB developed a successful flotation scheme to produce two separate copper and cobalt concentrates. The total flotation recovery of metal to concentrates achieved was 93% cobalt, 90% copper and 80% gold. The concentrate grades and recoveries are shown below:

Figure 3 - Millennium Project grades and recoveries

		Co	Cu	As	Fe	S	Si	Au
Conner Concentrate	Grade	0.5%	30.9%	0.15%	27.7%	32.7%	1.7%	9.5 g/t
Copper Concentrate	Recovery	5%	87%	2%	18%	33%	<0.5%	56%
Cobalt Concentrate	Grade	2.9%	0.9%	2.9%	19.0%	21.9%	15.8%	1.6 g/t
Cobail Concentrate	Recovery	88%	7%	94%	36%	63%	1%	26%

The cobalt concentrate was then treated using the COB Process:

- Step 1: Thermal decomposition of the pyrite, where all the pyrite (FeS2) was converted to pyrrhotite (FerS8).
- Step 2: Leaching the resulting calcine (pyrrhotite) to extract cobalt and copper.

The process successfully treated the cobalt concentrate, with leach extractions of 90% of the cobalt and 95% of the copper. Interestingly, 10% of the gold was also leached into solution, on account of the formation of gold-chloride complexes. The leach residue was filtered and washed and then subjected to a further cyanide leach to recover free gold. The total gold extracted from the cobalt concentrate was 90% (10% in the chloride leach and a further 80% in the cyanide leach). The detailed results form the test program were further evaluated during the quarter.

Carrapateena Testwork (South Australia)

As previously announced, OZL engaged COB to conduct amenability testing of the COB Process on a pyrite concentrate containing cobalt, gold and copper from Carrapateena. During the Quarter, OZL provided COB with a sample of concentrate and testwork commenced. It is anticipated the testwork will take four months to complete.

Cobalt Trends

How will COVID affect long term EV demand trends?

The Electric Vehicle (EV) consumer preference point is upon us. UBS (an investment bank) recently updated a long running consumer poll across the top seven automobile consuming nations. For the first time, consumers chose Battery Electric Vehicles (BEVs) in preference to Internal Combustion Engine (ICE) vehicles provided that the (1) BEV delivers at least 300 mile (~480km) range and (2) costs were comparable. With 300 mile range BEVs increasingly commonplace, this leaves just the sticker price.

This is a remarkable result. With over 300 BEV models available globally, consumer demand for product quality, range, after sales service, 2nd hand market depth (resale value) and charging infrastructure are now being met in EU countries, US and China. Driving lane and car parking privileges further sweeten the purchase.

The major EU countries are rolling out massive consumer subsidies to stimulate their economies, as automobile demand has been depressed due to COVID-19 effects on household spending. In particular:

- Germany: €9,000 on vehicles costing less than €40,000 brand new. Additional tax benefits for EVs are now available to any vehicle that costs €60,000. Previously, the limit was €40,000.
- France: €6,000 subsidies for EVs as part of an €8Bn stimulus for auto makers. This stimulus will include a €5Bn bailout for Renault that will retool the national automaker to focus on future proof vehicles, particularly BEVs.
- United Kingdom: a simple £6,000 "cash for clunkers" subsidies available for consumers switching to a BEV.



There is little doubt that the scale of these purchase subsidies will lower the BEV sticker price to well below the comparable ICE vehicle. Therefore, both demands (1) & (2) above are being met today. As a result, the EU is expected to overtake China this year for total EVs sold and lead a global rebound in BEV demand.

UBS estimate that EV market share will continue to rise strongly. To meet EV sales estimates they estimate that battery supply needs a 2020-25 volume of CAGR 39%. An exciting future awaits.

1,000 80% 900 70% 800 EV Battery Scale (GWh) 60% 700 50% 600 500 40% 400 30% 300 20% 200 10% 100 0 0% 2017 2018 2019 2020 2021 2022 2023 2024 2025 Y18 World Demand World Supply

Figure 4 - Global EV battery supply/demand (EV Battery GWh) vs. utilisation (%)

Corporate News

COVID-19

During the quarter COB implemented strategies to reduce the risk of transmission of COVID-19 to COB's staff, contractors and its potential impact on COB's business. Office-based employees and contractors successfully transitioned to a remote working model.

COB implemented a cash preservation and cost saving initiative which included a reduction in staff and contractor cash remuneration and a freeze on all non-essential expenditure.

Cash Position

COB's cash balance at 30 June 2020 was \$2.057m. During the quarter COB received approximately \$1.36 million relating to a R&D tax incentive rebate, refund of government security deposits and a CRCP grant payment.

COB's activities primarily relate to exploration and evaluation of the Broken Hill Cobalt Project. There were no activities related to production or development. During the quarter COB incurred¹ \$405,000 on exploration and evaluation activities, primarily relating to technical services.

Other

During the quarter COB's share price fluctuated between 8.8 cents and 14.5 cents. COB's accompanying Appendix 5B (Quarterly Cashflow Report) includes an amount in item 6.1 which constitutes directors' fees and salary.

¹ Refers to expenditure incurred on an accounting accruals basis as distinct from expenditure reported in the Appendix 5B, which refers to expenditure on a cash basis. The amounts were extracted from the unaudited accounts of the COB Group.

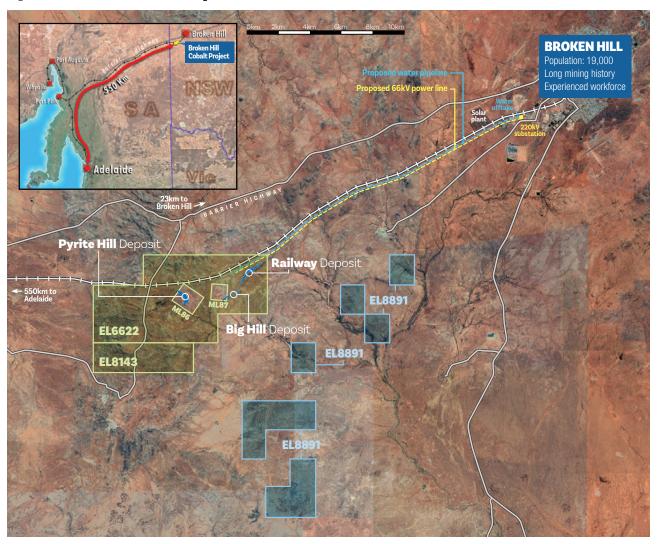




The Broken Hill Cobalt Project

The Broken Hill district map shows the proximity of the Broken Hill Cobalt Project to Broken Hill, the supporting rail line and road network, as well as the availability of both power and water utilities to support future production.

Figure 5 – Broken Hill District Map



Cobalt Blue Background

Cobalt Blue Holdings Limited (ASX: COB) is an exploration and project development company. Work programs advancing the BHCP in New South Wales continue. Cobalt is a strategic metal in strong demand for new generation batteries, particularly Li ion batteries now being widely used in clean energy systems.

Looking forward, we would like our shareholders to keep in touch with COB updates and related news items, which we will post on our website, the ASX announcements platform, as well as social media such as Facebook (1) and Linkedln (in). Please don't hesitate to join the 'COB friends' on social media and to join our newsletter mailing list at our website.

Joe Kaderavek

Chief Executive Officer info@cobaltblueholdings.com P: (02) 8287 0660





Previously Released Information

This ASX announcement refers to information extracted from the following reports, which are available for viewing on COB's website http://www.cobaltblueholdings.com.

- 16 July 2020: Broken Hill Cobalt Project Update 2020
- 7 July 2020: Cash Update
- 28 April 2020: MHP Testwork Delivers Premium Product
- 6 April 2020: COB Partnerships Testwork Success + Qld Minerals Initiatives
- 31 March 2020: Project update and Business Impacts of COVID-19 discussed
- 17 January 2020: Agreement to Acquire BPL's Interest in BH Cobalt Project
- 24 June 2019: Concentrate Circuit (Pilot Trial) program successfully completed

COB confirms it is not aware of any new information or data that materially affects the information included in the original market announcements and where applicable in the case of estimates of Mineral Resources or Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. COB confirms that the form and context in which any Competent Person's findings presented have not been materially modified from the original market announcement.

Tenement Holding

The COB Group held the following mining tenements at the end of the quarter:

Tenement	Location	Interest at end of quarter		
EL 8891	Broken Hill Region, New South Wales	 100% legal and beneficial interest 		
EL 6622	Broken Hill Region, New South Wales	100% beneficial interest*		
EL 8143	Broken Hill Region, New South Wales	100% beneficial interest*		
ML 86	Broken Hill Region, New South Wales	100% beneficial interest*		
ML 87	Broken Hill Region, New South Wales	100% beneficial interest*		

No tenements or farm-in or farm-out agreements were disposed of during the quarter.

^{*} On 17 January 2020 COB announced that it had entered into Final Agreements to acquire American Rare Earth Limited's, ARR, (formerly known as Broken Hill Prospecting Limited) interests in the Broken Hill Cobalt Project including legal title. During July 2020, the NSW Government registered the transfer of title from ARR to Broken Hill Cobalt Project Pty Ltd, a wholly owned subsidiary of COB.

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

COBALT BLUE HOLDINGS LIMITED	
ABN	Quarter ended ("current quarter")
90 614 466 607	June 2020

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation (if expensed)	-	-
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(133)	(796)
	(e) administration and corporate costs	(181)	(1,125)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	3	15
1.5	Interest and other costs of finance paid	(6)	(30)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	81	81
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(236)	(1,855)

2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) entities	-	-
	(b) tenements	-	(500)
	(c) property, plant and equipment	-	(3)
	(d) exploration & evaluation (if capitalised)	(388)	(1,847)
	(e) investments	-	-
	(f) other non-current assets	(1)	(67)

Cons	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (Security Deposit refunds, Government grants and tax incentives)	1,431	1,827
2.6	Net cash from / (used in) investing activities	1,042	(590)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (payment of lease liabilities)	(86)	(239)
3.10	Net cash from / (used in) financing activities	(86)	(239)

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	1,337	4,741
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(236)	(1,855)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	1,042	(590)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(86)	(239)
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	2,057	2,057

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	2,057	1,337
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	2,057	1,337

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1.	47
6.2	Aggregate amount of payments to related parties and their associates included in item 2.	-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

7.	Financing facilities available Note: the term 'facility' includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000	
7.1	Loan facilities	-	-	
7.2	Credit standby arrangements	-	-	
7.3	Other (please specify)	-	-	
7.4	Total financing facilities	-	-	
7.5	Unused financing facilities available at quarter end		-	
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.			

On 17 January 2020 the Company executed Final Agreements with American Rare Earths Limited (formerly Broken Hill Prospecting Limited (ASX: ARR) to acquire 100% ownership and legal title of the Broken Hill (Thackaringa) Cobalt Project (including all tenements). The consideration for the acquisition included a \$1,000,000 three -year unsecured Convertible Note (CN), with interest of 6% per annum payable annually in arrears. ARR is able to convert the CN to fully paid ordinary shares at maturity or on 18 January 2021 or 17 January 2022 (using a conversion price of \$0.20). COB can redeem the CN early. The consideration also included a five-year \$3,000,000 secured promissory note (PN) issued to ARR, with interest of 6% per annum payable in years 4 and 5. The PN can be repaid by COB at any time in whole or in part without penalty. Once the PN is repaid in full, the security will be extinguished.

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (Item 1.9)	(236)
8.2	Capitalised exploration & evaluation (Item 2.1 (d))	(388)
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	(624)
8.4	Cash and cash equivalents at quarter end (Item 4.6)	2,057
8.5	Unused financing facilities available at quarter end (Item 7.5)	-
8.6	Total available funding (Item 8.4 + Item 8.5)	2,057
8.7	Estimated quarters of funding available (Item 8.6 divided by Item 8.3)	3.30

- 8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:
 - 1. Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: Not applicable		

2. Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: Not applicable

3. Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: Not applicable

Compliance statement

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 27 July 2020

Authorised by: By the board

Notes

- This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the
 entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An
 entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is
 encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.