Quarterly Report



23 July 2019

Cobalt Blue Holdings Limited A Green Energy Exploration Company

СОВ

Commodity Exposure: Cobalt & Sulphur

Directors & Management:

ASX Code:

Non-Exec Chairman
Non-Exec Director
Non-Exec Director
CEO & Exec Director
Company Secretary

Capital Structure

Ordinary Shares at 23/07/2019:	149.9m
Options (ASX Code: COBO):	29.6m
Market Cap (undiluted):	\$22.5m
Share Price:	
Share Dries at 02/07/2010	¢0.15



Cobalt Blue Holdings Limited

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April to June 2019 - Highlights

Cobalt Blue June Quarterly Report

BROKEN HILL COBALT PROJECT

- Significant Resource Upgrade
- Mitsubishi Corporation Sulphur Agreement
- Concentrate Circuit (Pilot Trial) Program Completed

COBALT TRENDS

- Renewable Energy Market Update
- BP Energy Outlook 2019

CORPORATE NEWS

- Update on Joint Venture Dispute and Independent Expert
- Non-Renounceable Entitlement Issue and Placement

Broken Hill Cobalt Project

Significant Resource Upgrade (4 April 2019)¹

Completion of the April 2019 Mineral Resource estimate reflected the culmination of a sustained exploration effort by COB (30,000 m drilled from 2016) to realise a 235% increase in resource tonnes and a 189% uplift in contained cobalt since COB issued its prospectus and became an independent company listed on the ASX.

The April 2019 Broken Hill Cobalt Project Mineral Resource update followed ~9,500 m drilling completed during Q418–Q119 targeting definition of a component of Measured Mineral Resource through enhancement of geological confidence and data density by infill drilling. The infill program focussed on the upper extent (<200 m from surface) of the Pyrite Hill deposit which extends over 1.2 km along strike and is currently drill tested to approximately 300 m down dip. At Pyrite Hill, the drilling fleet successfully navigated steep terrain to increase data density through the oxidation profile. Drilling intersected variable zones of sulphide mineralisation intercalated with localised oxidation providing

1 These estimates of mineral resources were first announced by the Company in Significant Thackaringa Resource Upgrade released to ASX on 4 April 2019. The Company confirms that it is not aware of any new information or data that materially affects the information included in that announcement, and all material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.



sufficient constraint to include ' transition' (partially weathered) material for Pyrite Hill. The recent campaign also allowed completion of an initial phase of drilling to test down-dip extensions of the Pyrite Hill deposit with holes intersecting mineralisation approximately 180–280 m below surface.

With completion of the Broken Hill Cobalt Project Preliminary Feasibility Study ('PFS') (mid-2018) and Ore Reserve estimate (mid-2018), COB had established a technically feasible and economic project for production of cobalt sulphate heptahydrate and elemental sulphur from the Broken Hill Cobalt Project deposits. The more recent work has provided a robust basis for the revision of the resource cut-off grade to 400 ppm CoEq. The previous 500 ppm cobalt cut-off did not take into account sulphur as a revenue producing co-product.

The revised cut-off grade considers modifying factors guided by the PFS and appropriately incorporates revenue streams from elemental sulphur in addition to cobalt².

The 2019 Mineral Resource is listed in Table 1 below. The total Mineral Resource is 111 Mt@ 889 CoEq.

Category	Mt	Co ppm	CoEq ppm	Fe %	S %	Pyrite %	Contained Co (t)	Pyrite Mt
Pyrite Hill (at a 40	00 ppm CoEq	cut-off)						
Measured	18	928	1150	10.7	9.9	19	17,100	3
Indicated	7	759	940	9.7	8.1	15	5,600	1
Inferred	7	820	1020	10.4	8.9	17	5,700	1
Total ³	33	867	1070	10.4	9.3	17	28,400	6
Railway (at a 400	ppm CoEq c	ut-off)						
Indicated	37	677	843	8.5	7.4	14	25,100	5
Inferred	24	650	821	9.0	7.7	14	15,300	3
Total ³	61	667	834	8.7	7.5	14	40,500	9
Big Hill (at a 400	ppm CoEq cu	it-off)						
Indicated	11	629	767	6.7	6.2	12	6,800	1
Inferred	7	553	678	6.2	5.6	11	3,900	1
Total ³	18	599	732	6.5	6.0	11	11,000	2
Total (at a 400 ppm CoEq cut-off)								
Measured	18	928	1150	10.7	9.9	19	17,100	3
Indicated	55	679	841	8.3	7.3	14	37,500	8
Inferred	38	663	831	8.8	7.5	14	24,900	5
Total ³	111	715	889	8.9	7.8	15	79,500	16

Table 1. The 2019 Mineral Resource estimates for the Broken Hill Cobalt deposits (at a 400 ppmCoEq cut-off) per Mineral Resource classification (CoEq = Co ppm + S % * 22.235).

Mitsubishi Corporation Sulphur Agreement (31 May 2019)

COB is developing the Broken Hill Cobalt Project, targeting production of up to 4,000 tpa of cobalt and 300,000 tpa of elemental sulphur. The sulphur will be in a prilled (pelletised) form, suitable for long-distance transport and rehandling, without production of excess dust or fine particulates. COB is aiming to be a new supplier of elemental sulphur.

Mitsubishi Corporation are active global sulphur and sulphuric acid market traders, currently holding a significant share of the Asian sulphur and sulphuric acid market. COB intends to produce up to 100 t of elemental sulphur from bulk metallurgical testwork trials over the period to 31 December 2020.

2 The cobalt equivalent grade has been derived from the following cut-off calculation: CoEq ppm = Co ppm + [S ppm x (S price/ Co price x (S recovery/Co recovery)]. Using the Mineral Resource parameters, the CoEq equation simplifies to: CoEQ ppm = Co ppm + [S% x 22.235].

3 Totals may not add due to rounding.



The Company entered into an agreement with Mitsubishi Corporation to conduct marketing trials for the elemental sulphur. If the trials are successful, it is then the intention of both parties to negotiate an offtake contract for the commercial production and sale of elemental sulphur from the Broken Hill Cobalt Project.

Concentrate Circuit (Pilot Trial) program completed (24 June 2019)

The Company completed a concentrate circuit program during the quarter. This involved treating 45 t (wet basis) of Reverse Circulation (RC) drill chips through a pilot-scale concentrate circuit at ALS Metallurgy, Burnie Tasmania.

A combined gravity-flotation circuit was selected. The ore was crushed/milled to 1mm topsize and passed across gravity spirals to produce a gravity concentrate. The gravity rejects were size-classified and the fraction (nominally < 125 um) sent to a flotation circuit for scavenging the remaining cobalt-pyrite.

In the current pilot-scale program, the circuit was robust, with successful concentration of variable ore grades. Furthermore, the combination of two techniques – gravity and flotation, provides an effective method for treating ore samples which vary in particle size distribution. These are two common hurdles for reliable concentrator operations.

The overall results from the pilot-scale program are shown in Figure 1.

Figure 1. Overall deportment of cobalt, cobalt grade, and mass through the pilot-scale concentrate circuit.



The overall recovery of cobalt was 90%, in-line with the PFS testwork results.

Cobalt grades in the gravity and flotation concentrates were remarkably similar, ranging from 4444 ppm to 5075 ppm. This confirmed that the cobalt content in the host pyrite mineral was consistent across the range of ore grade samples.

COB is encouraged by the positive results achieved, when upscaling the quantity of material by 50x to the pilot trial. The successful use of commercial-sized spirals bodes well for commercial implementation of the circuit. In addition, the simplicity of the circuit equipment and the robustness to account for low-average-high grade ore and variable particle size distributions, provides a strong foundation for process plant operations.

Cobalt Trends

Renewable Energy - Market Update

The relationship between batteries (energy storage) and renewable energy is well established. Solar and wind generation do not provide a (continuous) baseload and any excess generation needs to be stored for later use (or wasted). Due to rapidly deflating costs, pairing utility scale battery storage with intermittent renewable resources has become increasingly competitive with traditional generation options.



However, utility scale storage materially lags renewable energy deployment. For example, the United States has an operating battery storage capacity of only 900 MW. This capacity is 1/70th of the total installed solar capacity and an even smaller percent of installed renewable energy capacity. This relationship will change drastically according to the U.S. Energy Information Administration (EIA), predicting that battery storage capacity will more than double to 2,500 MW by 2023 and then continuing to close the generation to storage gap.

BP Energy Outlook 2019

Renewable energy generation forecasts are thus indicative of (utility and household scale) battery demand trends. BP Plc (FTSE:BP) has now released its comprehensive (global) Energy Outlook (2019 Edition), outlining their considered view on long term energy markets. We take this opportunity to examine key renewable energy conclusions from the Energy Outlook.

The world continues to electrify, with power consumption growing strongly. The mix of fuels in global power generation shifts materially, with renewables gaining share at the expense of coal, nuclear and hydro.

The share of natural gas remains broadly flat at around 20%. Renewables account for around two-thirds of the increase in power generation, with their share in the global power sector increasing to around 30%. In contrast, the share of coal declines significantly. By 2040 renewables overtake coal as the largest source of global power.



Figure 2. Renewables set to become largest fuel source for power generation.

According to BP's base case, renewables are the fastest growing energy source (7.6% p.a.). Both wind and solar power grow rapidly – increasing by a factor of 5 and 10 respectively – accounting for broadly similar increments to global power. This rapid growth is aided by continuing pronounced falls in the costs of solar and wind power.







Remarkably, renewables are set to penetrate the global energy system more quickly than any fuel in history. Historically, it has taken many decades for new fuels to penetrate the global energy system. For example, it took almost 45 years for the share of oil to increase from 1% of world energy to 10% in late 1800s/early 1900s. For natural gas, it took over 50 years from the beginning of the 20th century.

Under BP's base case scenario, the share of renewables in world energy increases from 1% to 10% in around 25 years. This is far quicker than any fuel has ever penetrated the energy system in history.





Corporate news

Update on Joint Venture Dispute and Independent Expert

During the Quarter the Joint Venture Dispute with Broken Hill Prospecting Limited (ASX:BPL) was significantly advanced, with the parties providing their evidentiary material and submissions to the Independent Expert for a final and binding determination. The decision of the Expert is now expected to be delivered by mid August 2019. As announced (1 July 2019) the determination will cover all Dispute Notices issued by BPL under the Thackaringa Joint Venture Agreement.

With the remaining Dispute Notice issued by BPL (under the Royalty Deed), COB advised in its March 2019 Quarterly Report that it was still awaiting further information from BPL on this dispute. BPL advised during the Quarter it wished to seek "recommencement of the Dispute". COB has yet to hear any further from BPL regarding this Dispute Notice.

Non-Renounceable Entitlement Issue (13 May 2019) and Placement

COB completed a 1 for 6 non-renounceable entitlement issue (the Entitlement Issue) during the quarter. The Entitlement Issue offered Shareholders the opportunity to subscribe for one share for every six shares held at the Record Date (7:00pm AEST on 17 May 2019) at an issue price of \$0.12 per share. The maximum number of shares to be issued under the Entitlement Issue was 20,820,423.

Blue Ocean Equities Pty Limited (Blue Ocean) agreed to act as Lead Manager and Underwriter to the Entitlement Issue.

Blue Ocean was also engaged to raise up to another \$500,000 as a placement.

The Entitlement Issue was well received by shareholders with shareholders making applications for approximately 72% of the available entitlement. The shortfall was taken up by new shareholders as part of the Underwriting arrangements. A placement of \$500,000 (4,166,667 shares at \$0.12 per share), the maximum sought, was also completed.



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 and road network, as well as the availability of both power and water utilities to support future production.

Figure 5. Broken Hill District Map.



COB's activities relate to exploration and evaluation of the Broken Hill Cobalt Project. There were no activities relating to production or development. Following is a summary of COB's expenditure incurred⁴ on exploration and evaluation activities during the quarter:

Exploration and Evaluation Expenditure	\$'000
Technical services & consumables	297
General and administration	34
Other	10
Total	341

Finance

During the Quarter COB received an R&D tax rebate of approximately \$347,000. COB also received approximately \$3m from the Entitlement Issue and Placement during the quarter.

During the Quarter COB's closing daily share price fluctuated between a low of 12.6 cents and a high of 17.5 cents.

⁴ 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. These amounts were extracted from the unaudited accounts of the Company.

Cobalt Blue Background

Cobalt Blue Holdings Limited (ASX:COB) is an exploration and project development company focussed on green energy technology and strategic development to advance its mineral resource at the Broken Hill Cobalt Project in New South Wales. This strategic metal is in strong demand for new generation batteries, particularly lithium-ion batteries now being widely used in clean energy systems.

The Broken Hill Project, 23 km west of Broken Hill, with railway line passing through the project area, consists of four granted tenements (EL6622, EL8143, ML86 and ML87) with total area of 63km². The main targets for exploration are well known and document large-tonnage cobalt-bearing pyrite deposits. The project area is under-explored, with the vast majority of historical exploration directed at or around the outcropping pyritic cobalt deposits at Pyrite Hill and Big Hill.

Potential to extend the Mineral Resource at Pyrite Hill, Big Hill, Railway and the other prospects is high. Numerous other prospects within COB's tenement package are at an early stage and under-explored.

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 () and LinkedIn (in). Please don't hesitate to join the 'COB friends' on social media and to join our newsletter mailing list at our website.

1 / Julie

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

- 01 July 2019: Update on progress with Independent Expert Determination
- 24 June 2019: Concentrate Circuit (Pilot Trial) program successfully completed
- 06 June 2019: Non-Renounceable Entitlement Issue Under Subscription
- 31 May 2019: COB–Mitsubishi Corporation Sulphur Agreement
- 13 May 2019: Non-Renounceable Entitlement Issue Offer
- 30 April 2019: Cobalt Blue March Quarterly Report
- 04 April 2019: Significant Thackaringa Resource Upgrade
- 18 February 2019: JV Withdrawal Notice Served
- 04 July 2018: Thackaringa Pre Feasibility Study Announced

COB confirms it is not aware of any new information or data that materially affects the information included in the original market announcements, and, in the case of estimates of Mineral Resources, 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 the Competent Person's findings presented have not been materially modified from the original market announcement.

Competent Person's Statement

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by Mr Peter Buckley, a Competent Person who is a Member of The Australian Institute of Geoscientists (MAIG). Mr Buckley is employed by Left Field Geoscience Services and engaged by Cobalt Blue Holdings on a consulting basis. Mr Buckley 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' (2012 JORC Code). Mr Buckley consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Metallurgical Testwork Results or Engineering Design Studies is based on information compiled by Dr Andrew Tong, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Dr Andrew Tong is engaged by Cobalt Blue Holdings as Executive Manager. Dr Andrew Tong 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 JORC Code. Dr Andrew Tong consents to the inclusion in the report of the matters based on his information in the form and context in which they appear.

Mineral Resource Estimate Overview

The revised Mineral Resource was independently prepared by SRK Consulting using a Co-Kriging ('CK') method of estimation, suitable for the style of mineralisation. Mr Danny Kentwell, Principal Consultant (Resource Evaluation) at SRK Consulting, was engaged to estimate the Mineral Resource as the independent Competent Person. The Mineral Resource has been estimated and reported in accordance with the guidelines of the 2012 JORC Code.

Tenement Holding

The beneficial interests in tenements held by Cobalt Blue Holdings Limited at the end of the quarter and the related percentage of ownership:

Broken Hill Cobalt Project

- EL 6622 100%* beneficial interest Cobalt Blue Holdings Limited
- EL 8143 100%* beneficial interest Cobalt Blue Holdings Limited
- ML 86 100%* beneficial interest Cobalt Blue Holdings Limited
- ML 87 100%* beneficial interest Cobalt Blue Holdings Limited

* Refer COB's announcement dated 18 February 2019 for the basis of COB's interests in the tenements.

+Rule 5.5

Appendix 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

Name of entity

COBALT BLUE HOLDINGS LIMITED	
ABN	Quarter ended ("current quarter")
90 614 466 607	June 2019

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	-	-
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(149)	(893)
	(e) administration and corporate costs	(220)	(1,272)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	2	66
1.5	Interest and other costs of finance paid	(9)	(41)
1.6	Income taxes paid	-	-
1.7	Research and development refunds	10	10
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(366)	(2,130)

⁺ See chapter 19 for defined terms

¹ September 2016

Cons	olidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) property, plant and equipment	-	(16)
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets (see Note 4)	(546)	(7,584)
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (Research and Development tax refund)	338	338
2.6	Net cash from / (used in) investing activities	(208)	(7,262)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	3,079	4,791
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	(146)	(208)
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 (provide details if material)	(51)	(151)
3.10	Net cash from / (used in) financing activities	2,882	4,432

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1 September 2016

⁺ See chapter 19 for defined terms

Conse	olidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	2,531	9,799
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(366)	(2,130)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(208)	(7,262)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	2,882	4,432
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	4,839	4,839

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	4,741	2,433
5.2	Call deposits	98	98
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)	4,839	2,531

6.	Payments to directors of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to these parties included in item 1.2	122
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-
6.3	Include below any explanation necessary to understand the transactions included	in items 6.1 and 6.2
Directo	or fees/salary	

1 September 2016

⁺ See chapter 19 for defined terms

Appendix 5B Mining exploration entity and oil and gas exploration entity quarterly report

7.	Payments to related entities of the entity and their associates	Current quarter \$A'000
7.1	Aggregate amount of payments to these parties included in item 1.2	-
7.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-
7.3	Include below any explanation necessary to understand the transactions included	in items 7.1 and 7.2

8.	Financing facilities available Add notes as necessary for an understanding of the position	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1	Loan facilities	-	-
8.2	Credit standby arrangements	-	-
8.3	Other (please specify)	-	-

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

9.	Estimated cash outflows for next quarter	\$A'000
9.1	Exploration and evaluation – Broken Hill Cobalt Project	(500)
9.2	Development	-
9.3	Production	-
9.4	Staff costs	(230)
9.5	Administration and corporate costs	(600)
9.6	Other (provide details if material)	-
9.7	Total estimated cash outflows	(1,330)

⁺ See chapter 19 for defined terms

¹ September 2016

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced				
10.2	Interests in mining tenements and petroleum tenements acquired or increased				

Compliance statement

- 1 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.

Marin Sign here: Date: 23 July 2019

Print name: Robert J Waring

Notes

- 1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
- 2. If this quarterly 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 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. Line item 2.1 (d) includes Exploration and Evaluation Expenditure for the Broken Hill Cobalt Project.

⁺ See chapter 19 for defined terms

¹ September 2016