# Quarterly Report



31 January 2020

A Green Energy Exploration Company



ASX Code:

COB

#### **Commodity Exposure:**

#### **Cobalt & Sulphur**

#### **Directors & Management:**

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

#### **Capital Structure:**

Ordinary Shares at 31/01/2020: 150.9m
Options (ASX Code: COBO): 22.0m
Unquoted options: 7.5m
Market Cap (undiluted): \$22.6m

**Share Price:** 

**Share Price** at 31/01/2020: **\$0.15** 



#### **Cobalt Blue Holdings Limited**

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North Sydney NSW 2060
Ph: (02) 8287 0660
Website: www.cobaltblueholdings.com info@cobaltblueholdings.com f Cobalt.Blue.Energy n cobalt-blue-holdings

October to December 2019 - Highlights

## **Cobalt Blue December Quarterly Report**

## **BROKEN HILL COBALT PROJECT**

- Project update
- Pilot Plant
- Conceptual Project Development Plan and State Significant Development approval process

#### **COB PARTNERSHIPS**

Oz Minerals Testwork Agreement

#### **COBALT TRENDS**

- Electric Vehicle (EV) forecasts inflection point seen from 2025
- Battery cost deflation continues 'tipping point' forecast for 2023

### **CORPORATE NEWS**

Settlement with Broken Hill Prospecting Limited

## **Broken Hill Cobalt Project**

## **Project Update**

(5 December 2019)

COB announced it had reset project targets, including the delivery of a Feasibility Study, Project Approvals and a Final Investment Decision by early 2022.

The focus for the Broken Hill Cobalt Project team during the quarter was progressing:

- Pilot Plant activities (see below)
- Project Approvals (see below)
- Updated Ore Reserve: Work on updating the Ore Reserve Statement commenced. The updated Ore Reserve Statement is expected to be released in mid-2020. This will be based upon the 2019 Mineral Resource and incorporate other modifications to the Broken Hill Cobalt Project since the PFS, e.g. tailings and waste management, power supply and cost studies and updated mining schedules.
- Metallurgical Testing: Throughout the quarter, COB continued to optimise the processing steps for production of cobalt sulphate. The ongoing work at ALS Metallurgy will support the design and operation of the upcoming Pilot Plant.





#### **Pilot Plant**

## (9 December 2019)

COB announced its intention to build a metallurgical testing centre in Broken Hill. This will include a Demonstration Plant in support of the Broken Hill Cobalt Project. The plant will provide reliable testwork data for incorporation into the upcoming Feasibility Study in 2021 and will be focused on testing the COB patented minerals processing technology to produce cobalt sulphate from pyrite samples.

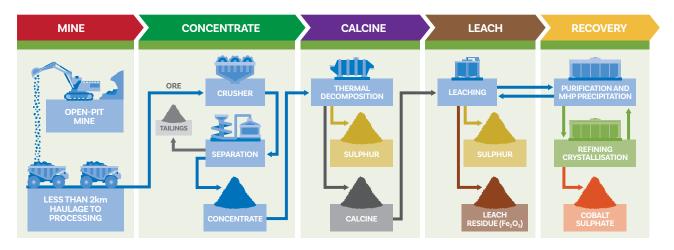
Design, engineering and procurement works were carried out during the quarter.

In addition to testing samples for the Broken Hill Cobalt Project, COB will make the facilities available for the evaluation of the technology for application to other projects. This work will be conducted under the COB Partnerships framework.

Initially, COB will use the existing 90 tonnes of samples stored from previous drilling campaigns to commission the plant. This step is expected to be completed in mid-2020. COB then intends to treat up to 4,000 tonnes of sample through the plant.

The Demonstration Plant simplified block flow diagram is shown below.

Figure 1. Conceptual flowchart for processing ore and production of cobalt sulphate



## **Conceptual Project Development Plan and State Significant Development approval process** (19 December 2019)

COB presented the Conceptual Project Development Plan (CPDP) for the Broken Hill Cobalt Project to the Department of Planning, Infrastructure and Environment (Division of Resources and Geoscience) (DPIE) on 17 December 2019. The presentation included detailed information on COB and the Broken Hill Cobalt Project including Deposit geology, Mineral Resource and Ore Reserve, Mining methods and optimisation, Geotechnical stability, Mineral Processing flowsheet, Project Economics, Environmental Issues, Stakeholder consultation and Assessment timeframes.

The purpose of the CPDP is to demonstrate that a project is a responsible and sustainable mining proposal that can develop the mineral resources of NSW in a sound manner.

The overall Broken Hill Cobalt Project development timeline is shown in the figure below.

Figure 2. The BHCP Development Timeline.

2017	2018	2019	2020	2021	2022
<ul> <li>IPO</li> <li>Resource upgrade         <ul> <li>Drilling: +8,000m</li> <li>Resource: 55Mt</li> </ul> </li> <li>Scoping Study</li> </ul>	<ul> <li>Resource upgrade         Drilling: +12,500m         Resource: 72Mt     </li> <li>LGI – Cobalt         First Mover     </li> <li>Pre Feasibility Study</li> </ul>	Mitsubishi — Sulphur Agreement  Concentration — Pilot Scale Testwork  Resource upgrade Drilling: +9,500m Resource: 111Mt  100% Project Ownership  CPDP Submitted	<ul> <li>Pilot Plant – Q2 2020</li> <li>Ore Reserve Update – Q2 2020</li> <li>Scoping Report – Jan 2020</li> <li>SEARs issued – Q2 2020</li> </ul>	■ Demonstration Plant - Q1 2021 ■ EIS Submission - 2020–21	<ul> <li>Feasibility Study and Approvals         <ul> <li>Q1 2022</li> </ul> </li> <li>Final Investment Decision – Q1 2022</li> <li>SSD Determination – H1 2022</li> </ul>
Α (	CHIEVEMEN	ТЅ		GOALS	





## **COB Partnerships**

## Oz Minerals Testwork Agreement

(21 October 2019)

COB announced that Oz Minerals Limited (ASX:OZL) had engaged COB to complete testwork to assess whether copper, gold and cobalt can be recovered from a pyrite concentrate from its Carrapateena copper-gold project in South Australia. A key aim will be to assess if a high purity cobalt sulphate can be produced from the concentrate.

There are similarities between the cobalt-pyrite minerals at the Broken Hill Cobalt Project and at Carrapateena. The initial testwork is focused on the technical viability of COB technology and will not optimise metal recoveries, which may be the subject of further studies.

## **Cobalt Trends**

## Electric Vehicle (EV) forecasts - inflection point seen from 2025

While only one in 200 vehicles (0.5%) on the road today is an EV, sales of Internal Combustion Engine (ICE) vehicles will likely peak within 5–7 years. EV forecasts vary considerably, but broadly agree that a sales inflection point is anticipated from 2025.

Wood Mackenzie (consultancy) forecasts EVs will account for 7% (6.3m) of global vehicle sales by 2025. The key limiting factor, Wood Mackenzie believes, is there is simply not enough cobalt to justify higher EV sales forecasts. Bloomberg New Energy Finance (BNEF) (consultancy) is more bullish, with an 11% (10m) forecast by 2025, with significant longer term growth including 29% (28m) by 2030 and 57% (56m) by 2040.

Glencore PLC (FTSE:GLEN), a cobalt supplier, forecasts EV sales to make up 12% of the global vehicle market by 2025 with forecasts broadly in parallel with BNEF thereafter.

In terms of global sales mix, BNEF forecasts EVs to be the dominant powertrain after 2035. The largest single factor in determining passenger car sales (by type) remains the cost of ownership, with battery costs typically determining the higher initial purchase price of the EV.

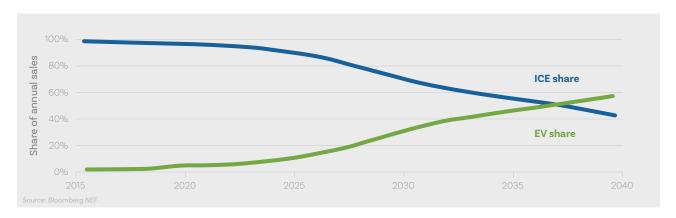


Figure 3. Global EV and ICE share of long-term passenger vehicle sales

## Battery cost deflation continues - 'tipping point' forecast for 2023

Battery prices, which were above US\$1,100 per kilowatt-hour (\$/kWh) in 2010, have fallen 87% in real terms to \$156/kWh in 2019. By 2023, average prices are forecast to be close to \$100/kWh, according to BNEF. This is estimated to be the "tipping point" where mass market electric vehicles are expected to reach price parity with ICE vehicles, whilst larger vehicle classes and premium vehicles have already passed parity in several cases.

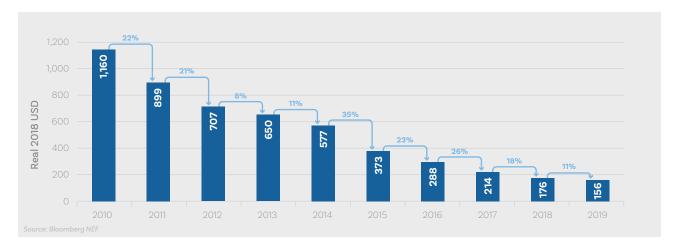
Considering total life cycle costs, EVs today are typically already more affordable than ICE vehicles, due to substantial lifetime savings on fuel and maintenance costs.

COB acknowledges contributions from Wood Mackenzie, Bloomberg New Energy Finance (BNEF) and Glencore in the Cobalt Trends section above.





Figure 4. Volume weighted average lithium-ion pack price



## **Corporate News**

## Settlement with Broken Hill Prospecting Limited (ASX:BPL)

(4 December 2019)

On 4 December 2019 COB announced that it had executed a binding Heads of Agreement with BPL to acquire 100% ownership and legal title of the Broken Hill Cobalt Project (including all tenements). This will result in the dissolution of the Thackaringa Joint Venture and provide COB with full control and continuing management of the Project.

On 17 January 2020 COB announced that COB and its wholly owned subsidiary, Broken Hill Cobalt Project Pty Ltd (BHCP), and BPL had executed final agreements for the assignment of BPL's interests (including legal title).

As part of the assignment, the COB group will pay/issue to BPL:

- \$500,000 cash (\$200,000 was paid on 17 January 2020, with the balance to be paid on or about 28 February 2020).
- 9,000,000 COB fully paid shares (expected to be issued on or about 5 February 2020).
- A \$1,000,000 three-year Convertible Note (CN), with interest of 6% per annum payable annually in arrears.
- A \$3,000,000 five-year Promissory Note (PN) from BHCP, with interest of 6% per annum payable annually in arrears (interest free for years 1, 2 and 3).

## 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.

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

Exploration and Evaluation Expenditure	\$'000
Technical services & consumables	583
General and administration	96
Total	679

During the quarter COB paid \$128,000 to related parties, comprising directory fees and salary.

### **Finance**

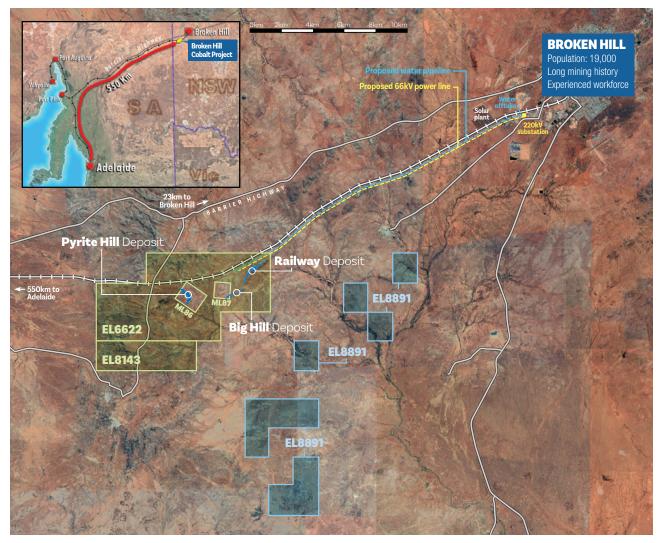
During the quarter COB's daily share price fluctuated between 11.5 cents and 17 cents.

<sup>1</sup> 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 Company.





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 Broken Hill Cobalt Project in New South Wales continue. Cobalt is a strategic metal in strong demand for new generation batteries, particularly lithium-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 (F) 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.

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

- 17 January 2020: Agreement to Acquire BPL's Interest in BH Cobalt Project
- 19 December 2019: Conceptual Project Development Plan delivered
- 9 December 2019: Pilot Plant Update
- 5 December 2019: CEO's Letter to Shareholders
- 4 December 2019: Settlement with BPL
- 21 October 2019: OZ Minerals Testwork Co-operation Agreement

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, 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 Company 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	<ul> <li>100% legal and beneficial interest</li> </ul>	
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.

<sup>\*</sup> On 4 December 2019 COB announced that it had entered into a binding Heads of Agreement with BPL for COB to acquire 100% ownership and legal title of the Broken Hill Cobalt Project, including all tenements.

## 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	December 2019

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 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	(224)	(479)
	(e) administration and corporate costs	(293)	(802)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	9	11
1.5	Interest and other costs of finance paid	(8)	(17)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(516)	(1,287)

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) entities	-	-
	(b) tenements	_ [1]	-
	(c) property, plant and equipment	(2)	(2)
	(d) exploration & evaluation (if capitalised)	(601)	(915)
	(e) investments	-	-
	(f) other non-current assets	-	-
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 (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(603)	(917)

<sup>[1]</sup> Of the \$500,000 cash consideration for the acquisition of the Broken Hill Cobalt Project Tenements, \$200,000 was paid on 17 January 2020 with the balance due on or about 28 February 2020.

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 (provide details if material)	(48)	(106)
3.10	Net cash from / (used in) financing activities	(48)	(106)

Cons	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 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	3,598	4,741
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(516)	(1,287)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(603)	(917)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(48)	(106)
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	2,431	2,431

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	2,431	3,598
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)	2,431	3,598

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.	128
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.

Director fees/salary

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	-	1
7.5	Unused financing facilities available at quarter end	ı	-
7.6	Include in the box below a description of each facility a and whether it is secured or unsecured. If any addition		

On 17 January 2020 the Company executed Final Agreements with Broken Hill Prospecting Limited (ASX:BPL) 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. BPL 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) which will be issued to BPL, 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.

proposed to be entered into after quarter end, include a note providing details of those facilities as well.

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (Item 1.9)	(516)
8.2	Capitalised exploration & evaluation (Item 2.1 (d))	(601)
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	(1,117)
8.4	Cash and cash equivalents at quarter end (Item 4.6)	2,431
8.5	Unused financing facilities available at quarter end (Item 7.5)	-
8.6	Total available funding (Item 8.4 + Item 8.5)	2,431
8.7	Estimated quarters of funding available (Item 8.6 divided by Item 8.3)	2.18

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?
Answe	er: 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?
Answe	er: 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?
Answe	r: Not applicable

If Item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8

## **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: 31 January 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.