# Market Update

24 August 2020

Cobalt Blue Holdings Limited
A Green Energy
Exploration
Company



ASX Code:

COB

## **Commodity Exposure:**

**Cobalt & Sulphur** 

## **Directors & Management:**

Robert BiancardiNon-Exec ChairmanHugh KellerNon-Exec DirectorRobert McDonaldNon-Exec DirectorJoe KaderavekCEO & Exec DirectorRobert WaringCompany Secretary

## **Capital Structure:**

Ordinary Shares at 21/08/2020: 199.8m
Options: 5.6m
Market Cap (undiluted): \$20.4m

#### Share Price:

**Share Price** at 21/08/2020: **\$0.102** 



## **Cobalt Blue Holdings Limited**

ACN: 614 466 607

Address: Suite 17.03, 100 Miller Street
North Sydney NSW 2060

Ph: (02) 8287 0660

Website: www.cobaltblueholdings.com

Email: info@cobaltblueholdings.com

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

## **Highlights**

# Pilot Plant Update – 2nd Delivery of Major Equipment Received

### **KEY POINTS**

- Major items of equipment continue to arrive at our Broken Hill plant site. COB has taken delivery of a 2nd tranche of Pilot Plant equipment – including reactors, tanks, filters, pumps and spirals.
- The Pilot Plant will inform Broken Hill Cobalt Project (BHCP)
   Feasibility Studies as well as supply cobalt product samples to the COB global sample partner program.
- The Pilot Plant will be modular and will be sized upwards to a Demonstration Plant (1:1,000 to full commercial size) by Q3 2021.

### CEO Joe Kaderavek, said:

"The 2nd tranche of critical equipment has now been received. We are on track to build/commission our Pilot Plant and then commence our global sample partner program from Q1 2021. The project represents an exciting commitment to the Broken Hill community."

This shipment comprises of the following items in preparation for installation during Q3/Q4 2020:

- Spirals. For concentrate production. Used during processing of ore to generate pyrite concentrate.
- Reactors and storage tanks. Range of capacities.
- Plate and frame pressure filters. To provide filtration capacity for secondary products and waste streams within the plant.
- Process pumps. A selection of liquor and slurry pumps.
- Spares. Belt filter, drive units for the pressure oxidation vessels and a replacement motor for the vacuum pump.

COB had previously announced (2 March 2020) that a first shipment of equipment had been received and delivered to site in Broken Hill. That shipment comprised the following key equipment:

- Pressure oxidation reactors and flash vessel. These are bespoke vessels, manufactured from high grade titanium and designed to withstand the process chemistry and conditions unique to the COB technology.
- Horizontal vacuum belt filter. This is the primary filtration equipment for use during multiple phases of operation of the Pilot and Demonstration Plants.

Figure 1 (below) shows a simplified 3D layout of the Pilot Plant. Figures 2  $\&\,3$  show equipment delivered to site.





Figure 1 – Pilot Plant (3D view)



Figure 2 – COB Pilot Plant – Vacuum Belt Filter and Reactors (foreground)







Figure 3 – COB Pilot Plant – Leaching Circuit Equipment received by Adam Randall (Plant Manager)



COB is building a Pilot Plant to test the leaching of calcined material (sourced from ~100 t of existing drill core) in two 5 t campaigns. The Pilot Plant will allow COB to produce varying specifications of cobalt products (including mixed hydroxides and sulphates) and represents a significant milestone for our business. Our commercial aim remains to make battery ready cobalt sulphate from this facility on a scale sufficient to provide **test samples** (~10 kgs) for global commercial partners.

Looking forward, these results will be used to design a larger Demonstration Plant and provide early confirmation of inputs in the BHCP Feasibility Study. COB intends to operate the 1:1000 scale Demonstration Plant in 2H 2021, focusing on calcining cobalt-pyrite concentrate for production of sulphur, and an integrated hydrometallurgical circuit for leaching calcine and recovery of cobalt and sulphur.

The 'steady-state' data collected from operations will be used in the BHCP Feasibility Study to confirm the process recoveries of cobalt and sulphur. As part of these activities, larger sample cobalt and sulphur products will be generated for assessment by potential commercial partners.

The BHCP development timeline to 2022 is shown in Figure 4.

Figure 4 – COB's Development Timeline

	2017	2018	2019	2020	2021	2022
Business Achievements	IPO	<b>LGI</b> — Cobalt First Mover	Mitsubishi — Sulphur Agreement 100% Project Ownership		Global cobalt sample program - Q1 2021	Final Investment Decision – H1 2022
Technical Studies	Resource upgrade Drilling: +8,000m Resource: 55Mt Scoping Study	Resource upgrade Drilling: +12,500m Resource: 72Mt Pre Feasibility Study	Resource upgrade Drilling: +9,500m Resource: 111Mt	Project Update 2020 — July 2020		Feasibility Study and Approvals - H1 2022
Metallurgical Studies			Concentration – Pilot Scale Testwork	Pilot Plant – Q4 2020	Demonstration Plant – Q2 2021	
Environmental Approvals			CPDP Submitted	Scoping Report  - Jan 2020  SEARs issued  - Feb 2020	EIS Submission – H2 2021	SSD Determination - H1 2022
	ACHIEVEMENTS			GOALS		





## **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. COB's ambitious goals are subject to funding availability. 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 (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

This announcement was authorised by the Board of Directors.

## **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

- 14 July 2020: BHCP testwork High purity cobalt and sulphur products
- 28 April 2020: Mixed Hydroxide Product (MHP) testwork delivers premium product.
- 02 March 2020: Pilot Plant Update Critical Equipment Received
- 09 December 2019: Pilot Plant Update
- 01 May 2019: COB-Mitsubishi Sulphur Agreement
- 24 June 2019: Concentrate Circuit (Pilot Trial) program successfully completed
- 04 April 2019: Significant Thackaringa Resource Upgrade
- 26 February 2019: Testwork Update

COB confirms it is not aware of any new information or data that materially affects the information included in the original market announcement, 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.