# Market Update

#### 23 November 2023

Cobalt Blue Holdings Limited A Green Energy Exploration Company



СОВ

\$0.285

#### Commodity Exposure Cobalt & Sulphur

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

Robert BiancardiNon-Exec ChairmanHugh KellerNon-Exec DirectorRobert McDonaldNon-Exec DirectorJoe KaderavekCEO & Exec DirectorDanny MorganCFO & Company<br/>Secretary

#### Capital Structure:

Ordinary Shares at 23/11/2023:	375.4m
Unlisted options/rights:	3.4m
Market Cap (undiluted):	\$107m
Share Price	

Share Price at 23/11/2023:



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

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### Highlights

# **Positive Results - Preliminary Flin Flon Tailings Test Work**

#### **KEY POINTS**

- Cobalt Blue Holdings Limited (COB) (ASX:COB) and Hudbay Minerals Inc. (Hudbay) previously announced a test work co-operation agreement examining the use of COB technology to treat Hudbay's Flin Flon tailings.
- COB has now completed preliminary roasting test work with positive results warranting further evaluation in the next stage of test work.
- The overall results successfully achieved greater than 90% conversion of the pyrite into pyrrhotite and elemental sulphur.

### Background

COB previously announced (ASX: 27 June 2023) that it had entered into a testwork co-operation agreement with respect to Hudbay's wholly-owned Flin Flon tailings storage facility located in the Province of Manitoba, Canada (the "Tailings Facility"). Hudbay estimates that the Tailings Facility contains over 100 million tonnes from approximately 90 years of operations, which ceased in 2022.

In 2021, Hudbay identified the opportunity to reprocess Flin Flon tailings and subsequently completed a confirmatory drilling program covering approximately two-thirds of the Tailings Facility. The assay results from Hudbay's drilling program indicated higher zinc, copper and silver grades than predicted from historical mill records while confirming the historical gold grade. The COB test work agreement is assessing the ability to recover valuable minerals while converting sulphides into stable and benign sulphur.

# **COB Technology**

COB has been developing minerals processing technology for extraction and recovery of cobalt and elemental sulphur from cobalt-pyrite feedstocks. The minerals processing technology is focussed on the treatment of pyrite, to recover payable metals, elemental sulphur, and generate environmentally stable iron oxide leach residues. The process specifically avoids the simultaneous production of sulphuric acid, which normally occurs when roasting pyrite, or leaching pyrite via pressure oxidation.



The technology has progressed to a Demonstration Plant scale in Broken Hill. During the execution of feasibility studies supporting the Broken Hill Cobalt Project (**BHCP**) the Demonstration Plant has completed over 2,000/600 hours of kiln/autoclave operations to date at near commercial scale with resultant production of hundreds of kilograms of commercial cobalt chemicals.

Previously, COB had successfully evaluated the application of the technology to cobalt-pyrite feedstocks from other locations within Australia, namely North Queensland and South Australia.

### **Testwork Results**

A 50 kg sample of tailings from Flin Flon has been received with preliminary test work completed. The sample contained:

- Approximately 0.8% Zn, 0.1% Pb, 0.2% Cu, 200 ppm Co
- Approximately 40% pyrite.

Laboratory scale 'proof-of-concept' testwork was completed including flotation, thermal decomposition of pyrite, and leaching of kiln calcine. The overall results successfully achieved >90% conversion of the pyrite into pyrrhotite and elemental sulphur.

These results will be used to design an overall flowsheet for the treatment of the tailings as part of the final test work.

## **Next Steps**

If the final test work results meet expectations, then further discussions concerning the next stages of technical cooperation will be held. Future collaboration may include larger-scale test work in parallel with potential commercial negotiations.

### Forward-Looking Information and Disclaimer

This release contains certain "forward-looking statements" and "forward-looking information" defined or applied under Australian securities laws. Forward-looking statements and information can generally be identified using forward-looking terminology such as "may", "will", "should", "expect", "intend", "estimate", "anticipate", "believe", "continue", "plans" or similar terminology. The forward-looking information contained herein is provided for the purpose of assisting readers in understanding management's current expectations and plans relating to the future. Readers are cautioned that such information may not be appropriate for other purposes.

Forward-looking information includes, but is not limited to, COB's expectations regarding the success, results and findings resulting from the Testwork Agreement; the timing and duration of the engagement; and the evaluation of the opportunity to reprocess tailings. Forward-looking information is not, and cannot be, a guarantee of future results or events. Forward-looking information is based on, among other things, opinions, assumptions, estimates and analyses that, while considered reasonable by the relevant company at the date the forward-looking information is provided, inherently are subject to significant risks, uncertainties, contingencies, and other factors that may cause actual results and events to be materially different from those expressed or implied by the forward-looking information.

The risks, uncertainties, contingencies and other factors that may cause actual results to differ materially from those expressed or implied by the forward-looking information may include, but are not limited to, risks generally associated with the mining industry and the current geopolitical environment, such as economic factors (including future commodity prices, currency fluctuations, energy prices and general cost escalation).

Should one or more risk, uncertainty, contingency or other factor materialise or any factor or assumption prove incorrect, actual results could vary materially from those expressed or implied in the forward-looking information. Accordingly, you should not place undue reliance on forward-looking information. COB does not assume any obligation to update or revise any forward-looking information after the date of this announcement or to explain any material difference between subsequent actual events and any forward-looking information except as required by applicable law.

### **About Cobalt Blue**

Cobalt Blue (ASX: COB) is a mining and mineral processing company focussed on the development of the Broken Hill Cobalt Project in New South Wales, Australia. The portfolio of three granted tenements in a total area of 49 km2 containing large-tonnage cobalt-bearing pyrite deposits are located 23 km west of Broken Hill. COB has developed a patented minerals processing technology for treating pyrite feedstocks targeting 85–95% recovery of cobalt from ore to product (as Mixed Hydroxide Precipitate or Cobalt Sulphate). The Broken Hill Cobalt Project has a targeted project life of +20 years and is expected to be a significant employer in Regional NSW, with around 400 fulltime jobs generated. COB anticipates becoming a global top 5 supplier of battery-grade cobalt (ex-China). Cobalt Blue is also seeking to develop a separate refinery operation in Kwinana, WA, that will have the potential to process future material from BHCP, other COB-owned cobalt projects and third-party material. Further information about COB can be found at www.cobaltblueholdings.com.



# **About Hudbay**

Hudbay (TSX, NYSE: HBM) is a copper-focused mining company with three long-life operations and a world-class pipeline of copper growth projects in tier-one mining-friendly jurisdictions of Canada, Peru and the United States.

Hudbay's operating portfolio includes the Constancia mine in Cusco (Peru), the Snow Lake operations in Manitoba (Canada) and the Copper Mountain mine in British Columbia (Canada). Copper is the primary metal produced by the company, which is complemented by meaningful gold production. Hudbay's growth pipeline includes the Copper World project in Arizona, the Mason project in Nevada (United States), the Llaguen project in La Libertad (Peru) and several expansion and exploration opportunities near its existing operations.

The value Hudbay creates and the impact it has is embodied in its purpose statement: "We care about our people, our communities and our planet. Hudbay provides the metals the world needs. We work sustainably, transform lives and create better futures for communities." Hudbay's mission is to create sustainable value and strong returns by leveraging its core strengths in community relations, focused exploration, mine development and efficient operations. Further information about Hudbay can be found on www.hudbay.com.

This announcement was authorised for release to the ASX by the board of Cobalt Blue Holdings Limited.

For further information, please contact:

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

### **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

• 27 June 2023: Flin Flon Tailings Testwork Agreement with Hudbay Minerals Inc.

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.

### **Competent Person's Statement**

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.