Market Update

CobaltBlue
green energy technology

02 April 2024

Cobalt Blue Holdings Limited

A Green Energy Exploration Company

ASX Code: **COB**

Commodity Exposure:

Cobalt & **Sulphur**

Directors & Management:

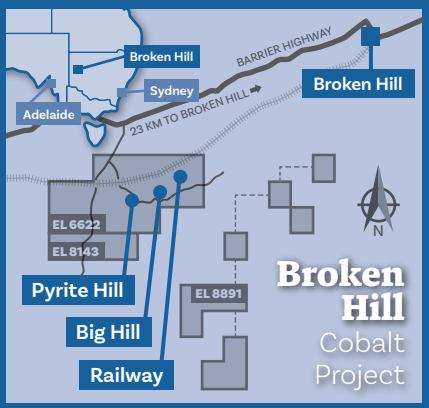
Robert Biancardi	Non-Exec Chairman
Hugh Keller	Non-Exec Director
Robert McDonald	Non-Exec Director
Joe Kaderavek	CEO & Exec Director
Danny Morgan	CFO & Company Secretary

Capital Structure:

Ordinary Shares at 2/04/2024:	**378.3m**
Unlisted rights	**5.8m**
Market Cap (undiluted):	**$53m**

Share Price:

Share Price at 02/04/2024:	**$0.14**



Cobalt Blue Holdings Limited

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Highlights

Cobalt-Nickel Refinery Progress

KEY POINTS

- COB is developing the first Cobalt Sulphate Refinery (Refinery Project) in Australia. Recent milestones achieved:
  - Large-scale feedstock samples sourced from third parties have been processed
  - Potential offtake partners have begun to assess larger-scale sulphate samples produced from these sources
  - Detailed engineering design has commenced
  - Permitting on target for submission mid-2024
- Workstreams are on track for a Q3 2024 decision to proceed to construction.
- COB and Iwatani Australia will jointly market the Refinery Project at the upcoming annual Cobalt Institute Conference (13–14 May 2024).
- COB is targeting both the US Inflation Reduction Act (IRA) and EU Critical Raw Materials Act (CRMA) compliance for its products. We believe that the timing of the Refinery Project is ideal as US/EU market demand will hit an inflection point in the coming years.
- COB published a Cobalt-Nickel Refinery Study presenting a compelling evaluation of a refining business that is expected to generate stable margins throughout the highs and lows of the cobalt price cycle.[1]

Joe Kaderavek, CEO Cobalt Blue commented *"Refinery Project development is progressing well, and we remain on pace to see construction commence by the end of this year. There is significant interest from WA State and Australian Commonwealth governments, along with international commercial parties in the emergence of a new midstream critical mineral capacity in Australia for the global battery supply chain."*

1 *Refer to ASX announcement dated 27 November 2023 for further information*

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1 Testwork

COB has secured 10 tonnes of feedstocks from global third parties for trial in our (Broken Hill based) Demonstration Plant. Work continues to optimise the key unit operations, including:

1. leaching;
2. trace metal removal;
3. cobalt separation by solvent extraction;
4. cobalt sulphate crystallisation; and
5. nickel recovery.

The plant is operating on a continuous basis, with ability to trial parameters and equipment settings. Weekly programs target specific unit operations.

Following recent meetings with prospective offtakers in Japan, target levels for non-metallic elements were set. For example, a required target content of calcium, magnesium and sodium in the cobalt sulphate was provided. Hence, modifications to the solvent extraction circuit have been trialled to meet the required carry-over of magnesium, calcium and sodium into the cobalt sulphate product. The Japanese battery industry is generally considered to have stringent offtake specifications, and we believe these trials will place COB in a strong position to engage with a broader range of global partners as a result.

The feedstock secured represents the targeted third-party materials COB expects to source for its future Kwinana-based commercial operations. COB intends to market this large-scale sample production to kick off the qualification process, that will then be carried over to by the commercial plant when operations begin.

A photo of a recent batch of cobalt sulphate is shown below. Approximately 30 kg was produced from a single crystallisation run.

Figure 1 – **Cobalt Sulphate crystals produced from third party feedstocks**

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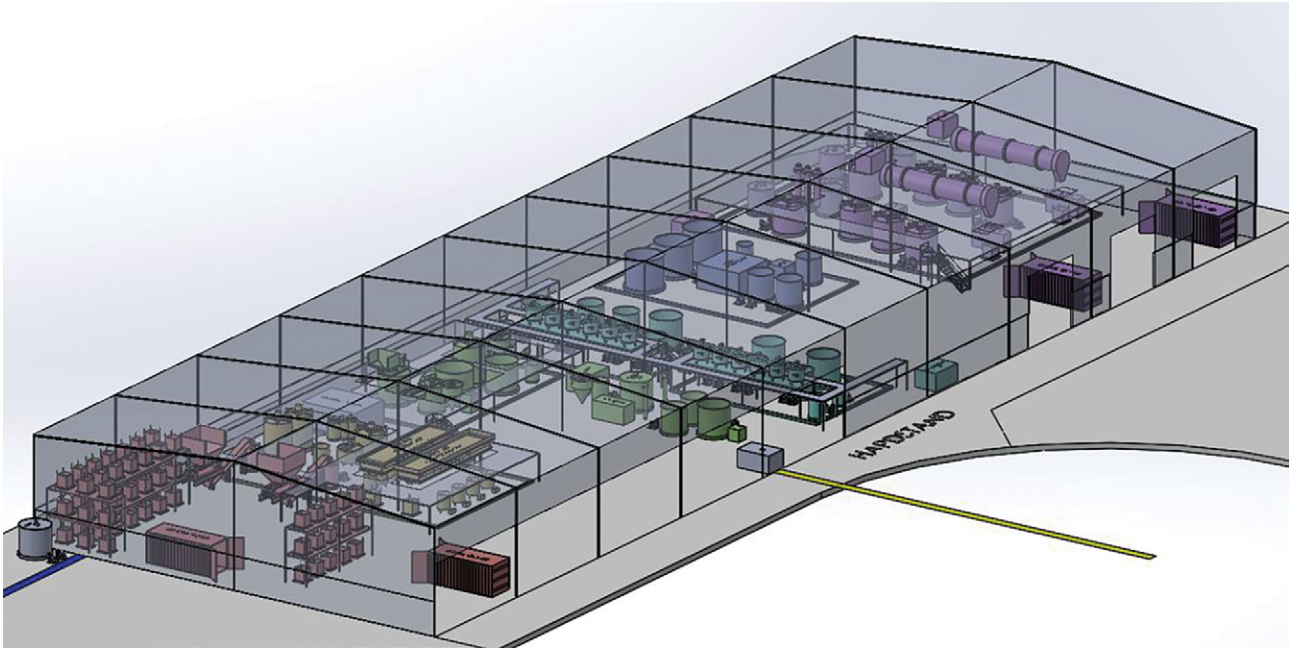
2 Engineering

COB has commenced the detailed engineering design. The process engineering design package will be completed by COB. External consultants will be engaged for civils, structural, electrical and instrumentation design. Efforts continue to select the preferred construction and management partner for the project.

Figure 2 – **Proposed Refinery site adjacent to Doral Fused Materials operation**

Figure 3 – **Conceptual 3D Model of the plant design**



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3 Feed Supply

COB is aiming to execute initial feedstock contracts by mid-2024. Supply must adhere to strict criteria, and COB will only source from suppliers that:

- do not contravene USA Foreign Entities Of Concern (FEOC) definitions; and
- meet appropriate environmental and labour standards; and
- permit traceability/authentication to validate origin and supply chain custody.

4 Offtake Contracts

COB is aiming to secure initial offtake contracts by mid-2024. A key risk for offtake contracts is the validation of these high purity chemicals into the manufacturing supply chain. COB continues to build on existing deep relationships with precursor cathode active material (pCAM) manufacturers, to optimise product specifications including contaminant trace metals, physical handling and moisture content, logistics supply and product storage requirements. Strategies are being developed to streamline validation once the Refinery Project plant has been constructed.

COB continues to develop a relationship with Iwatani Australia and will jointly market the Cobalt-Nickel Refinery at the upcoming Cobalt Institute conference in New York ("Cobalt Congress 2024") 13–14 May 2024.

5 Permitting

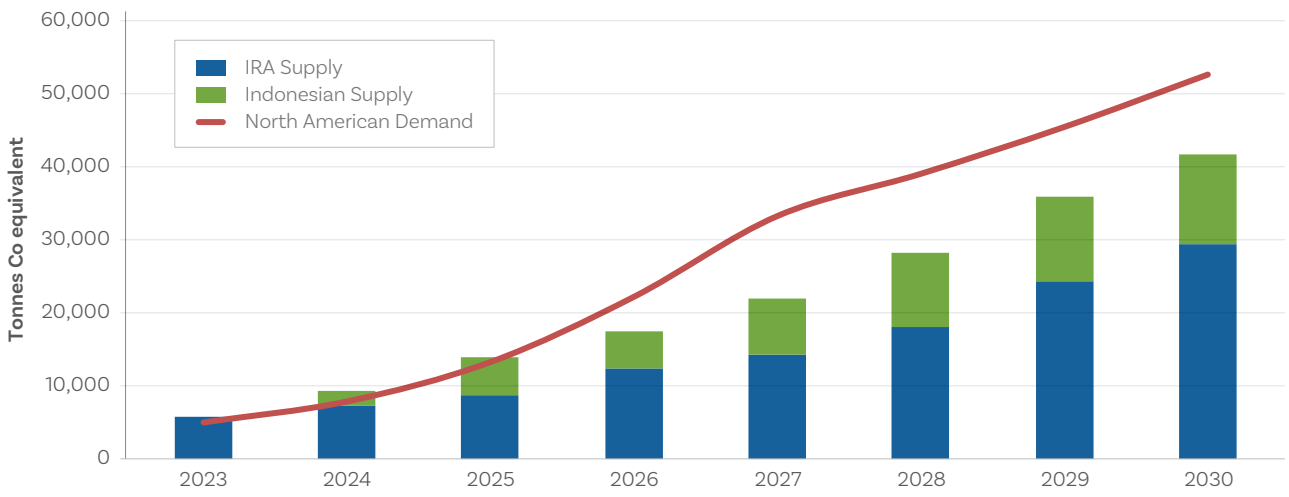
ABEC/Green Values has been appointed to prepare permit applications for the Refinery Project. A Works Approval for the existing Iwatani Australia license will be sought from the Department of Water and Environmental Regulation (DWER) Western Australia. The necessary background studies include assessment of air emission, waste management and use/storage/management of hazardous substances. COB is intending to submit the application by mid-2024 to DWER.

6 IRA compliant material – deficit emerging

COB is targeting both the US Inflation Reduction Act (IRA) and EU Critical Raw Materials Act (CRMA) compliance for its products. We believe that the timing of the Refinery Project is ideal as US/EU market demand will hit an inflection point in the coming years.

In the US, FEOC exclusion criteria are scheduled for implementation from 1 Jan 2025 (subject to an industry consultation period of up to 6 months), with any FEOC material content effectively excluding the Electric Vehicle maker from any benefit under the IRA. According to our analysis, from 2026, only 55% of the US supply requirement will be compliant – and this share will decline as EV sales grow.

Figure 4 – **Cobalt sulphate supply vs North American demand**



Source: Benchmark Minerals Intelligence, Rho Motion, Cobalt Blue Holdings

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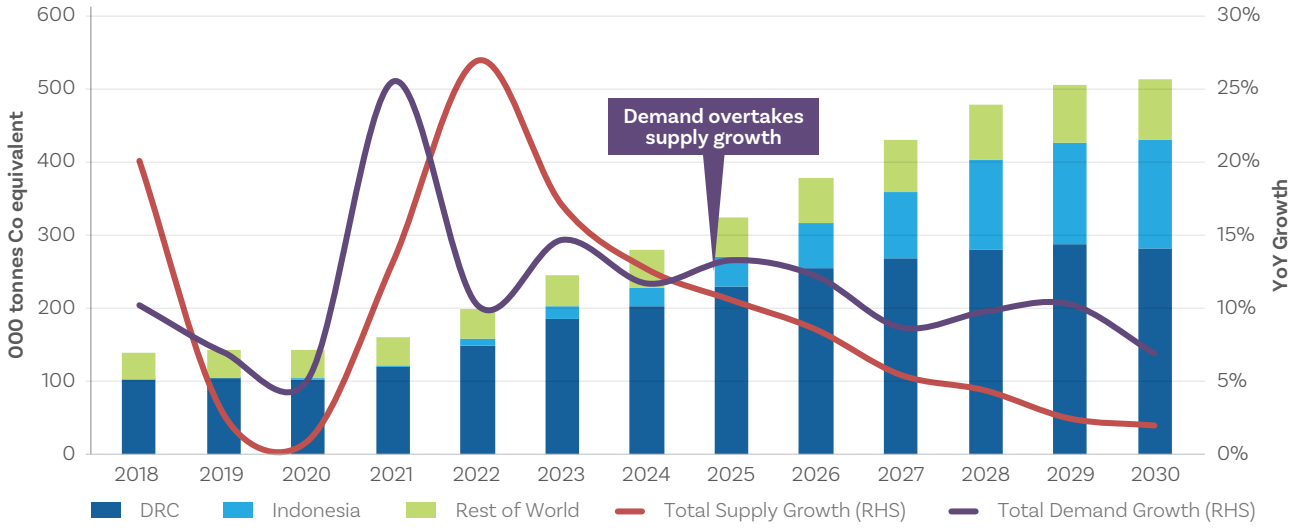
During the second half of this decade, global demand growth for cobalt will exceed supply growth for the fore-seeable future. Cobalt output has seen significant growth as a result of a deep pipeline of operational expansions and greenfield development in the Democratic Republic of Congo and Indonesia. As this extraordinary period of growth eases, a steady demand growth profile will likely create substantial market deficits and bring cobalt prices back over time to long-term averages.

Figure 5 – **Global cobalt supply by source vs demand growth**



Source: Benchmark Minerals Intelligence, Cobalt Blue Holdings

About Cobalt Blue

Cobalt Blue is a mining and mineral processing company focussed on the development of a Cobalt-Nickel Refinery in Western Australia, the Broken Hill Cobalt Project in New South Wales, and Cobalt in Waste Streams Projects with a view to global opportunities contained in mine waste.

This announcement contains "forward-looking statements". All statements other than those of historical facts included in this announcement are forward-looking statements. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include but are not limited to the ability to reach binding agreement on the proposed terms or at all, cobalt metal price volatility, timely completion of project milestones, funding availability, government and other third-party approvals. Readers should not place undue reliance on forward-looking statements. The Company does not undertake any obligation to release publicly any revisions to any "forward-looking statement".

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.

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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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.

- 26 February 2024: Broken Hill Cobalt Project and Cobalt-Nickel Refinery Update
- 27 November 2023: COB to Progress Cobalt Nickel Refinery Project in 2024
- 03 August 2023: Demonstration Plant success. Refinery Development Program launched.

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.

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