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13 April 2023

# CEO's Letter to Shareholders

## Cobalt Blue Strategy

I am writing to investors to provide an overview of COB's strategy amid the evolving global critical minerals backdrop. We have recently issued guidance on the progress of our Broken Hill Cobalt Project (BHCP), proposed Cobalt Refinery and Cobalt in Waste Streams projects. This letter details how all these pieces fit together.

There are three building blocks to the COB business:

1. BHCP
2. Refinery
3. Cobalt in Waste Streams Project/s (CWSP)

The BHCP remains our core focus, but the other building blocks remain integral to the realisation of our strategy, which we will explain below.

Firstly, the global backdrop.

## Global legislation and the emergence of an Allied Critical Raw Materials Supply Chain

It's a good time to review how these major proposed changes will affect our business, with guidance for the (US) Inflation Reduction Act and (EU) Critical Raw Materials Act finally in place (March 2023).

### United States Inflation Reduction Act (IRA)

The IRA includes ~US\$390Bn<sup>1</sup> of spending/credits over the next 10 years related to energy and climate change, with the goal of putting the U.S. on the path towards 40% emissions reductions by 2030. The US Treasury Department has advised that it intends to remain strict on sourcing and content requirements in order to trigger more announcements in EV production and battery investment aligned to US interests. In our view, these changes will lead to a global race for IRA-compliant supply. We have included a breakdown of key IRA incentives below.

Figure 1 – Summary – Inflation Reduction Act (IRA) 2022

Value chain segment		Selected IRA incentives
Battery industries	Mining	Up to US\$500 million in federal support for US mining and refining of critical minerals for batteries.
	Refining	Tax credits of up to 30% of the amount invested in establishing or upgrading a refining facility.
	Active materials	Tax credits of up to 10% of the costs incurred to produce electrode active materials.
	Cell and pack manufacturing	Up to US\$45/kWh in tax credits for cell and module manufacturing.
	Recycling	Tax credits of up to 30% of the amount invested in establishing or upgrading a recycling facility.
Adjacent industries	EV manufacturing	Tax credits of up to US\$7,500 for the manufacture of clean vehicles, subject to supply chain requirements, with an estimated total value of US\$7.5 billion over 10 years.
	EV adoption	Tax credits of up to 30% for businesses to adopt clean vehicles. US\$3 billion for the US Postal Service to purchase zero emission delivery vehicles.

<sup>1</sup> Source: US Treasury

US Treasury defines critical minerals to include cobalt and other EV destined metals. The critical mineral requirement is met if the percentage of total mineral value in the battery made in North America or Free Trade Agreement (FTA) (such as Australia) jurisdictions is 40% in 2023. This hurdle increases in annual 10 percentage point increments to an 80% ceiling after 2026.

### EU Critical Raw Materials Act (CRMA)

COVID supply chain disruptions and the Russia-Ukraine war have exposed EU dependency on critical raw materials. The three pillars of the EU CRMA are aimed at mitigating these dependencies: (1) an onshore CRM supply chain, (2) supply chain diversification, and (3) sustainable sourcing including circularity (recycling).

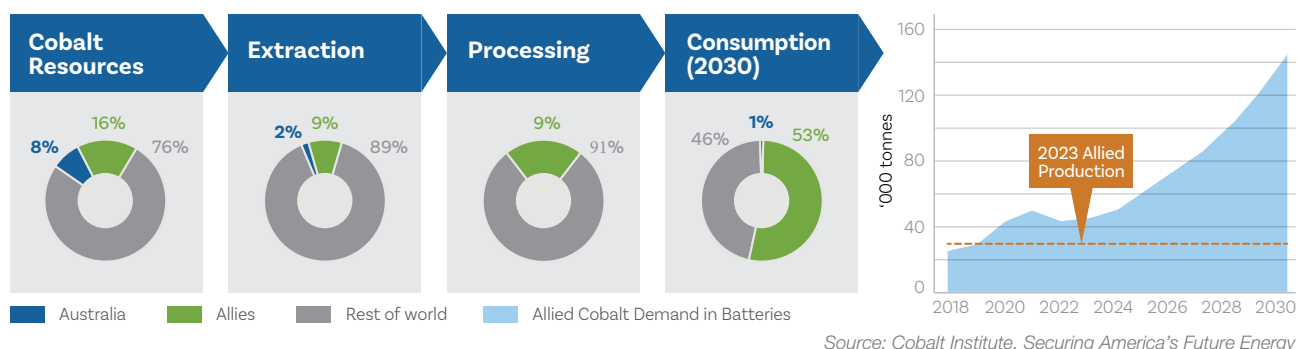
CRMA self-sufficiency objectives (2030) include 10% for extraction and 40% for processing. Recycling is targeted to meet an aggressive 15% of demand. Additionally, no more than 65% of critical materials demand per value chain step (extraction, concentration and processing) should be met by a single country.

### The Allied Supply Chain

The US has defined Foreign Entities of Concern as excluded from assistance under the IRA. Their focus is instead upon Allied Nations that include EU, UK, Japan, South Korea, Australia and other strategically aligned countries.

The mining/refining industries of Allied Nations are being incentivised to respond. Unfortunately, their historical response to demand challenges has been poor and instead became heavily reliant on China. Within the cobalt market, the cost of metal sourced from unsustainable practices (for example artisanal cobalt from Africa) is a disincentive to a supply response from sustainable and ethical sources. Both EU and US governments are attempting to encourage new supply chains that include sustainable metals production – a so called “race to the top”. We believe that these incentives will lead to the development of a new cobalt pricing index, one that will provide a premium for IRA and CRMA compliant cobalt.

Figure 2 – Cobalt – Allied Nations Production vs Forecast Demand – Shortfall



The chart above shows the cobalt resource, extraction (mining) and processing (refining) of Allied Nations. Today, these nations extract and process 11% and 9% respectively of global cobalt, however these nations are expected to consume over 50% of global consumption by 2030. Put another way (right hand chart), Allied Nations currently produce ~30,000tpa of cobalt metal. This amount will need to increase significantly to 140,000tpa by 2030 to meet its own demand. This shortfall can only be overcome by creating new supply chains that include new mines and refineries. COB is entering the global critical minerals market at a very exciting time.

## Cobalt Blue's Strategy

### COB Refinery

Demonstration Plant operations continue, systematically addressing scaling risks in our transition towards a commercial operation. This includes refining of BHCP mixed hydroxide precipitate into separate cobalt and nickel sulphates. Nickel forms a minor portion of the BHCP production, however our ability to successfully produce nickel sulphate from that plant provides COB with strong optionality for the future. The two products are shown in the photo below:

Figure 3 – **Demonstration Plant – nickel sulphate and cobalt sulphate**



Our plan remains to make a high-quality cobalt sulphate via an integrated BHCP mine/refinery process, albeit in two locations. In keeping with earlier guidance, we intend that COB will retain ownership of the BHCP production chain through to the production of cobalt sulphate.

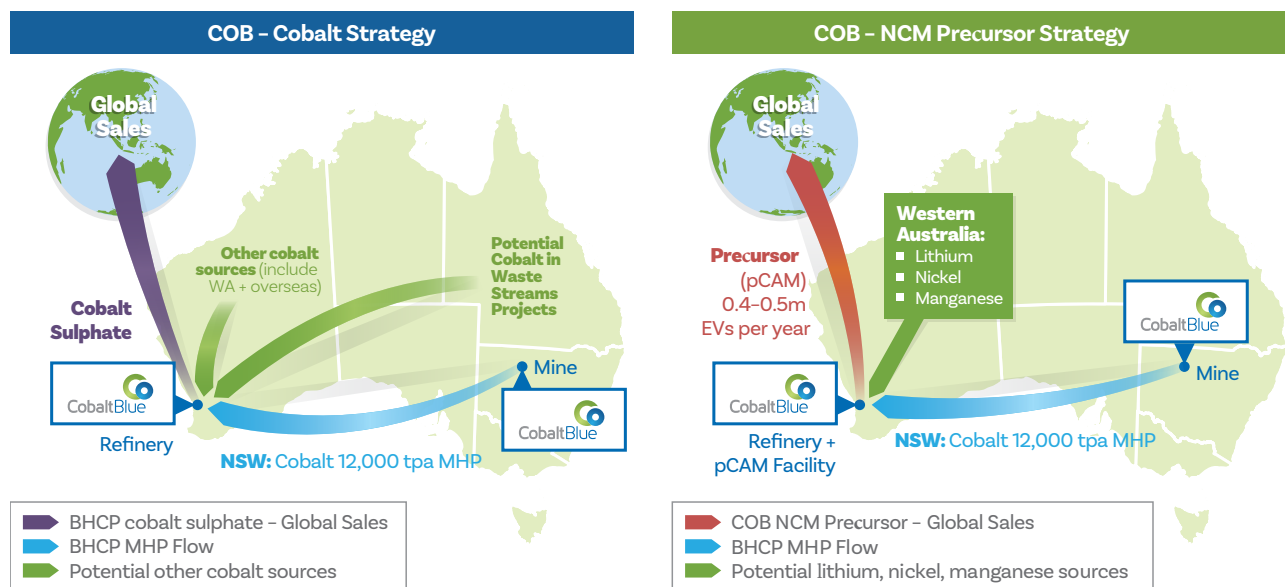
During our DFS process we are examining the option to refine BHCP cobalt mixed hydroxide precipitate (MHP) into cobalt sulphate at a separate location, namely in the Kwinana district south of Perth. There are strategic reasons for this decision:

- **Access to export markets:** Kwinana has a deep-water port and export facilities. Cobalt sulphate is a fragile product that absorbs water (particularly in hot/humid regional conditions) if left exposed and needs to be stored/shipped carefully. Direct port access provides a meaningful advantage.
- **Cost advantage:** Kwinana is a major chemicals district. Approximately 60–70% of the costs associated with conversion from MHP to cobalt sulphate come from reagent/chemical costs. This location provides ready access to low-cost chemicals.
- **Integrated business:** Refining is fundamentally an economy of scale business. A single, larger refinery allows COB to process future material sourced from BHCP and (in future) other COB owned cobalt projects, rather than build out individual refineries at mine sites dispersed through Australia:
  - BHCP will produce ~12,000 tonnes of MHP per annum which equals ~four rail wagons per week (~230 tonnes). As a reminder, the transcontinental railway line (linking Broken Hill with Kwinana) passes through our tenements;
  - new Australian mining projects (typically nickel/cobalt producers) that wish to enter the battery production chain (providing the COB Refinery with a “first mover advantage”). The projects are typically based in Western Australia;
  - globally sourced materials (for example Philippines, Indonesia) will likely qualify for significant US and EU financial incentives if processed via an approved country; and
  - Cobalt in Waste Streams Project/s (CWSP).

- **Australia's advantage:** Australia is the only country that mines all four of the cathode elements. These metals are processed through Kwinana and so represent an ideal location to cooperate with battery industry peers to make cathode precursor or active cathode materials for global markets.

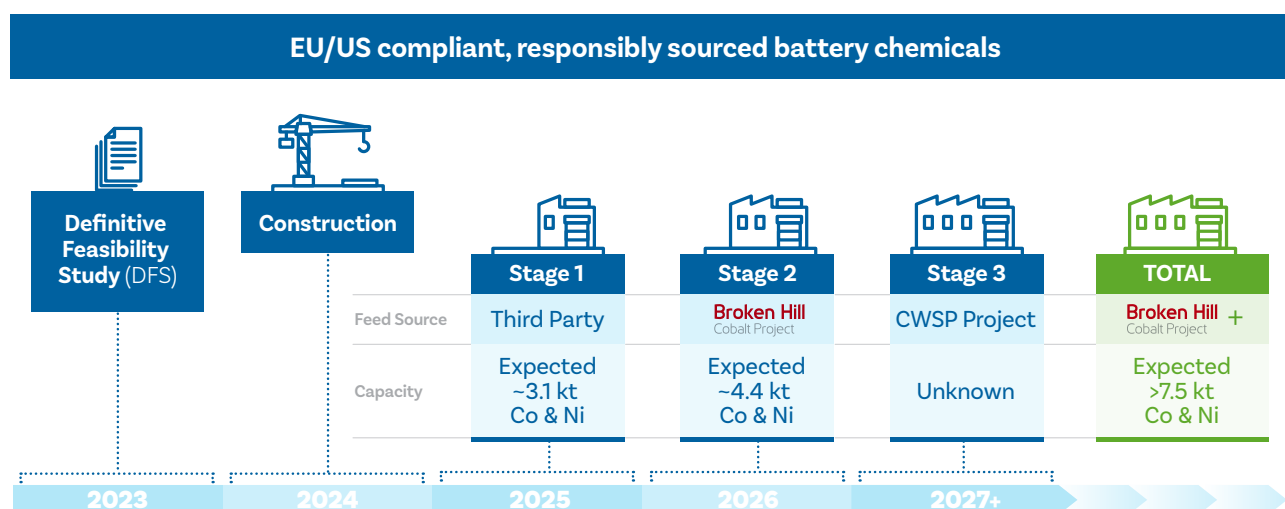
This overall strategy has been condensed into the graphics below:

Figure 4 – COB Cobalt and NCM Precursor Strategies



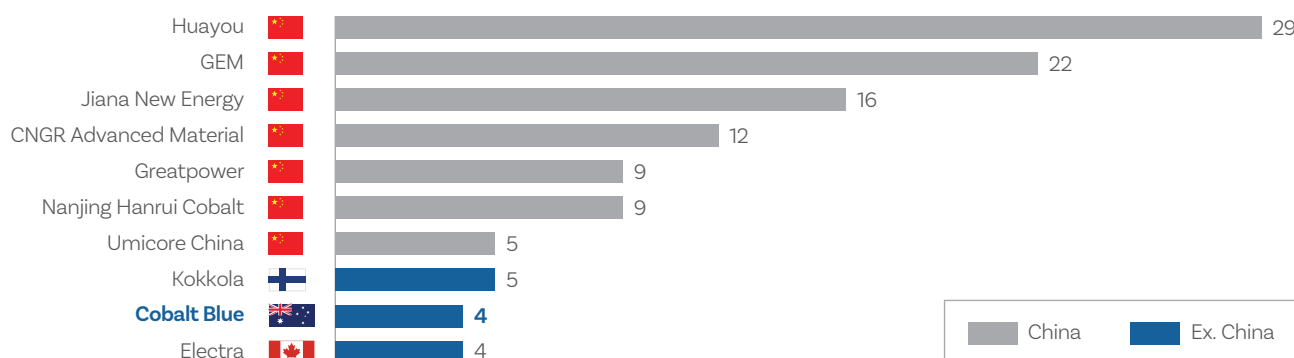
I have included a simple graphic of the refinery below. Whether Stage 1 (3rd party sourced material – likely international origin) comes ahead of Stage 2 BHCP material is not important, rather they are on different timelines. Stage 3 refers to our CWSP focussed initiative that is further described below. The graphic also explains the refinery capacity build out – with BHCP refining capacity included in previous BHCP capital estimates (Project 2020 Update), a point worth repeating, **there is no material change in our capital estimate guidance for BHCP by simply moving the refinery to Kwinana.**

Figure 5 – COB Refinery – multiple feedstock sourcing



A cobalt refinery of this scale is globally significant. In addition to cobalt, we are planning on processing nickel in the refinery. This would be sold as nickel sulphate crystals. We have included an illustrative (~3.9 ktpa) cobalt sulphate (metal equivalent) refinery in the global cobalt refinery comparison below, but note that our refinery targets for Stage 1 & 2 include a similar volume (~3.6 ktpa) nickel sulphate (metal equivalent).

Figure 6 – Global cobalt sulphate capacity, 2026 (Kt Co)



Source: Wood Mackenzie

### So how does the COB strategy work with the IRA and CRMA?

Simply put, Cobalt Blue is targeting an integrated approach focused on mining (**Extraction**) (Broken Hill) and refining (**Processing**) (Kwinana). Large scale **Extraction** and **Processing** in Australia will support secure compliant global supply chains.

### Cobalt in Waste Streams Projects (CWSP)

Our Demonstration Plant will be finalising its BHCP focussed test work in coming months. Beyond mid-year the plant is available for large scale test work for other projects, which we believe will arise from our current suite of identified opportunities. Recycling mining waste to commercialise metals contained within remains a focus for our business with a majority of Australian opportunities being cobalt dominated, while international opportunities include other metals. Whilst our current Queensland focussed test work continues, a mining specialist whose role will include a global search for mining waste stream and primary resource opportunities is expected to start with us shortly.

### Conclusion

We are proud to present the details of the three building blocks to the COB business:

1. BHCP
2. Refinery
3. Cobalt in Waste Streams Projects

BHCP remains our core focus (which will be updated as the Definitive Feasibility Study progresses) but expect updates on the other building blocks as well in the near term.

COB has a promising future with significant milestones expected to be achieved in the coming quarters. We look forward to keeping investors updated over this time.



**Joe Kaderavek**  
Chief Executive Officer

This announcement has been authorised for release by the Board.