Market Update

CobaltBlue

21 November 2025

Highlights

Cobalt Blue Holdings Limited

ASX Code: **COB**

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Kwinana Cobalt Refinery Project Update

Key Points

- In response to changed market conditions, COB has re-evaluated project parameters for the Kwinana Cobalt Refinery (**KCR**), revising feedstock sourcing, diversifying the cobalt products, and refreshing underlying economic assumptions.
- These revisions have resulted in an uplift in base case (Stage 1) financial metrics (on a 100% owned basis):
  - **NPV_8 (post tax):** increased from A$90m to A$155m
  - **IRR (post tax):** increased from 23% to 32%
  - **Total free cashflow:** increased from A$367m to A$503m
- Strong progress has been made towards a Final Investment Decision with key permits secured, feedstock agreement locked in, and customer qualification underway throughout 2025 – remaining steps include finalising offtake agreements and completing the project funding package.
- Cobalt products pricing (2025) have rebounded by 90%–300% across key products following a structural shift in market dynamics, a materially improved environment for cobalt refining.

Kwinana Cobalt Refinery Project

The Kwinana Cobalt Refinery (**KCR**) business plan targets an initial production capacity of approximately 3,000 tonnes of contained cobalt (base case – Stage 1) – notionally, 2/3 as cobalt sulphate and 1/3 as cobalt alloy grade metal. Expansion up to ~6,000 tonnes of cobalt (expansion option – Stage 2) is dependent on offtake demand, and feed supply opportunities.

COB previously provided cost estimates and revenue analysis for KCR on 9 October 2024[1], covering the base case development (Stage 1) and the expansion option (Stage 2). COB has since re-evaluated project parameters for KCR, to better reflect current market conditions for supply of feedstocks (only cobalt hydroxide) and diversification of offtake products (cobalt metal and cobalt sulphate).

The economic model has been updated for the base case (Stage 1), as this is the near-term focus for a Final Investment Decision (**FID**). A summary of the project parameter updates is provided in Table 1.

[1] Refer COB's ASX announcement 'Kwinana Cobalt Refinery Update' dated 9 October 2024.

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Table 1 - Summary of changes to KCR project parameters.

Parameter	October 2024	November 2025
Plant capacity	3,000 tonnes per annum (tpa) cobalt (as cobalt sulphate) ~500 tpa nickel (as nickel metal)	3,000 tpa cobalt (2,000 tpa as cobalt sulphate and 1,000 tpa cobalt alloy grade metal)
Estimate capital costs	A$60m (inclusive of 15.5% contingencies)	No change
Commissioning / Product qualification period	Up to 12 months at half throughput capacity and 75% of sales value	No change
Feedstock sources	Cobalt hydroxide and cobalt-nickel sulphide	Cobalt hydroxide
Products	Cobalt sulphate and nickel metal	Cobalt sulphate and cobalt alloy grade metal

The above changes to the project parameters are not expected to have a material impact on estimated capital or operating costs, as the plant will maintain flexibility to handle different feedstocks and product mixes in response to market dynamics.

Updated capital and operating costs will be released when the detailed engineering is finalised for project financing (expected during 1H 2026).

The financial metrics for the base case (Stage 1) scenario, reflecting the updated project parameters are set out in Table 2 below:

Table 2 - KCR Stage 1 EBITDA, NPV and IRR.

		October 2024	November 2025
Financials (100% owned)			
Total Cobalt Revenue	A$ m	4,454	4,157
Total EBITDA	A$ m	465	658
Total Operating Cash Flow	A$ m	367	503
Valuation (100% owned)			
Net Present Value (8% discount rate, post tax)	A$ m	90	155
Internal Rate of Return (post tax)	%	23%	32%
Total Capital Payback Period	Years	5.2	3.8
Assumptions			
Cobalt Price	US$/lb	27.00	23.00
Exchange Rate	AUD:USD	0.70	0.67

The updated financial metrics included updated consensus forecasts for long-term cobalt pricing and FX.

The cobalt sulphate/cobalt hydroxide and alloy grade/standard grade price spread assumptions are based on historical performance. Further analysis is provided in the Cobalt Market 2025 section below. Sensitivity tables for NPV and IRR, based on variations in the sales price assumptions are provided in Table 4 and 5.

Table 3 - Economic model assumptions for cobalt purchase and sales analysis.

	October 2024	November 2025	
Co purchase	72%	72%	Average payable for cobalt vs standard metal price
$CoSO_4$ sales	US$4.50/lb	US$4.50/lb	Sales price for sulphate above hydroxide price
Co metal sales	nil	US$2.00/lb	Alloy premium to standard metal grade
LT Co price	US$27.00/lb	US$23.00/lb	
FX	0.70	0.67	

Table 4 - NPV Sensitivity analysis.

Alloy Premium	Sulphate Margin over Hydroxide				
	US$3.5/lb	US$4/lb	US$4.5/lb	US$5/lb	US$5.5/lb
US$0.5/lb	A$82 m	A$103 m	A$123 m	A$144 m	A$165 m
US$1/lb	A$92 m	A$113 m	A$134 m	A$154 m	A$175 m
US$1.5/lb	A$103 m	A$123 m	A$144 m	A$165 m	A$186 m
US$2/lb	A$113 m	A$134 m	**A$155 m**	A$175 m	A$196 m
US$2.5/lb	A$123 m	A$144 m	A$165 m	A$186 m	A$206 m

Table 5 - IRR Sensitivity analysis.

Alloy Premium	Sulphate Margin over Hydroxide				
	US$3.5/lb	US$4/lb	US$4.5/lb	US$5/lb	US$5.5/lb
US$0.5/lb	22%	25%	28%	30%	33%
US$1/lb	23%	26%	29%	32%	34%
US$1.5/lb	25%	28%	30%	33%	36%
US$2/lb	26%	29%	**32%**	34%	37%
US$2.5/lb	28%	30%	33%	36%	38%

Kwinana Feedstock Sources

In the absence of Australian sourced feedstock, early operations will rely on imported cobalt hydroxide as feed. Australian nickel projects remain idle and are not producing cobalt byproducts.

COB has begun evaluating black mass recovered from Australian recycled lithium-ion batteries as a potential feedstock[2]. Should battery black mass prove to be a technically and commercially viable feedstock option for KCR, COB intends to integrate this material into the refinery's long-term business plan.

Adjustment to Product Mix

The initial production configuration has been revised to target approximately 2,000 t Co (contained) as cobalt sulphate crystals and 1,000 t Co (contained) as alloy-grade metal. This adjustment from a 100% sulphate product slate reflects feedback from prospective offtakers, as well as increasing interest from US-based customers and global trading houses seeking cobalt metal for industrial and strategic applications.

Cobalt Sulphate Offtake Review

The fastest-growing segment in the global cobalt market is the battery industry for the e-mobility sector, particularly electric passenger vehicles (**EVs**). While global EV adoption has been somewhat slower than early forecasts suggested, penetration rates continue to rise rapidly, driving strong demand for high-performance, energy-dense NCM battery chemistries.

Beyond EVs, demand remains robust across the broader portable electronics segment — anything powered by a lithium-ion battery. In particular, the expanding use of drones and unmanned aerial vehicles (**UAVs**) is creating new opportunities and interest from manufacturers in those markets.

Cobalt Metal Offtake Review

Although the cobalt metal market is smaller in volume compared to other segments, it's seeing significant momentum as industries seek diversified and secure sources of supply. We've received growing interest from the defence sector and other industrial customers looking for reliable, high-purity cobalt metal to support their applications.

[2] Refer COB's ASX announcement 'Cobalt Blue to Advance Black Mass Recycling at Broken Hill Technology Centre' dated 18 November 2025.

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KCR Progress Update

Over 2025, we have made strong progress towards a Final Investment Decision (**FID**), achieving several key milestones including securing a Works Approval permit from the West Australian Government, a binding feedstock agreement with Glencore for cobalt hydroxide sourced from their DRC operations, and production of cobalt sulphate and metal to prospective customer specifications.

The remaining steps ahead of FID include finalising binding offtake agreements and assembling the funding package to support project execution.

Cobalt Market in 2025

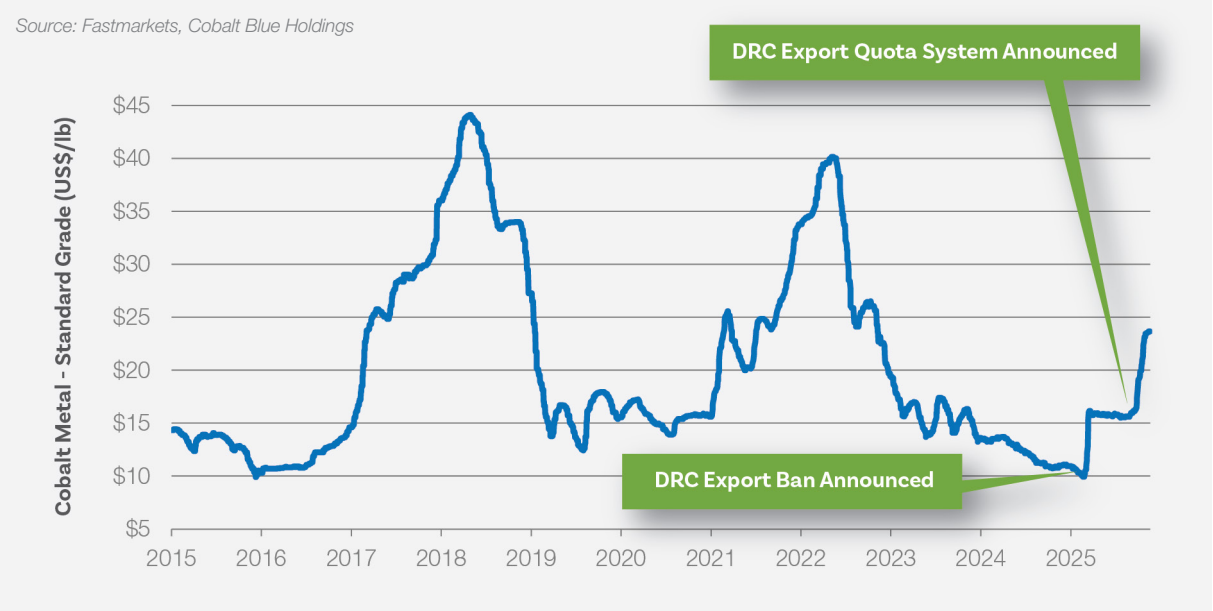
The DRC export ban rebalances the market and pricing

After several years of persistent oversupply that drove cobalt prices to all-time real lows, the global market underwent a structural shift in 2025.

In February, the Democratic Republic of Congo (**DRC**), the world's largest cobalt producer, introduced a temporary export ban aimed at rebalancing the market. The DRC's mineral regulator cited widespread illegal mining and chronic oversupply that had depressed prices, stating that "exports must align with global demand." The move signalled a clear intent to restore pricing power and stabilise the market.

The price response unfolded in two phases. The initial reaction was a rapid ~60% increase, followed by a period of consolidation as inventories and the typical 4–6-month DRC-to-China supply chain cycle absorbed the shock disruption.

Figure 1 - Cobalt metal price - Two phases of response to the DRC's export controls.



The second wave began in September, when the DRC replaced the ban with a new export quota system to remain in place until at least 2027. The approved export volumes amount to less than half of the country's 2024 production. With the market now facing multi-year supply constraints, prices rose a further ~50% as participants anticipated a much tighter cobalt balance ahead.

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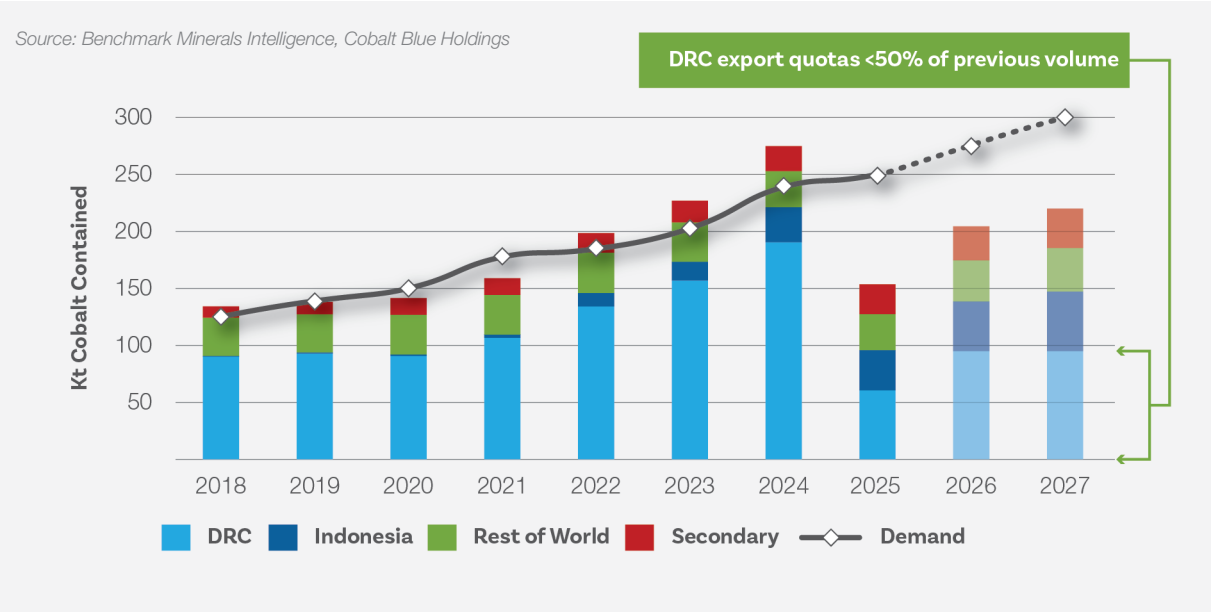
Figure 2 - Global Cobalt Supply/Demand post DRC export quota policy.

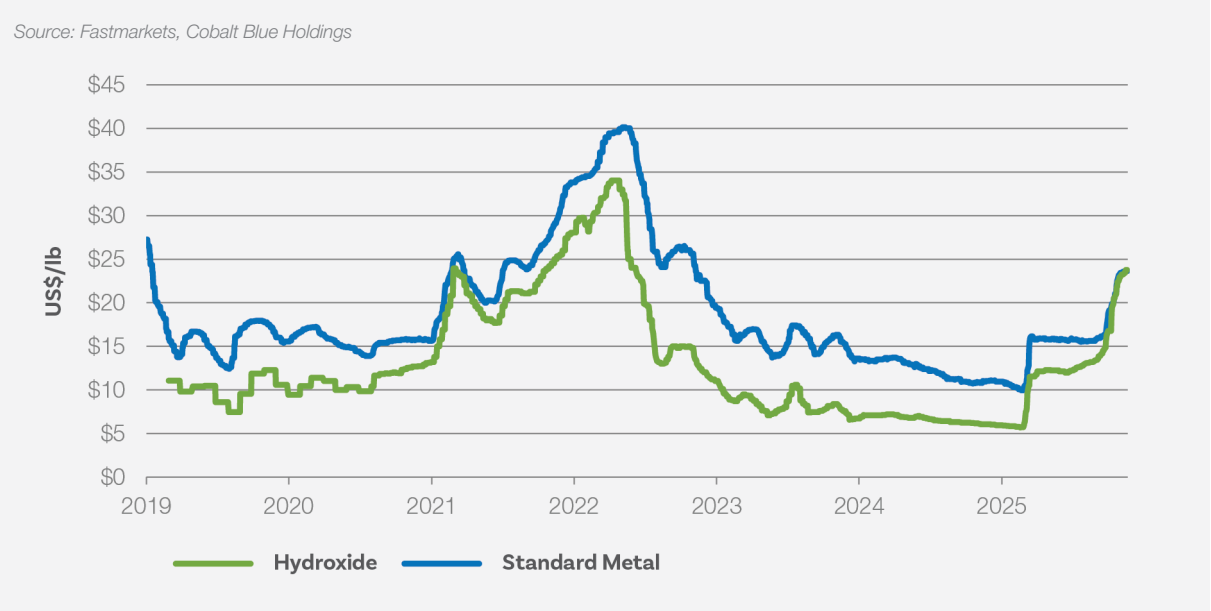


Cobalt Hydroxide and Sulphate Price Assessment

Although cobalt metal is the benchmark price commonly referenced across the industry, the prices of cobalt hydroxide and cobalt sulphate are equally significant, each reflecting different segments of the cobalt value chain.

Cobalt hydroxide (~30-40% Co) is the principal feedstock used to produce cobalt's end products—metals, powders and various salts—each manufactured to specific grades depending on customer requirements. Because cobalt hydroxide is also the dominant export form from the DRC, it has been the most directly affected by recent policy changes. As a result, this price index has seen the sharpest reaction, climbing more than 300% since the DRC announced its export ban.

Figure 3 - Cobalt hydroxide typically trades at a ~70% payable to metal – will likely mean revert once the global market rebalances.



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Cobalt sulphate (20.5% Co) is the key material used in the battery sector, and prices have increased 240% since the export ban was introduced. Around half of the world's cobalt refining capacity is dedicated to sulphate production, yet the material itself cannot be stored for long due to stability constraints. This makes the market especially sensitive to supply disruptions, and the recent price surge reflects a growing scarcity premium as refiners compete for limited feedstock.

Figure 4 - Cobalt sulphate typically trades at a ~95% payable to metal.

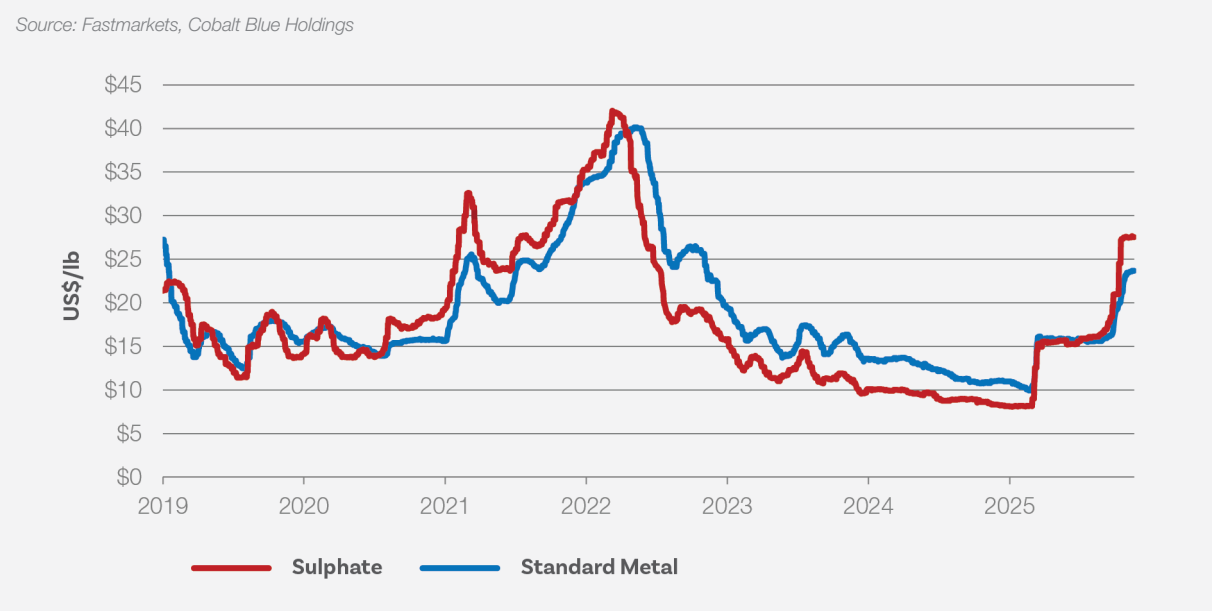
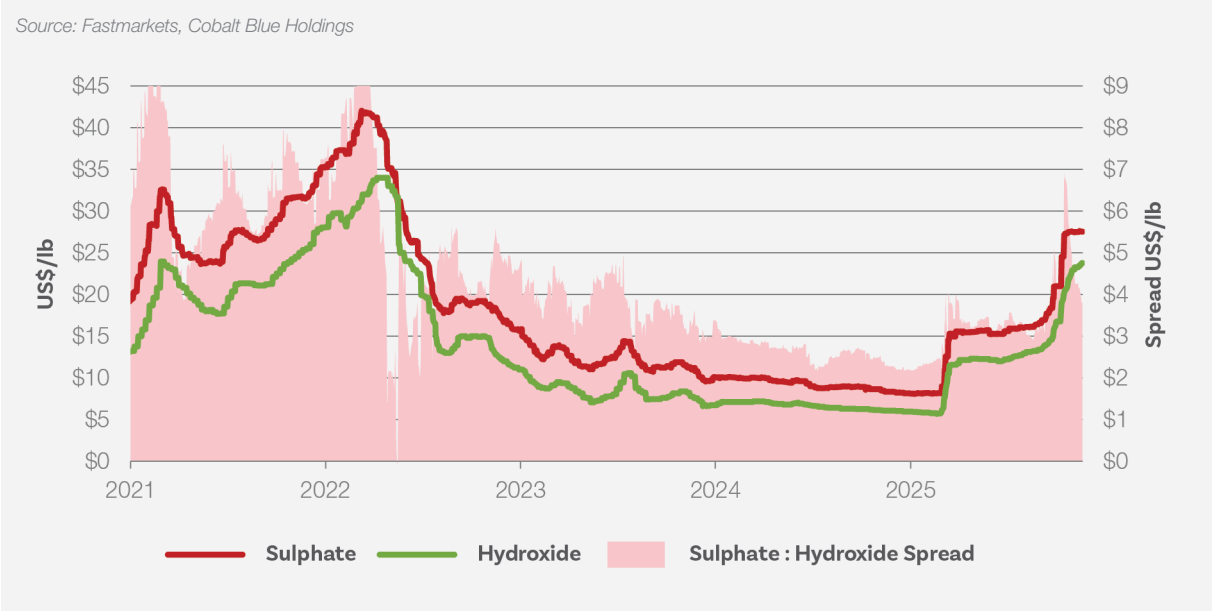


Figure 5 - Cobalt sulphate and hydroxide typically trade at a US$4-5/lb spread.



Cobalt Alloy Metal Price Assessment

There are two actively traded cobalt metal grades: standard grade and alloy grade. Alloy-grade cobalt is primarily used in the manufacture of aerospace components for both commercial and defence applications, with additional demand from medical devices and industrial gas turbines. Its' appeal stems from cobalt's exceptional high-temperature stability and wear resistance. Importantly, alloy-grade metal requires additional safety certification for use in rotating aerospace parts, which limits the number of qualified suppliers.

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Over the past five years, alloy-grade cobalt has consistently traded at a premium to standard grade. This reflects (1) stronger long-term demand fundamentals across defence, aerospace and medical sectors, and (2) a tighter supply profile, as only a small number of producers hold the necessary aerospace safety certifications—creating a structurally constrained supply environment.

Figure 6 - Cobalt alloy grade typically trades at a US$4-5/lb premium to standard grade.

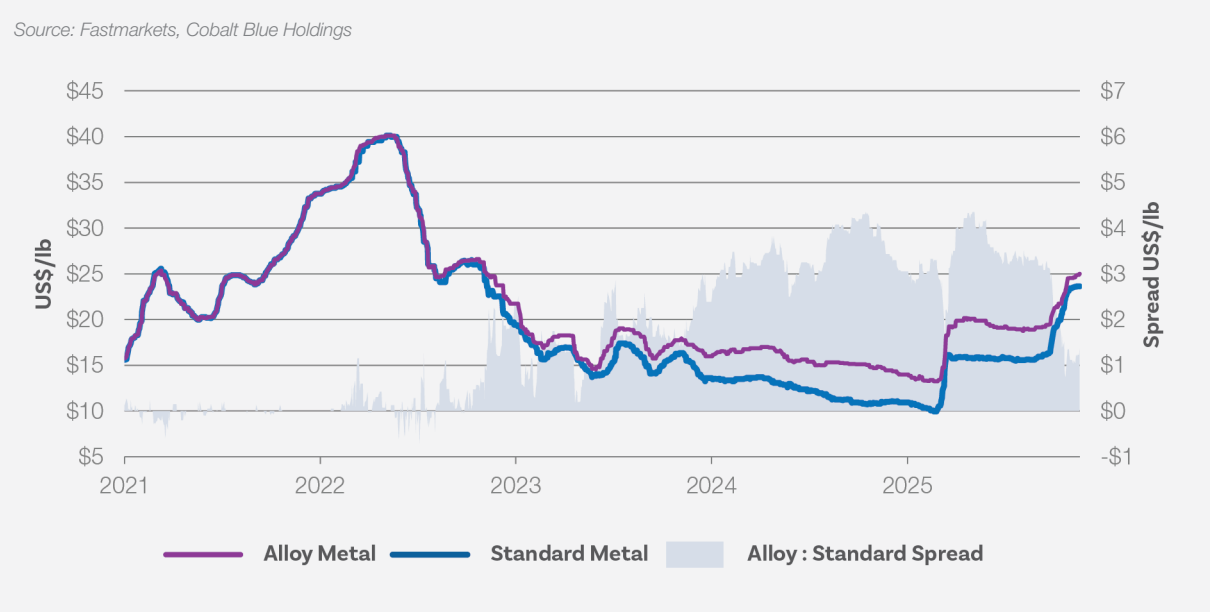

Table 6 - Price response since February 2025 for the key cobalt products.

Cobalt Product	Cobalt Content	Price reaction since DRC ban	Drivers
Hydroxide	30% Co minimum	+315%	Sharp rise as a result of perceived hydroxide scarcity over the next two years
Sulphate	20.5% Co minimum	+240%	Competition for feedstock and limited storage life increases scarcity impact
Standard Metal	99.8% Co	+140%	Large inventories held in Europe and Asia have buffered the price response
Alloy Metal	99.9% Co	+90%	

Forward Looking Statements and Disclaimer

This announcement contains "forward-looking statements". All statements other than those of historical fact 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 cobalt metal price volatility, timely completion of project milestones, funding availability, and government and other third-party approvals. The Company is not obligated to release any revisions to any "forward-looking statement" publicly. To the maximum extent permitted by law, COB and its respective advisers, affiliates, related bodies corporate, directors, officers, partners and employees expressly exclude and disclaim all responsibility and liability, including, without limitation, for negligence or in respect of any expenses, losses, damages or costs incurred by any person as a result of their reliance on this ASX announcement and the information in this ASX announcement being inaccurate or incomplete in any way for any reason, whether by way of negligence or otherwise.

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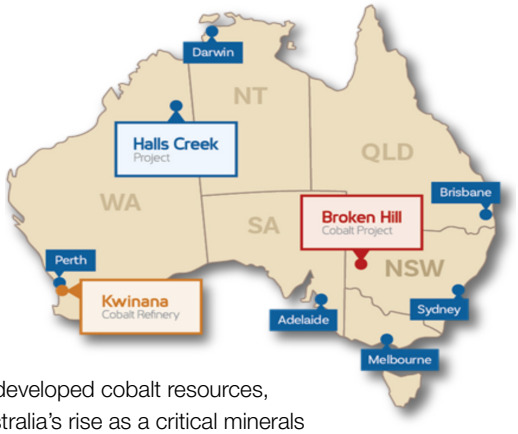
Cobalt Blue Background

Cobalt Blue Holdings Limited is a minerals processing and mining company focused on developing midstream processing capabilities in Australia to diversify supply chains with like-minded countries. Cobalt Blue's assets include:



- **Kwinana Cobalt Refinery** (**KCR**): Australia's first dedicated cobalt refinery to produce high-purity cobalt sulphate for the lithium-ion industry and high-grade cobalt metal for defence and industry. Near-term development of KCR de-risks domestic mining projects by providing a refining facility capable of treating a variety of feedstocks.
- **Broken Hill Cobalt Project** (**BHCP**): One of the world's largest, undeveloped cobalt resources, BHCP is set to become a generational operation at the heart of Australia's rise as a critical minerals powerhouse. The project was recently granted a three-year extension to Major Project Status by the Commonwealth Government.
- **Broken Hill Technology Centre** (**BHTC**): Since 2021, COB has invested over A$15m in BHTC to test and validate the complete flowsheet for BHCP – from mining through to production of cobalt sulphate, cobalt metal and elemental sulphur. It has also delivered key technological milestones that further strengthen the case for developing KCR.
- **Halls Creek Project**: Optionality for diversified commodity exposure via a low-cost copper-zinc-silver project with near-term exploration planned to test resource growth uplift.

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

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Previously Released Information

This ASX announcement refers to information extracted from the following reports which are available for view on COB's website www.cobaltblueholdings.com.

- 18 November 2025 Cobalt Blue to Advance Black Mass Recycling at Broken Hill Technology Centre
- 16 September 2025 Kwinana Cobalt Refinery Works Approval Granted
- 3 September 2025 Broken Hill Technology Centre Update
- 29 May 2025 Cobalt Blue and Glencore Contract to supply the Kwinana Cobalt Refinery
- 9 October 2024 Kwinana Cobalt Refinery Update

In respect of any referenced Resources, Production Targets or financial information derived from Production Targets, 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 Resources, Production Targets or financial information derived from the same, 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.