A compelling lead-silver play

Metals & Mining

Boab Metals Limited (ASX: BML) is focused on developing the Sorby Hills Lead-Silver Project in the tier-1 mining jurisdiction of Western Australia (WA). Sorby Hills has one of Australia's largest undeveloped, near-surface lead-silver deposits. With the robust economics demonstrated in the Definitive Feasibility Study (DFS) and the projections of solid demand for lead and soaring demand for silver, we think BML offers an attractive speculative investment opportunity.

DFS demonstrates strong project economics

The DFS Mine Plan is based on c.80% of Ore Reserves, and 75% of all cost assumptions are tendered costs. The Sorby Hills deposits are amenable to open pit mining, and extensive metallurgical testwork has shown excellent recovery rates using conventional floatation processes. The DFS has demonstrated favourable project economics with a low cash cost. BML is currently undertaking further project optimisation exercises while advancing negotiations with offtakers and financiers. Mining leases and EPA approval are in place.

Increasing energy transition demand for lead and silver

Technological advancement has supported lead and silver demand as critical materials for industrial applications, i.e. automotive applications, power storage batteries, solar panels etc. However, COVID has forcefully suspended a lot of investment on the supply side, thereby causing a wide demand-supply gap. According to the Silver Institute, the industrial demand for silver is expected to reach an all-time high of 550 million ounces (Moz) in 2023. Similarly, global demand for lead is also expected to remain north of supply in the foreseeable future. This is expected to provide BML with a substantial market opportunity.

Valuation range of A$0.70–0.81 per share

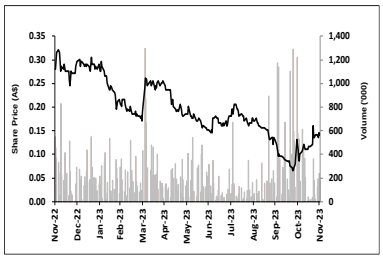
Our DCF-based valuation across base-case and bull-case scenarios yields a target price range of A$0.70-0.81 per share, slightly lower than our initial valuation range of A$0.74-0.84 in March 2023, mainly due to the higher discount rate used to reflect the increased interest rates in the last several months. We see the announcement of an offtake agreement or a debt funding arrangement as catalysts for a re-rating in the share price towards our valuation range. Our valuation does not take into account the possible value-unlocking from non-core assets. The key risks include funding risk, project delays and commodity price risk.

We have also used a relative asset-based valuation methodology to determine the just as it is fair value of Boab only based on the defined Sorby Hills lead-silver resources in the absence of the funding required to develop the project. Boab is currently trading at an EV/ weighted average (comparable) resource multiple of A$0.19/oz compared to the peer group average multiple of A$0.51/oz, which shows that BML is currently trading at a significant discount to its comparable peers.

Year-end (A$m)	FY 23	FY 24e	FY 25e	FY 26e	FY 27e
Revenue	0.3	0.2	0.3	222.2	291.5
EBITDA	(5.8)	(6.2)	(5.8)	68.6	115.7
EPS (A$ cents)	(3.4)	(3.6)	(3.5)	6.6	12.0
FCF	(7.0)	(6.6)	(223.8)	(31.9)	73.8
EV/EBITDA (x)	NM	NM	NM	2.9x	1.1x

Current Price (A$)	0.145
Target Price (A$)	0.70-0.81
Price / NAV (x)	0.19x
Market Cap (A$m)	24.4
52-week H/L (A$)	0.47 / 0.165
Free Float (%)	77.6%
Bloomberg	BML AU
Reuters	BML.AX

Price Performance (in A$)



Business description

Boab Metals Ltd (BML) is a Perth-based explorer and mine developer. Formerly known as Pacifico Minerals Limited, BML has been listed on ASX since 2004. It is mainly engaged in developing the Sorby Hills project site (75% ownership). Sorby Hills area has one of Australia's largest undeveloped and near surface lead-silver deposits. BML also owns the Manbarrum project site (100%) which is 25Km of Sorby Hills site. The company also has two non-core assets, one in Western Australia and and one in Columbia.

Analyst

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Investment Rationale

Boab Metals (ASX:BML) is a base and precious metal explorer and mine developer based in Perth, Western Australia (WA). The company's flagship asset is the Sorby Hills lead-silver Project, located in the East Kimberley region of WA. BML owns a 75% stake in the project, and the remaining 25% is owned by the joint venture (JV) partner, Henan Yuguang Gold and Lead Co. Ltd. (China's largest lead smelter and silver producer).

The company has one more core asset, the Manbarrum project, located within the same geology of Sorby Hills. In addition, BML owns a portfolio of non-core assets, both in Australia and overseas in Colombia. Currently, BML is focused on developing the Sorby Hills project and has kept all other non-core assets on hold.

Sorby Hills presents a compelling investment opportunity

Sorby Hills is a low-risk project with open-pitable and high grade resources, existing infrastructure and in-place regulatory approvals

Boab has completed a DFS for its Sorby Hills Lead-Silver Project, which has demonstrated the economic robustness of the Project. Sorby Hills deposits are amenable to open pit mining with a high average AgEq grade of more than 120 g/t (based on our calculations, using metals prices as of 22 November 2023). Most of Sorby Hills defined resources are in the higher confidence categories of Measured and Indicated Resources and 2/3 of them are proven reserves. The project has one of Australia's largest undeveloped deposits with total resources estimated at 1.5 million tonnes (Mt) of lead and 53 million ounces (Moz) of silver. Additionally, metallurgical testwork conducted at all deposits has returned strong average recovery rates of 91% for lead and 82% for silver, using conventional floatation processes. Boab has granted mining leases and an EPA (Environmental Protection Authority) approval in Place. There's a sealed road from Sorby Hills to Wyndham Port for future Concentrate sale. Wyndham Port is Australia's closest port to Asia and is only 150km away from Sorby Hills. The company has signed a Heads of Agreements (HOA) with the local shire to construct a Kununurra-based accommodation facility, 50km from Sorby Hills. It has also executed an HOA to secure clean energy from the Ord River Hydroelectric Plant. The project has advanced following the DFS with Boab having completed the Front End Engineering and Desing (FEED) studies with GR Engineering.

The DFS demonstrates strong project economics

BML completed its Definitive Feasibility Study (DFS) of Sorby Hills in January 2023, demonstrating the compelling economics of the project. The estimated C1 cash cost (direct cash cost incurred at each processing stage) of US$0.39 per pound of lead is one of the lowest in the current environment and is expected to deliver operating profitability of >40%. With c.80% of the production target underpinned by ore reserves, the project offers significant economic upside potential for investors. As per the DFS, with 8-10 years of mining life, the project offers a high potential return on investment (IRR of 35%), under current pricing assumptions. Despite cost escalations and an ongoing inflationary environment. The pre-production capital expenditure required to build the project is A$245m, inclusive of $20.9m contingency capital. Pleasingly, BML recently acquired refreshed contract pricing and has confirmed very little to no change to the DFS cost assumptions of the process plant and non-process infrastructure. This is because the DFS cost assumptions were completed at the height of post-COVID inflation.

BML is progressing towards closing project financing

BML is in advanced negotiations with financiers and offtakers and is leveraging feedback from financiers to implement project optimisation workstreams

After the completion of the DFS, the company initiated the next logical process of assessing financing options. It has been engaging with various lenders, including the Northern Australian Infrastructure Facility (NAIF), Export Finance Australia (EFA), and other domestic and international banks. ***Sorby Hills is a low-risk project as c.75% of the pre-production capital expenditure and direct mining costs are supported by current tendered pricing. This minimises the risk of substantial cost increases, which is quite common in most mining projects these days due to the currently high inflationary macroeconomic environment.***

BML is leveraging feedback from financiers to implement project optimisation workstreams, aiming to improve economic outcomes for shareholders. BML is confident that completing a well-documented FEED study will not impede the ongoing discussions with potential financiers. The company believes that the optimisation efforts undertaken so far will effectively mitigate key risk

factors and facilitate advancing discussions with debt providers. In the meantime, while discussions regarding offtake are at an advanced stage, the company has retained the option to grant the offtake for the Sorby Hills concentrate. This decision aims to optimise the chances of securing project finance from the involved offtake parties.

Demand for lead and silver growing on the back of energy transition

The onset of the pandemic and the subsequent stringent regulations by governments across countries have been compelling road users to shift towards sustainable mobility, i.e. hybrid vehicles, EVs, etc. Despite the availability of alternative battery technologies (the most common one being lithium-ion batteries), we believe lead-acid batteries are not going to lose their charm. The Hybrid EVs (with a forecast of 28.9% CAGR over 2022-30) still need lead-acid batteries for ignition and other ancillary functions. In addition, as a result of technological advancements, lead continues to be extensively used in renewable energy storage batteries, telecom tower power batteries, etc.

Similarly, despite the global economy facing headwinds, technological advancement is supporting the industrial utility of silver. In addition to the traditional usage of the precious metal in jewellery and ornaments, silver is increasingly used in new-age industries of jet engines, solar panels, electronic devices, water purification, etc.

On the other hand, the under-investment in lead and silver production since COVID-19 has created a widening supply-demand gap for those metals, which creates a long-term market opportunity for BML.

The DCF Valuation approach indicates substantial upside Potential

Given the low-risk nature of the Sorby Hills project and the progress that has been made on the site with respect to the DFS outcome, we believe that BML is highly undervalued. Additionally, we believe the exposure to the silver market further increases the attractiveness of BML. Our DCF-based valuation across base-case and bull-case scenarios at a discount rate (WACC) of 12.3% yields a target price range of A$0.70-0.81 per share. This valuation range is slightly lower than our initial valuation range of A$0.74-0.84 in March 2023, mainly due to the higher discount rate used to reflect the increased interest rates in the last several months. It is imperative to note that the value-unlocking from non-core assets is not included in this valuation. The company is seeking partnerships for its non-core asset portfolio, which we believe makes sense to continue realising value whilst mitigating risks for shareholders. This is expected to provide further organic growth prospects, thereby supporting the idea of even higher upside potential to the stock's valuation.

Higher and longer than expected interest rates volatility pose risks to our investment thesis

Key risks to our investment thesis include a worsening inflation situation, which will hurt economic growth across industries globally. In addition, a steep appreciation of the interest rates and uncertainty around the financial markets might restrict the company's ability to successfully close the funding plan on preferable terms, negatively impacting investor's potential return.

BML is massively undervalued

We have also used an asset-based relative valuation methodology (based on peer multiples) to determine the just as it is fair value of Boab only based on defined Sorby Hills lead-silver resources. We have done this to assess the fair value of Boab in the absence of a Final Investment Decision (FID) for Sorby Hills by our DCF assumption of 1Q 2025. Due to the currently extremely tight credit markets, raising debt funding for small companies has proven extremely difficult. Therefore, we believe an asset-based valuation approach will give us a good idea of how much Boab's defined lead-silver deposits should be valued at in the current market and in the absence of the funding required to bring the Sorby Hills Project to production.

Boab is trading at an EV/ weighted average (comparable) resource multiple of A$0.19/oz compared to the peer group average multiple of A$0.51/oz.

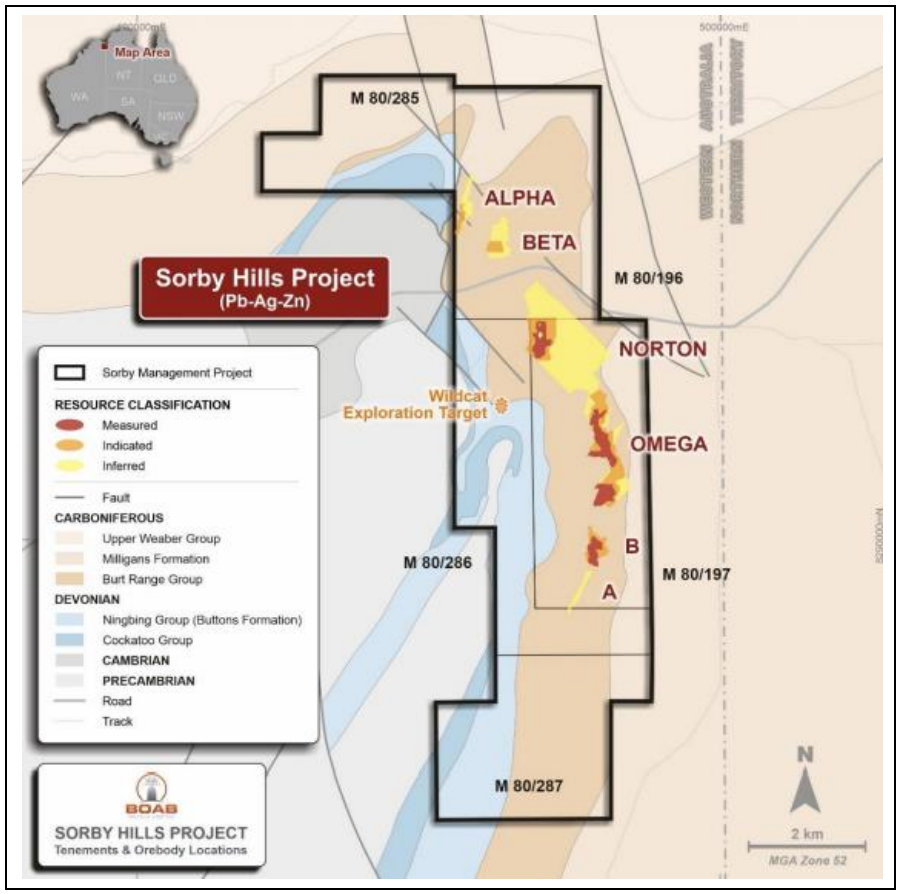
Currently, Boab is trading at an EV/ weighted average (comparable) resource multiple of A$0.19/oz compared to the peer group average multiple of A$0.51/oz. However, we can argue that BML demands a premium to its peers' average valuation multiple due to Sorby Hills' demonstrated multitude of economic benefits as described in the previous page. As such, we believe Boab is significantly undervalued at the current share price levels.

Sorby Hills — Boab Metals' flagship project

The Sorby Hills project is the largest undeveloped, near-surface lead-silver-zinc deposit in Australia. BML acquired a 75% stake in the project in October 2018. The remaining 25% is owned by Yuguang (Australia) Pty Ltd., a wholly owned subsidiary of Henan Yuguang Gold and Lead Co. Ltd. (China's largest lead smelter and silver producer). Sorby Hills comprises granted mining leases covering six lead-silver-zinc deposits in the East Kimberley region, WA (Figure 1).

Sorby Hills is one of the largest undeveloped, near-surface lead-silver-zinc deposits in Australia

Figure 1: Sorby Hills project



Source: Company

The project comprises five mining leases (M80/196-197 and M80/285-287) jointly held by BML and Yuguang (Australia). Additionally, BML has 100% ownership of the Eight Mile Creek project (E80/5317), located immediately south of the Sorby Hills.

Figure 2: Sorby Hills Tenement Summary

Tenement	Area (sq km)	Boab ownership %	Granted	Expiry
M80/196	9.99	75%	22-01-1988	21-01-2030
M80/197	9.95	75%	22-01-1988	21-01-2030
M80/285	5.57	75%	29-03-1989	28-03-2031
M80/286	7.89	75%	29-03-1989	28-03-2031
M80/287	8.15	75%	29-03-1989	28-03-2031
E80/5317	217	100%	05-03-2020	04-03-2025

Source: Company

Strategic benefits of the Sorby Hills project

Sorby Hills project offers a multitude of advantages, i.e. favourable geology, proximity to infrastructure, high quality resource base, etc, making BML a low-risk high potential play.

I. Favourable geology

Sorby Hills enjoys favourable regional geology as it is part of the onshore Bonaparte Basin, which is an under-explored mineral province prospective for zinc-lead-silver mineralisation (Figure 3).

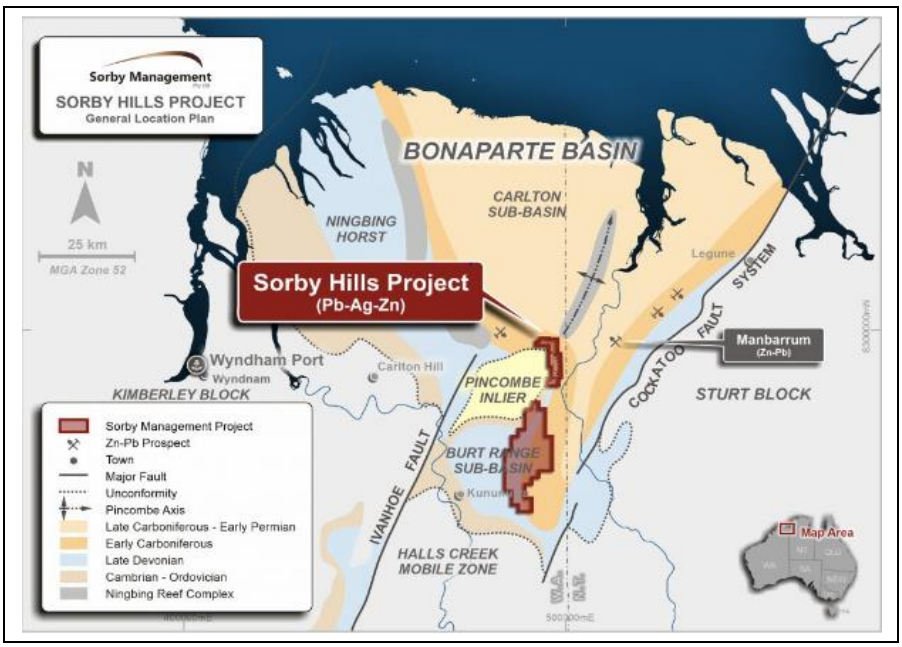
The Sorby Hills mineralisation is classified as Mississippi Valley Type (MVT), indicating replacement of carbonate and mixed carbonate siliciclastic rocks by Pb-Ag-Zn-Fe1 sulphides. MVT mineralisation is also referred to as carbonate-hosted zinc-lead (silver) mineralisation and is globally known to form mineral districts hosting millions of tonnes of base metals. Exploration across the globe has vindicated that most MVT districts include multiple deposits ranging from 0.5 Mt to 10 Mt. The smaller Burt Range Sub-basin within the Bonaparte Basin is analogous to global MVT districts in terms of size, source of metals, pathways for the expulsion of mineralisation and trap sites for mineralisation.

BML's exploration team takes the view that the Burt Range Sub-basin is highly prospective for MVT deposits and has significant remaining exploration potential.

Recent geological assessment has refined this to a sediment-replacement system, with mineralisation focused within an interval below the base of the Knox Sediments and the Sorby Dolomite (Transition Facies).

The mineralisation is largely stratabound and hosted mainly in the Transition Facies, an interval of about 20-25m. A massive micritic fossiliferous dolomite interval is located in the hanging wall. Strata generally dip shallowly, but variably to the east, southeast and northeast. The deposits form a curvi-linear north-trending belt extending over 7km, sub-parallel to the eastern margin of the Precambrian Pincombe Inlier with sub-economic mineralisation linking all deposits.

Figure 3: Geology of Sorby Hills project



Source: Company

[1] Pb is the symbol for lead, Ag is the symbol for silver, Zn is the symbol for zinc and Fe is the symbol for iron.

II. Favourable location and infrastructure

The Sorby Hills project is strategically located and is only 50 km away from the regional centre of Kununurra and 150 km from the Wyndham port (Figure 4) in the East Kimberley region in WA. Resource-rich WA is the most attractive region for mining investment, replacing the US state of Nevada, which fell to third place in the 2021 annual survey of mining companies released by the Fraser Institute[2]. The region has a rich mining and exploration history and is one of the world's largest exporters of raw materials such as iron ore, gold, lithium, copper, lead, and zinc.

The project has much of the required infrastructure in place, which includes the following:

- **Port access and services agreement:** Agreement in place with Cambridge Gulf for access and stevedoring services at Wyndham port until April 2034 (Figure 5). Wyndham port is the only deep-water port between Broome and Darwin and serves as an important link within Northern Australia's primary and secondary industries' supply chains. The company believes that this agreement will secure a path to market for the concentrates that it will produce from Sorby Hills;
- **Power:** Heads of agreement (HOA) executed with Horizon Power to secure c.90% of the annual electricity the project consumes. Sorby Hills will be supplied with low-cost, clean renewable energy from the Ord River Hydroelectric Power Plant for a period of 10 years;
- **Accommodation camp:** BML has purchased a second-hand 178-person accommodation camp to house project employees and contractors on the project site. The camp comprises 33 four-room buildings and 23 two-room buildings and four laundry buildings.

  In July 2023, BML executed a Heads of Agreement (HOA) with the Shire of Wyndham and East Kimberley (SWEK) for the construction and long-term lease of a new 180-person accommodation facility located in Kununurra, 50km away from the Sorby Hills Project. Under the HOA, BML will fund pre-construction work, including approvals and conceptual design, in return for securing a 10-year lease for the facility with an option to extend for a further 5 years. BML's pre-construction costs will be rebated against leasing costs. SWEK will fund and oversee the detailed design and construction of the facility, indicating the economic importance of the Sorby Hills Project for the region.

  BML intends to use the previously acquired second-hand accommodation camp during the construction phase of the Project and transfer its workforce into the new facility once operations commence. The second-hand camp would be resold once construction is complete.
- **On-site infrastructure facilities to be constructed:** a tailings storage facility, mine water settling pond, water storage facility, evaporation ponds and a water treatment plant;
- **Off-site infrastructure facilities include:** Accommodation and messing facilities in Kununurra (operations phase), road infrastructure, a concentrate container storage area and a container wash-down station at Wyndham Port.

[2] https://www.mining.com/western-australia-is-worlds-new-top-mining-destination/

Figure 4: Sorby Hills transport route

Figure 5: Wyndham port

Source: Company

III. High-quality mineral resource base

Successful drilling programs at Sorby Hills revealed substantial resources of **47.3Mt at 4.1% of lead equivalent (3.1% Pb, 35g/t Ag) and 0.4% Zinc (Figure 6) containing 1.5Mt Pb, 53 Moz Ag and 0.21Mt Zn.** As per the DFS, there has been a 14% increase in measured and indicated resources versus the pre-feasibility study's indicated resources. BML also reported a 78% increase in measured resources and the project's ore reserves saw a 12% increase and reached 15.2Mt.

Figure 6: Total mineral resource estimate

Deposit	Classification	Tonnes	Grade				Contained Metal		
		(Mt)	Pb %	Zn %	Ag g/t	PbEq[1] %	Pb kt	Zn kt	Ag koz
A	Inferred	0.6	5.3%	1.0%	23	6.1%	31	6	427
	SubTotal	**0.6**	**5.3%**	**0.1%**	**23**	**6.1%**	**31**	**6**	**427**
B	Measured	1.4	3.8%	0.3%	19	4.5%	52	4	859
	Indicated	1.3	3.4%	0.3%	21	4.1%	44	4	862
	SubTotal	**2.7**	**3.6%**	**0.3%**	**20**	**4.3%**	**97**	**8**	**1,720**
Omega	Measured	8.5	3.3%	0.4%	37	4.6%	279	32	9,995
	Indicated	5.8	3.5%	0.4%	34	4.7%	205	25	6,331
	Inferred	2.9	2.7%	0.4%	26	3.6%	76	13	2,414
	SubTotal	**17.2**	**3.3%**	**0.4%**	**34**	**4.5%**	**566**	**71**	**18,948**
Norton	Measured	2.8	4.1%	0.3%	75	6.7%	112	9	6,668
	Indicated	2.1	3.2%	0.5%	38	4.5%	68	11	2,617
	Inferred	16.2	2.5%	0.5%	27	3.4%	402	75	14,039
	SubTotal	**21.1**	**2.8%**	**0.4%**	**34**	**4.0%**	**590**	**96**	**24,090**
Alpha	Indicated	0.7	2.6%	0.5%	41	4.0%	18	4	923
	Inferred	0.8	3.6%	1.2%	86	6.6%	27	9	2,052
	SubTotal	**1.5**	**3.1%**	**0.9%**	**64**	**5.3%**	**45**	**13**	**2,975**
Beta	Indicated	1.0	4.1%	0.2%	42	5.6%	42	2	1,382
	Inferred	3.2	3.4%	0.4%	43	4.9%	109	14	4,474
	SubTotal	**4.2**	**3.6%**	**0.4%**	**43**	**5.1%**	**151**	**17**	**5,856**
Total Resource	**Measured**	**12.6**	**3.5%**	**0.4%**	**43**	**5.0%**	**444**	**45**	**17,521**
	Indicated	**11.0**	**3.4%**	**0.4%**	**34**	**4.6%**	**377**	**46**	**12,114**
	Inferred	**23.6**	**2.7%**	**0.5%**	**31**	**3.8%**	**645**	**117**	**23,406**
	Total	**47.3**	**3.1%**	**0.4%**	**35**	**4.3%**	**1,465**	**207**	**53,042**

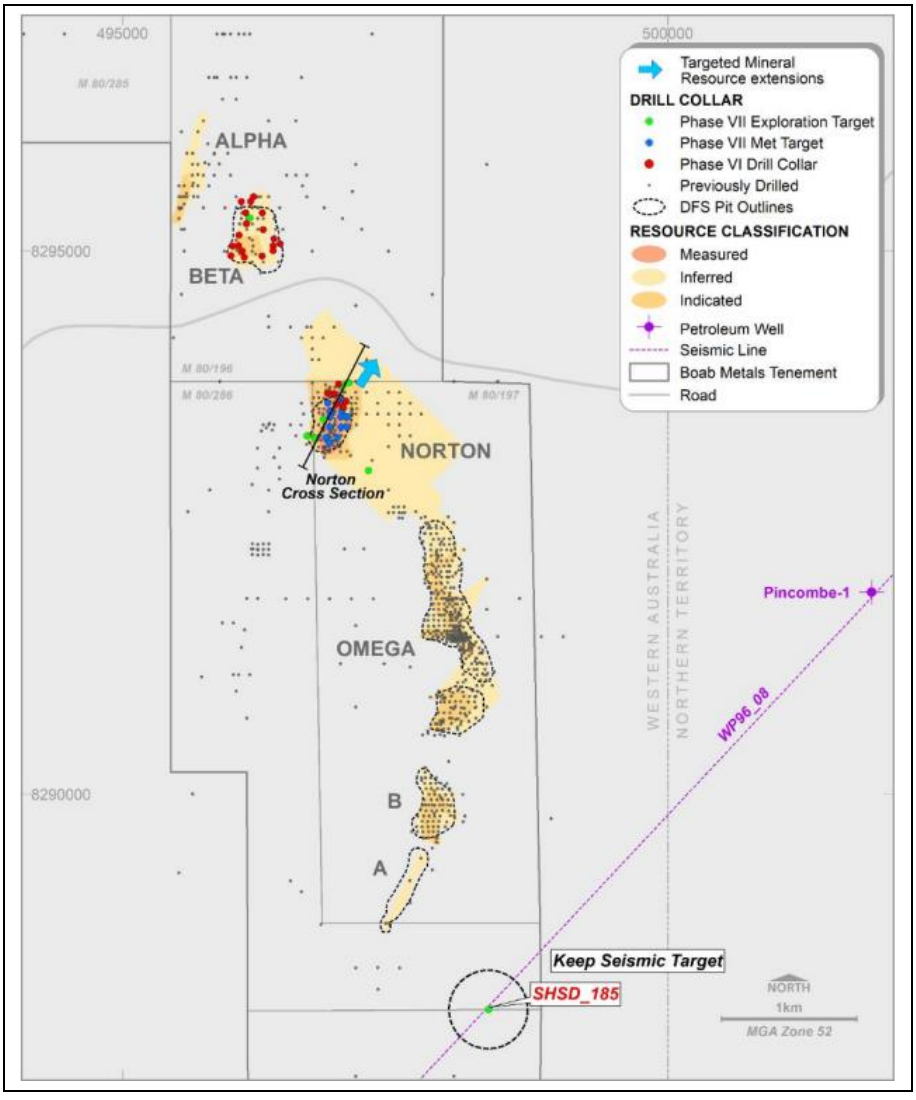
Source: Company

After the release of Sorby Hills Definitive Feasibility Study in January 2023, BML completed a phase VII drilling program at the Project for resource and reserve expansion as well as metallurgical purposes. The assay results released in November 2023

indicated several drill hole intercepts of exceptional grade and composition at the Norton Ore body, including 11.05m at 17.63% PbEq (10.98% Pb & 189 g/t Ag) from 81.95m and 11.60m at 20.23% PbEq (8.78% Pb & 325 g/t Ag) from 74.40m. BML is now undertaking metallurgical testworks on the samples from the Norton deposit to establish the uniformity of the deposit's metallurgy with other ore domains of the Sorby Hills deposit.

Exploratory drill holes targeting the periphery of the known mineralisation with emphasis on the areas of lower confidence in the ore distribution also returned significant intercepts, including 6m at 9.92% PbEq (3.92% Pb & 170 g/t Ag) from 101m. **But the most exciting of all was the result of the drilling at the Keep Seismic Target.** The first drill hole into this conceptual target intercepted significant base metal mineralisation, including 9.55m at 5.10% PbEq (2.59% Pb & 2.26% Zn & 17.6 g/t Ag) from 242.55m.

Figure 7: Plan view of the Sorby Hills Project showing the locations of completed drill holes for Phase VII with respect to previous drilling, the Mineral Resource and DFS open pit outlines



Source: Company

The Keep Seismic Target resulted from BML's interpretation of seismic data from petroleum exploration across the Burt Range Sub-Basin. The significant intercepts from the first drill hole into this target are particularly exciting given the conceptual nature of the target and its location in an area where no mineralisation had intersected before. The location of the drill hole sits around 2km away from the closest ore reserves at Sorby Hills and will be a catalyst for further exploration within BML's mining tenements. This will be in addition to the existing exploration potential at Sorby Hills as the step out drill holes

at Norton and Beta also confirmed the continuity of mineralisation at those deposits (see Figure 7).

IV. Strong Joint venture partner

BML's JV partner Henan Yuguang Gold and Lead Co. Ltd. is China's largest lead smelter and silver producer

The Sorby Hills project remains a strong prospect as it is backed by Henan Yuguang Gold and Lead Co. Ltd. (Yuguang), China's largest lead smelter and silver producer, via a 75%/25% JV. Yuguang provides its 25% contribution to all project costs. Further, Yuguang is completely committed to working with BML in order to accelerate the project financing process, supporting the progress towards FID and a decision-to-mine.

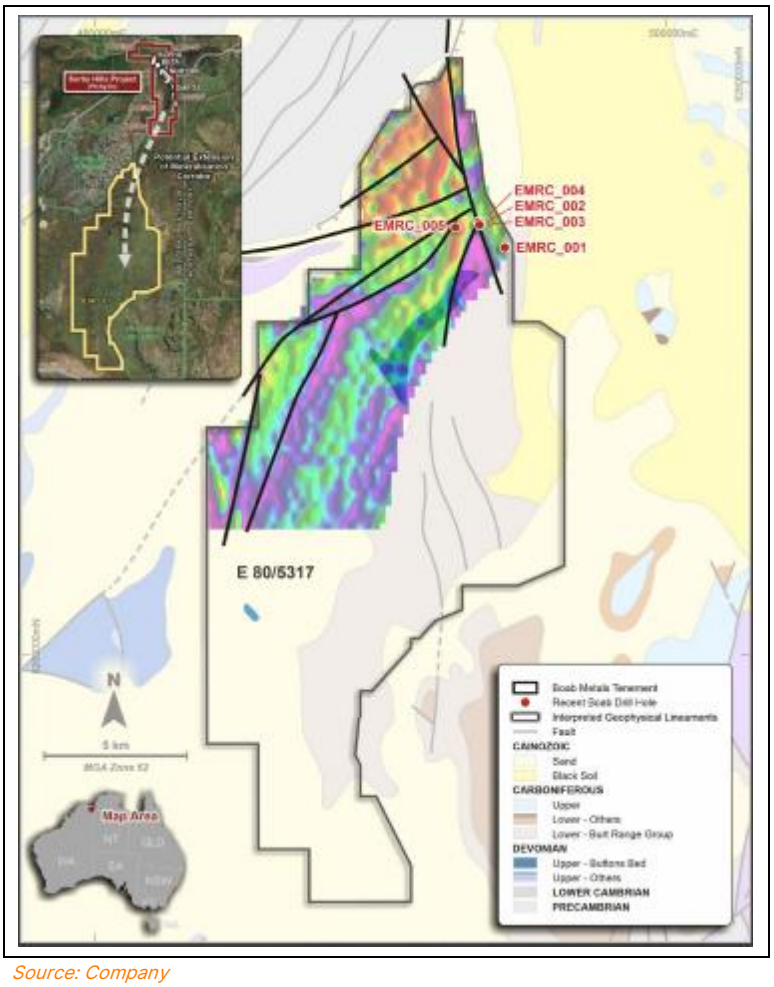
V. Significant regional exploration potential

Strategic acquisitions of Eight Mile Creek and Manbarrum projects are indicative of the management's intention to enhance the regional exploration potential.

The Eight Mile Creek project (Exploration licence E80/5317) is a 100% BML owned tenement and covers 206 sq km of underexplored tenure immediately south of Sorby Hills (Figure 8). The project has 30km of geology, prospective for deposits similar to those found at Sorby Hills. The 2022 drill programme targeted two locations to determine mineral prospects in the southern portion of the Burt Range Sub-basin. The company has a strong inclination to expand in the high-potential region and increase its zinc-lead-silver resource base. The maiden drilling of the prospective Eight Mile Creek project is a step towards progressing on growth opportunities.

The company intends to leverage its operational and geological synergies to create a regional mining camp in order to establish BML as a long-term mineral producer.

Figure 8: Location of Eight Mile Creek relative to the Sorby Hills project



Source: Company

VI. Deep roots within the Kimberley community

Consistent engagement with local community is highly important for mitigating social risks and BML is following the pattern

BML understands the importance of establishing and maintaining relationships with the communities in which they operate. That's why the company has become the Naming Rights Sponsor of the Ord Valley Muster for 2023 and beyond (9). The Ord Valley Muster is an annual festival of music, art and culture. It attracts thousands of visitors to Kununurra to experience the stunning landscape, cultural diversity and Kimberley hospitality for the last 20 years. The sponsorship is an indication of the company's commitment to the town of Kununurra and the Kimberley community.

Also, through BML's partnership, the Teach Learn Grow rural programme reached the children of the East Kimberley community for the first time in 2021.

BML supports the local communities in a wide range of areas, it seeks to negotiate an agreement with the MG Corporation to provide employment, contracting opportunities and other benefits through the Sorby Hills project to Miriuwung and Gajerrong people.

Figure 9: Ord Valley Muster

Source: Company

VII. Substantial leap forward with early works approval

EPA approval is a breakthrough as it paves the way for clearance of the Biodiversity Conversation Act 2016 and to begin with early works

In July 2022 BML received its amended EPA (Environmental Protection Authority) approval for early Works at Sorby Hills. The EPA initially approved BML for the Project's development in 2014. More recently, BML obtained approval for the amendments under section 45C(1) of the Environment Protection Act, allowing the company to increase its permitted development area. This will enable the company to begin the expansion, prepare the site to accommodate all-weather access to the project, and develop a materials laydown and hardstand area to facilitate the construction of its expanded processing plant. The approval also permits the establishment of the accommodation village.

The approval of the EPA amendment is a breakthrough as it paves the way for the commencement of Early Works on site.

DFS depicts robust project economics

The company released its DFS in January 2023. The main highlights of the study are:

- On the operational front, the open-pit production target stands at 18.3Mt at an average grade of 3.4% lead and 39g/t silver supported 83% by ore reserves, including 10.4Mt proved ore reserves.

- 2.25Mtpa capacity conventional flotation process plant producing an average of 103ktpa of lead-silver concentrate containing 67kt of lead and 2.2 Moz of silver.
- Impressive project financials, including a net cash flow of A$705m and an NPV_8 of A$370m. An average annualised EBITDA of A$119m with an internal rate of return (IRR) of 35%.
- In terms of costs, a pre-production capital expenditure (CAPEX) of A$245m is required to put Sorby Hills into production.
- As per the study, more than 50% of capex will go into the processing plant's engineering, procurement, and construction (EPC); A$ 40m has been set aside for early works and related infrastructure and A$21m has been set aside for contingency.
- C1 cash cost of US$0.39/lb of payable lead, including a net silver credit of US$0.38/lb payable lead, delivering an average operating margin of 41%.

The DFS proposes open-pit mining over an initial period of 8.5 years and processing 18.3Mt of ore from five of the six deposits, namely Omega, A, B, Beta[3] and Norton. Mined ore will be treated via a simple crush-mill-flotation circuit at an initial rate of 1.5Mtpa (will expand to 2.25Mtpa after the first year of production) to deliver an average 103ktpa of concentrate containing 64ktpa of payable lead and 2Moz pa of payable silver. Concentrate produced at the project will be transported via road in sealed half-height containers to Wyndham Port from where it will be shipped to end users.

About 75% of the pre-production capital expenditure and direct mining costs used in the Definitive Feasibility Study (DFS) were underpinned by tendered pricing at the height of post-COVID inflation. This included the mining contract and the processing plant EPC contract. BML received refreshed pricing for the processing plant EPC contract from GR Engineering Services in 1Q 2024 on the back of an ongoing Front-End Engineering and Design (FEED) study. The update resulted in a negligible change from the DFS pricing. BML has also received updated mining contract tenders and it's confident the updated tender will deliver a positive outcome for the project's economics. These outcomes increase our confidence in the cost assumptions used in the Sorby Hills DFS and lower the risk of cost overruns, which is quite evident in many mining projects currently.

Concurrent with refreshed pricing, BML is advancing project optimisation workstreams, including updated metallurgical test work at Norton using drill core from its recently completed Phase VII drilling program. These project optimisation efforts and updated prices are expected to support the company's ongoing discussions with financiers.

Sorby Hills is ready to swiftly move towards production upon funding

Exploration results at the project have led to a 78% increase in measured resource and a 12% jump in ore reserves as compared to the PFS

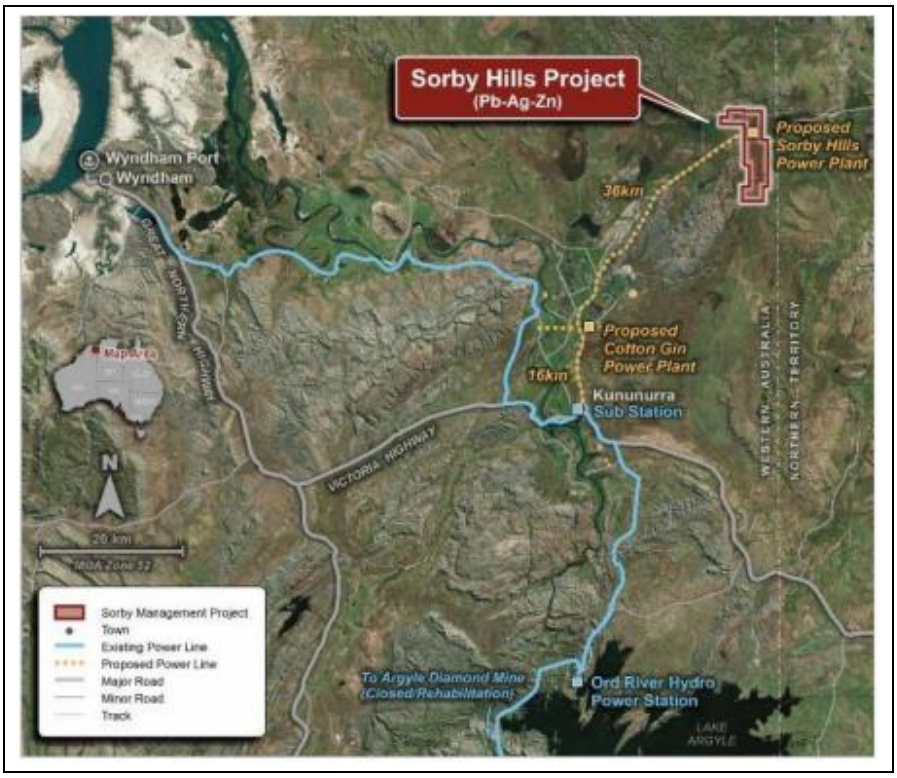
The comprehensive Sorby Hills DFS has significantly increased the confidence level in the project, and the strong results further support the progress towards a decision-to-mine. Some of the key milestones achieved as per the study are:

- The most recent updated mineral resource estimate depicted a 78% increase in measured resources and a 12% increase in ore reserves to 15.2Mt;
- A metallurgical programme validating high metal recoveries and providing strong input for the design of the process plant was completed;
- The process plant capacity in the DFS increased 50% over that of the PFS, expanding from an initial rate of 1.5Mtpa to 2.25Mtpa, and helped maximise concentrate production and optimise unit operating costs;
- Independent technical due diligence on the mineral resource, metallurgical test work programme and ESG status review against global environmental standards;

[3] Beta deposit has recently been included as per the Sorby Hills DFS mine plan

- Updated mine plan, including the incorporation of the beta deposit for the first time — Alpha and Beta were excluded from Sorby Hills PFS mine plan. The new schedule to allow for in-pit tailings deposition in B-pit and Omega South pit to minimise the cost of construction;
- Updated water management strategy based on hydrogeological and hydrological fieldwork and modelling;
- Selected GRES as the preferred EPC contractor for the process plant at Sorby Hills. GRES is a leading engineering firm that is highly regarded within the industry for its technical ability and track record of project delivery;
- Agreement in place with Cambridge Gulf for access and stevedoring services at Wyndham port till April 2034. Wyndham Port, through which concentrates produced from Sorby Hills will be shipped, is the only deep-water port between Broome and Darwin. The port is designed for the export of metal concentrates and bulk ore shipping and serves as a vital link within Northern Australia's primary and secondary industries' supply chains;
- Heads of agreement (HOA) executed with Horizon Power to deliver low-cost, clean renewable energy from the Ord River Hydroelectric Power Plant for a period of 10 years (Figure 10);
- Purchased a 178-person accommodation camp to house project employees and contractors during the project construction and operational phases on the Sorby Hills site.
- Secured amendments to the existing EPA approval for the commencement of early works, including all-weather access, material laydown area and accommodation camp installation.

Figure 10: Ord River Hydroelectric Power Plant is in close proximity to the Sorby Hills project



Source: Company

BML's activities after the release of the Sorby Hills DFS in January 2023 have further paved the way for a rapid move towards production upon acquiring the required funding. BML has signed a Heads of Agreement with the Shire of Wyndham and East Kimberley (SWEK) for the construction and long-term lease of a new 180-person accommodation facility located in Kununurra, 50km away from the Sorby Hills Project, to be funded by SWEK. In addition, BML is undertaking optimisation workstreams, obtaining refreshed contractor prices, and progressing the approval

workstreams to enhance the economics of the Sorby Hills project while supporting its ongoing discussions with project financiers.

DFS vs. PFS

As per the Sorby Hills PFS, completed in August 2020, the project had a pre-tax NPV_8 of A$303m, an IRR of 46% and an average life of mine EBITDA of A$75m pa. Since then, further exploration results at the project have led to a 14% increase in measured and indicated resources compared to the PFS, including a 78% increase in measured resources with significant upside potentials (Figure 11).

The results of the recent DFS suggest that the proposed project is highly lucrative. The study outlined a net cash flow of A$705m, NPV_8 of A$370m and an IRR of 35%. So far, the project appears to be exceptional, with an estimated initial 8.5 years of mine-life processing 18.3Mt of ore. The cash cost of production is also projected to be low at US$0.39/lb payable Pb (including a net silver credit of US$0.38/lb payable Pb), delivering an average operating margin of >40%. As such, the payback is expected to be 2.5 years from its first production. Accordingly, we could expect an average EBITDA of A$119m annually.

Figure 11: PFS vs. DFS

Item	PFS		DFS	
Physicals	**Unit**	**Value**	**Unit**	**Value**
Life of Mine	Years	10	Years	8.5
ROM mined	'000 t	14,760	'000 t	18,263
Strip ratio	Waste:Ore (t:t)	8.0x	Waste:Ore (t:t)	7.5x
Processed tonnes	'000 t	14,760	'000 t	18,263
Lead grade	%	3.6	%	3.4
Silver grade	g/t	39.5	g/t	39.0
Lead recovery	%	93%	%	91%
Silver recovery	%	80%	%	82%
Concentrate produced	'000 dmt	807	'000 dmt	872
Avg. lead grade	%	-	%	65.5
Avg. silver grade	g/t	-	g/t	665
Payable lead	'000 t	475	'000 t	543
Payable silver	'000 oz	14,300	'000 oz	17,232

Source: Company and East Coast Research

Production target and ore reserve estimate for Sorby Hills

As per the DFS, the open-pit mine contains a production target of 18.3Mt ore, at a grade of 3.4% Pb and 38.8g/t of Ag equating to 628kt of Pb and 22.8 Moz of Ag metal. The pits also contain 136Mt of waste material for an average strip ratio of 7.5:1 (Figure 12). The production target is supported by 15.2Mt of ore reserves, including 10.4Mt of proved reserves (Figure 13).

Figure 12: DFS Production target

Pit	Total (Mt)	Waste (Mt)	Ore (Mt)	Pb (%)	Ag (g/t)	Strip Ratio
Pit A	4.1	3.7	0.5	3.7	16.4	8.1
Pit B	14.8	12.6	2.3	3.2	17.4	5.5
Omega South	21.1	18.3	2.8	2.9	29.5	6.5
Omega Main	57.7	50.3	7.4	3.6	38.7	6.8
Norton	21.4	19.5	1.9	4.0	78.5	10.0
Beta	35.6	32.2	3.4	3.3	41.5	9.5
Total	**154.8**	**136.5**	**18.3**	**3.4**	**38.8**	**7.5**

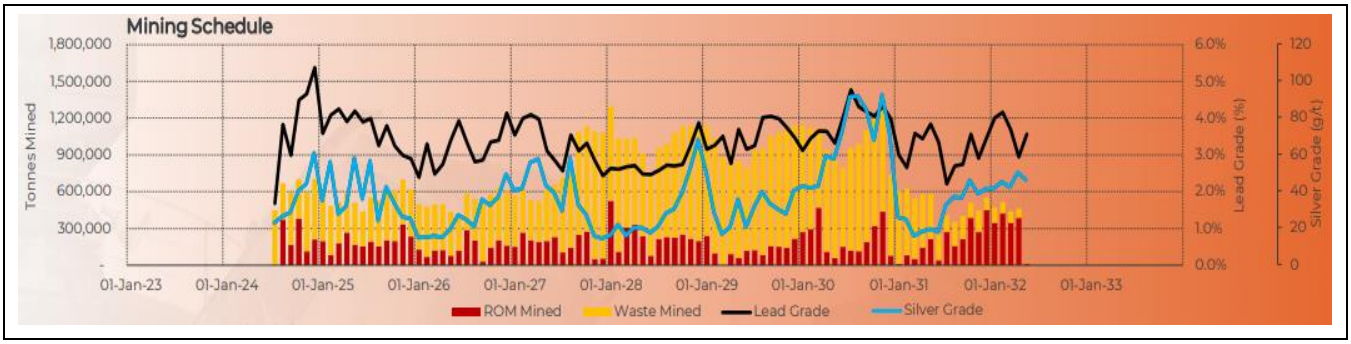
Source: Company

Figure 13: Sorby Hills ore reserve statement

Ore Reserve Category	Ore (Mt)	Grade		Contained Metal	
		Pb (%)	Ag (g/t)	Pb (kt)	Ag (Moz)
B Pit	1.32	3.4%	18	45	0.7
Norton	1.87	4.0%	80	74	4.8
Omega Main	4.98	3.6%	42	179	6.7
Omega South	2.18	2.8%	27	61	1.9
Beta	-	-	-	-	-
Proved	**10.40**	**3.5%**	**42**	**358**	**14.1**
B Pit	0.94	3.0%	17	28	0.5
Norton	0.04	4.0%	40	2	0.1
Omega Main	2.30	3.8%	34	86	2.5
Omega South	0.62	3.2%	37	19	0.7
Beta	0.99	3.7%	38	37	1.2
Probable	**4.90**	**3.5%**	**32**	**172**	**5.0**
Total Ore Reserve	**15.20**	**3.5%**	**39**	**531**	**19.1**

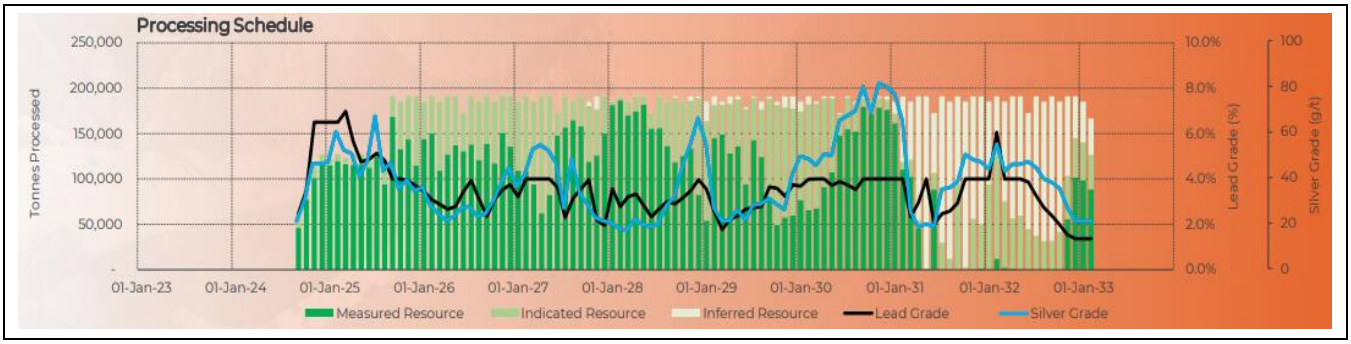
Source: Company

Figure 14: Mining schedule



Source: Company

Figure 15: Processing schedule



Source: Company

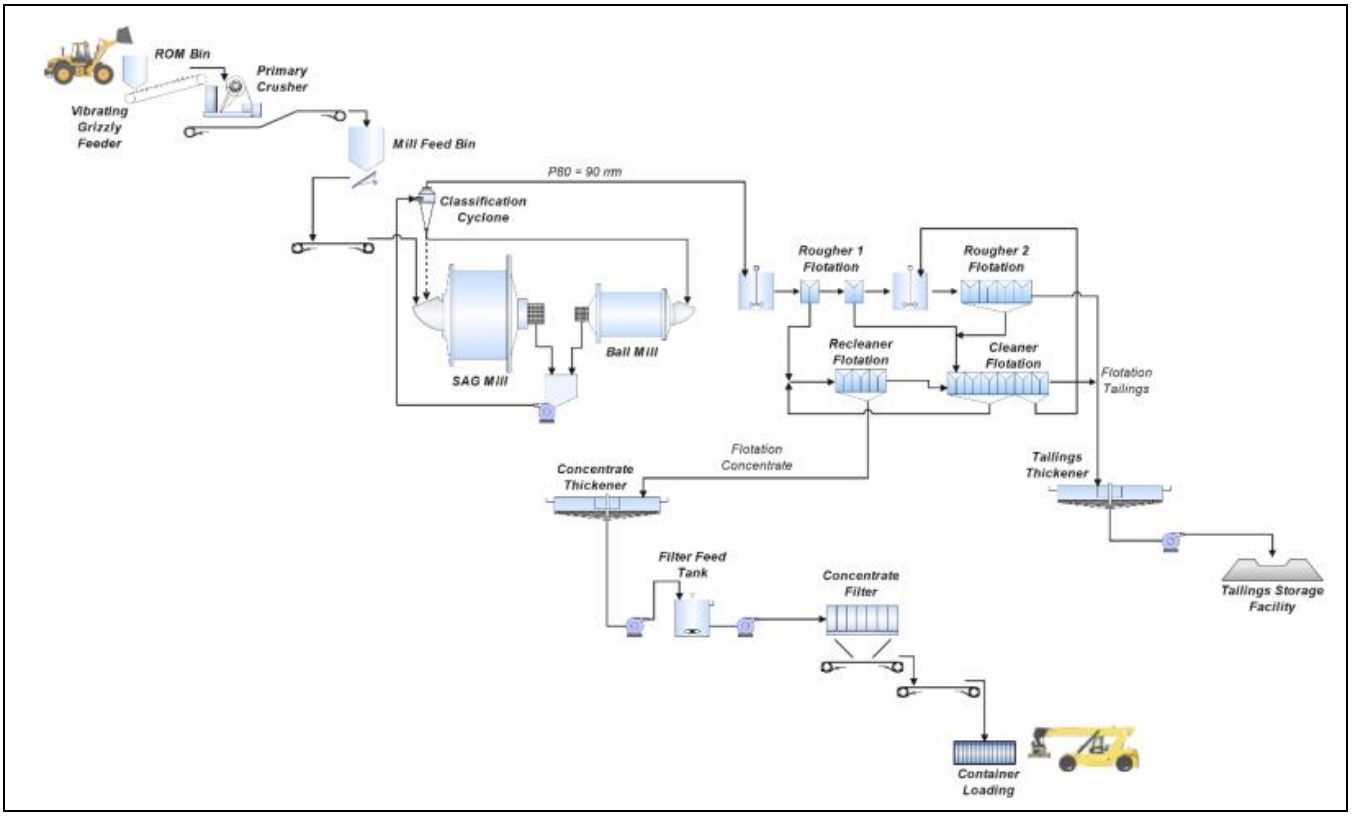
As part of Boab's project optimisation exercise, the company is working on an updated tailings strategy to allow for the higher-grade Norton deposit to be mined earlier within the mining sequence, thus bringing forward increased metal production and revenue. The drill cores collected from the Norton deposit in the latest Phase VII drilling program are being used for additional metallurgical test work to refine conservative metal recoveries that were necessarily adopted for the DFS due to limited core availability at the time. **The expected update to Norton's metal recovery assumptions can potentially leave a very positive impact on the economics of the Sorby Hills Project.**

Sorby Hills process flow sheet

The Sorby Hills process plant design criterion is supported by the DFS metallurgical test work and process engineering. Mined ore will be treated at the process plant via a simple crush-mill-flotation circuit (Figure 16) at an initial rate of 1.5Mtpa – the rate will likely increase to 2.25Mtpa after 1 year of production. The feed capacity of 2.25Mtpa is a 50% increase from that proposed in the PFS and will maximise concentrate production and reduce unit operating costs.

BML has advanced to the next stage of project engineering and design at its Sorby Hills project. On 13 March, 2023, it executed an agreement with GRES to begin the front-end engineering & design (FEED) work for the process plant. The completion of FEED will result in a more detailed process plant design and optimised plant layout. Subject to an FID on the project, BML and GRES will progress to sign an EPC contract and start a full detailed design for the plant.

Figure 16: Sorby Hills process flow sheet



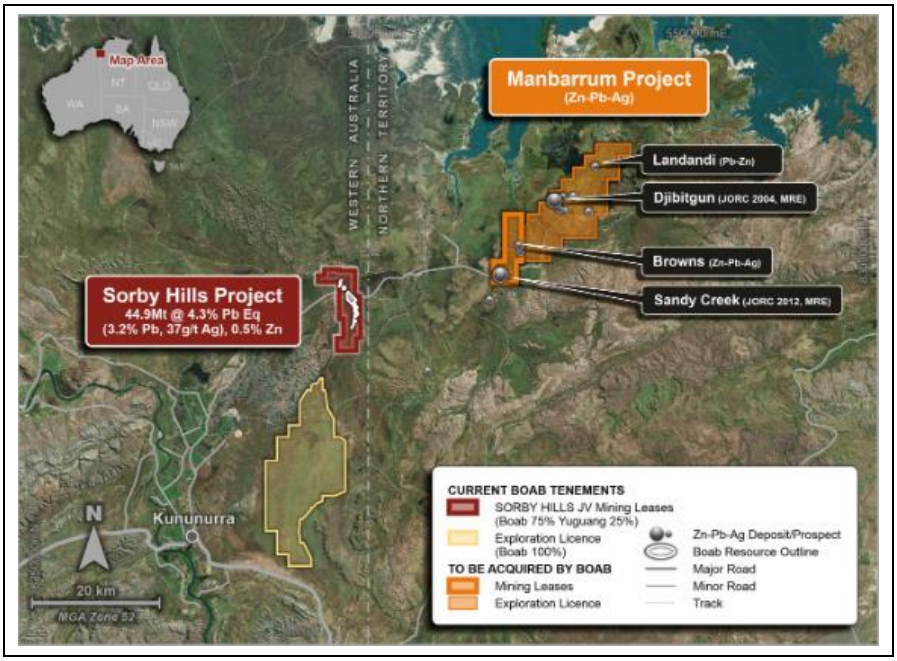
Source: Company

The strategic acquisition of the Manbarrum project

BML acquired a 100% interest in the Manbarrum zinc-lead-silver project from Todd River Resources in July 2021. The project is located in the Northern Territory, 25km east of the Sorby Hills. It has 175 sq km of prospective tenements (including two granted mining leases) and has geology that is genetically related to that found at Sorby Hills (Figure 17).

CSA Global conducted conceptual open-pit mining studies in 2018, wherein CSA Global identified the opportunity to improve project economics via toll treating at a future plant located at Sorby Hills. Toll treatment provides a chance for companies to process their ore at another company's mill so they do not have to build their own mill, which is an economically viable option.

Figure 17: Manbarrum project area is in the vicinity of the Sorby Hills project

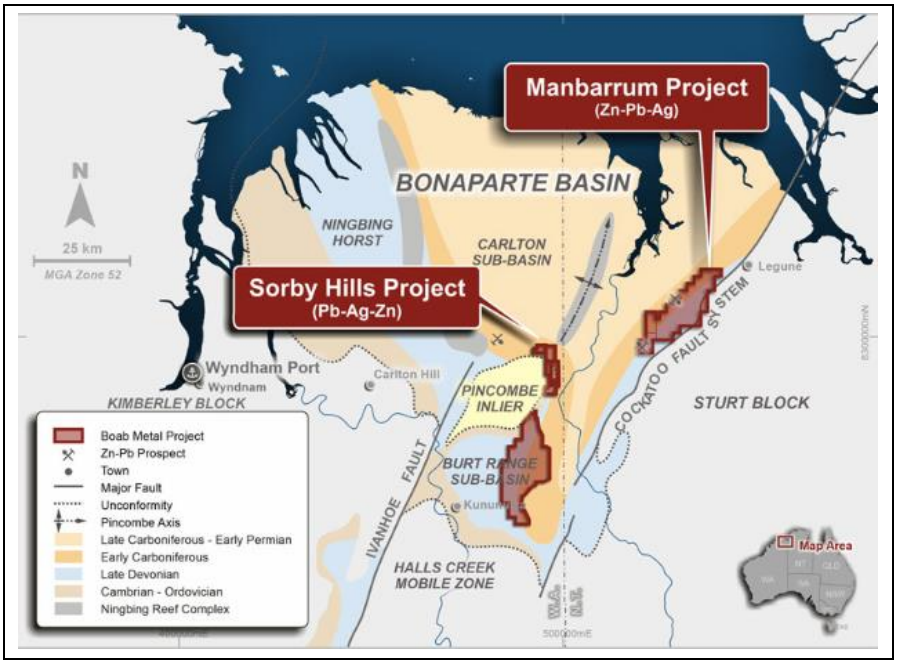


Source: Company

Favourable geology for potential Zn-Pb-Ag discoveries

The Manbarrum project has geology that is genetically related to that found at Sorby Hills. Zinc-dominated mineralisation has been discovered and delineated by drilling at two locations, Sandy Creek and Djibitgun, within the Manbarrum project. Both occurrences are located along the eastern margin of the onshore Bonaparte Basin (Burt Range Sub-basin) with Sorby Hills being the geographical counterpart on the western margin of the sub-basin (Figure 18).

Figure 18: Regional geology where BML has assets is highly favourable for potential Zn-Pb-Ag discoveries

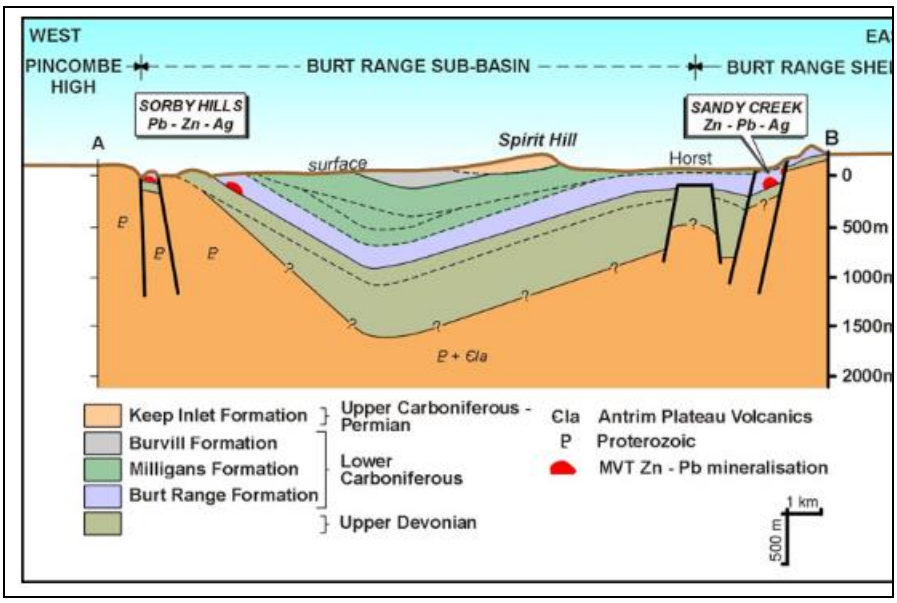


Source: Company

Both mineralisation districts are a part of the MVT mineral system. A cross-section of the Burt Range sub-basin geology that shows relationship between the Manbarrum project and Sorby Hills is depicted below (Figure 19). There are mineral resources declared at two prospects, Sandy Creek and Djibitgun, within the Manbarrum Project area. The zinc-dominated, Sandy Creek resource consists of mineralisation that has resulted in exceptional intercepts in the past.

BML management believes that these high-grade zones will prove to be attractive exploration targets, and it can leverage exploration knowledge gained from its Sorby Hills project to increase the resource size of the Sandy Creek project with subsequent drilling programmes.

Figure 19: Cross-section of the Burt Range sub-basin geology shows the close relationship between Manbarrum and Sorby Hills project



Source: Company

BML's exploration strategy remains regional

BML has a clear exploration plan for the projects in the region. The company intends to integrate all the technical data into a basin-wide exploration model and define priority target areas in the medium to long term. This will be followed by an assessment of the untested geochemical, geophysical, and structural geological anomalies within Manbarrum. The company will then combine mineralisation settings across the sub-basin whilst reviewing the scope for re-interpretation and targeting the high-grade mineralisation at Sandy Creek and Djibitgun.

It is worth noting that the Manbarrum site hosts multiple zinc-lead-silver soil anomalies along the eastern basin margin, coincident with faults mapped from seismic and gravity data that have yet to be drilled and tested.

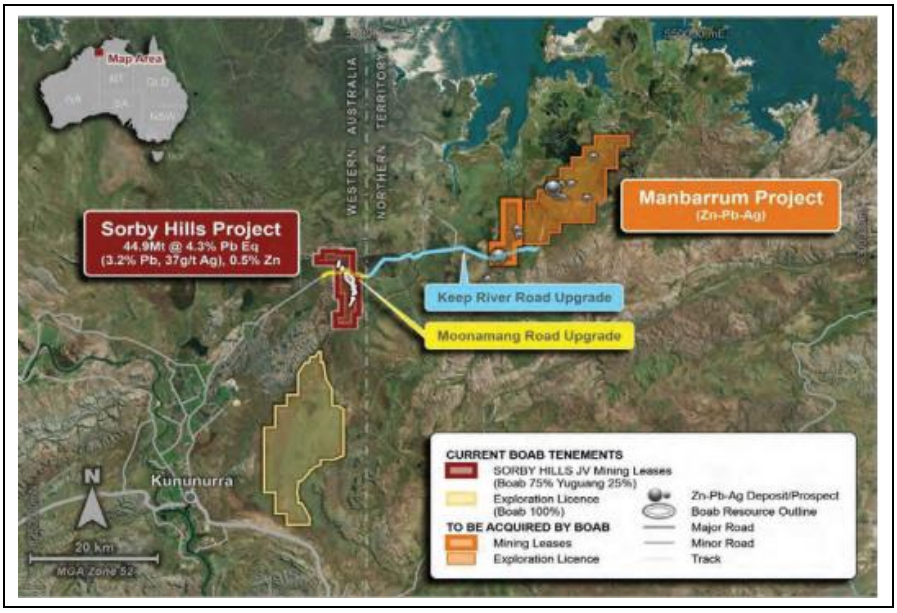
The company intends to create a regional mining camp in order to establish BML as a long-term mineral producer

We see strong synergies that could develop between Manbarrum and Sorby Hills projects. The Manbarrum project and its similar geology to Sorby Hills will allow further exploration and economic evaluation of a highly prospective and underexplored geological domain.

While BML remains focused on developing its Sorby Hills project, the strategic acquisition of the Manbarrum project provides an opportunity to investigate a broader regional production strategy that leverages the clear synergies between the two projects.

BML is fully focused on its strategic growth opportunities. The company intends to create a regional mining camp to establish BML as a long-term mineral producer.

Figure 20: Recently completed road upgrades connecting the Manbarrum project and the Sorby Hills project



Source: Company

BML's non-core assets

Besides the Sorby Hills and Manbarrum projects, the company has two non-core assets located in the Northern Territory and one overseas in Colombia.

BML is fully focused on developing its Sorby Hills Project and has decided to put its non-core assets on hold. The company is seeking joint ventures, partnerships and buyers for its non-core asset portfolio, which we believe makes sense to continue realising value whilst mitigating risks for shareholders.

BML is currently seeking JVs, partnerships and buyers for its non-core asset portfolio

Borroloola West JV project

The Borroloola West JV project is located in the McArthur and Mt. Isa Basins in the Northern Territory and comprises nine exploration licences and one mining licence. BML owns a 51% interest in the project with the remaining 49% interest held by Sandfire Resources NL. The project consists of an exceptional package of ground with high potential for the discovery of base metal deposits. The prospects mentioned below are part of the package:

- Coppermine Creek consists of impressive copper, cobalt and silver mineralisation with an outcrop length of 700m.
- The Lorella prospect lies 100km northeast of the McArthur River Mine and consists of oxide copper mineralisation.
- The Mariner prospect comprises Barney Creek Formation, which is host to the McArthur River zinc-lead deposit, and there is potential for the discovery of further zinc-lead deposits.
- BML also owns 100% of Limestone Creek (EL31354), which lies north of the Coppermine Creek prospect within the Borroloola West JV project. The area is considered to be highly prospective for zinc-lead mineralisation.

Colombian projects

BML commenced activities in Colombia in 2011 and owns the Natagaima, and Urrao Projects. These Projects are prospective for Copper-Gold deposits.

Project Financing: availability of multiple options; management remains judicious

After the completion of the DFS study in January 2023, the management of the company is now focused on arranging the project financing for pre-production capital expenditure. The management is exploring various options to lock in the financing at the earliest. To help them in this endeavour, BML has engaged BurnVoir Corporate Finance — a Sydney-based independent financial, commercial and strategic advisor.

Despite an ongoing inflationary environment, BML's management has reconfirmed pricing on the major components of its pre-production expenditure (Figure 21). Pleasingly, the recently acquired refreshed contract pricings have shown little to no change to the DFS cost assumptions. This is because the DFS cost assumptions were completed at the height of post-COVID inflation.

BML is leveraging feedback from financiers to implement project optimisation exercises, aiming to improve economic outcomes for shareholders.

Figure 21: Initial pre-production cost schedule for the Sorby Hill project

Item	Pre-production (A$M)	Sustaining (A$M)	Total (A$M)
Early Works / Bulk Earthworks / Road Construction	9.9	15.7	25.6
Process Plant and Non-Plant Infrastructure (NPI)	130.5	-	130.5
Tailings Storage and Evaporation Pond	18.0	1.9	19.9
Mine Water Settling Pond & Water Storage Facility	12.4	21.3	33.7
Accommodation refurbishment	4.1	-	4.1
Communications	0.9	-	0.9
Fuel Tanks	-	1.3	1.3
Testing Laboratory	-	0.0	0.0
Concentrate Transport & Containers	7.9	-	7.9
Owners Cost	25.3	5.8	31.0
Project Development Contingency	20.9	-	20.9
Pre-Production Operating Costs	14.6	-	14.6
Mine Closure	-	9.3	9.3
Total	**244.6**	**55.2**	**299.8**

Source: Company

Following is the explanation of some of the potential financing sources for Sorby Hill Project's initial pre-production funding requirements:

- **Government financing agencies:** BML's management has engaged with Australia's government-owned project financing agencies, i.e. Northern Australian Infrastructure Facility (NAIF) and Export Finance Australia (EFA). This engagement with the premier institutions has now been going for some time and they have provided BML with their feedback. BML is using the feedback it received from the financiers to undertake Project optimisation works and address key risks.

  BML is presently in the process of finalising, documenting, and modelling the Project optimisation exercise. The company plans to unveil the results through a Sorby Hills FEED Study to be released to the market in Q1 2024.

  The company believes that the optimisation efforts undertaken so far will effectively mitigate key risk factors and facilitate advancing discussions with debt providers.

  While finalising a deal with such government agencies is always a time-consuming process, it is imperative to note that they are one of the most experienced financiers of such large-scale mining projects.

- **Private Banks:** The company management has acknowledged that some of the leading private banks have been showing keen interest in funding the project, including some of the big Chinese banks. The question is the conditions, i.e. interest rates etc. For pre-production

expenses the capital cost will be relatively higher from these institutions, something which management intends to keep low.

- **Private Infrastructure/Debt Funds:** This option is less favoured mainly due to relatively higher capital costs. In addition, with mining now finding low preference for ESG parameters, many funds are expected to shy away.

Offtake partners: We believe the company's management will need to lock away an offtake agreement. The question is at what stage will management decide to do this.

Boab Metals has engaged in constructive conversations with offtakers, starting even before the DFS. Subsequently, the company has identified and progressed negotiations with preferred parties. In more recent developments, BML has initiated discussions with offtakers regarding financial support to complement the funding sought from other potential lenders.

While discussions regarding offtake are at an advanced stage, the company has retained the option to grant the offtake for the Sorby Hills concentrate. This decision aims to optimise the chances of securing project finance from the involved offtake parties.

- **Equity Investors:** Considering that the equity market is curently soft, we believe this is not a lucrative option as of now. However, BML would have to raise equity at some stage as financial institutions are unlikely to commit the entire funding requirement. In our model, we have assumed equity capital will be raised after the stock's price experiences a re-rate following an announcement of a successful funding arrangement or an offtake agreement.
- **Acreage sell-off:** This is the least favoured route for any fund raising programme. Additionally, the company's leadership is not looking to part-sell any project site (except non-core assets) at this stage. The leadership team feels that the company has many options to raise funds and does not favour taking extreme steps.

The clear vision of the management about its debt funding prospects gives us confidence about the availability of financing options and the probability of their success.

Figure 22: The conundrum of project finance

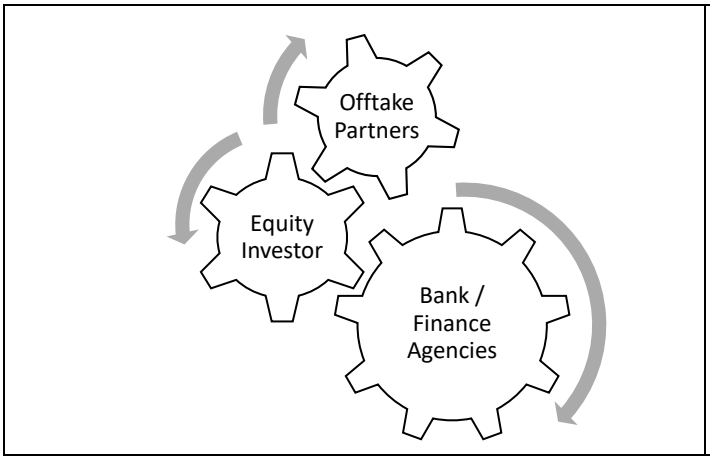
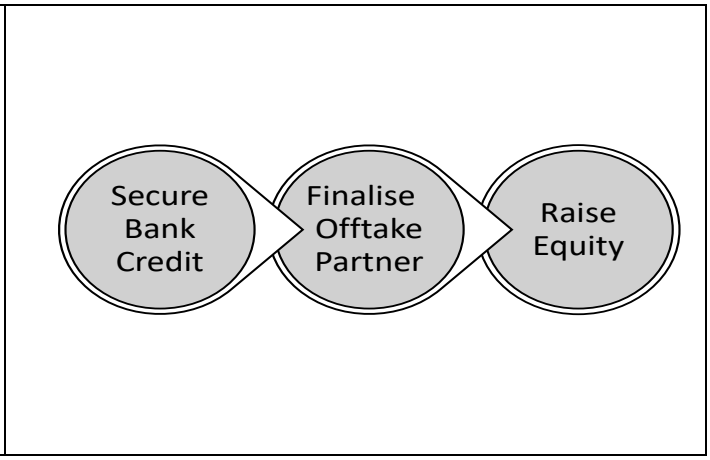


Figure 23: Idealistic project finance path for BML



Source: Company and East Coast Research

While management has confirmed that it is actively exploring all the financing options judicially, some shareholders are getting nervous about the pace of developments on the funding side. We believe that the main debate is not around the project's feasibility but around the project's financing. We think the company's management is trying to maintain the favourable economics of the project by not rushing into unfavourable offtake agreements.

Ideally, the company will try to lock in the debt before finalising an offtake agreement and then raise equity, but banks might want to see money on the table before opening their chest. This might force the management to go for offtake first and then raise equity and bank debt simultaneously. We believe a critical flashpoint for the stock price to move ahead will be the way this vicious circle is broken. Timing of the end result will remain critical ceteris paribus.

We need to mention that the general economic environment in recent months has been very tough for junior resources companies to secure funding. This is because of the significant tightening of credit markets due to the ongoing economic uncertainty and rising interest rates. Although there's no certain answer to the question of when the credit markets will start to loosen up, BML is using the time until securing the required funding as an opportunity. The company is completing project optimisation exercises and improving and expand its mineral resources at Sorby Hills. We think these activities are value creative and in the long-term enhance potential shareholder returns once the credit markets improve and funding for the development of Sorby Hills Project is secured.

Lead-acid batteries will continue to be widely used

Lead is the fourth most used metal worldwide. Due to its notable corrosion resistance, lead was formerly used in plumbing applications. However, in current times, the majority of lead is used in the production of lead-acid batteries. The most recent report from the US Geological Survey indicates that the lead-acid battery sector constituted more than 92 per cent of lead consumption in the United States in 2022.

Lead-acid batteries have low cost of production and maintenance with high reliability and performance.

Since its invention in 1859 by French physicist Gaston Plante, lead-based batteries have been used for commercial purposes. In 1970, the first maintenance-free lead-acid battery was introduced, and it transformed the power supply landscape for stationed and wheeled applications, i.e. automobiles, forklifts, heavy commercially used electric equipment, etc.

One of the main reasons for the success of lead-acid batteries is its low initial cost and lower maintenance cost. Lead-acid batteries are very high in reliability and performance, i.e. they can sustain long periods of inactivity and work effectively even in extreme conditions. Lead-acid batteries have one of the highest power, energy and value per kilo-watt hour (kWh). According to the International Lead Association, nearly 50% of the global lead demand is sourced from recycled lead. This means lead mining is essential to the supply of lead to global markets.

Figure 24: 12V lead-acid battery as used in an internal combustion (IC) engine

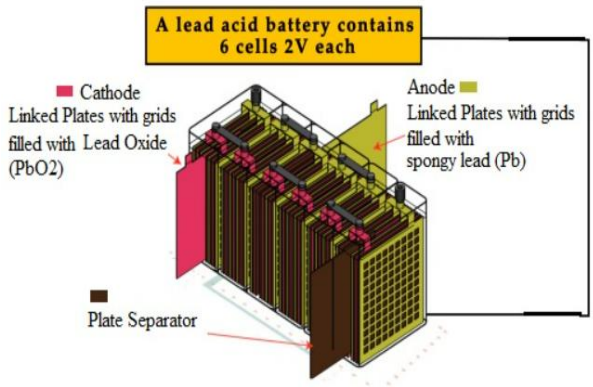


Figure 25: Advantages-disadvantages of lead-acid battery

Advantages of lead-battery	Disadvantages of lead-battery
It is a low cost product that is available in all shapes and sizes	Heavier than other alternatives
Being a mature technology, it has a very high capability and reliability. It can withstand any speed of charging (slow, fast and even overcharging)	Poor weight to energy ratio limits usage to stationary and wheeled applications
Offers high power, energy and value per KWH	Not friendly to the environment - hazarderous contents
Offers equally good performance in extreme conditions, i.e. low and high temperature	Repeated deep discharge cycling reduces battery life
Low maintenance requirements	Has transportation restrictions

Source: RF Wireless World and East Coast Research

Technically, one of the most important types of lead-acid battery is SLI (starting, lighting and ignition) batteries (Figure 24). These batteries have been designed to maintain the power supply. While automobiles are the biggest end-users of SLI batteries, the technological advancement has catapulted the lead-acid battery usage as the preferred choice for powering telecom towers, hospital equipment, emergency lighting and uninterrupted power supply (UPS) systems.

Contrary to common perception, lead has an important role in EVs

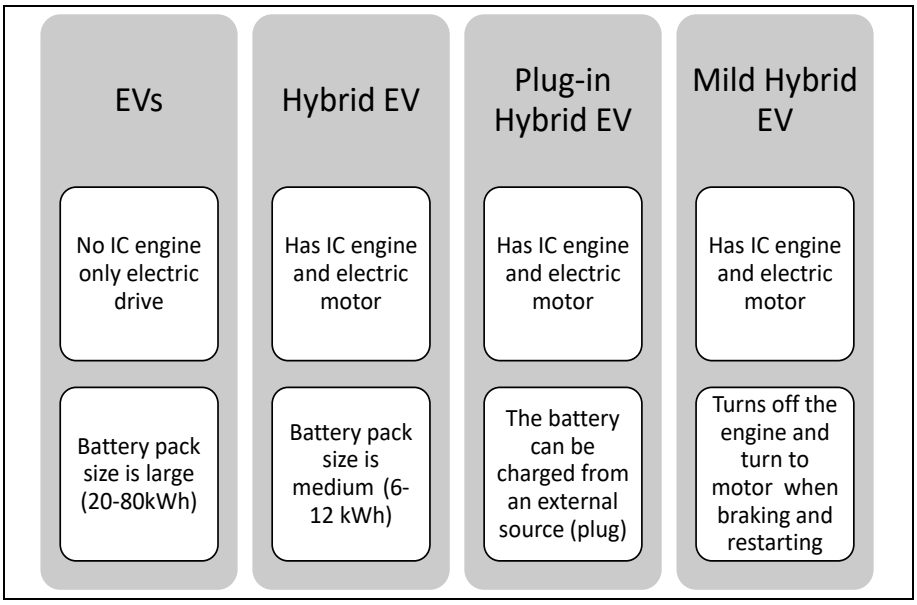
Of late, with the advent of alternative battery technologies which use different metals (lithium, Nickel, cobalt etc.), questions have been raised on the growth prospect of lead. We think this

debate is neglecting the continual and growing utility of lead-acid battery. While lithium is definitely gaining a lot of traction as the main battery metal for electric vehicles (EVs), it is important to note that technological advancements have also been made into lead-acid batteries, expanding the usability of these batteries.

While the world aims to move towards 100% electric mobility, carbon neutral battery options have still not gained mass production/usage. Instead, hybrid vehicles have strongly emerged. Hybrid vehicles offer the best alternatives, bridging the gap between electric and gasoline powertrains. Hybrid vehicles combine the functionality of a gas-powered traditional IC (Internal Combustion) engine and an electric vehicle technology. Each hybrid vehicle uses a 12-Volt lead-acid battery while also pulling energy from a traction battery (energy storage battery that supplies power to the electric motor). The vehicle can switch seamlessly between power sources.

To ignite an IC engine a significant amount of power is required for a short period of time, which only lead-acid battery can provide. Lead-acid batteries have extremely low internal resistance (~50mΩ; indicator of difficulty for flow of current), hence can deliver high output, while Lithium batteries have high internal resistance so can deliver only 1/10th of the peak current.

Figure 26: Different types of EVs and use of lead-acid battery in them (IC engine)

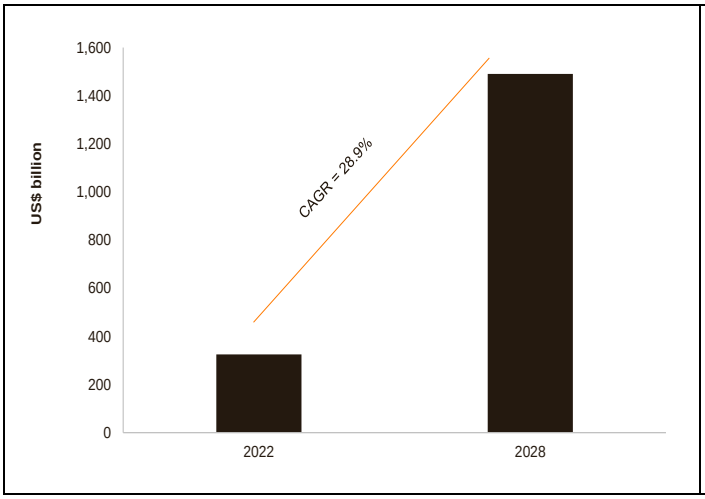


Source: Synergy Files and East Coast Research

Revenue for lead-acid battery forms 14.3% of the global EV battery market revenue and is expected to grow at a 23.3% CAGR over 2022-30

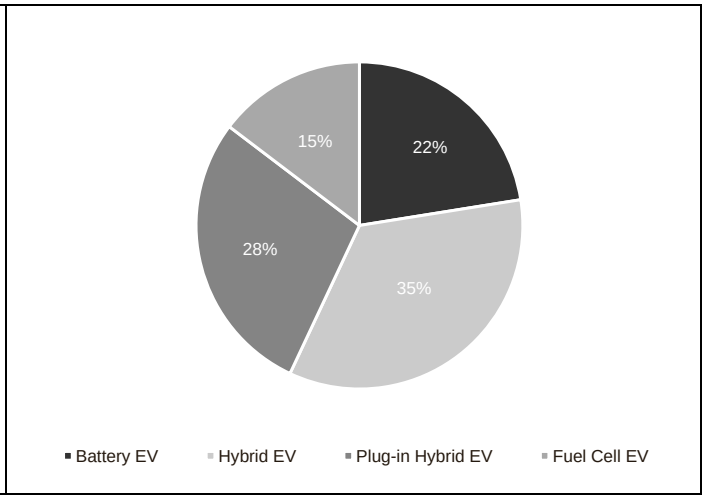
In fact, the lead-acid battery in hybrid vehicles is not merely for ignition and has other responsibilities as well. One of the roles is to provide a power supply for low-energy components, such as lights, cooling systems and clocks. The high-power components run off the main lithium-ion battery and all the usual accessories run from the 12-volt lead-powered supply. When the car's engine is turned off, accessories still need power. The most important function of the lead-acid battery in Hybrid EVs is to enable the main traction battery. According to Mordor Intelligence, a market research and business intelligence solution provider, the global Hybrid EV market is expected to grow at a 28.9% CAGR over 2022-28. This is expected to be beneficial for upcoming lead mining sites such as Sorby Hills.

Figure 27: Hybrid EV's Global market value is expected to grow significantly



Source: Mordor Intelligence and East Coast Research

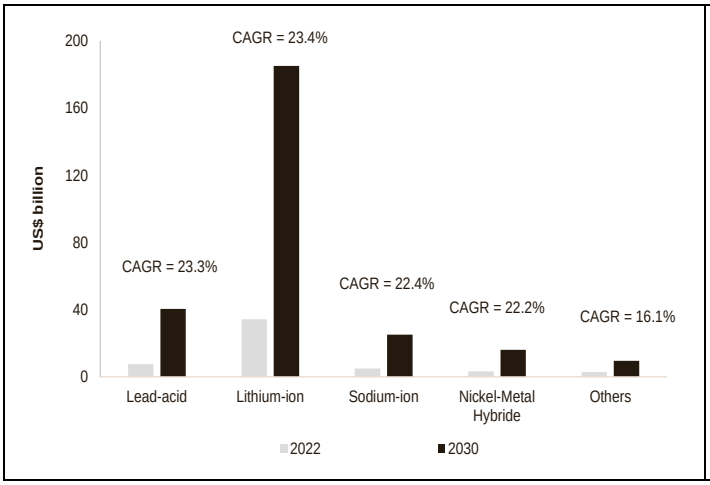
Figure 28: Hybrid Vehicles hold a significant revenue share within the global EV battery market (by propulsion)*



Note: 2021
Source: Precedence Research and East Coast Research

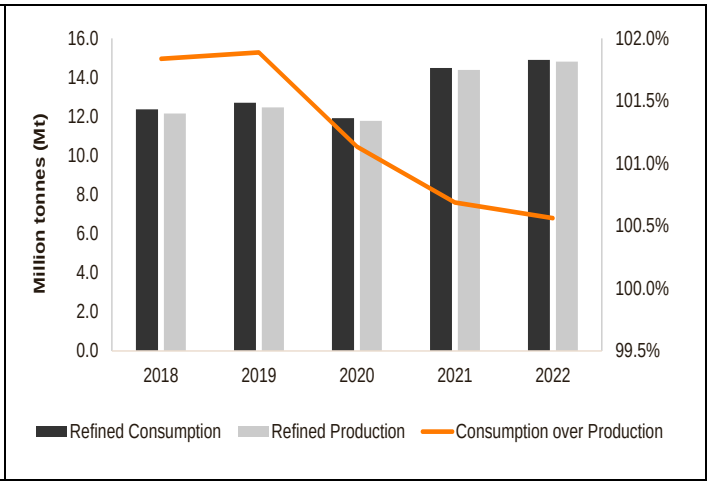
In the last few years, the increasingly stringent environmental protection regulations by governments across many countries have been compelling users to shift towards sustainable mobility, i.e. hybrid vehicles. In addition, the growth in global lead supply has not been able to keep pace with the burgeoning demand (Figure 30). The consequent rise in demand and supply constraints is expected to continue after BML starts production.

Figure 29: Within the global EV battery market, revenue of lead-acid batteries is expected to grow consistently



Source: Precedence Research and East Coast Research

Figure 30: Supply has not been able to keep pace with global lead demand



Source: World Bureau of Metal Statistics and East Coast Research

Utility and telecom sectors will reinforce growth for lead-acid batteries

While the entire focus has been the viability of lead as a battery metal within the personal mobility space, it is imperative to note that the lead-acid battery has wider usage.

1. **Data centres**: With the onset of digitalisation across the working environment, in order to disseminate data, there has been massive investment globally in IT infrastructure, i.e. enterprise cloud computing, data centres, etc. Most of these infrastructure establishments

require large amounts of uninterruptible power supply (UPS) systems. This is expected to proliferate the use of lead-acid batteries.

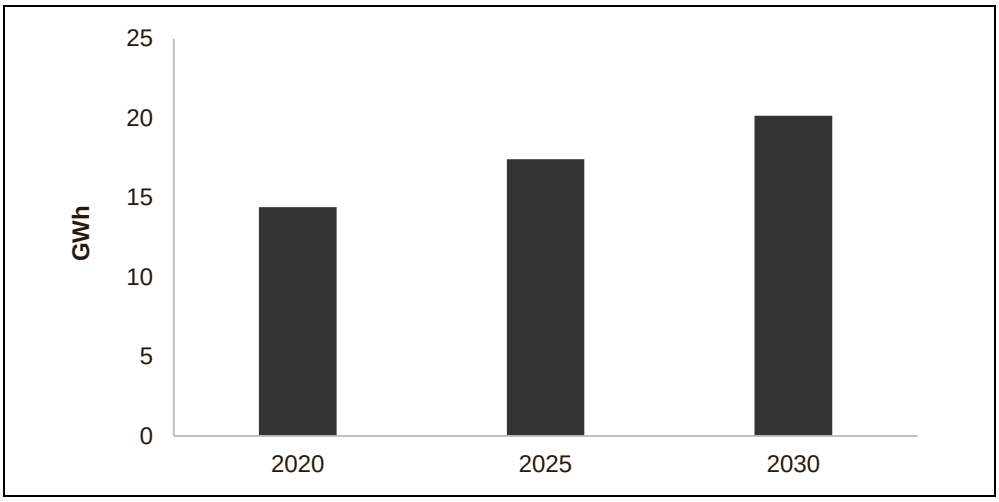
2. **Telecom network**: Another social change is the consumption of mobile data. With the rapid roll-out of the 5G network, an exponential increase in mobile traffic is expected — according to Ericsson, a global networking and telecommunications company, an average of 46GB data per smartphone will be consumed globally by 2028 at a CAGR of 21% across 2022-2028. Such a significant jump will also require the telecom networks to consume a lot of power. With energy being ~90% of telecom network cost (power storage and related applications), low-cost energy options are imperative, thereby increasing reliance on lead-powered batteries for distributed energy storage systems. Lead-powered batteries are preferred over other alternatives for telecom tower networks mainly due to the following reasons: (a) a combination of reliability and durability; (b) the ability of the batteries to act as an active component within backup power applications; (c) the capability to support very long operating lifetimes and (d) ability to operate within high temperatures.

5G deployments along with fulfillment of deferred orders (due to COVID) is expected to drive the lead-based battery demand within the telecom sector globally

3. **Utility**: With rising urbanisation and industrialisation, there has been an increase in the requirement for low-cost uninterrupted power supply. For residential, commercial and industrial applications, there exists a massive demand for energy storage systems (ESS). In addition, renewable energy sources also require ESS. For the integration of all these, a wide range of batteries will be required, each with their different strengths. And without doubt, lead batteries are one of the dominant choices for energy storage.

As a result of the wideness of usage and increasing demand, we believe lead as a battery metal will continue to shine and survive in the long term.

Figure 31: 5G deployment to drive Telecom power demand globally



Source: ILZSG and East Coast Research

According to a report by Fitch Solutions Group, the growth in lead consumption across 2022-2031 will be 7% more than the annual growth rate achieved in 2012-2021

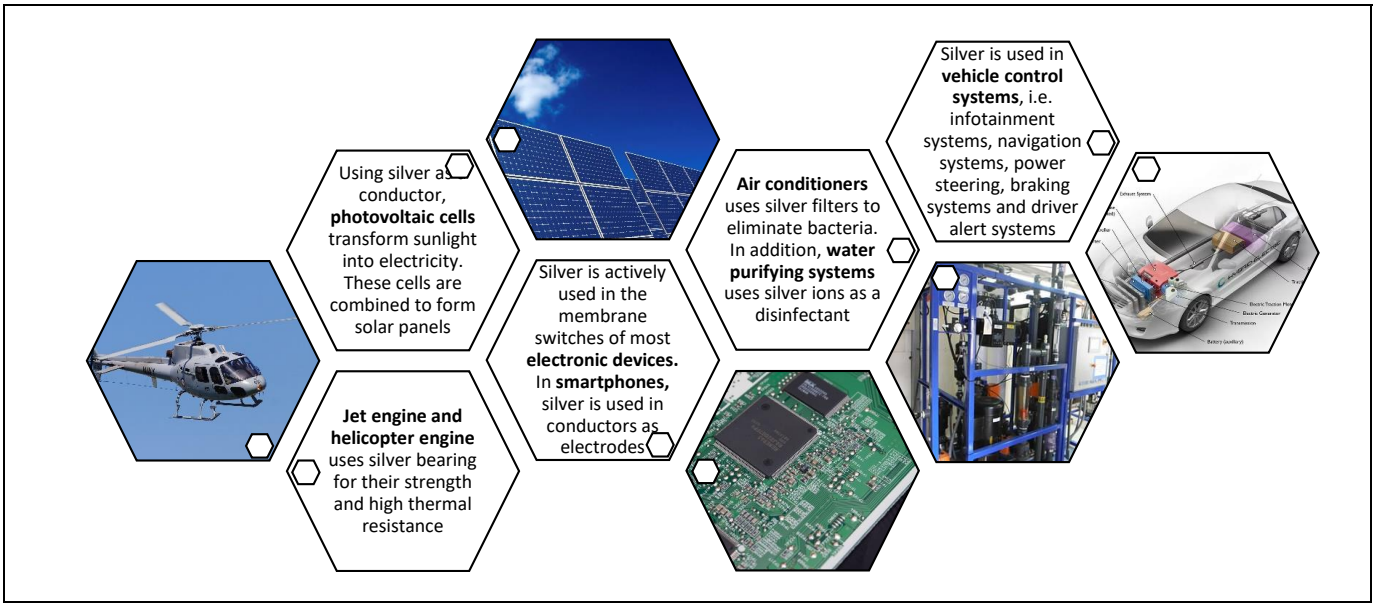
According to International Lead and Zinc Study Group (ILZSG), a global think tank for international trade of lead and zinc formed by the UN in 1959, increases in the requirement for energy storage systems and industrial applications will provide incremental demand for lead. Globally, the total power demand is expected to increase at a CAGR of 21.3% over 2020-2030, thereby supporting demand for power storage batteries, including lead batteries.

New-age usage is expected to boost demand for silver

Since time immortal, silver has been regarded as one of the precious metals. Its place as a trading element and a metal to store value is well appreciated globally. Due to its selective properties silver has long been used for making coins, ornaments and jewellery, i.e. malleable, ductile, shiny white in colour and highly resistant to atmospheric oxidation.

However, it's the other intrinsic properties of the metal that are particularly appealing. Silver is a highly versatile metal and has high thermal and electric conductivity. As a result, it is suitable for power generation industries, such as batteries and conductors. Additionally, the antimicrobial and non-toxic nature makes silver useful in medicine and consumer products. Its high sensitivity to light is also being explored in new-age industries, like solar panels and photovoltaic cells.

Figure 32: Technological advancement is supporting the usage of silver across different industries



Source: Silver Institute and East Coast Research

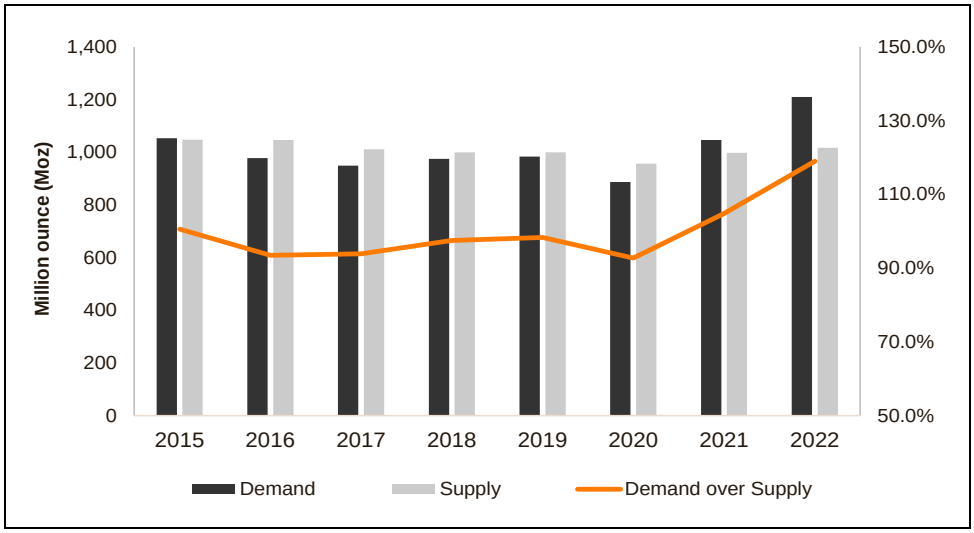
According to Silver Institute, global automobile industry is expected to consume ~90Moz. of silver by 2025 (~60Moz. in 2021)

According to Silver Institute, a non-profit international association of silver industry players, the global demand for silver increased 15.7% YoY and reached 1.2bn ounce in 2022. While some may argue that this is pent-up demand post the pandemic, it is imperative to note that the supply also has not been able to keep pace with the overall growth. The global silver demand was 119% of the industry supply in 2022 vs. 104.8% in 2021 and 93.9% in 2017.

We believe that while personal usage (jewellery) and physical investment might take a backseat in the current inflationary environment (10% YoY and -16% YoY in 2022, respectively), the increasing areas of industrial usage will continue to guide silver demand globally. According to the Silver Institute, the industrial demand for silver metal is expected to be 550Moz in 2023, a lifetime high, +2.0% YoY.

The commodity analysts at BMO Capital Markets expect the major areas of silver's industrial demand to see substantial growth in the next several years. This expected silver demand growth is largely attributed to the metal's usage in photography as well as in the green energy transition. Even assuming a reduced silver intensity per cell, the analysts still see a significant increase in silver demand in photovoltaic cells by 2030. This steadily growing demand is expected to provide BML with a readymade market once the first ore is mined.

Figure 33: Industrial usage has been the chief demand growth driver for silver metal



Source: Silver Institute and East Coast Research

Unlike most other base and precious metals, silver is mined and produced mainly as a by-product of the mining of other metals. About 75% of silver is globally generated as a by-product of copper, zinc, lead and, to a lesser extent, gold production. We see this as an advantage to silver prices in the medium to long term in a way of reducing the metal's price fluctuations. A drop in the prices of base metals during economic downturns will result in a substantial decline in silver supply as base metals mining decreases. This can happen while silver demand is not being affected as much as the base metals demand due to silver's demand from industries that are less cyclical in nature, such as photography and solar panels.

Significant silver credits make Sorby Hills particularly attractive

lead is often produced as a by-product of zinc mining and production. The two metals are commonly found together in ore deposits, and many mines that extract zinc also yield lead. This co-occurrence is because both zinc and lead are often found in the same types of mineral deposits, and their extraction is intertwined.

With the world's largest lead mines producing lead from lead-zinc deposits, we see a substantial economic advantage to projects with lead-silver deposits, such as the ones at BML's Sorby Hills Project. This is because of the much more bullish outlook for silver prices compared to zinc prices.

The last several months have seen zinc prices fall to their lowest levels since 2020. This has led to the closure of several zinc mines in Europe, the US and elsewhere. The decline in zinc price, accompanied by high energy prices and general cost inflation, has made zinc mining operations unprofitable in many jurisdictions. The fall in zinc prices is attributed to the low level of construction activity due to a slowdown in the global economy.

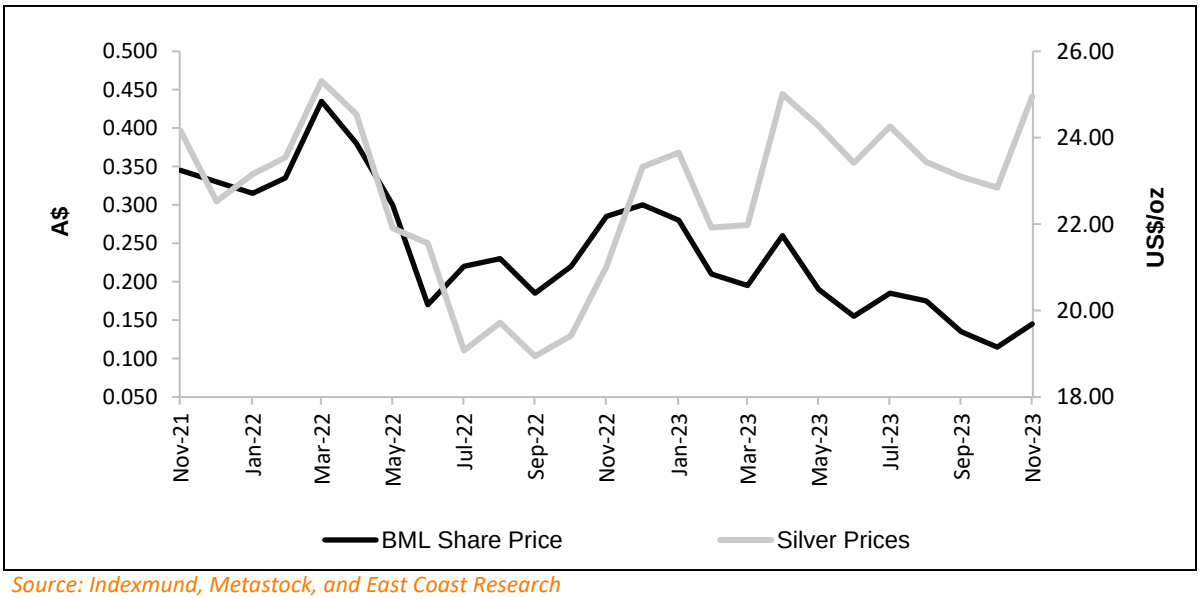
In the meantime, Australian dollar denominated silver prices are trading not too far from all-time high levels (figure 34). This is owed to silver's increasing industrial use by the soaring production of solar panels, as well as the high correlation of the Australian dollar – US dollar exchange rate to precious metals prices.

Figure 34: Historical silver prices denominated in Australian dollars (A$/oz)

Source: Tradingview

Sorby Hills has one of the highest silver credits amongst known lead-silver deposits. Based on Sorby Hills 2023 DFS, about 30% of the Project's forecasted revenue will come from silver credits. We think the share of silver revenue in Boab's Sorby Hills Project can considerably increase in the long-term as we see significant upside potential to current silver prices. The high exposure of Sorby Hill's economics to silver prices can be seen in Boab's share price correlation to silver prices (Figure 35).

Figure 35: BML's share price has some catching up to do

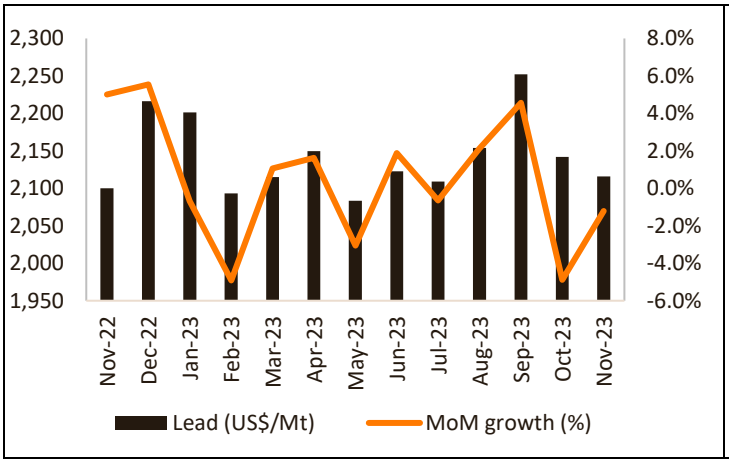


Source: Indexmund, Metastock, and East Coast Research

The current volatility in metal prices could benefit BML

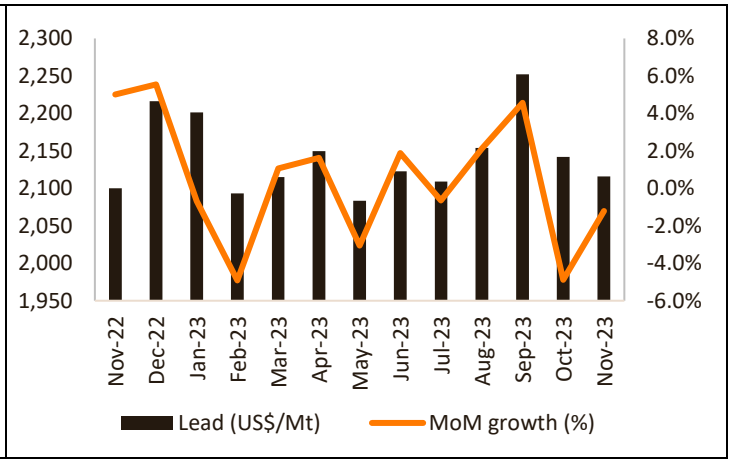
Constant volatility in metal prices over the last year has forced many miners to rationalise operations — deferring mine construction, resizing operations, revaluating financing terms, etc. We believe this situation could turn out to be advantageous for BML. Due to its low-cost structure, BML is relatively better placed than its competitors. In addition, being closer to the end market (mineral guzzling Asia-Pacific region) means that BML can transport the final product to smelters relatively quickly and at a low cost. This is expected to help BML gain market share at the expense of more costly and far-off mines.

Figure 36: Price of silver is witnessing a revival



Source: World Bank and East Coast Research

Figure 37: Lead prices have remained range-bound



Source: World Bank and East Coast Research

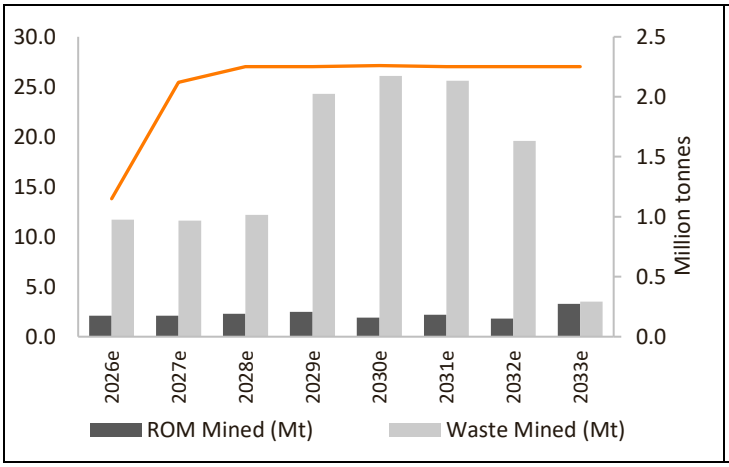
Valuation: DCF approach indicates substantial upside Potential, while comparable resource-based approach shows BML is currently significantly undervalued

We have used a DCF-based approach to calculate the long-term value of BML. We value BML at A$0.70 per share in a base-case scenario and A$0.81 per share in a bull-case scenario. Our target price range indicates substantial upside potential to the current share price of A$0.145 per share. Our updated DCF valuation is slightly lower than our initial valuation range of A$0.74-0.84, released in March 2023. This is mainly due to higher borrowing cost assumptions used as the interest rates and risk premiums lenders demand have increased in the last 8 months. Our basic valuation methodology has the following key indicators:

- Our DCF model for the Sorby Hills Project is broadly based on the assumptions of DFS released in January 2023. We have assumed the business operations will continue beyond year 9 as BML develops the Manbarrum zinc-lead-silver project and uses the same proposed processing facility at the Sorby Hills Project.
- Due to the currently tight credit markets, we have assumed a delay in finalising funding plans. As such, we have assumed that BML will start production in Q1 2026 — this includes a gestation period before the commencement of commercial production.
- We have assumed forecasted revenues to be net of royalty. The volume of mined ores has been forecasted in line with project economics.
- We have assumed a discount rate (WACC) of 12.3% and a terminal growth rate of 2%.
- Other assumptions included a 30% corporate tax rate and a royalty rate of c. 4%.

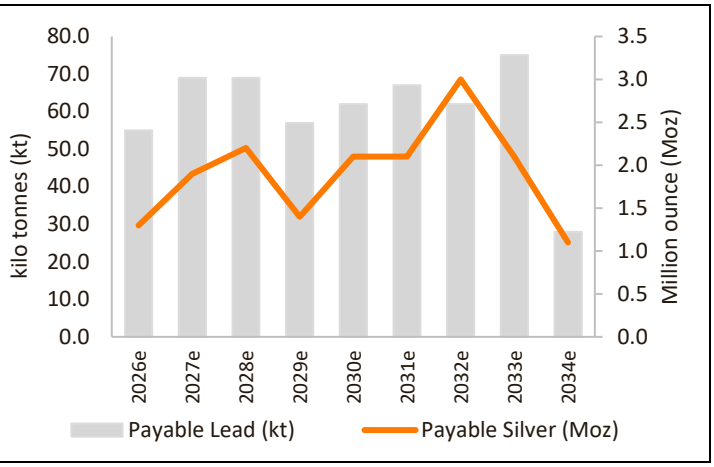
Ores extracted and production: We have used the total measured, indicated and inferred resources for our assumption. Since Sorby Hills area is an open-pit site with near surface resources, it's unlikely to require a lot of additional development costs in excess of the current contingency capital. For both of the scenarios, the volume of extraction has been kept in sync with the DFS conducted in January 2023. We have used a total ROM resource of c.18.3Mt.

Figure 38: ROM, Waste and Processed mineral (Mt)



Source: Company and East Coast Research

Figure 39: Payable Lead and payable silver



Source: Company and East Coast Research

Commodity price: We believe lead prices will remain range-bound over the next decade. In the base case we have assumed the lead metal price range of US$2,094-2,249 per tonne. Similarly, we have assumed the price of silver will stay within a tight range of US$22.75-25.25 per ounce. These commodity price assumptions are considerably more conservative than the DFS assumptions, as well as consensus expectations, especially for silver prices. As such, we have used c. 10% higher silver price assumptions in our bull-case scenario. Across our two scenarios, we have assumed conversion rates in a range of A$1=US$0.66-0.70.

Operating costs: Across our two scenarios, we have assumed an average total operating cost of A$82.6/t of ROM mined ore. This is a bit more than what the management has guided through DFS as we believe the project could face additional inflationary pressure especially in the second half of the mine life. This includes the mining cost, processing costs, logistic costs, administrative costs and treatment costs. We have considered a royalty rate of c.4% on the revenue.

Capital costs and project funding: As highlighted in the DFS, our model also assumes a pre-production capital cost of A$245m to be incurred in the next couple of years. We have assumed that BML would raise c. A$245m by early Q1 2024 through debt and equity issuance. We have used a 50:50 debt-equity ratio to fund the capital requirement. Post the commencement of production, the company should be able to fund its operations through internally generated cash flow.

Below is the summary of our final DCF valuation range (Figure 40). Considering that we have not taken into account the value of the company's non-core assets, we believe that the DCF valuation represents a conservative estimate for BML. We have not considered the option to acquire more tenements and assets. We believe the management will undertake this at a suitable time in the long term. The target price range represents a Price/NAV of 0.19x, which we believe provides a significant cushion for potential investors. The intrinsic value is highly sensitive to changes across WACC, exchange rates, and metal price movements. The sensitivities across these key indicators have been represented below (Figure to 43).

Figure 40: DCF-based valuation for BML (post equity dilution)

BML Valuation (A$ m)	Base Case	Bull Case
Present value of FCF	99.7	145.6
PV of Terminal FCF	207.0	208.0
Net debt (cash)	(4.5)	(4.5)
Firm value (A$ m)	**311.2**	**358.2**
Diluted Shares (m)	444.3	444.3
Implied price (A$ cents)	70	81
Current price (A$ cents)	14.5	14.5
Upside (%)	383.1%	456.0%
Mid-point Target Price (A$ cents)	**75**	
Price / NAV (X)	0.19x	

Source: East Coast Research

Figure 41: Valuation sensitivity to discount rate and terminal growth rate

		WACC						
	0.70	10.9%	11.4%	11.9%	12.4%	12.9%	13.4%	13.9%
Terminal Growth Rate	1.7%	0.88	0.81	0.74	0.69	0.63	0.58	0.54
	1.8%	0.89	0.82	0.75	0.69	0.64	0.59	0.54
	1.9%	0.90	0.82	0.76	0.70	0.64	0.59	0.54
	2.0%	0.90	0.83	0.76	**0.70**	0.64	0.59	0.55
	2.2%	0.92	0.84	0.77	0.71	0.65	0.60	0.55
	2.4%	0.94	0.86	0.78	0.72	0.66	0.61	0.56
	2.5%	0.94	0.86	0.79	0.73	0.67	0.61	0.57

Source: East Coast Research

Figure 42: Valuation sensitivity to lead prices and exchange rate

		Average Lead Price (US/t)						
	0.70	2,099	2,149	2,199	2,249	2,274	2,284	2,297
AUD : USD	0.60	0.93	0.93	0.94	0.94	0.94	0.95	0.95
	0.61	0.89	0.90	0.90	0.91	0.91	0.91	0.91
	0.62	0.86	0.86	0.87	0.87	0.87	0.87	0.87
	0.67	0.69	0.70	0.70	**0.71**	0.71	0.71	0.71
	0.69	0.64	0.64	0.64	0.65	0.65	0.65	0.65
	0.71	0.58	0.58	0.59	0.59	0.59	0.59	0.59
	0.72	0.55	0.56	0.56	0.56	0.57	0.57	0.57

Source: East Coast Research

Figure 43: Valuation sensitivity to silver prices and exchange rate

		Average Silver Price (US$/oz)						
	0.70	23.8	24.0	24.5	25.0	26.0	27.0	27.5
AUD : USD	0.60	0.94	0.94	0.94	0.94	0.94	0.95	0.95
	0.61	0.90	0.90	0.90	0.91	0.91	0.91	0.91
	0.62	0.87	0.87	0.87	0.87	0.87	0.87	0.88
	0.67	0.70	0.70	0.70	**0.71**	0.71	0.71	0.71
	0.69	0.64	0.64	0.65	0.65	0.65	0.65	0.65
	0.71	0.59	0.59	0.59	0.59	0.59	0.60	0.60
	0.72	0.56	0.56	0.56	0.56	0.57	0.57	0.57

Source: East Coast Research

Where our assumptions stand different?

Compared with contemporary belief and DFS representation, we have a few key differences:

- **Metal prices**: Within our two scenarios and across the mining life we have assumed a wider range of metal prices. We believe inflationary pressure will continue to hamper demand resulting in greater price volatility for most of 2023 and 2024.
- **Cost Inflation**: We are a bit conservative on the overall operating cost. We believe that the cost inflation will be higher in the second half of the project life mainly due to deep-rooted mining.
- **FID timing**: We have assumed that the final funding decision will only get executed in 1Q 2025. The recent volatility in the capital markets globally is expected to impact management's equity raising plan in the immediate future. This, in turn, is expected to further delay the fund release by financial institutions.

Relative Resource-Based Valuation: BML is currently valued considerably cheaper than its comparable peers

We have also used an asset-based relative valuation methodology (based on peer multiples) to determine the just-as-it-is fair value of Boab. We have done this to assess the fair value of Boab in the absence of a Final Investment Decision (FID) for Sorby Hills by our DCF assumption of 1Q 2025. Due to the currently extremely tight credit markets, raising debt funding for small companies has proven extremely difficult. Therefore, we believe an asset-based valuation approach will give us a good idea of how much Boab's defined lead-silver deposits should be valued at in the current market and in the absence of the funding required to bring the Sorby Hills Project to production.

There are a number of Australian silver-base metals explorers of varying sizes listed on the ASX. These companies, other than one, are working to grow their resources and/or awaiting funding to bring their projects to production, similar to Boab. For the purpose of comparison, we have chosen 7 of these companies with projects located in Australia.

Figure 44: Peer list

Company	ASX Code	Market Cap* (A$m)	Adjusted EV^ (A$m)
KGL Resources	KGL	82.3	63.6
Silver Mines	SVL	231.7	224.4
Investigator Resources	IVR	59.0	55.7
Manuka Resources	MKR	25.3	36.3
Horizon Minerals	HRZ	23.1	16.0
Galena Mining	G1A	57.2	52.3
PNX Metals	PNX	21.5	19.5
Peer Median		**57.2**	**52.3**
Peer Average		**71.4**	**66.8**
Boab Metals	BML	25.3	30.7

**As of 27th November 2023*

^EV has been adjusted based on the companies' ownership of the resources and their other assets.

Source: Companies' ASX releases and East Coast Research

Boab is trading at an EV/ weighted average (comparable) resource multiple of A$0.19/oz compared to the peer group average multiple of A$0.51/oz.

To arrive at our Fair valuation, we have used a peer group average EV/weighted average (comparable) resource multiple of A$0.51 per ounce of silver equivalent to value the Sorby Hills Lead-Silver Project in our base case scenario.

As mentioned before, the majority of silver produced globally comes as a byproduct of base metals production. As such, the number of pure silver plays on the ASX is very limited and Boab and its peers have significant deposits of base metals and in some cases gold, besides their defined silver resources. Therefore, for comparison, we have calculated the silver equivalent resources of Boab and its peers using the metals' prices as of 22 November 2023.

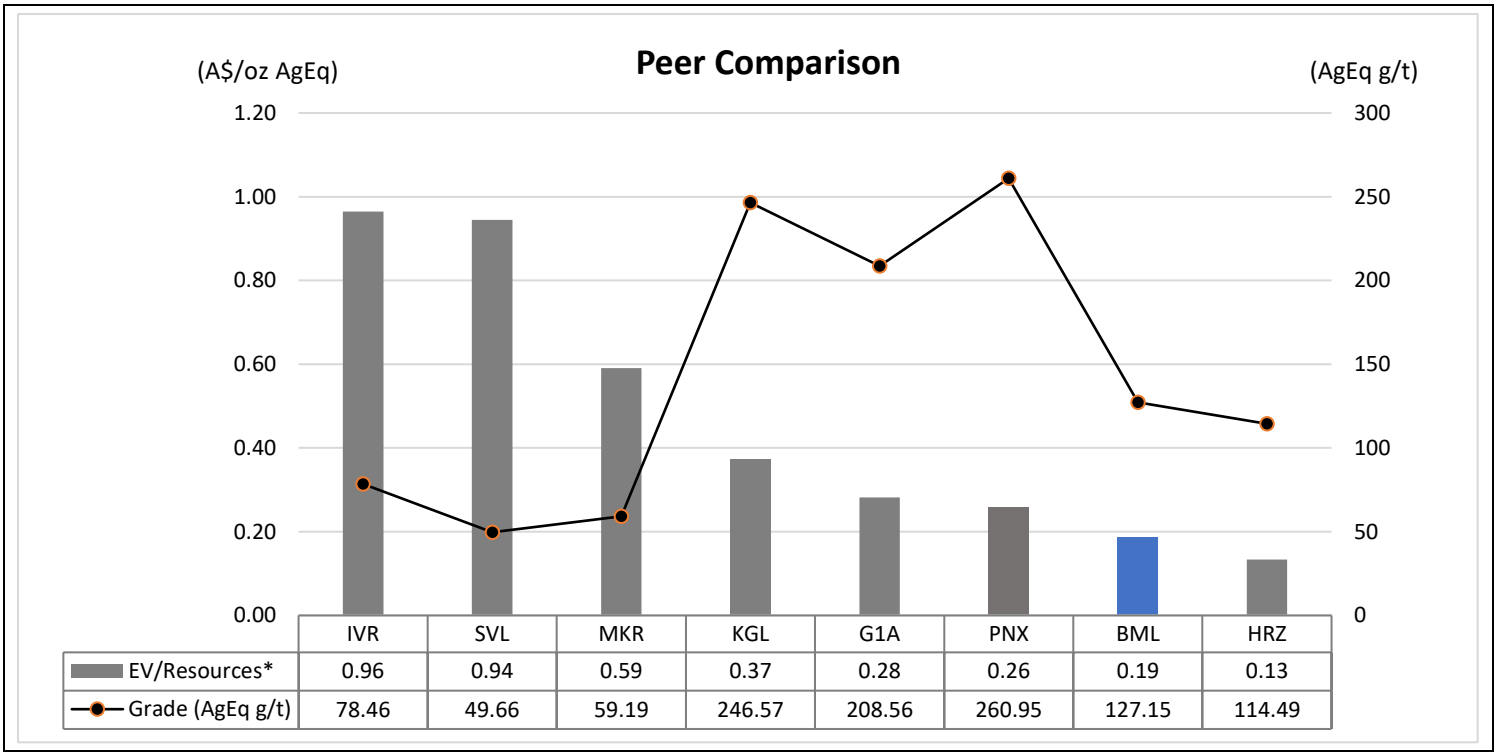
We have used a weighted average of total resources to take into account the confidence of each company's resources estimates by giving a weight of 0.5 to Inferred Resources and 1.0 to Measured and Indicated Resources. Therefore, the EV/ounce of silver equivalent valuation multiple that we have used for the Sorby Hills valuation considers the resources' size and confidence. However, multiple other factors have significant roles in determining the valuation of a company's defined resources. These include the quality of the resource, meaning the grades and whether the resources are openpitable or not, as well as the metallurgical recovery and required processes for metals recovery for different deposits. Other factors to consider include access to ready infrastructure and workforce for the future development of resources, as well as the likelihood of converting Inferred Resources to Indicated or Measured categories with further exploration activities.

Many qualitative factors impact the valuation of a company's defined resources, including access to ready infrastructure, grades of the deposits and closeness to the surface, amongst others.

These factors, as mentioned, have great implications for the valuation of different resources and can, to a great extent, justify the great variability observed in the EV/ounce of silver equivalent valuation multiples that the market has assigned to different companies in Boab's peer list (as observed in figure 45). For example, the very low valuation per ounce of gold assigned to HRZ's resources by the market (as per our calculations) can be somewhat explained by our understanding that its Resources are dispersed across more than 15 deposits and that there are large distances between many of those deposits to each other.

On the other hand, we have IVR (Investigator Resources) and SVL (Silver Mines) in our peer list, which are trading at high EV/Resource multiples currently. The high valuation multiple assigned to SVL can, at least partially, be explained by the fact that it has the largest undeveloped silver deposit in Australia and that its deposits are near surface (waste to ore strip ratio of 1.6:1), based on the company's reports to the ASX. In the case of IVR, the company has a PFS for its flagship project, the Paris Silver Project. It is currently working on a DFS for a proposed silver-lead mine at the Paris Silver Project, which claims to have the highest-grade silver deposit (not silver equivalent) in Australia.

Figure 45: Boab is currently trading at a significantly lower EV/Resources multiple compared to its peers



	IVR	SVL	MKR	KGL	G1A	PNX	BML	HRZ
EV/Resources*	0.96	0.94	0.59	0.37	0.28	0.26	0.19	0.13
Grade (AgEq g/t)	78.46	49.66	59.19	246.57	208.56	260.95	127.15	114.49

*Note: * Resources include 100% of measured and indicated resources and 50% of inferred resources.*
Source: Companies' ASX releases and East Coast Research

Boab is significantly undervalued

Although Boab is currently trading at a significant discount to its peers, we can argue that Boab's Sorby Hills Resources benefit from many advantages that demand a premium to its peers' average valuation multiple.

Boab's resources should be valued at a significant premium to the peer group's average multiple due to the strategic benefits of the Sorby Hills Lead-Silver Project.

Boad has completed a DFS for its Sorby Hills Lead-Silver Project, which has demonstrated the economic robustness of the Project. Sorby Hills deposits are amenable to open pit mining with a high average AgEq grade of more than 120 g/t (based on our calculations, using metals prices as of 22 November 2023). Additionally, metallurgical testworks conducted at all deposits have returned strong average recovery rates of 91% for lead and 82% for silver, using conventional floatation processes. Boab has mining leases granted with EPA (Environmental Protection Authority) approvals in Place. There's a sealed road from Sorby Hills to Wyndham Port for future Concentrate sales from the Project. The company has signed Heads of Agreements (HOA) with the local shire to construct a Kununurra-based accommodation facility, 50km from Sorby Hills. It has also executed an HOA to secure clean energy from the Ord River Hydroelectric Plant. And it has optimised Front End Engineering and Desing (FEED) studies nearing completion.

We think the current valuation of A$0.51/oz of AgEq is close to the trough levels, which have been partially affected by the deteriorated sentiment on the pre-production commodity stocks in the last 18 months. We anticipate valuations will regain momentum as excessive commodity price risks subside in the next 12 to 18 months through a gradual improvement in the global economy. Therefore, we have used a 30% higher EV/Resources multiple in our bull case scenario.

We have arrived at a relative resource-based valuation of A$0.36 per share in the base case and A$0.46 per share in the bull case scenario (Figure 46). The mid-point fair valuation of A$0.41 represents a 173% upside potential to the current share price of A$0.145, indicating a substantial valuation headroom only based on BML's currently defined resources.

Figure 46: Asset-based relative valuation for BML (post equity dilution)

BML Relative Valuation (A$ m)	Base Case	Bull Case
Weighted average AgEq resources (Moz)	164.19	164.19
Sector Average (EV/Total resource* in A$m/Moz AgEq)	0.51	0.66
Sorby Hills Lead-Silver Project Value	83.2	108.2
Implied EV	**83.2**	**108.2**
Cash ^	3.0	3.0
Debt	-	-
Minority Interest	20.8	27.0
Total Market Value	**65.4**	**84.1**
Fully diluted number of shares on Issue (m)	182.3	182.3
Implied price (A$)	**0.36**	**0.46**
Current price (A$)	0.145	0.145
Upside (%)	*147.4%*	*218.2%*
Mid-point Target Price (A$)	**0.41**	
Upside (%)	**183%**	

*Notes: * Total resource includes 100% of measured and indicated resources and 50% of inferred resources.*

^ As of 30 September, 2023.

Source: Company, East Coast Research

Re-rating of BML

BML's stock is currently trading below our mid-point target valuation. Achieving the following milestones will enable a re-rating on the stock, thereby increasing the shareholder value:

- An announcement of **a successful offtake agreement** will increase confidence in the project's economics and debt funding prospects.
- An announcement of **a successful debt funding arrangement** will be a major step towards closing the project's funding requirements and will increase investors' confidence in the project.
- **Successful completion of the funding plan**: We believe the biggest catalyst for a value uplift would be successfully closing a favourable Final Investment Decision (FID). This will be a testimony of the project's economics and will open the way towards production.
- **Timely commencement** of production from Sorby Hills following a successful FID will enhance the management's reputation of delivering on promise and consequently attract more investors.
- **Any increase in lead and silver prices** will directly impact the project's future cash flows and its expected return profile.
- Further **engineering and process improvement initiatives** will enhance the expected profitability from the project and the shareholder's return.
- An **increase in the indicated and inferred reserves** in further studies will expand the life of the mine, thereby enhancing the project value.

Risks

We see the following key risks to our investment thesis for BML:

- **Underlying commodity price risk**: Historically, BML's share price has stayed in tandem with the global silver prices (Figure 35). This exposes BML to commodity price risk, which depends on macroeconomic factors and demand and supply dynamics of the underlying metals, i.e., lead and silver. Any prolonged drop in lead and silver prices will be detrimental to our investment thesis.
- **Funding risk**: BML is required to raise substantial amounts of capital to commence mining developments. Raising funds on favourable terms (both debt and equity) and in a timely manner continues to be the biggest challenge for the company as of now.
- **Project delays**: Any potential delay in initiating mining activity, either due to funding or operational challenges, will negatively affect the cash flow projections and potential shareholders' returns.
- **Geological risk**: For a resources company such as BML, there exists a perennial risk of downward estimates of reserve figures. There also exists a risk of re-categorisation of the Indicated Resources to Inferred Resources in further studies. Any such incident will negatively impact the stock's valuation.

Appendix I: BML SWOT analysis

Figure 47: SWOT analysis

Strengths	Weakness
(1) This is a low-risk project as it is backed by strong JV partner Henan Yuguang Gold and Lead Co. Ltd., China's largest lead smelter and silver producer (2) Large and high-grade mineral resource base with more than 2/3 in proven reserves (3) The project is located in Western Australia, which is one of the most attractive regions for mining investment (4) Efficient project work stream execution: (a) GRES has been selected as the preferred EPC contractor; (b) Horizon Power is designated to deliver low-cost, clean renewable energy from the Ord River Hydroelectric power plant; (c) an agreement is already in place with Cambridge Gulf for access and stevedoring services at Wyndham port till April 2034; (c) HOA signed with local shire for a Kununurra based accommodation facility. (5) Highly experienced leadership team in place	(1) Economic problems leading to lower industrial usage of lead and silver (2) Delay in debt financing is impacting investors' confidence
Opportunities	**Threats**
(1) Manbarrum and Eight Mile Creek projects offer significant regional exploration potential. (2) Potential to further improve resource and production targets through the ongoing project optimisation exercises. (3) Potential to further optimise costs by reducing mining costs and identifying CAPEX and OPEX savings. (4) Possibility to enhance metal recoveries at Norton deposit with the ongoing additional testworks.	(1) Global recession leading to high interest rate volatility and low capital markets activity for financing exploration and development projects. (2) Lithium being preferred over lead for auto battery. (3) Inflationary pressures increasing the cost of the project. (4) Volatility in lead and silver prices.

Source: East Coast Research

Appendix II: Highly experienced and diverse leadership

The current board and management members of BML possess rich and diverse experience, with expertise across the exploration and mining industry and also in strategic management, business planning, finance, corporate advisory and capital raisings (Figure 48).

Figure 48: BML's management and board members

	Name and Designation	Profile
	Mr. Gary Comb **Chairman**	• Mr. Comb has more than 30 years of experience in the Australian mining industry. He has a strong track record in successfully commissioning and operating base metal mines. • He has held a variety of senior roles, including the Chairman of Finders Resources Ltd., the Managing Director of Jabiru Metals Ltd. and the CEO of BGC Contracting Pty Ltd.
	Mr. Simon Noon **Managing Director and CEO**	• Mr. Noon has spent the past 15 years managing Public Resources Companies, with extensive experience in strategic management, business planning, finance and capital raising across a variety of commodities. • He was the Managing Director and co-founder of West Rock Resources Ltd. Eventually, the company was acquired by Boab Metals Ltd in 2013. • Prior to being the Managing Director of Rock Resources Ltd., he was managing Groote Resources Ltd. from a Market Cap of under $10m to market highs in excess of $200m.
	Mr. Andrew Parker **Non-Executive Director**	• Mr. Parker has significant experience in the exploration and mining industry and also in corporate advisory, strategic consultancy and capital raisings. • He previously held the position of Managing Director at Trident Capital Pty Ltd, a corporate advisory and venture capital firm that he co-founded. • He is also the Chairman of Widgie Nickel Pty Ltd.
	Mr. Richard Monti **Non-Executive Director**	• Mr. Monti is a geologist with more than 30 years of experience in many facets of the exploration and mining industry, including technical, commercial, marketing, and finance. • He has held roles at several international and Australian companies, including Anaconda Nickel, Azimuth Resources Ltd., The North Group, Normandy Group, and RTZ Exploration. • He is currently a director at Black Dragon Gold Ltd.

Source: Company

Appendix III: Financial Statement

Figure 49: BML's summary of historical and forecasted financial statements

Profit & Loss (A$m)	2021	2022	2023	2024e	2025e	2026e	2027e	2028e
Total Revenue	**0.5**	**0.3**	**0.3**	**0.2**	**0.3**	**222.2**	**291.5**	**306.9**
Mining and Processing cost	0.0	0.0	0.0	0.0	0.0	(136.0)	(154.7)	(161.1)
Operating expenses	(5.5)	(7.0)	(6.1)	(6.5)	(6.0)	(17.5)	(21.1)	(21.3)
EBITDA	**(5.0)**	**(6.7)**	**(5.8)**	**(6.2)**	**(5.8)**	**68.6**	**115.7**	**124.5**
Depreciation	(0.1)	(0.1)	(0.1)	(0.0)	(0.0)	(17.7)	(31.3)	(29.6)
EBIT	**(5.0)**	**(6.8)**	**(5.9)**	**(6.3)**	**(5.8)**	**51.0**	**84.4**	**94.9**
Tax expense	0.0	0.0	0.0	0.0	0.0	(12.6)	(22.9)	(26.3)
Net Profit	**(5.0)**	**(6.8)**	**(5.9)**	**(6.3)**	**(15.4)**	**29.5**	**53.5**	**61.5**

Cash Flow (A$m)	2021	2022	2023	2024e	2025e	2026e	2027e	2028e
Profit after tax	(5.0)	(6.8)	(5.9)	(6.3)	(15.4)	29.5	53.5	61.5
Depreciation	0.0	0.1	0.1	0.0	0.0	17.7	31.3	29.6
Changes in working capital	0.5	(0.7)	0.1	(0.3)	(0.0)	(7.1)	(4.2)	(0.7)
Other operating activities	(0.1)	0.9	0.4	0.0	0.0	0.0	0.0	0.0
Operating cashflow	**(4.6)**	**(6.5)**	**(5.4)**	**(6.6)**	**(15.4)**	**40.1**	**80.6**	**90.3**
Payments for exploration and development	(0.0)	(0.0)	(1.6)	0.0	(208.4)	(36.3)	0.0	0.0
Other investing activities	(0.1)	0.2	0.0	0.0	0.0	(35.7)	(6.8)	(2.0)
Investing cashflow	**(0.1)**	**0.1**	**(1.6)**	**0.0**	**(208.4)**	**(72.0)**	**(6.8)**	**(2.0)**
Equity raised (repurchased)	4.6	10.2	5.7	0.0	91.7	0.0	0.0	0.0
Financing cashflow	**4.3**	**14.4**	**5.3**	**(0.1)**	**234.7**	**19.4**	**(1.5)**	**(12.4)**
Net change in cash	(0.4)	8.1	(1.7)	(6.6)	10.9	(12.5)	72.3	76.0
Cash at End Period	**1.6**	**11.0**	**4.6**	**(2.0)**	**8.8**	**(3.7)**	**68.6**	**144.6**

Balance Sheet (A$m)	2021	2022	2023	2024e	2025e	2026e	2027e	2028e
Net Cash	12.9	6.2	4.5	(2.0)	(103.6)	(135.5)	(61.7)	26.6
Total Assets	18.7	11.7	11.6	2.9	222.1	282.2	335.8	385.4
Total Liabilities	1.7	1.1	1.2	0.3	112.7	143.3	143.4	131.5
Shareholders' Funds	17.0	10.6	10.4	4.1	110.9	140.4	193.9	255.4

Ratios	2021	2022	2023	2024e	2025e	2026e	2027e	2028e
Total Cash / Total Assets	69.1%	54.1%	39.4%	-70.8%	4.0%	-1.3%	20.4%	37.5%
Return on Assets (%)	NM	NM	NM	NM	NM	20.7%	19.2%	18.4%
Return on Equity (%)	NM	NM	NM	NM	NM	40.8%	35.1%	31.1%

Source: East Coast Research, company

Appendix IV: Peer Companies' Resource Estimates

Figure 50: BML's Peers' Mineral Resource Estimates

Company	ASX Code	Total Resources (AgEq Moz)	Inferred Resources (AgEq Moz)	Weighted Average (Comparable) Total Resources* (AgEq Moz)
KGL Resources	KGL	202.647	64.950	170.172
Silver Mines	SVL	350.329	225.396	237.631
Investigator Resources	IVR	66.422	17.332	57.755
Manuka Resources	MKR	85.139	47.393	61.442
Horizon Minerals	HRZ	142.559	45.299	119.909
Galena Mining	G1A	245.710	119.917	185.751
PNX Metals	PNX	83.761	16.752	75.385

*Note: * Weighted Average Comparable Total Resources include 100% of measured and indicated resources and 50% of inferred resources.*
Source: Companies ASX releases and East Coast Research

Appendix V: Analyst's Qualifications

Behzad Golmohammadi, lead analyst on this report, is an equity research analyst at Shares in Value (East Coast Research).

- Behzad has a bachelor's degree in Engineering (Industrial) and a master's degree in Applied Finance (Investing) from Sydney Business School where he was the top performer in his cohort. He has also passed the first two levels of the CFA Program.
- Behzad has several years of experience working as an Equity Research Analyst and Technical Analyst in Australia and overseas and has a broad knowledge of ASX listed companies. He has been a speaker at the Australian Technical Analysts Association (ATAA).

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