Sprott | Equity Research

24 January 2023

Ticker: EMR AU	**SCPe 4Q22 net cash:** (A$9.5m)	**Project**: Okvau / Bullseye
Market cap: A$846m	**Price:** A$1.43/sh	**Country:** Cambodia / W Australia
REC. (unc): BUY	*TARGET (+0.35): A$1.70/sh*	*RISK RATING (unc): HIGH*

Two key takes-homes from our site visit to Okvau/Memot in Cambodia last week are (i) a best-in-class team that should drive a premium valuation as they did at Regis, and (ii) a catalyst heavy story with reserve replacement (at least, we think) at Okvau, maiden Memot and maiden Bullseye MREs this year the preceding steps to two, and now potentially three, mines. On site (SCPe 110-120koz pa at ~US$760-800/oz AISC) the operation is the most compact and lean we've seen outside Australia, with a small physical footprint, short hauls, and a lean roster but still with built-in resiliency. Operationally, that Emerald has delivered a(nother) on-time/budget US$98m 2Mtpa build, already running 10% above nameplate, shouldn't be a surprise as this teams fifth in a row after Equigold / Regis.

*Valuation update: Despite being a top performer year after year, we see significant upside in EMR not from closing some artificial P/NAV gap, but by the triple-play of i) ounce growth, ii) second-mine production growth, and iii) premium-lift from 'domestic' production and associated dividend franking credits, not the least given only one covering analyst on Bloomberg in Australia right now. Adding in a nominal A$50m for Memot ahead of the maiden MRE, we lift our Okvau NAV multiple from 1.0x to 1.25x in anticipation of resource growth. At our LT US$1,700/oz gold price this equates to A$1.55/sh, or A$1.85/sh at spot US$1,915/oz. For now we use the mid-point, **maintaining our BUY rating and lifting our PT from A$1.35/sh to A$1.70/sh** as we review our gold price forecast. Catalysts ahead are (i) the Okvau MRE update this quarter including new eastern high-grade feeder; (ii) Bullseye MRE update and DFS by year end; and Memot maiden MRE mid-year. We expect the updated Okvau MRE to replace reserves at a minimum. At Bullseye we'd look for ~1Moz, while Memot is harder to forecast with drilling ongoing, but the very high grades bode well for a third mining centre there.*

Okvau site visit: tier one team and asset - three MRE updates this year lay path to three mines

Last week we visited Emerald's Okvau Mine in Cambodia. By the numbers, the build and ramp up was very much 'did it again' – on time and budget at lowest in industry capital intensity (US$98m for 2.0Mtpa CIL, now running at 2.2Mtpa, 115-120koz pa), just like the four prior to that at Regis and Equigold. The operation is impressive, with an efficient/compact footprint generating corresponding savings on earthworks (capex) and haul distances (opex – haul is 0.8km for waste and just over 1km for ore). There are very few people on site in relative terms, just 350 in camp at a given time, which is the leanest we've seen outside domestic Australia. Power is sourced from the grid at 11c/kWh, water is readily available, and site is accessible from Phnom Penh via tarred roads (8h) or helicopter (1h).

Figure 1: Site layout from above, compact layout minimizes haul distances / earthworks

Source: SCP

Operations: Mining is from a single open pit, with flat year to year mined volumes (LOM 5.8:1 strip ratio) to avoid year-to-year fleet mobilisation/demobilization; this is lowest cost over the life of mine. The mining contractor, MACA, has a longstanding relationship with the Emerald team through its prior companies, a demonstrably accretive relationship given no availability / mining constraints here. Mined ounces have slightly outperformed the model (more tonnes) and grades have performed in line with the model, thus mining is performing well on the key metrics (tonnes, mining recovery, dilution). The processing plant (2x crush 7MW SAG mill, gravity, 6 stage flotation, 10um regrind, 4x CIL) is running 10% above 2.0Mtpa run rate with recoveries at 80-81% (vs DFS 84%). Installation of an additional oxygen plant (~US$0.75m capex) is planned and expected to increase recovery by ~2-3%. The TSF has capacity through 2026 with lifts are carried out continuously; currently within 1.5m of final design height. Sustaining capital is minimal (less than US$1m/year on average) due to flat life of mine strip ratio (no pre-stripping in sustaining capital in any years), continuous tailings lifts, continuous rehabilitation, and contractor mining.

Figure 2: Open pit mining ~2.2Mtpa of ore, 5.8x strip ratio (consistent year to year over the LOM)

Source: SCP

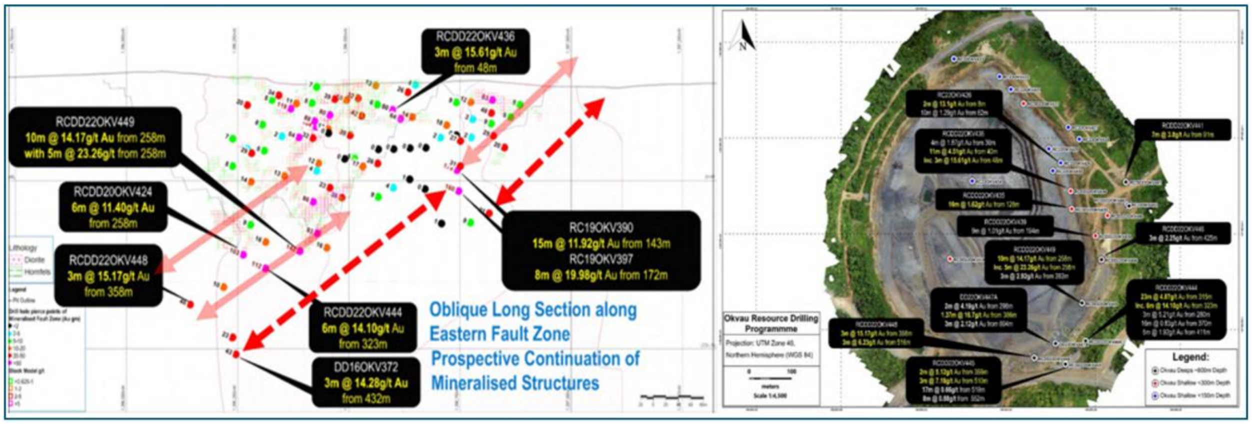
Our view: Our first takeaway was the lack of red flags / significant risks. Operations coped well with an outlier wet season last year, effecting mining and water management, and processing overcame a gear box failure; operations have proven to be resilient and are helped by an experienced team, and good project design and practices. The shallow oxides (less pit geotech risk), and consistent year-to-year grade and tonnage profile reduces risk of down years from a production perspective. We expect consistent year to year performance on grade and volumes, with scope to improve gold recovery to ~83-84% with the addition of an additional oxygen plant. With additional drilling, we expect a decline-accessed underground at depth with potential to lift production to ~150kozpa, though we do not yet model this as base case.

Figure 3: Processing plant – crushing circuit, 7MW SAG mill, CIL tanks

Source: SCP

Geology / Exploration: Okvau: Mineralization occurs as shallow dipping (~30 degree) sheeted sulphide veins hosted in granitic intrusives (tonalite) with hornfels metasediments to the east. The resource has outperformed the model in ounces to date, with more grade and tonnes in blowouts and in contact zones. An updated MRE is expected this quarter, incorporating additional drilling at depth, and the new Eastern Fault Zone. ***We expect at least replacement of depletion*** since the prior resource, with potential to add ounces thanks to the EFZ. Mineralization remains open at depth with multiple >100 gram metre intercepts, so there is potential for a portal-accessed 6-8g/t underground operation at depth, that could increase production to ~140-150kozpa, though more drilling at depth is needed to define the UG resource.

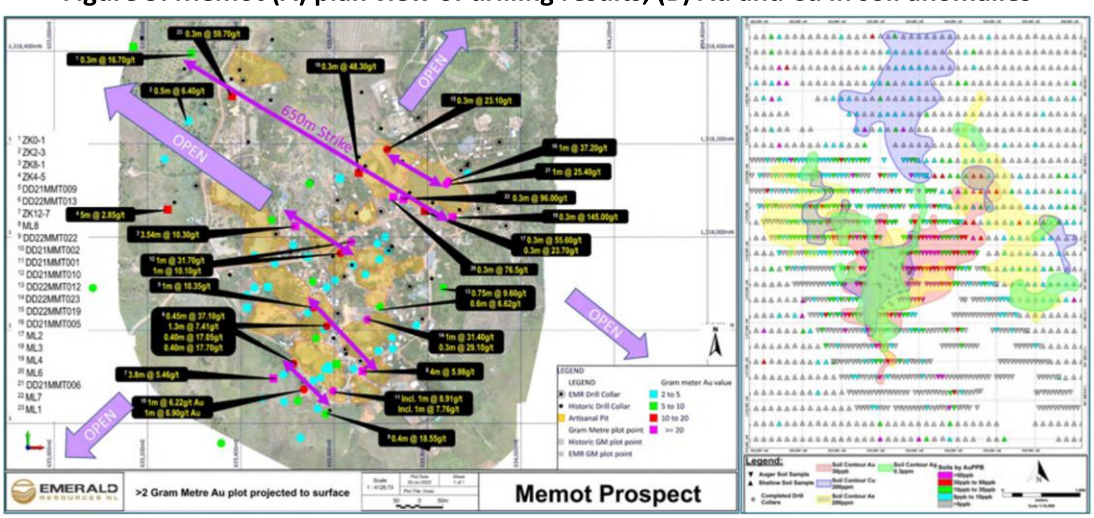
Figure 4: Eastern Fault Zone – long section and plan view



Source: Emerald Resources

Memot: The highest priority Cambodian growth prospect, is located 100km SE of Okvau, previously mined by Korean/Chinese JV in the 2000s and now the site of significant artisanal activity covering 800m north--south surface footprint (similar to at Okvau pre-development). Mineralization occurs as a high grade massive sulphides veins hosted in tonalite with along strike continuity of ~20-30 gram metres at 0.3-1.0m widths, dipping at 30 degrees (similar to Okvau). To the north is a significant Cu in soil anomaly with copper associated with chalcopyrite. With additional rigs arriving in Q1, we expect Emerald to drill out Memot targeting a mid-year maiden resource. A conceptual 650m strike averaging ~25gram metres diluted to 2m mining width, 150m pit depth, and 2.9t/m^3 (averaging tonalite and massive sulphide) would yield ~300koz per vein, thus 3-4 veins could delineate a pittable resource capable of delivering 100-120kozpa for 5-7 years. In our view an option would be to build a mill-flotation plant at Memot and truck concentrate to Okvau for regrind, CIL and dore smelting.

Figure 5: Memot (A) plan view of drilling results, (B) Au and Cu in soil anomalies



Source: Emerald Resources

Our view: We expect this year's MRE at Okvau to replace depletion at a minimum, a key material catalyst not currently in our valuation / PT. More rigs are arriving in country this year, which should enable drill out of Memot targeting initial MRE mid-2023 (second catalyst), drilling at depth and along the Eastern Fault Zone at Okvau, and increased grade control drilling. The target here is to add similar production (100koz plus) from Memot, in a high-grade high-strip ratio open pit, while drilling out the underground at Okvau.

Figure 6. (A) Flooded artisanal pit at Memot and (B) artisanal workings

Source: SCP

Cambodia: Pre-Covid, Cambodia achieved a 10-year period of 5-8% annual GDP growth with PPP per capita at ~US$4.5k and GDP per capita of US$1.6k/capita. What this means on the ground is productivity and infrastructure are very high relative to prevailing wage levels. Supply chain is excellent with access to fabricators throughout Asia, port / tarred road access, and 7h by air (connections in Bangkok, Singapore) from Perth to Phnom Penh and 1h by helicopter from PP to site. From a fiscal perspective the country is modelling itself after the Western Australia mining code, encouraging investment to grow the industry. Foreign companies can own 100% of mining leases, with 4.5% royalties, 30% profit tax and 15% withholding tax on dividends outside the country. Emerald is the early mover with 1,600km^2 of 100% owned ground, a Mineral Development Agreement for Okvau, low-cost political risk insurance (PRI) and a close relationship with the Ministry to encourage more companies to commence exploration in country.

Our view: Cambodia appears to be highly prospective with good mine ownership and fiscal terms, geologically prospective but underexplored, and with very good infrastructure and supply chain access. Time zone proximity to Western Australia and ability to reach site within 7h door to door from Perth are also significant benefits. Emerald's early mover advantage in country is for both parties.

Catalyst-rich 2023 to include updated Okvau MRE, Bullseye MRE+DFS and Memot maiden MRE

In our view Emerald's most valuable asset is its people, their history together as a team across multiple companies, their accumulated experience and the tangible ability to build mines on time, at significantly lower capital intensity than peers. The capex savings alone creates the ability to achieve superior asset level returns, and even better compounded returns on a per share basis. But, the rubber hits the road on production growth and nothing else. Thus, this year's *three* MREs (Okvau update, maiden Memot and Bullseye) lay the foundation for just that.

Okvau's MRE update due this quarter; we expect to see iterative ounce growth at depth and potential Eastern Fault Zone additions. At Bullseye/North Laverton, Drilling is planned for H1 with an updated MRE guided for mid-year to support a DFS/production decision in H2, we'd look for around a million ounces from the kickoff to form the foundation for production so maintain our A$115m 3.0Mtpa 138koz pa model. At Memot, drilling is also guided for H1 (~40 holes / 4,500-6,000m) to inform a maiden MRE and potential satellite milling-flotation operation – this is the key win for us form the site visit, as we previously didn't include this in the valuation. Ahead of a resource, we add a nominal A$50m to our valuation for now . The big picture is we expect Emerald to continue adding production, funded by cash flow generation, with best in class management capable of delivering the one mine to three mine growth strategy attracting a premium to NAV as 'domestic' production (and attributable franking credits) approach.

Site Visit Gallery

Figure 7: Okvau site as viewed from helicopter approach

Source: SCP

Figure 8: Okvau site as viewed from helicopter approach

Source: SCP

Figure 9: TSF in foreground, Mine in background, process plant on far right

Source: SCP

Figure 10: Processing plant as viewed from admin buildings

Source: SCP

Figure 11: Primary and secondary crushing circuit

Source: SCP

Figure 12: 7MW SAG mill – fewer relines than a ball mill and better economics at lower power costs

Source: SCP

Figure 13: Single open pit design – consistent 5.8x LOM strip ratio delivers flat annual mined tonnage

Source: SCP

Figure 14: Contact between granitic tonalite (left) and metasediments (right)

Source: SCP

Figure 15: TSF – currently working on second to final stage, current capacity doesn't require lift until 2026 but progressive lift work continues

Source: SCP

Figure 16: TSF with decanting ring for potentially acid-forming material on LHS of the photo

Source: SCP

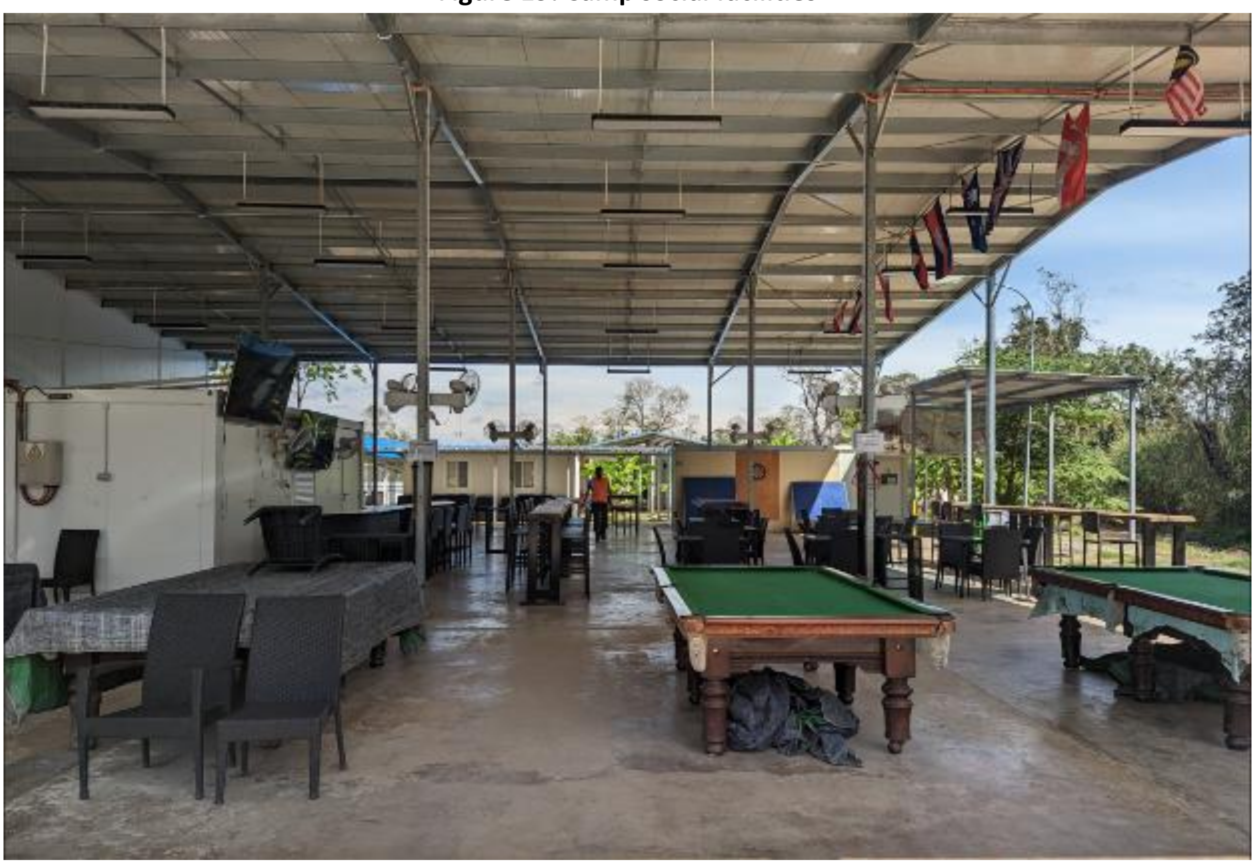
Figure 17: Camp mess hall facilities

Source: SCP

Figure 18: Camp housing facilities

Source: SCP

Figure 19: Camp social facilities



Source: SCP

Figure 20: Memot DD22 MMR022 Box 32 – 0.4m @ 18.6g/t from 151m in quartz-massive sulphide vein

Source: SCP

Figure 21: Significant artisanal gold workings at Memot

Source: SCP

Why we like Emerald

- Management has built seven mines on time and on budget at Equigold, Regis and Emerald
- Management aligned with holders as A$19m equity invested
- Second mine Bullseye to ~double production to ~250koz pa by 2024
- Likely reserve extensions in Cambodia, and regional potential with first-mover belt control

Catalysts

- 1Q23: Okvau MRE update
- 1H23: Okvau near-mine drilling
- CY23: Ongoing Memot drill results
- To 3Q23: 98,000m drilling at Bullseye
- 2Q23: SCPe MRE for Bullseye and Memot
- 4Q23: DFS for Bullseye
- 2H24: SCPe Bullseye production

Research

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Ticker:	EMR AU	**Price / mkt cap:**	A143c/sh, A$846m	**Group P/NAV today:**	1.13x	**Country:**	Cambodia / WA
Author:	B Salier / E Magdzinsl	**Rec/1.25xNAV5% PT:**	BUY, A$1.70/sh	**1xNAV5% FF FD:**	A$234c/sh	**Asset:**	Okvau / Bullseye

Commodity price	**CY20A**	**CY21A**	**CY22E**	**CY23E**	**CY24E**
Gold price	1,761	1,794	1,803	1,879	1,769

Group-level SOTP valuation		**Dec 22**			
	A$m	**US$m**	**O/ship**	**NAVx**	**A$c/sh***
NPV Okvau 4Q22	588	412	100%	1.25x	121
NPV Bullseye (@start 2Q23)	600	420	59%	0.60x	35
Memot - nominal	50	35	100%	1.00x	8
NPV central & finance costs	(107.5)	(75)	-	1.00x	(18)
Net cash prior quarter	(13.7)	(9.6)	-	1.00x	(2)
Cash from options	12.9	9.0	-	1.00x	2
Expl'n (0.5Moz @ US$75/oz)	71.4	50	-	1.00x	12
1xNAV5% US$1700/oz		**841**			**158**

Asset value: 1xNAV (US$m, geared)*					
Group NAV (US$m)	$1600oz	$1700oz	$1800oz	$1900oz	$2000oz
9% discount	1,277	1,419	1,562	1,703	1,846
7% discount	1,353	1,503	1,654	1,803	1,955
5% discount	1,437	**1,595**	1,756	1,914	2,075
Group NAV2317 (A$/sh)	$1600oz	$1700oz	$1800oz	$1900oz	$2000oz
9% discount	202	223	244	264	285
7% discount	213	234	256	278	300
5% discount	224	**247**	270	293	316

Company NAV net finance costs and SG&A, discounted to 2Q22

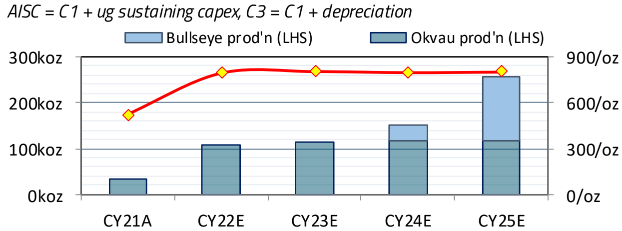
Group NAV5% over time	**Mar-23**	**Mar-24**	**Mar-25**	**Mar-26**	**Mar-27**
NPV Okvau 4Q22	411.8	330.7	253.5	182.1	109.8
NPV Bullseye (@start 2Q23)	412.3	482.7	543.1	481.3	409.1
Cent. costs (US$m)	(75.3)	(50.4)	(29.3)	(20.7)	(11.7)
Net cash prior quarter	(9.6)	7.6	35.6	186.2	341.0
Cash from options (US$m)	9.0	9.0	9.0	9.0	9.0
Expl'n (0.5Moz @ US$50/oz)	50	50	50	50	50
NAV (US$m)	**798**	830	862	888	907
1.25xNAV5%/sh FF FD (Ac/sh)	**234**	**195**	**202**	**208**	**213**

1.25xNAV/sh @ SQ20 vs gold, discount, recoveries (US$m, geared)^					
1.0xNAV (US$/m)	$1600oz	$1700oz	$1800oz	$1900oz	$2000oz
9% discount	659	728	798	868	938
7% discount	698	772	846	920	995
5% discount	742	**820**	900	978	1,058

^Project NPV less central SG&A & finance cost, plus net cash at the time

Production	**CY21A**	**CY22E**	**CY23E**	**CY24E**	**CY25E**
Okvau Production (000oz)	34	107	115	116	116
Bullseye Production (000oz)		-	-	36	139
AISC cost (US$/oz)	519	793	804	797	801
C3 cost (US$/oz)	710	971	999	982	979

AISC = C1 + ug sustaining capex, C3 = C1 + depreciation



Resource	**Au (koz)**	**Au (g/t)**	**Reserve**	**Au (koz)**	**Au (g/t)**
Okvau M & I & Inf	1,141koz	2.01g/t	Okvau P&I	907koz	2.0g/t
Bullseye Ind & Inf.+pot'l	447koz	2.46g/t	-	-	-

Share data				
Basic shares (m)	593.8		FD with options (m)	609

Ratio analysis	**CY20A**	**CY21A**	**CY22E**	**CY23E**	**CY24E**
Avg shares out (m)	524	530	530	530	530
EPS (A$c/sh)	(3.3)	0.6	12.5	13.0	18.3
CFPS (A$c/sh)	(15.0)	(4.3)	17.5	9.6	11.0
EV (A$m)	721	824	730	705	665
FCF yield (%)	-	-	12.3%	6.7%	7.7%
PER (x)	-	221.7x	11.4x	11.0x	7.8x
P/CF (x)	-	-	8.1x	14.8x	13.0x
EV/EBITDA (x)	2,539.4x	25.4x	6.8x	4.2x	3.3x

Income statement	**CY20A**	**CY21A**	**CY22E**	**CY23E**	**CY24E**
Revenue (A$m)	0.3	63.6	284.6	308.3	381.9
COGS incl royalty (A$m)	-	(31.2)	(176.8)	(141.1)	(183.0)
D&A (A$m)	0.0	(0.1)	20.9	(22.9)	(31.7)
Gross profit (A$m)	**0.3**	**32.3**	**128.7**	**144.3**	**167.2**
Finance cost (A$m)	(0.7)	(8.3)	(18.0)	(24.7)	(18.3)
Exploration (A$m)	(5.5)	(4.1)	(10.9)	(8.0)	-
Admin + other (A$m)	(11.3)	(14.9)	(10.7)	(15.7)	(15.7)
Tax (A$m)	-	(1.6)	(23.0)	(27.2)	(36.4)
Net income (A$m)	**(17.2)**	**3.4**	**66.0**	**68.7**	**96.8**
EBITDA (A$m)	*0.3*	*32.4*	*107.8*	*167.2*	*198.9*

Cash flow statement	**CY20A**	**CY21A**	**CY22E**	**CY23E**	**CY24E**
Revenue (A$m)	0.2	63.5	284.6	308.3	381.9
Payments (A$m)	(2.5)	(33.7)	(171.7)	(181.7)	(232.8)
Chaning in WC (A$m)	0.9	1.5	(3.9)	(0.6)	(23.2)
Others (A$m)	(4.6)	(3.7)	(9.5)	(8.0)	-
Cash flow ops (A$m)	**(6.0)**	**27.7**	**99.5**	**118.0**	**125.9**
PP&E (A$m)	(72.7)	(50.4)	(6.9)	(67.2)	(67.7)
Cash flow inv. (A$m)	**(72.7)**	**(50.4)**	**(6.9)**	**(67.2)**	**(67.7)**
Shares / lease (A$m)	78.3	0.2	(10.4)	-	-
Debt draw (repay) (A$m)	92.9	(10.5)	(42.1)	(26.4)	(40.2)
Cash flow fin. (A$m)	**171.1**	**(10.3)**	**(52.5)**	**(26.4)**	**(40.2)**
Net cash change (A$m)	92.5	(33.0)	40.1	24.4	18.1

Balance sheet	**CY20A**	**CY21A**	**CY22E**	**CY23E**	**CY24E**
Cash (A$m)	76.8	17.9	54.3	51.1	50.8
Acc rec. + inv. (A$m)	3.0	36.3	54.4	53.7	85.8
PPE (A$m)	123.3	88.7	92.7	75.8	268.6
Oth + mine-build (A$m)	13.6	183.8	246.3	309.4	152.5
Total assets (A$m)	**216.7**	**326.6**	**447.7**	**489.9**	**557.8**
Debt (A$m)	51.0	87.4	29.7	1.5	(38.7)
Accnts payable (A$m)	12.3	24.3	29.6	28.9	37.8
Total liabilities (A$m)	63.3	111.7	59.3	30.4	(0.8)
S'holders equity (A$m)	195.4	219.0	283.7	286.1	288.4
Retained earnings (A$m	0.3	2.2	10.3	10.3	10.3
Reserves (A$m)	(83.1)	(79.9)	(17.4)	51.3	148.1
Liabilities + equity (A$m	**216.8**	**326.6**	**447.7**	**489.9**	**557.8**

Source: SCP estimates

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NEUTRAL: The stock's total returns are expected to be in line with the overall market

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TENDER: The analyst recommends tendering shares to a formal tender offering

UNDER REVIEW: The stock will be placed under review when there is a significant material event with further information pending; and/or when the research analyst determines it is necessary to await adequate information that could potentially lead to a re-evaluation of the rating, target price or forecast; and/or when coverage of a particular security is transferred from one analyst to another to give the new analyst time to reconfirm the rating, target price or forecast.

NOT RATED ((N/R): The stock is not currently rated

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2	The analyst or any associate of the analyst responsible for the report or recommendation or any individual directly involved in the preparation of the report holds or is short any of the issuer's securities directly or through derivatives	NO
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9	The analyst has been reimbursed for travel expenses for a site visit by the issuer	YES

Sprott Capital Partners Equity Research Ratings:

Summary of Recommendations as of January 2023	
BUY:	53
HOLD:	1
SELL:	0
UNDER REVIEW:	1
TENDER:	0
NOT RATED:	0
TOTAL	55

[1] As at the end of the month immediately preceding the date of issuance of the research report or the end of the second most recent month if the issue date is less than 10 calendar days after the end of the most recent month