

Non-Independent Research
*SP Angel acts as Nomad and
Broker

MiFID II Exempt

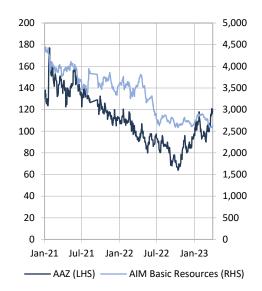
Mining Flash Note Anglo Asian Mining* AAZ LN

BUY TP 201p

04 April 2023

Stock Data	
Ticker	AAZ LN
Share Price	116p
Market Cap	£133m

Price Chart



Research

Sergey Raevskiy

+44 20 3470 0474

sergey.raevskiy@spangel.co.uk

John Meyer

+44 20 3470 0490

john.meyer@spangel.co.uk

Simon Beardsmore

+44 20 3470 0484

simon.beardsmore@spangel.co.uk

Sales

Richard Parlons

+44 20 3470 0472

richard.parlons@spangel.co.uk

Grant Barker

+44 20 3470 0471

grant.barker@spangel.co.uk

Rob Rees

+44 20 3470 0535

rob.rees@spangel.co.uk

Abigail Wayne

+44 20 3470 0534

abigail.wayne@spangel.co.uk

Road to +35ktpa CuEq production

Anglo Asian Mining is an AIM listed precious and base metals mining company with an established portfolio of copper/gold/silver production assets in western Azerbaijan and an exciting pipeline of organic growth development projects across its strategic +2,500sq km license area. AAZ produced 58koz AuEq in 2022 and is planning to commission two new greenfield copper projects to transition to a +35ktpa CuEq predominantly copper producer from 2028. The Company pays a dividend and the Board holds >40% of the stock making it well aligned with other shareholders.

- The Company released its strategic plan last week providing a roadmap to gradually grow its production rate from current ~52koz(AuEq)/10kt(CuEq) to >175koz/35ktpa by 2028 becoming a multi asset, mid-tier copper/gold producer;
- The plan involves commissioning of four new mines in Azerbaijan including development of two greenfield copper projects (Xarxar and Garadag) significantly growing exposure to copper (from current ~20/30% to 90%);
- Near term growth is driven by commissioning of high grade Gilar underground mine (2023/24) and doubling of the flotation plant capacity (Q3/Q4/23) lifting gold and more than doubling copper output (FY23e: 50-54koz AuEq; FY24-25e: 70-75koz AuEq); higher processed grades help unit costs lower during the period:
- Medium term growth is led by sequential development of two open pit copper projects including Xarxar (~9ktpa Cu, in-house MRE ~20mt at 0.46% Cu, est start 2026) and Garadag (~22ktpa Cu, in-house MRE ~66mt at 0.49% Cu, 2027/28);
- The Company has ~\$20m in cash and no bank debt (YE22), positive FCF at Gedabek and access to a recently agreed credit revolving facility (\$32m) with forecast earnings supporting higher debt levels if required;
- The team has recently reiterated commitment to maintain existing dividend policy (2023-24e 8c pa/\$9mpa or ~5-6%DY).

Valuation: We estimate risked NAV of ~\$300m and 201p reiterating our BUY recommendation. The Company offers an attractive exposure to a strong growth profile, increasing share of copper production, management team with a track record of discovering and commissioning projects as well as a potential new discovery at the strategic >2,500sq km landholding in Azerbaijan, all while paying a dividend. Current market value seems to reflect only Gedabek with little recognised for the rest of portfolio. Gedabek accounts for ~50% of value in our risked NAV and ~30% in 100% unrisked scenario highlighting significant rerating potential.

(Dec year end)		FY20	FY21	FY22E	FY23E	FY24E
Gold price	US\$/oz	1,780	1,786	1,813	1,897	1,900
Copper price	\$/t	6,185	9,294	8,801	8,989	10,500
Gold production	koz	56.9	48.7	43.1	31.3	39.6
Copper production	kt	2.6	2.6	2.5	4.1	6.8
AuEq Production	koz	67.3	64.6	57.6	52.5	79.2
CuEq Production	kt	19.4	12.4	11.9	11.1	14.3
AISC (incl PSA, co product)	US\$/oz	840	970	1,129	1,150	902
Revenue	US\$m	102.1	92.5	83.5	83.3	123.8
EBITDA	US\$m	52.9	29.2	28.5	27.9	57.4
FCF	US\$m	33.8	12.2	-4.5	7.9	9.1
EV/EBITDA	X	2.9	6.0	3.9	5.2	2.5
PER	X	8.3	28.6	18.8	15.8	6.3
DY	%	5%	4%	7%	6%	6%
Net Debt	US\$m	-36.9	-34.2	-17.6	-16.1	-16.5

Source: SP Angel, Company

Valuation

We valued Gedabek, Xarxar and Garadag on DCF8% basis using assumed respective mining schedules, operating and capital development costs. Demirli Cu/Mo porphyry operation (located in the Demirli and Kyzlbulag CAs, referred to Demirli onwards) was valued on a series of market multiples given little verified information on the size/quality of the resource and production facilities. We risk adjusted estimated NPVs assigning factors ranging from 0.25x (i.e. 25% of estimated value) for Demirli given uncertainty on timing for securing access to the site and 0.5x for Xarxar and Garadag projects reflecting inhouse resource stage of development assets to 1.0x for de-risked and producing Gedabek complex.

We arrive at ~\$300m NAV equivalent to 201p target price for AAZ and reiterate our BUY recommendation assuming growth copper projects deliver targeted production increase.

On 100% de-risked basis, potential NAV goes to almost \$500m and over 300p per share highlighting strong upside potential to our base case valuation as the Company delivers production at Xarxar and Garadag and gains access resuming operations at Demirli.

Valuation	Method	NPV 100%	Interest	P/NAV	Att US\$m	GBp/shr
Gedabek	DCF8%	154	100%	1.00	154	104
Xarxar	DCF8%	48	100%	0.50	24	16
Garadag	DCF8%	186	100%	0.50	93	63
Demirli	Multiple	112	100%	0.25	28	19
Investments	Mkt Value	3	100%	1.00	3	2
Project Value					301	203
Adjustments						_
(Net debt)/Net Cash					18	12
Corporate overheads					-21	-14
Company NAV					298	201

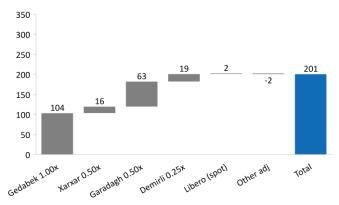
GBPUSD 1.3; Long term commodity prices - \$1,900/oz Au and \$10,500/t Cu

Source: SP Angel

Our valuation does not include any upside from a potential new discovery at the extensive license area package covering >2,500sq km in Azerbaijan, although, we highlight that the team is building up a good track record of exploration success having delivered Ugur (a~150koz at 1.4gpt reserves of easily leachable material at surface that cost only \$2m in exploration i.e. \$13/oz discovery cost and contributed feed for Gedabek for ~3 years) in the past and now Gilar.

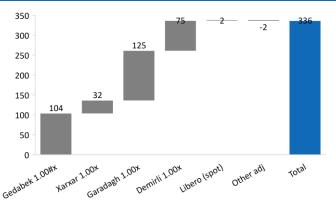
Also no upside currently included from any value appreciation of a strategic $^{\sim}20\%$ stake in TSX-listed Libero Copper & Gold (21m shares and 12m warrants) that is valued at market spot prices.





'Other adj' refers to Corporate Overheads and Net Debt balance Source: SP Angel

Completely de-risked NAVPS, GBp

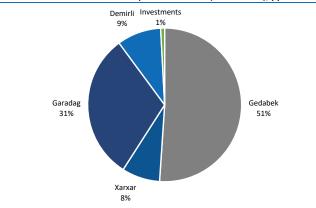


Source: SP Angel

Anglo Asian Mining*

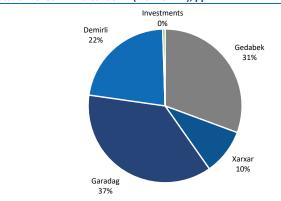
Portfolio breakdown – Gedabek underwrites current value with its mineral inventory accounting for just ~25% of mineral inventory and medium term upside driven by Xarxar and Garadag copper development projects

Risked NPV breakdown between portfolio assets (incl Demirli), pp



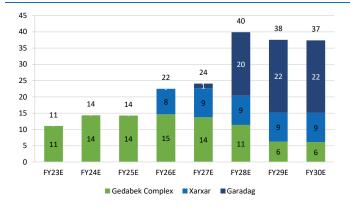
Source: SP Angel, Company

100% unrisked NPV breakdown (incl Demirli), pp



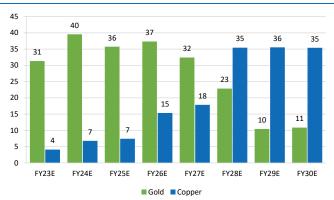
Source: SP Angel, Company

Production breakdown by main producing assets, kt CuEq



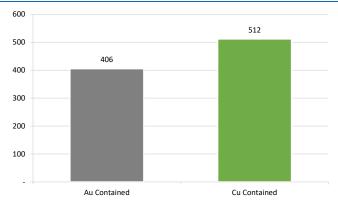
Source: SP Angel, Company

Estimated gold and copper production, koz Au and kt Cu



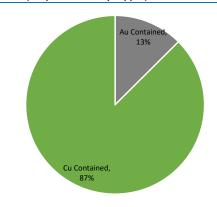
Source: SP Angel, Company

Total mineral inventory used in valuation on absolute basis— ~400koz Au and ~500kt Cu (contained, i.e. pre metallurgical recoveries)



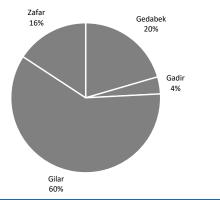
Source: SP Angel, Company

Total mineral inventory used in valuation on relative basis – share of gold and copper in the total (i.e. predominantly copper)



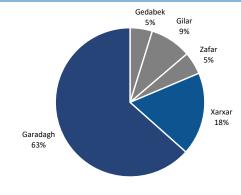
Source: SP Angel, Company

Breakdown of gold mineral inventory between assets (note no Xarxar and Garadag as those are copper only assets)



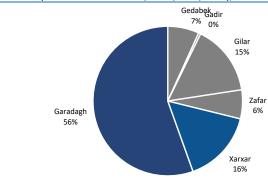
Source: SP Angel, Company

Breakdown of copper mineral inventory between assets (dominated by copper assets, Xarxar and Garadag)



Source: SP Angel, Company

Breakdown of mineral inventory used in the DCF b/n three mains CAs (Gedabek (subdivided in Gedabek/Gadir/Gilar/Zafar), Xarxar and Garadag)



Source: SP Angel, Company

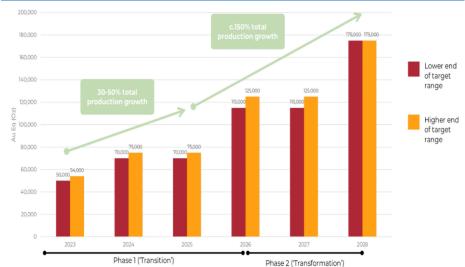
Road to +35ktpa CuEq production

The Company has just released a Strategic Plan laying out a roadmap to significantly increase production rates and become predominantly a copper producer.

The plan involves commissioning of four new mines in Azerbaijan gradually expanding production to >35ktpa CuEq, equivalent to 175koz AuEq, in 2028, up from current 50-54koz AuEq.

- 2023 guidance is for c. 50-54koz AuEq (c. 10.3-11.2kt CuEq) comprised of 30-32koz gold and 4.1-4.3kt copper (2022: 43koz and 2.5kt). A change in the AuEq composition reflects lower agitational leaching plant (AGL) throughput and doubling of the capacity at the flotation circuit (FLO) that is expected to come online in Q3/Q4.
- 2024-25 period to run at c. 70-75kozpa AuEq (c. 15.0-15.5kt CuEq) on the back of the high grade feed from the Gilar underground operation.
- 2026-27 period to run at c. 115-125kozpa AuEq (c. 24.0-26.0kt CuEq) reflecting contribution from the recently secured Xarxar copper deposit (extra ~9kt CuEq).
- 2028 target is for c. 175koz (c. 36.0kt CuEq), implying a ~3x increase in annual output rate, as the team is planning to develop and bring into production the Garadag copper deposit (extra >20ktpa CuEq).

Production growth targets



Source: Company

The plan is driven by sequential commissioning of four new mining operations

The Company provided indicative timing of commissioning of new mine operations.

Indicative mine development schedule	Commodity	CA	Commissioning
Gilar	Cu/Au	Gedabek	2023/24
Zafar	Cu/Au/Zn	Gedabek	2023/24
Xarxar	Cu only	Xarxar	2026
Garadag	Cu only	Garadag	2027/28

"CA" refers to Contract Area

Source: Company

The plan involves two phases:

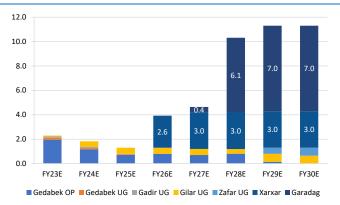
- Phase 1 or Transition Phase delivers first leg of expansion with three new mines being commissioned at Zafar (Gedabek CA), Gilar (Gedabek CA) and Xarxar (Xaxar CA) complementing Gedabek and Gadir mines extending lie of mine at the Gedabek complex.
- Phase 2 or Transformation Phase is based on development of the Garadagh Copper Project hosting ~66mt at 0.49% Cu for+320kt of copper in resource,

the largest in the Group portfolio, with preliminary estimates suggesting the project could add +20ktpa CuEq from 2028.

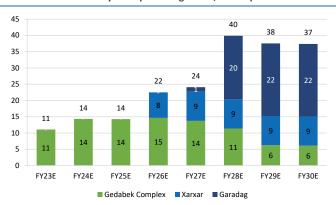
To reiterate, Gilar, Xarxar and Garadag are key to growth strategy.

- Gilar underground mine commissioning will provide high grade feed for AGL and FLO circuits allowing to run Gedabek at targeted ~15ktpa CuEq (~75kozpa AuEq) in 2024/25. This is the reason for higher production during the period despite flat/falling throughput rates reflecting higher processed grades and retreatment of AGL feed that is already milled and, hence, cheaper to process. Zafar is expected to act as a balance feed for the Gedabek FLO plant reflecting its lower grades and is currently not expected to contribute to production in the near term.
- Development and start of production at Xarxar and Garadag will be instrumental to meet production targets post 2026.

Mine schedule between mining operations, mt ore



Production breakdown by main producing assets, kt CuEq



Source: SP Angel, Company

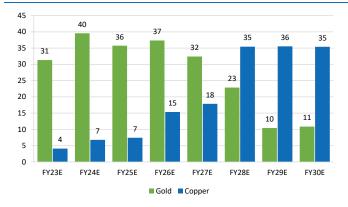
Source: SP Angel, Company

Predominantly copper producer from 2028 (Cu $^{\sim}90\%$ of total production) driven by commissioning of Xarxar and Garadag copper projects

Besides strong production growth outlook, the composition of the Group production will move gradually towards copper, the commodity critical to meet net zero environmental targets.

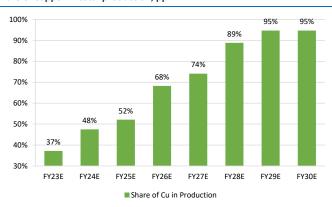
We estimate share of copper to expand from current $^30\%$ to $^90\%$ by 2028 after two copper projects are up and running (Xarxar and Garadag).

Estimated gold and copper production, koz Au and kt Cu



Source: SP Angel, Company

Share of copper in total production, pp



Source: SP Angel, Company

The plan is dynamic and contingent on ongoing exploration programme results

It is important to understand that the plan is "live" and driven by incoming exploration programme data. That means that if exploration yields a high grade close to surface discovery we would expect the team to review mine schedule prioritising higher margin tonnages. Hands on management, existing infrastructure, flexible processing

facilities capable of processing gold and copper rich oxide/transitory/primary feed as well as the nature of the PSA (Production Sharing Agreement) all allow for fast turnaround from discovery to development of a potential discovery. The latest example of the approach was reprioritising Gilar development over Zafar following impressive drilling results last summer with the former expected to supply first ore as early as Q4/23 and become major supplier to the AGL and FLO circuits in the Transition Phase.

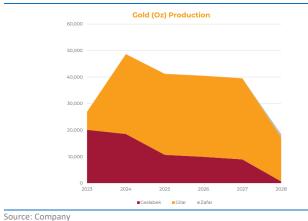
We touch on main assets driving growth further in the note.

Gilar key to reaching near term production targets of 70-75kozpa AuEq

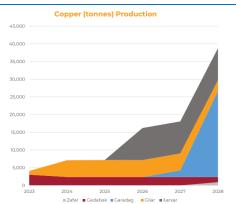
Gilar is due to come online in Q4/23 with its high grade gold/copper ore to feed both AGL and FLO circuits. Gilar contribution coupled with expanded flotation plant capacity is driving near term 30-50% growth in production from targeted 50-54koz (2023) to 70-75koz AuEq (2024-25).

Gilar accounts for ~50-75% and ~60-70% of annual gold and copper production in 2024-25 making it critical to reaching production targets.

Group gold production breakdown, koz Au



Group copper production breakdown, kt Cu



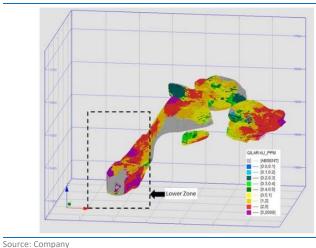
Source: Company

Underground development works are ongoing with the team currently driving a 1,400m access decline to the high grade zone of the deposit (Lower Zone on the chart below). The plan is to reach it in Q4/23 and start trucking feed $^{\sim}12$ km to the Gedabek plant

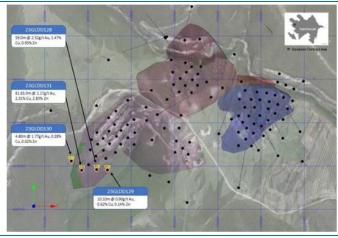
Latest MRE is for 5.6mt at 1.4gpt Au and 0.8% Cu (in-house estimate) based on a significant amount of drilling (~32,000m). Class 1 and Class 2 have a high level of confidence given relatively narrow drilling spacing grid of 25x25m and 38x38m, respectively. Within that, a deeper but higher grade zone offset zone is found estimated to host 2.1mt at 1.9gpt and 1.3% Cu (see Class 1/2/3 resources below)

The high grade lower zone is the SW part of the deposit where recent drilling returned wide high grade intersections including 59m at 2.5gpt gold and 1.5% copper (#128) and 62m at 2.2gpt gold and 2.5% copper (#131) and that is the focus of mining operations in the near term. A 700ktpa mining operation means around three years of high grade feed at least.

Gilar geological block model showing a high grade lower zone



Plan view over Gilar deposit with latest high grade drill results in the SW



Source: Company

Further inclined drilling is ongoing (~3,000-4,000m) to test continuation of the mineralisation. The mineralisation remains open down dip to SW with extensions to

be tested from underground workings in the future to save on costs given the depth of the deposit (200-300m).

Another MRE update is expected before mining consultants are engaged to prepare a mining scoping study for the optimal mining method.

Box cut and portal at the Gilar underground development



Source: SP Angel

Drill pads and operating rigs testing Gilar mineralisation continuation



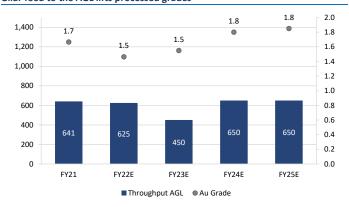
Source: SP Angel

Gilar is key to operational performance at Gedabek as well as our earnings estimates.

Rich Gilar ore will be treated with AGL to recover gold with tailings to be processed by expanded FLO circuit to recover copper (or vice versa depending on the mineralogy of the feed). Sequential processing has a benefit of retreating already milled material allowing to save on operating costs. AGL feed grades are expected to recover to ~1.8-1.9gpt Au in 2024/25 compared to ~1.6gpt Au in 2021/23 helping to recover gold dorè production at Gedabek while second FLO line to treat ~1.0% Cu more than doubling copper production.

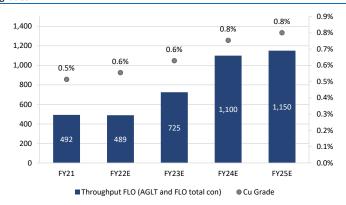
Higher processed grades, benefits from tailings reprocessing mentioned above and stronger overall production are behind our estimates for falling AISC in 2024/25.

Gilar feed to the AGL lifts processed grades



Source: SP Angel, Company

FLO plant expansion and Gilar copper rich AGL tailings lifts throughput and grades



Source: SP Angel, Company

Zafar is an 'insurance policy' to be tapped into if required

Zafar ore contribution has been pushed out to later years reflecting the availability of more economic feed from the Gedabek open pit. The Company decided to continue with underground development for several reasons including relatively low cost of development works, securing access to the orebody offering that flexibility for the ore feed should other operations fall behind and more economic/productive exploration drilling from the underground (testing down dip and down plunge extensions of 300m deep deposit). Under the base case plan, the Group does not expect Zafar to start contributing to production before 2028.

Zafar is a copper dominant, polymetallic mineral deposit discovered in 2021 and located only 850m NW of the Gedabek process plant. The Zafar underground operation is envisaged as a conventional flotation plant feed reflecting higher copper content of the ore and producing copper/gold concentrate. The project is well advanced with ~30,000m of drilling completed, JORC compliant MRE released and a mining scoping study recently prepared by Mining Plus.

Zafar underground portal area



Source: SP Angel

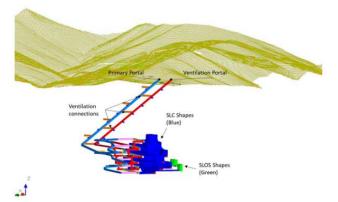
The team is driving a 1,100m twin decline to access the area of mineralisation that at current development rates should be completed in less than six months. The bulk of the deposit to be mined using low cost sublevel caving with long hole open stoping potentially used on margins of mineralised zones that are less continuous. Both methods were used at its existing underground mines reducing operation risk. Zafar is expected to have 700ktpa capacity producing from five 20m levels with ore trucked to the nearby Gedabek flotation plant.

Zafar location next to the Gedabek processing complex



Source: Company

Zafar underground mine design with twin decline and five 20m levels



Source: Company

Zafar MRE (2022)	mt	Au gpt	Cu pp	Zn pp	Au koz	Cu kt	Zn kt
Measured&Indicated	5.5	0.36	0.45	0.58	64.0	25.0	32.0
Inferred	1.3	0.22	0.23	0.23	9.0	3.0	3.0
Total	6.8	0.33	0.41	0.51	73.0	28.0	35.0

Source: Company

Xarxar to take share of copper in total production past 50% and potentially de-risk larger Garadag development project

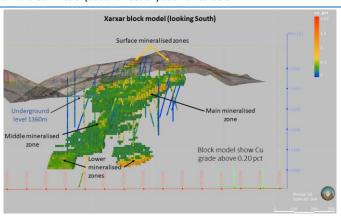
The Xarxar Contract Area is a 466sq km land package located next to the Gedabek CA and hosting the Xarxar Project what looks like a copper porphyry deposit. The area was secured in mid-2022 as part of the award of three new licenses (Xarxar, Garadag and Demirli) along with all historical exploration data and the relinquishment of the Soutely CA.

The Xarxar deposit appears to fit a Corbett model for classic copper porphyry structures with mineralised copper ore between the phyllic and potassic alternation zones. The deposit is estimated to be 500m long (E-W) and 290m wide (N-S) with mineralisation continuing to a depth of over 500m. The mineralisation is copper-dominant and comprises mainly highly weather oxides outcropping at surface (malachite and azurite) and secondary sulphides (chalcocite and bornite) with some primary chalcopyrite recorded at depth. The depth of oxide, transition and sulphide zones is being studied.

Xarxar CA and same name deposit location relative to Gedabek CA



Xarxar block model (South direction) at 0.2% Cu COG



Source: Company

Source: Company

The Company completed 19 DD holes (~7,700m) and 9 RC holes (~800m) infilling and verifying historical data (AzerGold, previous owners, completed ~4,500m of drilling over 13 holes) as well as drove nearly a 500m underground exploration tunnel providing further samples for the block model and metallurgical studies. It will be used as a drilling platform for underground exploration. Drilling is currently ongoing to infill the deposit with three rigs on site (two core and one RC).

Top of Xarxar (NE direction) overlooking a drilling rig with Garadag deposit located over the ridge to the right



Source: SP Angel

Entrance to the exploration tunnel at Xarxar



Source: SP Angel

The initial geological model and open pit optimisation yields a mineral inventory of 20mt at 0.46% Cu for >90kt Cu that at an assumed 3mtpa mining rate translates into ~7y mine life at ~10ktpa Cu. The base case is based on bacterical heap leaching as a primary processing method for production of copper cathodes.

These are early stage estimates that we would expect to be refined as the team completes more drilling, geotechnical work and metallurgical studies to optimise the project including best mining method (OP/UG/mix) and processing circuit (bacterial heap leaching/flotation/in-situ leaching).

The team is expected to prepare a JORC compliant MRE on completion of the ongoing drilling and exploration programme.

Xarxar is expected to be developed separately and potentially share some of infrastructure with a larger Garadag deposit. One may consider Xarxar as a starter project de-risking development of a larger Garadag that is likely to utilise same processing route and offering a modular expansion in Group production. Xarxar is expected to come online in 2026, ahead of Garadag (2027/28).

Below we provide basic assumptions behind Xarxar DCF8% valuation. The project benefits from relatively low strip ratio (1.6x) and low development capital cost assuming bacterial heap leaching. Highly weathered part of the deposit benefits from potential free dig mining while oxide material may be heap leached to produce copper early on unlike in the flotation plant scenario.

On a project standalone basis, Xarxar yields \$60m and 43% in post tax NPV and IRR that when adjusted for other costs (exploration, studies etc) takes it to ~\$48m. We risk the NPV by a 0.50x factor accounting for an early asset development stage to arrive at \$24m or 16p contribution to our NAV.

SPA Xarxar	indicative	economics
Commo	dity Drie	

Commodity Prices		
Copper	US\$/t	10,500
Mineral Inventory		
Tonnage	kt	20,000
Grade	рр	0.46%
Production		
Commissioning		2026
Process		Bacterial HL
LOM	years	7.0
WO ratio	Χ	1.6
Throughtput	kt	3,000
Grade	рр	0.46%
Recoveries	рр	65%
Production pa	kt Cu	9.0
Capex		
Development	US\$M	40
Sustaining	US\$M	28
Opex		
AISC (ex PSA & Exploration, Gross)	US\$/Cu	5,317
Financials		
PSA pp over LOM	рр	20%
Revenue pa	US\$M	72
EBITDA pa	US\$M	32
EBITDA margin		45%
NPV8% (post-tax) ex Other	US\$M	60
IRR (post-tax) ex Other	рр	43%
SPA valuation		
Final NPV8%	US\$M	48
Risk Factor	Χ	0.50
Risked NPV8%	US\$M	24
NAVPS	GBp	16

Other include Exploration, Studies etc

Source: SP Angel, Company

Garadag to add >20ktpa Cu representing major contribution to the +35ktpa target

The Garadag Contract Area covers 344sq km and is road connected to Xarxar (~4km) and Gedabek (~16km). The Company secured the license area together with Xarxar and Demirli in Jul/22 (as ratified by Parliament of the Republic of Azerbaijan and subsequently signed into law on 5 July 2022 by the President of the Republic of Azerbaijan) and acquired a sizeable amount of historical exploration data including, geological maps, geophysics survey results, drill core and assays accumulated from exploration first by Soviets (~35,000m) and then two previous owners including Aimroc and Azergold (~31,000m).

Xarxar and Garadag deposits with drilling roads and pads from historical and AAZ drilling

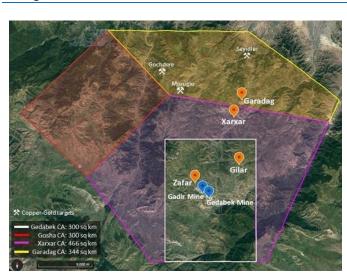


Source: Google Map:

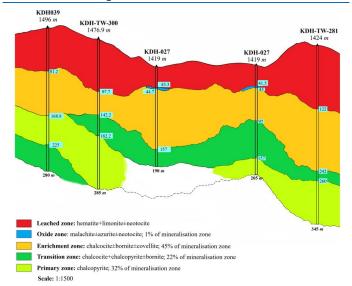
Garadag CA hosts a major copper porphyry deposit with mineralisation traced for 1,500m along strike, 500m across and up to 500m at depth. Soviet historical estimates showed potential for a total resource of 49mt at 0.64% Cu for ~320kt Cu (C1 and C2 categories). The Company prepared an open pit optimisation study using the data from Azergold historical drilling data (~23,000m) estimating a preliminary inhouse resource of 66mt at 0.49% Cu for 325kt Cu (0.3% Cu COG), closely matching historical estimates.

Garadag CA location relative to Xarxar and Gedabek

Source: SP Angel



Cross section of Garadag mineral zones



Source: SP Angel

The project is likely to be a bulk open pit mining operation with a fair amount of pre strip as indicated by a barren 50-100m leached zone in many places. A preliminary appraisal of historical data shows most of the mineralisation is hosted within

secondary enrichment zone with the balance found in primary copper minerals and little to none in oxide zone.

The plan is to relog and validate historical drill core and carry confirmatory as well as infill drilling to tighten up the geological block model. Additionally, complete metallurgical tests for the optimal processing route (bacterial heap leaching/flotation/in-situ leaching).

The team is forecasting to release a maiden JORC compliant MRE mid-2024.

We used a preliminary resource estimate of 66mt at 0.49% Cu as mineral inventory that at 7mtpa mining rate implies over 9 year life of mine and assumed low capital cost bacterial leaching option for processing. Conservatively, we assumed a more than two year long waste pre stripping period (~50mt of waste costing ~\$90m). Excluding capitalised pre-strip, strip ratio averages around low 1.3x. First ore is treated towards the end of 2027 and full plant capacity (7mtpa) reached in 2028 delivering ~22ktpa Cu production rate.

On project standalone basis, Garadag yields \sim \$200m and 36% in post tax NPV and IRR that when adjusted for other costs (exploration, studies etc) takes it to \sim \$186m. We risk the NPV by a 0.50x factor accounting for an early asset development stage to arrive at \$93m or 63p contribution to our NAV.

SPA Gara	ıdag i	ndicative	economics

Commodity Prices		
Copper	US\$/t	10,500
Mineral Inventory		
Tonnage	kt	66,300
Grade	рр	0.49%
Production		
Commissioning		2027/28
Process		Bacterial HL
LOM	years	9.0
WO ratio	X	1.3
Throughtput	kt	7,000
Grade	рр	0.49%
Recoveries	рр	65%
Production pa	kt Cu	22.0
Capex		
Development	US\$M	121
incl Pre Strip	US\$M	91
Sustaining	US\$M	53
Opex		
AISC (ex PSA & Exploration, Gross)	US\$/Cu	4,680
Financials		
PSA pp over LOM	рр	25%
Revenue pa	US\$M	186
EBITDA pa	US\$M	87
EBITDA margin		47%
NPV8% (post-tax) ex Other	US\$M	197
IRR (post-tax) ex Other	рр	36%
SPA valuation		
Final NPV8%	US\$M	186
Risk Factor	X	0.50
Risked NPV8%	US\$M	93
NAVPS Other include Evaluation, Studies etc.	GBp	63

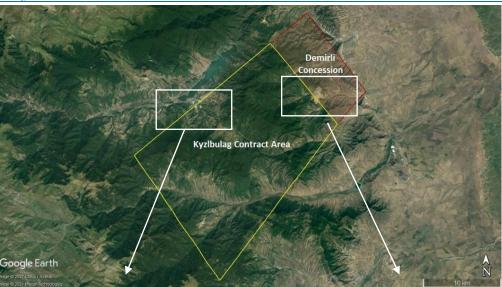
Other include Exploration, Studies etc

Source: SP Angel, Company

Demirli Cu/Mo porphyry project may add extra >6ktpa Cu, currently outside strategic plan, once access reinstated

The project straddles the Kyzlbulag CA and the contiguous Demirli Concession (albeit, the majority of the operation is located in the Demirli CA) that was secured in Jul/22 as part of adding three new concessions including Xaxar, Garadag and Demirli. The parliament approved the transaction in Jul/22. The Demirli Cu/Mo porphyry project hosts an open pit and a conventional flotation operation (commissioned c. 2016) that were left behind by previous operators as territories were reoccupied by Azerbaijan in H2/20.

Kyzlbulag and Demirli CAs in the Karabakh economic region (Bottom Right: Cu-Mo Demirli mine; Bottom Left: Kyzlbulag underground Cu/Au operation [now believed to be fully exploited])







Source: Company, Google Maps

Potential additional production contribution from Demirli was not included in the Group strategic plan for >35ktpa CuEq target released earlier.

We provide a brief update on the current status and a description of the project from our previous note below.

The license area hosts the Demirli (formerly known as Kashen) Cu/Mo deposit in the northern part of the Karabakh economic region where an Armenian Company "Vallex Group" is reported to have commissioned a treatment plant. No compliant MRE is publicly available, but separate reports referred to an estimate of 275kt copper and 3.2kt of molybdenum with the Group claiming to have invested \$130m in processing facilities. The plant is reported to have 1.75mtpa capacity. Vallex pointed to the resource of 56mt that would imply ~0.5% Cu and 0.01% Mo grades. Operations are reported to have not been damaged by the military conflict.

The license area also includes the historic underground Gyzlbulag (formerly known as Heyvali) copper/gold operation that was also run by the same group at ~35kozpa before mining was suspended as the focus moved to the Demirli project. The operation is located on the western boundary of the Kyzlbulag CA.

The Kyzlbulag Contract Area along with the extension remains the most limited in terms of the site access with Russian peacekeepers stationed in Khankendi (formerly "Stepanokert"), the largest city in the region, to monitor the ceasefire between Armenian and Azerbaijan forces agreed in Nov/20. Russian troops agreed to remain in place for an initial five year period (the term automatically rolls over for another five years unless any of three signatory parties (Russia, Azerbaijan, Armenia) object).

So access may potentially get reinstated in 2025 with most of operations in place suggesting a relatively fast resumption of production. Although, timing may change.

We used the installed 1.75mtpa flotation plant capacity and suggested minimum 25 year life of mine and assumed the deposit to host 44mt (25y*1.75mtpa) at 0.5% Cu producing over 7ktpa CuEq and generating >\$60mpa in net sales (post 12.75% PSA).

We applied a series of EV multiples to assumed reserves/resources/production/sales and risked by a 0.25x factor reflecting early stage nature of our MRE/potential production estimates as well as uncertainty on regaining access timing. We arrive at ~\$110m unrisked NAV or 75p contribution and risk adjusted ~\$30m and 19p, respectively.

Demirli NAV estimate

Copper price assumption	10,500					
PSA	12.75%					
Parameters	kt CuEq/\$m	EV multiple	EV \$m	Interest	Risk	NAV \$m
PP	226	500	113	100%	0.25x	28
MI	NA	NA	NA	100%	NA	NA
MI&I	302	250	76	100%	0.25x	19
Production	7.4	15,000	110	100%	0.25x	28
Sales (post PSA)	63	2.0	125	100%	0.25x	31
Median \$m			112			28
NAVPS GBp			75			19

Source: SPA, Company

Strategic +2,500sq km landholding represents strong organic growth development pipeline potential

The Company holds eight contract areas (CAs) that cover >2,500sq km, representing ~3% of the national total area, offering exceptional exposure to a potential discovery. Existing processing facilities as well as new planned operations significantly improve development optionality. License areas provide no lack of targets for a potential epithermal or porphyry discovery with the team constantly reviewing priority of exploration assets based on incoming data.

Location of AAZ Contract Areas with respective status of each license area



Source: Company

The Company recently signed up a company named Exploration Mapping to carry out a region wide WorldView3 satellite survey to pick up surface alteration and rock types to assist with exploration effort and prioritise targets. The plan is to layer up results of the survey with historical ZTEM data together with available geological maps to guide follow up exploration (geochemistry, ground based geophysics, trenching and drilling). Anomaly signature of discovered deposits like Gedabek/Gadir/Ugur/Gilar help with identification of new targets.

Group development pipeline featuring existing operations, greenfield development projects and early exploration assets

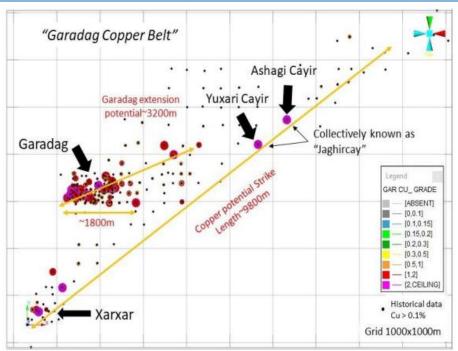


Pipeline is Robust and Balanced with Early Stage and Advanced Projects

Source: Company

There are dozens of regional exploration targets with drilling to be carried at most of CAs over the coming years. Of note, the team is planning to drill 2,500m testing copper potential at Ordubad following a break since 2019. Drilling is focused on geochemical anomalies recorded over an 8km diameter structure with leached copper oxides in soils and outcrops. Drilling results are expected July-August.

Garadag and Xarxar CAs copper occurrences from drilling indicating a potential for a $^{\sim}10,000$ m long copper trend



Source: Company

Growth plans and dividend sustainability

The Company recently reiterated its commitment to their existing dividend policy.

The Company is well capitalised supported by FCF generating Gedabek operations, Net Cash balance of \$18m (YE22) and a recently secured access to a seven year \$32m revolving facility with the International Bank of Azerbaijan. Forecast earnings support higher debt levels if the Company decides to bring additional capital in.

Expectations are for the Company to pay at least same dividend in FY23 as in FY22 equivalent to 8c or 59 m (c. 5.6% on 116p). FY22 Final dividend is likely to be announced with FY22 results (presumably in May) and we expect it to match the interim dividend of 4c taking the total for the year to 8c.

Moving forward, we would expect dividend payments to be contingent on development scenarios for Xarxar and Garadag as well as commodity prices. Under base case bacterial heap leaching option we would expect dividends to be well protected at current spot commodity prices (i.e. \$1,950/oz and \$8,000/t).

Risks

We highlight a series of risks regarding the growth strategy below; while it is by no means exhaustive that typically involves a development and mining operation (e.g. geological, operational, political, environmental, financial, commodity price etc) we believe, many of those are significantly reduced given current robust financial position of the Company and a track record of production in the country.

Operational risk

Near term growth in production significantly relies on Gilar that accounts $^{\sim}50-75\%$ and $^{\sim}60-70\%$ of annual gold and copper production in 2024-25. Any underperformance on tonnage or grade is likely to see Group production lower and unit costs higher during the period.

Technical risk

Base case for the processing technology to be used for growth projects, both Xarxar and Garadag, is bacterial heap leaching.

When compared to conventional flotation process, bacterial heap leaching technology features lower operating costs and upfront development capital cost (~\$70m assumed for both projects i.e. ~\$2,250/t Cu capital intensity for Xarxar (9ktpa) and Garadag (22ktpa) combined compared to an industry average capital intensity of \$10,000-14,000/t for flotation plant option; although, Azerbaijan is a low cost jurisdiction and the team demonstrated its ability to deliver projects cost efficiently in the past) but comes at a cost of lower metallurgical recoveries (e.g. 65% vs typical 85% in flotation) and higher technical risk (maintenance of optimal operational environment for bacteria including temperature, moisture, pH and oxygen), albeit a tailings management facility would be required for flotation process but not for heap leaching.

Metallurgical testwork for best processing option is currently ongoing and will be critical for future final project trade-off studies.

Bioleaching v Flotation

Technology	Bacterial HL	Flotation
Final product	Cu cathode	Cu concentrate
Payable factor	100%	Less than 100%*
Met recoveries	Lower (eg 65%)	Higher (eg 85%)
Operating cost	Lower	Higher
Capital cost	Lower	Higher
Tailings facilities	No	Yes
Technical risk	Higher	Lower

^{*}depends on grade, TC/RCs, deleterious elements - \sim 90% for 20% Cu con and \$75/7.5c TC/RC less penalties for deleterious elements on top Source: SP Angel, Company

Execution risk

An expansion schedule involving a nearly 3x increase in production through to 2030 and commissioning of two standalone copper projects would require employment of suitably experienced and competent personnel to control execution risk.

Earnings Summary

Market data		
Ticker		AAZ LN
Last price	GBp	116
Target price	GBp	201
Rec		BUY
GBPUSD		1.23
Mkt cap	GBPm	132.5
	USDm	163.0
EV	GBPm	118.2
	USDm	145.4
Av # of sh in issue	mln	114.2
Av # traded, 100d	mln	0.11

US\$m unless stated (YE Dec)						
Operating metrics		FY20	FY21	FY22E	FY23E	FY24E
USDAZN		1.70	1.70	1.70	1.70	1.70
Gold price	US\$/oz	1,780	1,786	1,813	1,897	1,900
Copper price	US\$/t	6,185	9,294	8,801	8,989	10,500
Gold production	koz	57	48.7	43.1	31.3	39.6
Copper production	kt	2.6	2.6	2.5	4.1	6.8
AuEq	koz	67.3	64.6	57.6	52.5	79.2
CuEq	kt	19.4	12.4	11.9	11.1	14.3
Share of Cu in Production	pp	13%	21%	21%	37%	48%
AISC (incl PSA, co product)	US\$/koz	840	970	1,129	1,150	902
	U3\$/KUZ	FY20				
Income Statement (US\$m)			FY21	FY22E	FY23E	FY24E
Revenues		102	92	83	83	124
EBITDA		53	29	28	28	57
margin		52%	32%	34%	34%	46%
EBIT		36	12	14	15	38
Net Interest		-0	-1	-0	0	0
PBT		36	13	11	15	38
Tax		-13	-5	-4	-5	-12
PAT		23	7	7	10	26
EPS basic, cents		20	6	6	9	23
EPS diluted, cents		20	6	6	9	23
Cash flow (US\$m)		FY20	FY21	FY22E	FY23E	FY24E
CFO		60	35	10	28	57
Tax paid		-11	-9	-4	-3	-13
Net CFO		50	26	6	25	44
Capex (incl Exploration)		-16	-14	-10	-17	-35
CFI		-16	-16	-13	-17	-35
Issue of shares		-	-	-		-
Dividends paid		-10	-11	-9	-9	-9
Borrowings net change		-2	-0	-1	-1	-1
Interest paid		-0	-0	-0	-	_
CFF		-13	-12	-9	-10	-10
Net cash flow		21	-12 -1	- 1 7	- 10 -2	-10
Cash cf		39	37	20	-2 18	-0 18
Balance Sheet (US\$m)		FY20	FY21	FY22E	FY23E	FY24E
Cash		39	37	20	18	18
Receivables/prepayments		7	20	38	38	38
Inventories		41	37	42	42	42
Current assets		87	94	101	99	99
Exploration & PPE		91	92	88	92	107
Non-current assets		92	95	90	93	109
Total assets		180	189	191	193	208
Payables, provisions		19	31	32	32	32
Borrowings ST (incl leases)		0	0	1	1	1
Current liabilities		20	31	33	33	33
Borrowings LT (incl leases)		1	3	2	1	1
Other		37	37	40	42	41
Non-current liabilities		38	40	42	43	41
Total liabilities		58	71	75	76	74
Net assets		122	118	116	117	133
Key financial metrics		FY20	FY21	FY22E	FY23E	FY24E
Net debt/(cash)		-37	-34	-18	-16	-16
Av # of sh (diluted)		114	114	114	114	114
EV/EBITDA		2.9	6.0	3.9	5.2	2.5
PER		8.3	28.6	18.8	15.8	6.3
FCF (NCFO-Capex)		34	12	-5	8	9.5
FCF yield		18%	6%	ر۔ -	5%	6%
DY		5.5%	4.3%	7.1%	5.6%	5.6%
ROA		12.8%	4.3%	3.6%	5.4%	12.9%
P/BV		1.6	1.8	1.1	1.4	1.2
Interest coverage		110.29	23.01	133.3	nm	nm
Net Debt/EBITDA		-0.7	-1.2	-0.6	-0.6	-0.3

Source: SP Angel, Company

DISCLAIMER: Non-independent research

This note is a marketing communication and comprises non-independent research. This means it has not been prepared in accordance with the legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of its dissemination.

MiFID: Based on our analysis, we have concluded that this note may be received free of charge by any person subject to the new MiFID rules on research unbundling pursuant to the exemptions within Article 12(3) of the MiFID Delegated Directive and FCA COBS Rule 2.3A.19. Further and fuller analysis may be viewed here http://www.spangel.co.uk/legal-and-regulatory-notices.html.

This note has been issued by SP Angel Corporate Finance LLP ('SPA') in order to promote its investment services. Neither the information nor the opinions expressed herein constitutes, or is to be construed as, an offer or invitation or other solicitation or recommendation to buy or sell investments. The information contained herein is based on sources which we believe to be reliable, but we do not represent that it is wholly accurate or complete. SPA is not responsible for any errors or omissions or for the results obtained from the use of such information. Where the subject of the research is a client company of SPA we will usually have shown a draft of the research (or parts of it) to the company prior to publication in order to check factual accuracy, soundness of assumptions etc.

No reliance may be placed for any purpose whatsoever on the information, representations, estimates or opinions contained in this note, and no liability is accepted for any such information, representation, estimate or opinion. All opinions and estimates included in this report are subject to change without notice. This note is confidential and is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published in whole or in part, for any purpose.

In some cases, this research may have been sent to you by a party other than SPA, and if so, the contents may have been altered from the original, or comments may have been added, which may not be the opinions of SPA. In these cases SPA is not responsible for this amended research.

The investments discussed in this report may not be suitable for all investors. Investors should make their own investment decisions based upon their own financial objectives and financial resources and it should be noted that investment involves risk. Past performance is not necessarily a guide to future performance and an investor may not get back the amount originally invested. Where investment is made in currencies other than the currency of the investments, movements in exchange rates will have an effect on the value, either favourable or unfavourable.

This note is intended only for distribution to Professional Clients and Eligible Counterparties as defined under the rules of the Financial Conduct Authority and is not directed at Retail Clients.

Distribution of this note does not imply distribution of future notes covering the same issuers, companies or subject matter.

SPA has put in place a number of measures to avoid or manage conflicts of interest with regard to the preparation and distribution of research. These include (i) physical, virtual and procedural information barriers (ii) a prohibition on personal account dealing by analysts and (iii) measures to ensure that recipients and persons wishing to access the research receive/are able to access the research at the same time.

You are advised that SPA and/or its partners and employees may have already acted upon the recommendations contained herein or made use of all information on which they are based. SPA is or may be providing, or has or may have provided within the previous 12 months, significant advice or investment services in relation to some of the investments concerned or related investments.

SP Angel Corporate Finance LLP is a company registered in England and Wales with company number OC317049 and its registered office is SP Angel Corporate Finance LLP, 35 – 39 Maddox Street, London W1S 5PP United Kingdom. SP Angel Corporate Finance LLP is Authorised and Regulated by the Financial Conduct Authority whose address is 25 The North Colonnade, Canary Wharf, London E14 5HS and is a Member of the London Stock Exchange plc.

SP Angel Corporate Finance LLP definition of research ratings:

Expected performance over 12 months: Buy - Expected return of greater than +15%, Hold - Expected return from -15% to +15%, Sell - Expected return of less than -15%

*SP Angel acts as Broker to this Company