

Mining

9 October 2012

Price	A\$0.16
Market cap	A\$34m
	A\$1.57/£
Shares in issue	218.6m
Free float	N/A
Code	SUM
Primary exchange	ASX
Other exchanges	N/A

Share price performance



%	1m	3m	12m
Abs	6.9	118.3	3.3
Rel (local)	5.5	106.6	(7.2)
52-week high/low	A\$0.18	A\$0.06	

Business description

Sumatra Copper & Gold is an emerging producer and explorer located on the island of Sumatra in Indonesia. It owns seven mining business permits (IUPs) covering 3,219km².

Next events

Final permitting	Q412 - H113
Project financing	Q412 - H113

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Final clarification on Stage 1

Sumatra has announced how it intends to develop its Tembang gold-silver project in Indonesia. The company states a two-stage approach, with Stage 1 production targeted for the very end of 2013, and the commencement of Stage 2 currently targeted for the start of 2015. Total LOM AuEq production is estimated at 474koz over eight years. Total Stage 1 pre-production capex is US\$38.5m, with a further US\$30m required for processing and common costs. To develop Tembang Sumatra intends to raise US\$58.5m using an approximate 2:1 debt:equity finance structure. On this basis, we value Tembang on a fully diluted basis at A\$0.35/share (at our revised long term gold price of US\$1,676/oz Au, US\$28.15/oz Ag and a 10% discount rate).

Year end	Revenue (£m)	PBT* (£m)	EPS* (p)	DPS (p)	P/E (x)	Yield (%)
12/10	0.0	(1.2)	(0.7)	0.0	N/A	N/A
12/11	0.0	(1.8)	(1.1)	0.0	N/A	N/A
12/12e	0.0	(1.5)	(0.7)	0.0	N/A	N/A
12/13e	0.8	(3.6)	(1.3)	0.0	N/A	N/A

Note: *PBT and EPS are normalised, excluding intangible amortisation and exceptional items.

Permitting almost complete

Sumatra obtained its key environmental permit and mining licence in H112. Only a forestry permit is now required before Tembang can be given the development green light. Sumatra is targeting completion of its permitting Q412–H113. This is critical if it is to achieve first mine production by end 2013.

Project financing: 2:1 debt:equity

Sumatra targets completion of project financing by early 2013. It states that to develop Tembang Stage 1 fully and also allow development of Stage 2, US\$58.5m will be required. One-third is to be raised via the issue of equity, with the remaining two-thirds raised via debt facilities. We await details from the company as to when it plans to raise equity and agree its debt financing arrangements.

Valuation: Shares trading at 54% discount

Assuming Sumatra achieves the remaining project milestones (permitting and financing) such that mine production occurs at the very end of 2013 and produces in line with its Stage 1 and Stage 2 mine plans (see page 3 onwards), we value its shares at A\$0.35 (using our long-term gold price of US\$1,676/oz, long term US\$28.15/oz silver price, and a 10 discount rate to reflect general equity risk). This places its current share price at a 54% discount, reflecting uncertainty concerning both its final permit and details regarding its project financing arrangements. Information on either of these points would be a positive.

Company description: Developing Tembang

Sumatra's Stage 1 definitive feasibility study (released September 2012) for Tembang details a project that will deliver 0.146Moz Au and 1.388Moz Ag over a five-year mine life at a pre-production capital cost of US\$38.5m, and C1 cash costs of US\$487/oz. First production from Stage 1 mining is targeted for late 2013. Sumatra intends the cash flows generated during Stage 1 from Q313 to Q115 will provide the cash required to bring Stage 2 into production, which will deliver a further 0.249Moz Au and 3.446moz Ag over three years, giving a total Tembang mine life of eight years. The incremental pre-production capital cost of Stage 2 is minor at US\$1.5m, this being a result of all capital needing to be sunk prior to mining Stage 1.

Final Tembang reserve

The conversion of Tembang's JORC resources to reserves has been completed. The resource to reserve conversion rate achieved was 58.7% (Au resource 0.98Moz, Au reserve 0.403Moz) for gold and 56.7% for silver (Ag resource 12.794Moz, Ag reserve 5.539Moz). This is an appropriate figure for conversion of a geologically interpreted mineral resource into an economically derived mineral reserve. There are a number of factors including, but not limited to, drilling at the resource state being deeper than the mine being developed, metallurgical factors limiting gold recovery and engineering constraints (eg pit wall angles constraining the maximum depth of extraction) subsequently preventing the remaining resources from being converted into reserves. The following exhibit details Tembang's reserve estimate:

Exhibit 1: Tembang Mineral reserve estimate

Deposit	Reserve Category	Tonnes (kt)	Grade Au (g/t)	Contained Gold (oz)	Grade Ag (g/t)	Contained Silver (oz)
Asmar	Proven	650	1.7	35,000	24	498,000
	Probable	1230	1.3	49,000	20.5	808,000
Berenai	Proven	910	2	60,000	40.8	1,195,000
	Probable	980	2.1	67,000	23.6	740,000
Buluh	Proven	560	2.5	45,000	40.9	735,000
	Probable	400	2	26,000	29	374,000
Aidit	Proven	0	0	0	0	0
	Probable	20	3.1	2,000	44.6	30,000
Bujang	Proven	140	4.2	19,000	52.1	238,000
	Probable	50	2.3	4,000	26	40,000
Belinau OP	Proven	90	5.5	16,000	68.4	196,000
	Probable	60	3.4	6,000	53.2	97,000
Belinau UG	Proven	50	8.7	15,000	74.1	130,000
	Probable	360	5	59,000	39.3	458,000
Total	Proven	2,400	2.5	190,000	38.7	2,991,000
	Probable	3,100	2.1	213,000	25.6	2,547,000
	Total	5,500	2.3	403,000	31.4	5,539,000

Source: Sumatra Copper & Gold

Tembang mine plan – Stage 1, Asmar and Belinau

First mining at Tembang will occur using the conventional open pit method, concentrating on the Asmar and Belinau deposits. First production is targeted for the very end of 2013. The Asmar deposit will be mined only on an open pit basis; Belinau however, will be mined first as an open pit, and then will progress underground to extract deeper reserves. The following exhibit details the longevity of each operation, the ounces of gold and silver recovered and their associated metallurgical recovery factors for reference:

Exhibit 2: Stage 1 mine plan

Deposit	Mining method	Commencement of mining	Planned end to mining	Recovered gold (oz)	Gold recovery (%)	Recovered silver (oz)	Silver recovery (%)
Asmar	Open pit	0413	0417	64,375	86.30	928,970	83.30
Belinau	Open Pit	0413	0117	22,371	90.70	248,729	75.50
	Underground	0314	0218	87,618	90.70	566,382	75.50

Source: Sumatra Copper & Gold

Tembang Stage 2 – mining Berenai, Bujang, Aidit, Buluh

The second stage of mining will concentrate on four deposits, Berenai, Bujang, Aidit and Buluh. Mining is planned to commence at the start of 2015, and will overlap Stage 1 until 0218. Note that the current mine plan for Stage 2 is at the pre-feasibility stage and will require further technical studies to be completed to provide as accurate a representation of future cash flow generation as the definitive feasibility study completed for Stage 1 (September 2012). However, with the process plant being built to accommodate a throughput of 900ktpa and mineral reserves having already been calculated for these four deposits, the technical risks of developing these satellite ore bodies have already been minimised. The following exhibit details the predicted longevity of each operation, and the expected ounces of gold and silver recovered and their associated metallurgical recovery factors for reference:

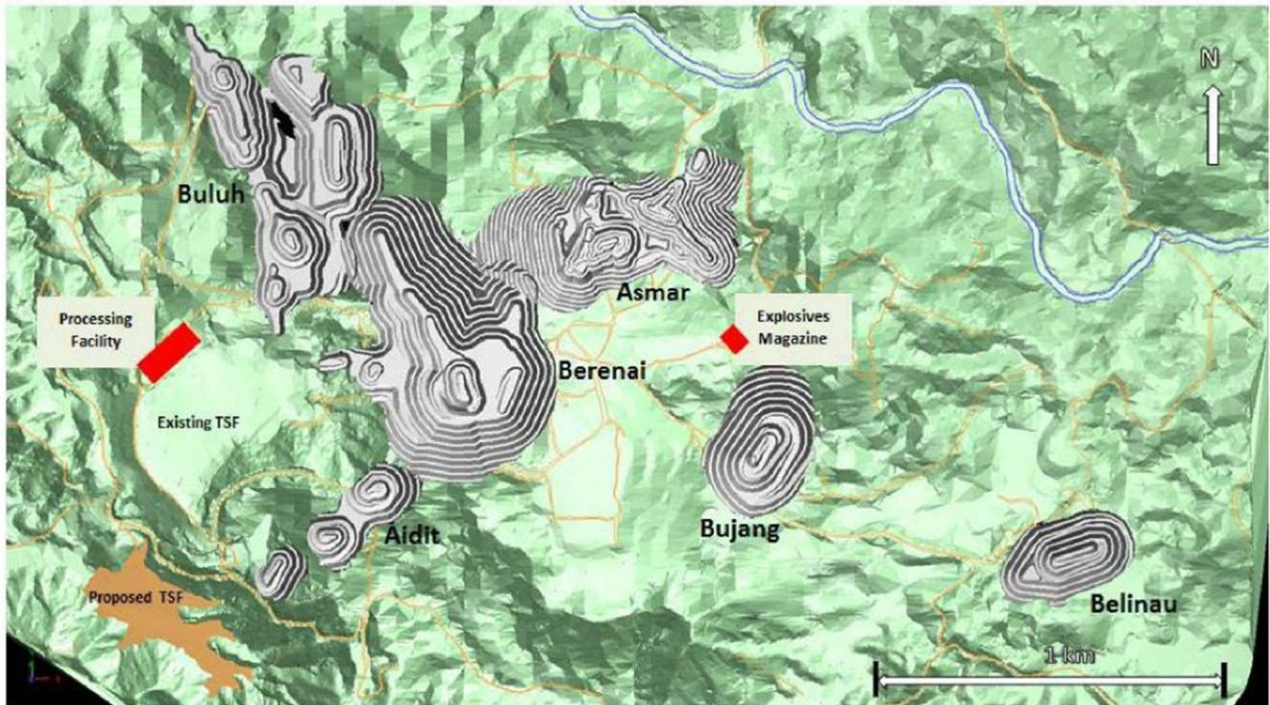
Exhibit 3: Stage 2 mine plan

Deposit	Mining method	Commencement of mining	Planned end to mining	Recovered gold (oz)	Gold recovery (%)	Recovered silver (oz)	Silver recovery (%)
Berenai	Open Pit	0115	0320	124,863	88.3	1,748,071	82.2
Bujang	Open Pit	0319	0221	19,598	85.1	232,877	81.7
Aidit	Open Pit	0417	0218	8,476	85.0	43,502	75.0
Buluh	Open Pit	0417	0121	71,476	88.3	10,365,223	88.3

Source: Sumatra Copper & Gold

The location of both Stage 1 and Stage 2 deposits are shown below:

Exhibit 4: Tembang Mine, plan view



Source: Sumatra Copper & Gold September 2012 corporate presentation

Key valuation parameters used

Based on both the Stage 1 definitive feasibility study and Stage 2 pre-feasibility study for Tembang, we have revised our valuation for Sumatra. Exhibit 5 illustrates the main differences between those valuation parameters used in our September 2011 update note, which was at a scoping study level of confidence, and the values supplied to us by Sumatra's management reflecting the DFS and PFS.

Exhibit 5: comparison of key valuation parameters

Revised assumptions October 2012	Unit	Revised value	Old values*
Life of mine	Yr	2013-2021	2012-2022
Tembang commissioning date	Yr	2013	2012
Ramp up/Stage 1 mining - from revised model	Yr	2013-2014	2012-2016
Steady State annual ore tonnes mined	Mtpa	Variable: average 798kt	750 from 2017 to 2022
Average annual waste tonnes mined	Mtpa	Variable: average 17.2	10.2
Total annual tonnage mined (after ramp up)	Mtpa	N/A	11.0
Strip ratio		Variable: average 31 to 1	18.9 to 1
Gold grade	g/t Au	2.3	4.3
Silver grade	g/t Ag	30.2	52.0
Average gold recovery	%	87.8	90.0
Silver recovery	%	80.2	80.0
Gold equivalent annual production (at steady state)	koz	63.0	54.0
Total pre-production capex (Stage 1 and 2)	A\$m	40.8	45.7
Year pre-production capex expended	yr	2013-2015	2012-2016
Average Annual sustaining capex	A\$m	8.0	0.8
Gold royalty (paid on gold revenue)	%	3.75	3.75
Silver royalty (paid on silver revenue)	%	3.25	3.45
Tax	%	28.0	28.0
Gold price used	US\$/oz	1,676	1,350
Silver price used	US\$/oz	28.15	25

Source: Sumatra Copper & Gold

Of most importance in looking at the exhibit above is that these figures only give a broad headline comparison of the new Stage 1 and Stage 2 mine plans with the old values used in our March 2011 update note. The underlying figures for the new Stage 1 and Stage 2 mine plans detail a far more variable production schedule ranging from (excluding the minor production of 16kt planned at end 2013) 279kt (in the final year of mining – 2021) to 1,197kt (2017). The majority of the operational parameters given in Exhibit 5 are broadly comparable with those outlined by the company in March 2011 in its Tembang scoping study. The breakdown of mining and processing costs for Stage 1 and Stage 2 are given below:

Exhibit 6: Estimated breakdown of operating costs

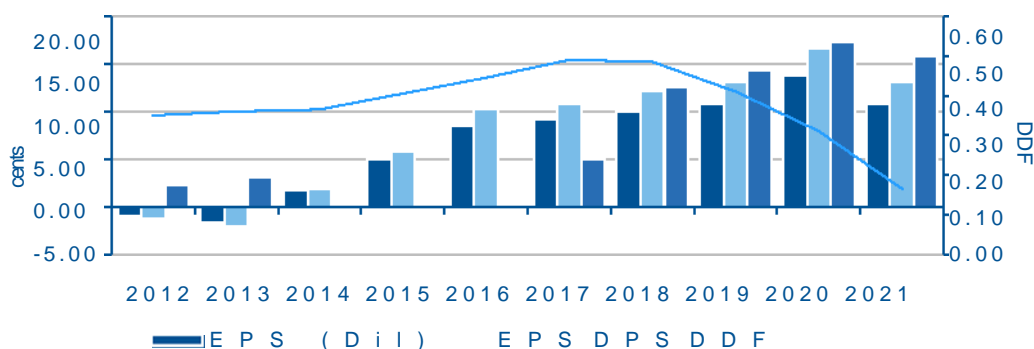
Item	\$/t ore	\$/oz Au	\$/oz AuEq
Mine operating cost	30	465	388
Processing operating cost	18	271	226
Administration cost	4	62	52
Total direct operating cost (C1)	52	798	666
By-product credits	-22	-330	N/A
Total C1 cost (net by-product)	31	468	N/A
Royalties	5	73	N/A
Total cash opex (net by-prod. incl roy)	35	541	N/A
Mine capital	3	43	N/A
Processing capital	15	224	N/A
Total cash cost (net of by-product)	53	808	N/A

Source: Sumatra Copper & Gold

Sumatra has provided guidance on how it will meet its US\$58m funding requirements to fully develop the Tembang project (this includes the US\$38.5m of pre-production capex for Stage 1 stated in its September 2012 corporate presentation, plus additional funds required for processing and common costs). Sumatra states it will be looking to secure US\$40m via debt facility, with the remainder raised in equity. Assuming a raising at A\$0.15 for the equity component of its capital funding requirement would equate to the issue of c 121.1m shares in 2013, or 44% dilution to its current issued number of shares of 218.6m. This is factored into our valuation below.

Valuation

Assuming Sumatra pays out all its spare cash in the form of dividends from the time the Tembang project enters production from the very end of 2013 until cessation of mining activities, currently forecast to be 2021, we estimate the dividend stream to investor's will be worth A\$0.35 per share, fully diluted, in current money terms (at a 10% discount rate, our long-term gold price of US\$1,676/oz and US\$28.15/oz for silver).

Exhibit 7: Edison estimate of EPS, fully diluted EPS and theoretical DPS FY13-FY21 at Au = US\$1,774/oz.

Source: Edison Investment Research. NB DDF = Discounted dividend flow

Of particular note in the exhibit above is that the theoretical dividend flow (light blue line) to investors is depressed slightly between 2013 and 2014, due to both the ramp of Stage 1 and the development of the Stage 2 projects. This delays the first theoretical free cash flow to 2017.

Sensitivities

We highlight the following qualitative and quantitative sensitivities pertinent to the development and viability of the Tembang gold and silver project.

- **Permitting:** Sumatra has successfully obtained a number of key permits required to bring Tembang into production, with its Amdal permitting (Indonesian Environmental Impact Assessment) and mining licence obtained in H112. Final permitting, including a key forestry permit, is being targeted for completion in H212/H113. A key member of Sumatra's board, Adi Sjoekri, has been instrumental in the permitting process.
- **Financing:** Sumatra has stated in its September 2012 corporate presentation that it is targeting successful completion of project financing in H212 to H113. This will be critical if it is to meet its target for first mine production in H213. As yet the company has not announced details as to the progress of this critical milestone in its development timeline.

Empirically our model has sensitivities to various input parameters, such as the gold price and discount rate, as shown below:

Exhibit 8: Sensitivity to the gold price

US\$/oz	1,550	1,676	1,750	1,850	1,950	2,050
NPV (A\$)	0.31	0.35	0.38	0.42	0.44	0.51

Source: Edison Investment Research

Exhibit 9: Sensitivity to discount rate

%	5	7.5	10	12.5	15	22
NPV (A\$)	0.49	0.41	0.35	0.30	0.25	0.18

Source: Edison Investment Research

Financials

Sumatra's interim results show cash on the balance sheet of £2.1m at 30 June 2012. Post period, on 29 August, Sumatra completed a gross A\$3.8m (£2.4m) subscription (of 28m shares at A\$0.135 each) agreement with Provident Capital Partners. We note that Sumatra forecasts c A\$3.1m to be spent by end 2012 in relation to the first payments relating to development of Stage 1. The subscription by Provident Capital Partners, and the A\$5.0m convertible debt finance facility arranged with Macquarie Bank Ltd on 2 April 2012, will satisfy this initial end 2012 capital requirement. However, the company will be required to provide details of how it will meet its ongoing capital expenditure requirements to fully develop Stage 1 (as stated on page 6). We also note that Provident Capital Partners is eligible for a call option on a further 40m shares in Sumatra contingent upon it gaining its forestry permit, or Provident acquiring a further 10m shares in the company. The call option is exercisable at a price equal to a 15% discount to the 10 day VWAP at the time of giving notice of the exercise and is exercisable at any point after satisfying the aforementioned criteria until 31 December 2012, or where Sumatra gives Provident notice that a minimum of A\$1.0m Sumatra shares have traded at A\$0.20 or more.

Exhibit 10: Financial summary

	£'000	2010	2011	2012e	2013e
Year end 31 December		IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS					
Revenue		0	0	0	802
Cost of Sales		0	0	0	(1,222)
Gross Profit		0	0	0	(420)
EBITDA		(1,319)	(1,857)	(1,258)	(1,678)
Operating Profit (before amort. and except.)		(1,320)	(1,857)	(1,395)	(3,486)
Intangible Amortisation		0	0	0	0
Exceptionals		0	(1,632)	(106)	0
Other		368	0	0	0
Operating Profit		(952)	(3,489)	(1,501)	(3,486)
Net Interest		81	14	(74)	(129)
Profit Before Tax (norm)		(1,239)	(1,843)	(1,470)	(3,614)
Profit Before Tax (FRS 3)		(871)	(3,476)	(1,576)	(3,614)
Tax		0	0	0	0
Profit After Tax (norm)		(871)	(1,843)	(1,470)	(3,614)
Profit After Tax (FRS 3)		(871)	(3,476)	(1,576)	(3,614)
Average Number of Shares Outstanding (m)		132.2	167.3	204.6	278.6
EPS - normalised (p)		(0.7)	(1.1)	(0.7)	(1.3)
EPS - normalised fully diluted (p)		(0.5)	(0.9)	(0.5)	(1.0)
EPS - (IFRS) (p)		(0.7)	(2.1)	(0.8)	(1.3)
Dividend per share (p)		0.0	0.0	0.0	0.0
Gross Margin (%)		N/A	N/A	N/A	N/A
EBITDA Margin (%)		N/A	N/A	N/A	N/A
Operating Margin (before GW and except.) (%)		N/A	N/A	N/A	N/A
BALANCE SHEET					
Fixed Assets		11,881	14,639	18,026	41,275
Intangible Assets		11,757	13,363	14,885	14,885
Tangible Assets		124	127	1,992	25,241
Investments		0	1,149	1,149	1,149
Current Assets		4,614	2,023	3,650	10,588
Stocks		0	0	0	67
Debtors		0	0	0	66
Cash		4,248	1,570	3,196	10,002
Other		366	453	453	453
Current Liabilities		(997)	(1,508)	(1,452)	(1,553)
Creditors		(997)	(1,508)	(1,452)	(1,553)
Short term borrowings		0	0	0	0
Long Term Liabilities		0	0	(3,206)	(25,499)
Long term borrowings		0	0	(3,206)	(25,499)
Other long term liabilities		0	0	0	0
Net Assets		15,498	15,154	17,017	24,810
CASH FLOW					
Operating Cash Flow		(1,017)	(1,127)	(1,420)	(1,644)
Net Interest		82	82	(74)	(129)
Tax		0	0	0	0
Capex		(3,107)	(4,581)	(3,524)	(25,056)
Acquisitions/disposals		0	(179)	0	0
Financing		4,891	3,282	3,439	11,407
Dividends		0	0	0	0
Net Cash Flow		848	(2,523)	(1,579)	(15,421)
Opening net debt/(cash)		(3,399)	(4,248)	(1,570)	10
HP finance leases initiated		0	0	0	0
Other		0	(155)	0	(65)
Closing net debt/(cash)		(4,248)	(1,570)	10	15,496

Source: Sumatra Copper & Gold and Edison Investment Research

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