

Caledonia Mining

Ore extraction hindered by IP implementation

Q2 & H117 results

Metals & mining

As Caledonia Mining (CMCL) continues to implement its investment plan (IP), logistical issues governing ore handling volumes and access to higher-grade ore bodies have affected gold production during Q2 and H117. Underground works to ameliorate material handling bottlenecks have taken place with successful completion, inter alia an underground tramming loop. However, grades are lower due to restricted access to the higher-grade Eroica and Lima ore bodies situated on the other side of the Central Shaft development area to the main surface haulage route – the No. 4 haulage shaft. We have adjusted our valuation to reflect this and the H117 financial results, leading to a valuation of 933p for successful implementation and operation of the Blanket IP.

Year end	Revenue (US\$m)	PBT* (US\$m)	EPS* (c)	DPS (c)	P/E (x)	Yield (%)
12/15	49.0	5.1	40.0	23.7	16.4	3.6
12/16	62.0	19.6	106.9	28.4	6.2	4.3
12/17e	67.6	20.4	135.6	27.5	4.9	4.2
12/18e	78.7	24.9	147.1	27.5	4.5	4.2

Note: *PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items, share based payments and deferred tax. Historical earnings reflect share consolidation.

FY17 cost and production guidance intact

We have revised our quarterly gold production forecasts to 14,174oz produced in each of Q317 and Q417, requiring 140kt of ore processed each quarter (Q217 saw 136kt processed) at a grade of 3.35g/t (the average of the company's quarterly head grades since Q114). Based on previous cost guidance, we estimate that the company will finish 2017 with net cash of US\$10.5m, a y-o-y decrease of 27%, before the effects of the company's completed Central Shaft development drive cash generation higher in 2018. We estimate end-2018 net cash to nearly double to US\$19.6m (from c 64koz Au produced and sold at a US\$1,220/oz Au price and incurring cash costs of US\$588/oz). 2017 gold production guidance is 52-57koz.

Valuation and earnings reflect share consolidation

We forecast FY17 earnings to be back-weighted to H2 with basic EPS of 28.9 cents per quarter. This follows Q1 and Q2 reported EPS of 25.1c and 6.1c respectively. H217 earnings potential reflects our relatively conservative view of gold production coming in at 54koz, the midpoint of CMCL's 52-57koz revised FY17 guidance.

Valuation: Adjusted for a number of factors

We have adjusted our valuation for numerous changes, including revisions to H217 and H118 gold production values, a reduction in facilitation loan account interest rates, our in-house gold price assumption to reflect ytd gold price moves and a recalculation of Caledonia's gold rebate. Details of each of our valuation changes can be found on page 5 of this report. These changes result in a new valuation of 933p/share (post-consolidation) using Edison gold price forecasts and a 10% discount rate to reflect general equity risk. Applying a flat US\$1,300/oz gold price results in a valuation of 950p.

14 September 2017

Price **510.00p**

Market cap **£54m**

US\$/£:1.29

Net cash (US\$m) at end June 2017 10.9

Shares in issue 10.5m

Free float 95%

Code CMCL

Primary exchange AIM (CMCL) TSX (CAL)

Secondary exchange NYSE American (CMCL)

Share price performance



%	1m	3m	12m
Abs	3.0	5.2	(1.5)
Rel (local)	3.4	6.7	(9.6)
52-week high/low	143.0p		69.0p

Business description

Caledonia Mining mines gold at, and maintains management control over, its main operating asset, the 49%-owned Blanket gold mine in southern Zimbabwe. It is also progressing its understanding of a number of promising satellite projects close to Blanket.

Next events

Q317 results November 2017

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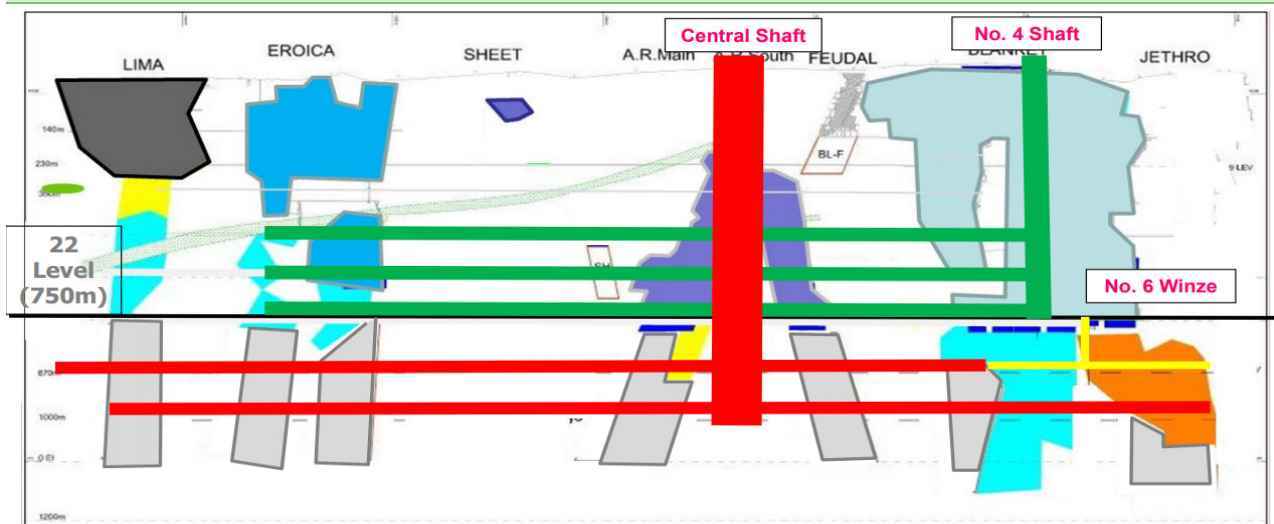
Caledonia Mining is a research client of Edison Investment Research Limited

Investment plan implementation guides performance

Caledonia produced 12,521oz of gold in Q217, a slight increase over Q1's 12,510oz. Second quarter cash costs were US\$696/oz, 10% higher than Q117 (US\$629/oz), resulting from the lower gold grades mined (3.08g/t vs a budgeted grade closer to 3.6g/t). All-in sustaining costs for Q217 were US\$855/oz and 8% lower on a q-o-q basis. Q217 gold production resulted in a gross profit of US\$5.0m, 16% lower than Q216 (US\$5.9m). H117 gross profit was US\$10.9m, up 11% from the same period a year ago, and net profit attributable to shareholders is US\$3.0m, 27% lower on a l-f-l basis.

The second quarter of 2017 saw steady progress concerning implementation of the company's investment plan. The Central Shaft is now completed to a depth of 870m, or 81% of its 1,080m initial design depth. During Q217, 202m was completed at the Central Shaft, 63% above the quarter's budgeted development target of 124m. With Central Shaft development the most critical element of the company's investment plan (started in late 2014), material, and importantly, ore, haulage capacity has been constrained on the 22 Level, 750m below surface (see below).

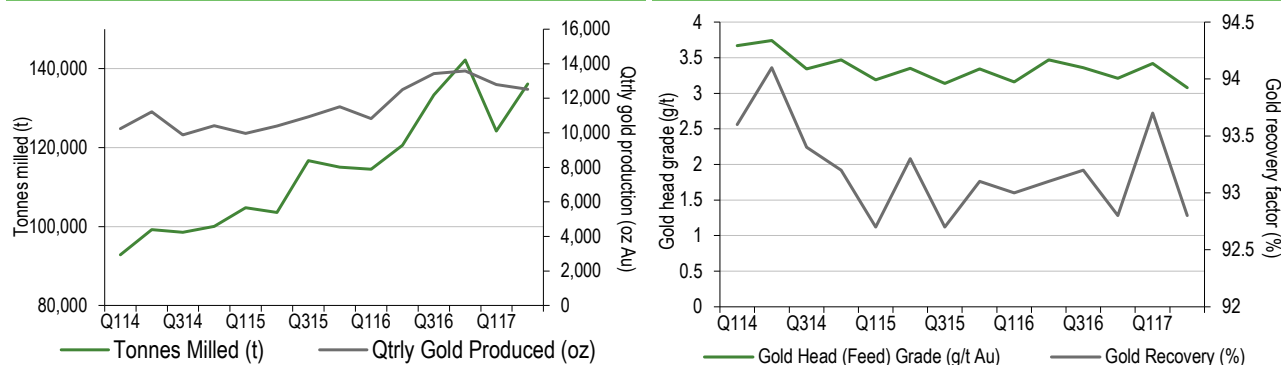
Exhibit 1: Long section of Blanket mine with ore bodies and main haulage development and shafts



Source: Caledonia Mining

This constraint on material handling around the Central Shaft development led the company to initiate a number of work programmes in an attempt to raise tonnes and thereby maintain gold production targets. For 2017, 60koz of gold were to be produced. However, as mentioned above, constraints on the 22 Level forced the company to revise this gold production target down to a range of 52-57koz. We have revised our model to reflect production of 54koz of gold, with 14.2koz produced in each of Q317 and Q417.

Production performance by quarter has seen a slight reduction in gold grades mined at Blanket, and this has been the overriding factor in the company's decision to downgrade its production guidance.

Exhibit 2: Quarterly gold production, tonnes milled, gold grade AND recovery data Q114-Q217


Source: Edison Investment Research, Caledonia Mining

Since the implementation of Caledonia's investment plan, gold grades have fluctuated between a high of 3.74g/t Au and a low reached Q217 of 3.08g/t Au, with an average of 3.35g/t Au. The major reason for this is the fact that the higher-grade Eroica and Lima ore bodies are unsympathetically located relative to the main No. 4 Shaft (used currently as the main haulage route to surface) relative to the Central Shaft development (see Exhibit 1). As a result, and to maintain the development schedule of the Central Shaft and associated lateral development below the 22 Level (horizontal red lines in Exhibit 1), the vast majority of gold ore had to be mined from the marginally lower-grade AR Main and AR South ore bodies.

As already stated by Caledonia, these production and gold grade issues are likely to persist until completion of the Central Shaft. We find it reassuring that this most critical of capital projects has seen above-budget development meterages achieved during the last quarter and that it is firmly on track to complete in mid-2018, with first production from the Central Shaft stated to come shortly before end 2018.

As can be seen from Exhibit 2 above (right-hand side), while the head grade at blanket has seen a gradual reduction over the past few quarters, tonnages trammed and hauled to surface (left-hand side) have seen a 300% increase since the tramming loop was completed.

Grade estimate revisions for H217 & H118 as Central Shaft completes

We have conservatively revised our gold grade forecasts downwards for the remainder of 2017 and the first half of 2018 to accommodate the haulage bottleneck on the 22 Level and the restricted access to higher-grade ore bodies while the Central Shaft development completes (due mid-2018).

Previously we had a grade of 3.66g/t mined during H217 and 3.71g/t Au mined during H118. We now anticipate that a gold grade reflecting the average of Blanket's head grades since Q114 is mined through H217 to H118 – 3.35g/t Au. We maintain gold recovery at 94% efficiency. This revision results in 14.2koz produced in Q317 and Q417, and 15.1koz produced in Q118 and Q218.

Capital projects status

The following points give an outline summary of the capital project works completed during Q217.

- AR South decline below 750m (22 Level): a conveyor belt was commissioned, the extraction haulage on 780m level was completed and work of the 785m extraction haulage level continues (these are represented as the two horizontal, red-shaded lines below 750m on Exhibit 1 above).
- Development on a second decline at the AR Main ore body is planned from 750m to 780m and will allow accelerated access to gold resources situated below the 22 Level.

- At the No. 6 Winze development, three haulages are being developed 870m below surface to link the Blanket section to the AR South and Blanket 2 and Blanket 4 ore bodies.
- On 22 Level an extraction haulage is being developed towards the Eroica orebody.
- Upgrade of electricity supply from the grid and the ring feed between the two standby generator farms at Central and four shafts. This is due to be completed by end 2017, with the purpose of stabilising the supply of Zimbabwean grid power.
- An upgrade of the metallurgical plant, including the installation of a third Knelson concentrator and vibrating Gemini table (ie gold processing equipment using gravity as the means of gold separation from crushed waste rock).

H117 and forecasts: Earnings back-weighted to H217

Quarterly income statement and earnings forecasts

The following exhibit provides historical 2017 quarterly income statements, as well as our forecasts for the remainder of the year. Assuming gold production comes in at the levels we estimate based on our in-house assertion of gold grades mined and tonnes hauled and processed, H217 should provide a considerable increase in earnings potential over that achieved in H117. Overall, following the revision in our production assumptions, we have had to downgrade our revenue and profit estimates for FY17. Our updated revenue and normalised PBT estimates are US\$67.6m (vs US\$76.2m) and US\$20.4m (vs US\$26.0m) in FY17, and US\$78.7m (vs US\$81.9m) and US\$24.9m (US\$26.8m) in FY18.

Exhibit 3: 2017 PL quarterly results and forecasts						
US\$'000s	Q117	Q217	H117	Q317e	Q417e	FY17e
Revenue (incl of refining costs and rebate)	16,449	15,484	31,933	17,813	17,813	67,560
Royalty	(823)	(776)	(1,599)	(834)	(834)	(3,267)
Operating costs	(9,098)	(8,814)	(17,912)	(9,263)	(9,263)	(36,439)
Depreciation	(882)	(859)	(1,741)	(953)	(953)	(3,647)
Gross profit	5,646	5,035	10,681	6,763	6,763	24,207
G&A	(1,441)	(1,493)	(2,934)	(1,183)	(1,183)	(5,300)
Share-based payments	(410)	(959)	(1,369)	-	-	(1,369)
Foreign exchange gain/(loss)	(64)	83	19	-	-	19
Other income	644	557	1,201	-	-	1,201
Operating profit	4,375	3,223	7,598	5,580	5,580	18,758
Net interest	(7)	(10)	(17)	135	135	253
PBT (FRS 3)	4,368	3,213	7,581	5,715	5,715	19,011
Tax (excludes deferred tax charge)	(1,460)	(2,090)	(3,550)	(1,783)	(1,783)	(7,116)
Deferred tax	-	-	-	-	-	-
PAT (FRS 3)	2,908	1,123	4,031	3,932	3,932	11,895
Minority interest	(570)	(429)	(999)	(891)	(891)	(2,781)
Forex translation differences	73	60	133	0	0	133
Attributable profit	2,411	754	3,165	3,041	3,041	9,114
EPS (IFRS)	21.5	6.1	27.6	28.9	28.9	86.4

Source: Caledonia Mining and Edison Investment Research

Share-based payment expense: a write-down has been made of the facilitation loan value linked to the reduction in interest paid by indigenous parties. Previously, the three loan accounts carried a Libor plus 10% interest rate. This has now reduced to Libor plus 7.5% and has incurred a US\$1.0m write-down, accounted for as a share-based payment due to the company's accounting treatment of its facilitation loans as share options.

Tax paid vs charged: the income statement has recorded high variable tax charges linked to Caledonia's capital expenditure amounts. This results in the actual amount of tax paid being far lower. This is due to the timing effects of capital expenditure, with a gross tax amount charged to the income statement and the actual amount of tax paid reflecting the taxable capex during the

given reporting period. The deferred tax liability is carried as a liability on Caledonia's balance sheet, which we estimate for FY17 will total US\$3.7m. The following exhibit provides an overview of the past three years of tax.

Exhibit 4: Comparison of P&L and cash flow tax values				
	2015	2015	2016	2017e
P&L tax charge (US\$ 000s)	(5,982)	(2,370)	(7,717)	(7,116)
Tax paid (US\$ 000s)	(4,526)	(1,462)	(2,466)	(3,750)
Difference between P&L & CF tax (%)	32%	62%	213%	90%

Source: Caledonia Mining, Edison Investment Research

Valuation: Reflects share consolidation 54koz for 2017e

In summary, we have made the following changes made to our model, and these drive our revised valuation of Caledonia's shares:

- Revised FY17 gold production down to 54koz by the mining and processing of 280kt over H217 at a gold grade of 3.35g/t and recovering 94% of the contained gold. Caledonia's revised FY17 production guidance is for 52-57koz of gold.
- A revision to H118 gold production estimates. This is to account for current logistical issues persisting until completion of the Central Shaft in mid-2018. We have revised our H118 gold grade down from 3.71g/t Au to 3.35g/t Au, and estimate that the company will mine 149.5kt of ore to produce 15.1koz of gold per quarter (previously 16.8koz). We then expect tonnages mined to be maintained at the same level to H118 in H218, while the gold grade improves to 3.71g/t as the Central Shaft development frees up access to higher-grade ore bodies.
- An increase in capex from US\$18m to US\$20m, as well as a US\$3m increase in prepayments. Both relate to IP implementation and early purchases on Central Shaft equipment.
- A recalculation of Caledonia's gold rebate (at 3.5% of total gold sales).
- We pro rata our FY17 gold price assumption to reflect spot gold price performance ytd. This has resulted in a 1.4% fall from US\$1,275/oz to US\$1,256/oz.
- We adjust the interest rate paid on the facilitation loan accounts owed to Caledonia, down from Libor plus 10% to Libor plus 7.5%. This adjustment is related to the US\$959k share based payment expense recorded in Q217, being a write-down of the value of Caledonia's outstanding facilitation loan amounts from the aforementioned change in the interest rate.
- Consolidating Caledonia's shares in issue on an effective 5:1 basis. This has resulted in a new number of shares in issue of 10,533,873.
- Adjusted the 1.375 cent quarterly paid dividend on a post-consolidation basis to 6.875 cents.
- Changed our US\$/£ forex rate from 1.25 to 1.29.

On the basis of the above, with all other mining assumptions unchanged, our valuation becomes 933p per share, placing Caledonia's current 510p share price at a hefty c 83% discount.

Financials

Caledonia had cash at end June of US\$10.9m, a q-o-q decrease of 7.2%. This was after capital expenditure of US\$7.5m, US\$1.4m in dividend payments and a US\$0.8m repayment of Caledonia's small term loan facility. Our full-year capital expenditure projection is for US\$20m spent at Blanket, indicating that the majority of capex will be spent over H217. Alongside our production assumptions noted above and earnings potential back-weighted to H217, we estimate that this will result in the company finishing FY17 with a cash position of US\$10.5m.

Exhibit 5: Financial summary

	US\$'000s	2015	2016	2017e	2018e
Year end 31 December		IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS					
Revenue		48,977	61,992	67,560	78,678
Cost of Sales		(35,796)	(38,500)	(43,353)	(47,484)
Gross Profit		13,181	23,492	24,207	31,194
EBITDA		8,967	23,257	23,774	29,847
Operating Profit (before amort. and except.)		5,645	19,766	20,127	24,647
Intangible Amortisation		0	0	0	0
Exceptionals		2,850	(788)	(1,369)	(1,000)
Operating Profit		8,495	18,978	18,758	23,647
Net Interest		(535)	(176)	253	210
Other financial items			0		
Profit Before Tax (norm)		5,110	19,590	20,380	24,856
Profit Before Tax (FRS 3)		7,960	18,802	19,011	23,856
Tax		(2,370)	(7,717)	(7,116)	(6,121)
Profit After Tax (norm)		2,740	11,873	16,630	18,736
Profit After Tax (FRS 3)		5,590	11,085	11,895	17,736
Minority interests		(811)	(2,797)	(2,781)	(3,217)
Net income (norm)		4,220	11,276	14,308	15,518
Net income (FRS3)		4,779	8,288	9,114	14,518
Average Number of Shares Outstanding (m)		10.6	10.6	10.6	10.6
EPS - normalised (c)		40.0	106.9	135.6	147.1
EPS - normalised and fully diluted (c)		34.6	92.4	134.4	145.7
EPS - (IFRS) (c)		8.9	79.5	86.4	137.6
Dividend per share (c)		23.7	28.4	27.5	27.5
Gross Margin (%)		26.9	37.9	35.8	39.6
EBITDA Margin (%)		18.3	37.5	35.2	37.9
Operating Margin (before GW and except.) (%)		11.5	31.9	29.8	31.3
BALANCE SHEET					
Fixed Assets		49,276	64,917	81,167	84,167
Intangible Assets		0	0	0	0
Tangible Assets		49,276	64,917	81,167	84,167
Investments		0	0	0	0
Indigenisation receivable		0	0	0	0
Current Assets		23,562	25,792	21,360	34,286
Stocks		6,091	7,222	4,492	4,623
Debtors		4,236	3,425	2,776	6,467
Cash		12,568	14,335	10,480	19,585
Other		667	810	3,611	3,611
Current Liabilities		(8,397)	(9,832)	(10,550)	(13,312)
Creditors		(6,709)	(9,832)	(10,550)	(13,312)
Short term borrowings		(1,688)	0	0	0
Long Term Liabilities		(14,080)	(19,365)	(19,365)	(19,365)
Long term borrowings		0	0	0	0
Other long term liabilities		(14,080)	(19,365)	(19,365)	(19,365)
Net Assets		50,361	61,512	72,612	85,776
Minority interests		(1,504)	(3,708)	(6,020)	(8,768)
Shareholder equity		48,857	57,804	66,592	77,008
CASH FLOW					
Operating Cash Flow		8,331	25,631	22,539	26,113
Net Interest		0	(194)	253	210
Tax		(1,462)	(2,466)	(3,750)	(6,121)
Capex		(16,567)	(19,885)	(20,000)	(8,200)
Acquisitions/disposals		0	3	0	0
Term loan facility and equity issuance		0	3,360	0	0
Dividends		(2,504)	(2,994)	(2,897)	(2,897)
Net Cash Flow		(12,202)	3,455	(3,855)	9,105
Opening net debt/(cash)		(23,082)	(10,880)	(14,335)	(10,480)
HP finance leases initiated		0	0	0	0
Other		0	0	(0)	0
Closing net debt/(cash)		(10,880)	(14,335)	(10,480)	(19,585)

Source: Caledonia Mining accounts, Edison Investment Research. Note: EPS is adjusted for deferred tax charge.

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