

Caledonia Mining

Doing everything you want a gold miner to do

Caledonia Mining (CMCL) beat its FY16 production target of 50kozpa by recording 50.4koz Au produced, with AISC costs down 12% y-o-y to US\$912/oz, while C1 costs dropped 9% due to a commensurate annual increase of 18% in gold ounces produced. Investment continues at Blanket to raise production towards 80kozpa by 2021, with US\$36m spent in the past two years alone, and another US\$18m due in 2017 before capex drops off markedly. The central shaft is on track and on budget for completion in mid-2018 and is two thirds-complete. While this investment takes place, CMCL carries a sound cash balance of US\$14.3m at end December 2016. The dividend yield is a high 3.8% and the stock is trading on a very low P/E of c 4x vs the FTSE miners index at 2.1% and 40x respectively.

Year end	Revenue (US\$m)	PBT* (US\$m)	EPS* (c)	DPS (c)	P/E (x)	Yield (%)
12/15	49.0	5.1	8.1	4.8	17.8	3.3
12/16	62.0	19.6	21.4	5.5	6.7	3.8
12/17e	76.2	26.0	35.6	5.5	4.1	3.8
12/18e	81.9	26.8	29.8	5.5	4.8	3.8

Note: *PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments.

Costs driven down by ramp-up

Caledonia's on-mine and all-in sustaining costs (AISC) continue to fall with 2016 recording a y-o-y decline in mine costs of 9.3% from US\$701/oz to US\$636/oz as production increased 18% in line with the Investment Plan (IP) roll-out. AISC decreased 12% from US\$1,037/oz to US\$912/oz. The AISC decrease in part reflects CMCL's accounting of the Zimbabwean government's 2016 launch of an export incentive credit rebate in H216 (see page 4).

Exploratory drilling replenishing gold stocks

Caledonia ramped up its underground drill programme in 2016, completing 22.2km of exploratory and resource definition drilling. This has resulted in a marked increase in resource confidence and the addition of new inferred material (page 3).

Valuation: Adjusted for FY16 results, forecasts intact

As a result of adjusting our model for FY16 results, royalty and rebate adjustments and using our gold price assumptions and maintaining our US\$/£ forex rate at 1.25, our combined dividend discount flow (of Blanket's free cash flow of production post-IP implementation) and DCF of vendor facilitation loan repayments increases slightly from 146p to 149p share. We also expect a 124% increase in headline EPS to 35.6c in 2017 (cf 15.9c reported in 2016). Our valuation uses a 10% discount rate to reflect general equity risk. Forcing our model's valuation of Caledonia's shares to its current share price (113p as of 12 April 2017) requires using a discount rate of 15.6% (in our Q317 note this was 16.3%). In our view this relatively low, and decreasing, hurdle rate represents a marked reduction in the country risk factor applied by the market to Caledonia's shares, and an increasingly positive view on CMCL's ability to deliver its IP successfully.

Q4 and FY16 financial results

Metals & mining

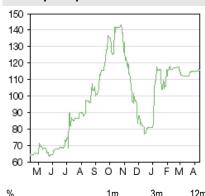
12 April 2017

N/A

Price	115.50p
Market cap	£61m
	US\$/£:1.25
Net cash (US\$m) 31 December 2016	14.3
Shares in issue	52.8m
Free float	97.7%
Code	CMCL
Primary exchange	AIM

Share price performance

Secondary exchange



%	1m	3m	12m
Abs	3.1	(0.9)	87.8
Rel (local)	2.5	(2.6)	58.9
52-week high/low	,	143.0p	63.5p

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

Q217 results	August 2017

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2016 and 2017: Production up and costs down

Caledonia's FY16 results show the company continues to run a tight ship at its 49%-owned Blanket gold mine in Zimbabwe. Effective control of its mining practices and increased underground mining flexibility are evident on the bottom line, with y-o-y EPS growth of 79%, simultaneously driven by the marked y-o-y increase in gold production to 50.4koz – a slight beat on Caledonia's guidance of 50koz for 2016.

The year ahead should continue the positive trend of 2016, with production up, costs down and positive cash generation comfortably covering capital outflow. Management targets 2017 production of 60koz, which in our view puts it well on track for its targeted 80koz in 2021.

Cash costs down: FY17 should see a further incremental drop

C1 equivalent on-mine cash operating costs fell for the second consecutive year, supporting the company's ability to implement significant capital expansion plans at Blanket. Cash operating costs were 9.3% lower y-o-y in 2016 and a further 3% drop is expected in 2017 as production ramps up to 60koz.

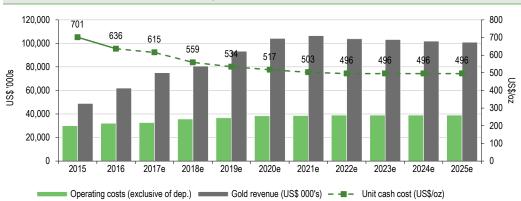


Exhibit 1: Cash cost profile, showing 2015 and 2016 reported numbers and 2017-25e

Source: Caledonia Mining and Edison Investment Research. Note: Solid line denotes reported numbers, dashed are forecast

We note from the company's MD&A that in Q416, on-mine costs were actually at our forecast for FY17 at US\$614/oz. Although quarterly production is relatively variable (as with all mines), this early sign that costs are coming down as planned is further support to management's ability to implement the Investment Plan.

Expansion plans: Central shaft key for 2017

With two elements of Caledonia's Investment Plan completed on schedule during 2016 (ie the No. 6 Winze and Tramming Loop), the company's main development focus is the sinking of the 1,080m planned Central Shaft. So far, this shaft has been excavated to a depth of 633m and is therefore roughly two thirds complete. The main phase of capital investment has now passed, with US\$36m expended over the course of 2015 and 2016, and the last major capital investment of US\$18m due over 2017. Most of this will be used to finish excavation and fit-out the Central Shaft ready for operation in mid-2018, as planned. Pre-development works underground, using the newly completed No. 6 Winze, have been completed and will ensure that once the Central Shaft is completed, first gold production can occur shortly thereafter.



Caledonia stated in its FY16 MD&A that the main impediment to the central shaft's development has been some intermittent loss of electricity to its shaft sinking equipment as a result of electricity supply difficulties from the Zimbabwean national grid. As a result, extra diesel-powered generators were installed in 2016 to provide additional power to the Central Shaft development as and when required.

Additional works to add flexibility at minimal cost

Caledonia has decided to tweak the internal structure to Blanket's haulage ways, beyond those originally provided by the Investment Plan. This is only a slight modification to the Investment Plan, incurring minor incremental costs, but should result in even greater flexibility as the mine establishes itself for long-term growth below the 750m Level.

These other projects are:

- The AR South Decline, completed in early 2016 to a depth of 780m, is now being extended to 870m or the 26 Level and will allow for more rapid access to deeper level gold resources.
- A second decline at AR Main will also be completed to a depth of 780m. Again, this will provide additional mining flexibility to access gold resources below the 750m Level.
- A further extension to the Tramming Loop is also being completed. This extension will decongest the Level 22 haulage way, and include a loop around all the grizzlies used on 22 Level. Grizzlies are parts of the mine where ore is screened for oversized pieces prior to haulage to surface.

Exploration drilling significantly raising resource confidence

To address the issue of lower-confidence resource ounces being present below the 750m Level, Caledonia materially stepped up resource delineation and exploration drilling over 2016. The company drilled 22,172m of drilling over 2016, 55% up on the year. This, backed by information generated from digitising historical production and exploration data has resulted in an increase in resources and reserves. Highlights of these programmes are:

- Addition of 1.2Mt of new mineralised inferred category material equating to 200koz grading 5.00g/t Au.
- Upgrading 343,000 tonnes grading 5.19g/t Au for 47,700oz Au from inferred to indicated category.
- 5% increase in code-compliant resources and a 13% increase in Proven and Probable reserves.

A note on geological digitising of old mine plans

As Caledonia formalises its digital models using old paper mine plans, we expect it to markedly increase its geological understanding of Blanket's numerous orebodies. Although orebodies can be relatively easily followed by miners underground, understanding the subtleties of orebody shapes and the nuanced interactions they can have with each other and various geological structures around them, can yield surprisingly positive results. We expect the company to continue to develop its own internal geological systems and for the results of these improvements to be borne out in a net positive gain for resources and reserves at year-end. New resource to reserve estimates are currently being compiled and will replace the old published ones released in 2014.

There is also the potential, however uncertain at present, that the digitising process could open up fresh lines of thought into Blanket's orebody genesis and provide new drill targeting techniques with the obvious potential positive impact it could have on gold resource and reserve levels.



Additionally, increased knowledge of the orebodies underground will allow tighter mine planning by engineers to take place, and potentially small improvements to grade control practices through optimised orebody wireframe modelling, in particular around production headings.

FY16 results and valuation adjustments

The following paragraphs highlight the key changes and main assumptions we use to value Caledonia's shares. For an extensive overview of the company's Investment Plan please read our January 2015 outlook note, Future-proofing Blanket.

Edison's gold price deck – in line with current levels long term

The model we use to forecast the gold price implicitly assumes a relationship between the total US monetary base, inflation and the gold price. In 2015 there was a (extremely rare) decline in the total US monetary base and (arguably conservative) absence of inflationary pressures. These combined to reduce the base for our longer-term analysis and, therefore, our longer-term numbers.

For further detail on the above method, please refer to page 48 of our October 2016 sector report: Mining overview: Gold and other metals.

We base our valuation of Caledonia's shares using the following gold price deck and apply it to our production forecasts which include the targeted 60koz in 2017.

Exhibit 2: Edison's gold price forecasts										
Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
US\$/oz	1,275	1,220	1,284	1,362	1,344	1,281	1,274	1,257	1,245	1,264
Source: Edison In	vestment F	Research								

Zimbabwean gold industry incentives

The Zimbabwean government reduced the royalty rate paid on incremental gold production in 2016 from 5% to 3%. For Caledonia, this meant that for the additional 7,196ozs of gold it produced in 2016 compared to 2015, it saved a modest US\$181k which will be offset against royalty payments due in 2017. We assume this continues into 2017 and 2018, which covers off the main phase of development at Blanket, but resist applying this royalty reduction longer term due to potential changes in its structure.

Using our gold price assumptions (see Exhibit 2) and the estimated annual gold production amounts as outlined in the IP for 2017 and 2018 results in the following small royalty savings:

Exhibit 3: Revised royalty payment amounts 2017 and 2018						
(US\$m)	Old royalty charge	New royalty charge	Change (%)			
2017	3.8	3.6	-6%			
2018	4.1	3.9	-4%			
Source: Edison Inv	estment Research					

Export incentive credit (EIC) introduced to promote gold mining

In May 2016, the Zimbabwean government announced an export incentive scheme designed to promote increased gold mining and therefore increase the amount of gold the country can export. The export incentive provided to Blanket was 2.5% of the sale proceeds from the gold sold to the Fidelity refinery in Harare. Caledonia recorded the majority of this incentive in Q417, which was the reason all-in sustaining costs were much lower than in previous periods. The total amount under the export incentive scheme received by Caledonia was US\$1.1m.



We note from management that the scheme has recently increased the rebate on sales from 2.5% to 3.5%. In terms of adjusting our forecasts for this rebate, we increase our gold revenues by 3.5% of total sales across our valuation period 2017 to 2026 as shown in Exhibit 4.

Exhibit 4: Edison forecast for export incentive credit rebate over valuation period											
	Unit	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Gross gold revenue	US\$ 000s	76,223	81,856	94,671	105,818	108,137	105,410	104,834	103,435	102,448	104,01
Rebate at 3.5% of total sales	US\$ 000s	2,668	2,865	3,313	3,704	3,785	3,689	3,669	3,620	3,586	3,640
Source: Edison Investment Research. Note: Our estimates of the rebate on total gold sales before refining or royalty costs are applied											

Cash build expected to accelerate post 2017

Caledonia invested US\$19m over 2016 and after all mine and head office costs, finished the year with a net cash position of US\$14.3m, a 33% y-o-y increase. Note that with production expected to reach 60koz for 2017 and costs expected to decrease as fixed costs (which at Blanket account for approximately 60% of total mine costs) are spread over more ounces, we expect a further 6% increase in cash to US\$15.3m. This assumes US\$18m in capex spent in 2017, as well as a gold price of US\$1,275/oz.

2018 should see a doubling in cash

Looking further ahead, as capex drops off markedly in 2018 (only US\$8.2m is forecast for 2018) and production increases from 60koz to 67koz, cash build should accelerate considerably with a doubling of cash to US\$29.4m at end 2018, we estimate.

Dividend increased and policy looks sustainable

Caledonia guides that its recently increased 5.5c annual dividend paid in 1.375 cent amounts, will be maintained and is covered three times by cash. For reference, the FTSE Mining Index average cash cover is only 1.1x, making Caledonia appear a far lower risk investment in terms of dividend sustainability. We include this dividend in our model for both 2017 and 2018.

Valuation: Export incentive drives moderate increase

As a result of adjusting our model for FY16 results, royalty and rebate adjustments and using our gold price assumptions and maintaining our US\$/£ forex rate at 1.25, our combined dividend discount flow (of Blanket's free cash flow of production post-IP implementation) and DCF of vendor facilitation loan repayments increases by 2.0% from 146p to 149p per share. This is at a 10% discount rate to reflect general equity risk. Forcing our model's valuation of Caledonia's shares to its current share price (113p as of 12 April 2017) requires using a discount rate of 15.6% (in our Q317 note this was 16.3%). This relatively low hurdle rate represents, in our view, a marked reduction in the country-risk factor applied to Caledonia's shares, as well as a significantly more positive view on the company's ability to deliver its IP on time and on budget, which is now two years completed.



US\$'0	00s 2015	2016	2017e	2018
Year end 31 December	IFRS	IFRS	IFRS	IFR
PROFIT & LOSS				
Revenue	48,977	61,992	76,225	81,85
Cost of Sales	(35,796)	(38,500)	(44,181)	(47,847
Gross Profit	13,181	23,492	32,045	34,01
EBITDA	8,967	23,257	29,556	31,66
Operating Profit (before amort. and except.)	5,645	19,766	25,745	26,46
Intangible Amortisation	0	(700)	0	
Exceptionals	2,850 8,495	(788) 18,978	25,745	26,46
Operating Profit Net Interest	(535)	(176)	25,745	20,40
Other financial items	(555)	(170)	201	31
Profit Before Tax (norm)	5,110	19,590	26,031	26,83
Profit Before Tax (FRS 3)	7,960	18,802	26,031	26,83
Tax	(2,370)	(7,717)	(3,750)	(7,345
Profit After Tax (norm)	2,740	11,873	22,281	19,49
Profit After Tax (FRS 3)	5,590	11,085	22,281	19,49
Minority interests	(811)	(2,797)	(3,502)	(3,765
Net income (norm)	4,220	11,276	18,779	15,72
Net income (FRS3)	4,779	8,288	18,779	15,72
Average Number of Shares Outstanding (m)	52.1	52.8	52.8	52.
EPS - normalised (c)	8.1	21.4	35.6	29.
EPS - normalised and fully diluted (c)	8.1	21.4	35.6	29.
EPS - (IFRS) (c)	8.9	15.9	35.6	29.
Dividend per share (c)	4.8	5.5	5.5	5.
Gross Margin (%)	26.9	37.9	42.0	41.
EBITDA Margin (%)	18.3	37.5	38.8	38.
Operating Margin (before GW and except.) (%)	11.5	31.9	33.8	32.
BALANCE SHEET				
Fixed Assets	49,276	64,917	79,106	82,10
Intangible Assets	0	04,517	0	02,10
Tangible Assets	49,276	64,917	79,106	82,10
nvestments	0	0	0	02,10
Indigenisation receivable	0	0	0	
Current Assets	23,562	25,792	26,867	41,57
Stocks	6,091	7,222	4,444	4,62
Debtors	4,236	3,425	3,133	6,72
Cash	12,568	14,335	18,480	29,41
Other	667	810	810	81
Current Liabilities	(8,397)	(9,832)	(7,753)	(10,730
Creditors	(6,709)	(9,832)	(7,753)	(10,730
Short term borrowings `	(1,688)	0	0	
Long Term Liabilities	(14,080)	(19,365)	(19,365)	(19,365
Long term borrowings	0	0	0	//0.00
Other long term liabilities	(14,080)	(19,365)	(19,365)	(19,365
Net Assets	50,361	61,512	78,855	93,58
Minority interests Shareholder equity	(1,504) 48,857	(3,708) 57,804	(6,739) 72,116	(10,034 83,55
	40,037	37,004	72,110	00,00
CASH FLOW				
Operating Cash Flow	8,331	25,631	28,512	29,01
Net Interest	0 (4.400)	(194)	287	37
Tax	(1,462)	(2,466)	(3,750)	(7,345
Capex Acquisitions/disposals	(16,567)	(19,885)	(18,000)	(8,200
Acquisitions/disposals Term loan facility and equity issuance	0	3,360	0	
Dividends	(2,504)	(2,994)	(2,903)	(2,903
Net Cash Flow	(12,202)	3,455	4,145	10,93
Opening net debt/(cash)	(23,082)	(10,880)	(14,335)	(18,480
HP finance leases initiated	(23,002)	(10,000)	(14,333)	(10,400
Other	0	0	(0)	(0
Closing net debt/(cash)	(10,880)	(14,335)	(18,480)	(29,412



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