

# Caledonia Mining

## Discounted gold

Caledonia Mining (Caledonia) has had a good start to 2018 and its share price is up 22.5% year to date. Caledonia produced 56.1koz of gold during 2017, marginally beating its guidance for production of 54-56koz, despite suffering from electricity shortages and underground logistical issues (which it has since addressed). It remains on track to deliver output of 80koz by 2021 (all funded from internally generated cash flow). With capex peaking this year, we see a marked improvement in cash-flow generation, opening up the possibility of dividend increases beyond 2019.

In addition to an improving political backdrop in Zimbabwe, Caledonia will also benefit from an increase in the country's export credit incentive, from 2.5% to 10% of sales, for 2018. Caledonia expects to see an increase in income of US\$5.1m as a result. Despite these developments, Caledonia is trading at a marked discount to our NAV estimate of 884.7p per share.

Caledonia's Blanket mine was Zimbabwe's first fully indigenised mining operation. Caledonia has a 49% interest in the mine although, through the structure of its indigenisation arrangement, it participates in the mine's cash flow at the much higher level of 77%.

Year	Gold prod. (koz)	AISC (US\$/oz)	Rev. (US\$m)	EBITDA (US\$m)	EBITDA margin (%)	EPS* (USc)
2018f	59.0	799	83.3	32.5	39	169
2019f	61.0	842	80.3	30.0	37	150
2020f	68.0	758	89.5	38.8	43	150

Source: Marten & Co \* Attributable to Caledonia shareholders after non-controlling interests

## Valuation summary

Our analysis, using a long-term gold price of US\$1,300/oz, leads to an NPV<sup>15%</sup> for Caledonia's share of Blanket cash flows of 785.14p per Caledonia share and a NAV for the company of 884.7p per share. This suggests that Caledonia is currently trading in London at a discount of 29.4% to NAV.

<b>Listed</b>	AIM, TSX, NYSE America
<b>Tickers</b>	CMCL LN CAL CN CMCL US
<b>Base currency</b>	GBP
<b>Price</b>	625.0p
<b>Daily volume (1-year average)</b>	4.2k shares
<b>1-year high</b>	702.5p
<b>1-year low</b>	415.0p
<b>1-month performance</b>	(9.1%)
<b>3-month performance</b>	19.6%
<b>1-year performance</b>	28.9%
<b>Calendar YTD perf.</b>	22.5%
<b>Yield*</b>	3.2%

\*Note: based on a quarterly dividend of US\$6.875c per share and a share price of US\$8.63 per share as at 3 July 2018.

## Caledonia v MSCI ACWI Natural Resources (rebased)

Time period: 03/07/2013 to 03/07/2018



Source: Bloomberg, Marten & Co

<b>Net cash (US\$m)</b>	13.4
<b>NAV<sup>15%</sup> p/share</b>	884.7
<b>P/NAV</b>	0.71
<b>Market cap (GBPm)</b>	66.3
<b>Shares outstanding (m)</b>	10.6

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Further information regarding Caledonia can be found at the company's website:

[www.caledoniamining.com](http://www.caledoniamining.com)

Readers may also be interested in our previous notes (please see page 29 of this note).

Please see the glossary at the back of this note for an explanation of some of the terms used in this note.

## Introduction

Caledonia is a gold-mining company with an operating mine in the southern region of Zimbabwe that is expected to produce between 55 and 59koz of gold in 2018.

The company's shares trade on London's AIM (symbol: CMCL), the Toronto Stock Exchange (symbol: CAL) and, since July 2017, the NYSE American exchange (symbol: CMCL). A five-for-one share consolidation was undertaken in conjunction with the NYSE American listing in order to comply with that exchange's US\$5 minimum share-price criteria. As at 3 July 2018, Caledonia had 10.6m shares outstanding and a market capitalisation of £66.3m.

### Single-asset mining company, with a high dividend

Caledonia is a single-asset mining company that is registered in Jersey. All of its value is derived from its Blanket mine in Zimbabwe. Caledonia acquired a 100% interest in the Blanket mine from Kinross Gold in 2006. In 2012, it transferred a 51% interest in the mine to various local parties to comply with a new indigenisation law, although it currently participates in Blanket's cash flow at the much higher level of 77% because of the way the indigenisation deal was facilitated.

Caledonia is currently embarking on an expansion programme, which it is funding from current and future cash flow, to increase gold production at the Blanket mine to 80koz per year by 2021.

Caledonia currently pays quarterly dividends of US\$6.875c per share, which is equivalent to a yield of 3.2% on the share price of US\$8.63 as at 3 July 2018.

## Key investment points

Since our last note in April 2017, Caledonia has:

- undergone a five-for-one share consolidation;
- listed on the NYSE American;
- increased resources;
- announced an extension to the Central Shaft sinking project; and
- presented a new mine plan with an extended mine life.

The following are the key investment points.

- The company currently pays a quarterly dividend of US\$6.875c per share, implying a yield of 3.2% (see page 7).
- 2017 basic EPS was up 8.9% to US\$0.86 (2016: US\$0.79).
- 2017 net profit rose 7.3% to US\$11.9m (2016: US\$11.1m).
- Net profit attributable to Caledonia's shareholders increased by 10.1% to US\$9.4m from US\$8.5m in 2016.
- Since our last note our long-term gold price assumption has reduced from US\$1,350/oz to US\$1,300/oz.
- The US-dollar exchange rate has also changed from 1.23 to 1.35.

- Our modelling suggests that the company should see further growth in EPS and we believe that the company will have sufficient funds to increase the dividend beyond 2019 (see page 12).
- Gold production in 2017 was 56.1koz, up 11.5% on 2016 (50.4koz), driven by increased production and a higher grade.
- Tonnes milled for the year were a record 547kt, an increase of 7.0% over 2016's 511kt, which was also a record (see page 6).
- On-mine unit costs were reduced by 0.5%, to US\$633/oz, (2016: US\$636/oz) and AISC by 7.1%, to US\$847/oz.
- The mine is targeting a further increase in production to approximately 60koz in 2018, at an AISC of US\$810-850/oz, and 80koz by 2021 (see page 6).
- The expansion in production is being funded internally (see page 7).
- The company completed significant elements of the expansion programme in 2016, with the key element, a new vertical shaft, on schedule for mid-2018 completion (see pages 6 to 8).
- The company is set to benefit from an increase in Zimbabwe's export credit incentive, which is paid to all gold miners, for 2018. This has been increased, for one year only, from 2.5% to 10% of sales. Caledonia expects to see an increase in income for 2018 of US\$5.1m as a result.
- We project an NAV<sup>15%</sup> of 884.7p per share (see page 9).
- Shares are currently trading at a 29.4% discount to NAV.
- Year-to-date stock-market performance showed a rise of 22.5%.
- The company has cash of US\$15.0m and debt of US\$1.6m.

## Investment case

### Political change to unlock full potential?

On 4 December 2017, Zimbabwe's new president, Emmerson Mnangagwa, and his new cabinet took office.

The installation of Mr Mnangagwa as president, after Robert Mugabe's resignation at the end of November, marks the first change in head of government since the country's independence in 1980. Although Zanu-PF remains the ruling party, and the new president is in many ways a like-for-like swap, the rest of the world seems to regard the removal of Mr Mugabe as the most significant factor to offer hope for the country's economy.

The new president has called for public unity, to revive Zimbabwe's sickly economy.

Observers and commentators around the world seem to be in accord that Mr Mnangagwa's approach will be much more pragmatic than that of his predecessor. It is thought that he may be able to engage with foreign governments and secure the trade, aid and investment packages that the country desperately needs. He has called for public unity to revive the country's sickly economy.

The 51% local ownership requirement has been relaxed for all sectors other than diamonds and platinum.

Caledonia would consider purchasing the government and Fremiro stakes in Blanket.

Relaxation of the indigenisation laws creates opportunities for Caledonia to purchase other assets.

## Zimbabwe's indigenisation laws have been relaxed

A key development has been a relaxation of the country's indigenisation laws, which came into effect in April 2018. The indigenisation laws, which required 51% control by locals in major sectors of the economy, have long been blamed for deterring foreign investment. It is argued that this has put a brake on employment in a country that reportedly has an unemployment rate in excess of 90%. It was these laws that led Caledonia to carry out its indigenisation plan in September 2012 (see Appendix 1 on page 29 of this note), which saw a 51% stake in Blanket mine transferred to various local groups. Following the relaxation of the laws, investment in all sectors, other than diamonds and platinum, is open to all investors regardless of nationality.

Caledonia has made various public statements in the past that, in the event that the indigenisation laws were relaxed, it would consider buying the government and Fremiro stakes. However, this would require that the other shareholders in Blanket were willing sellers at a price that makes sense to Caledonia. Caledonia would, however, like to keep the workers' and community trusts in place as shareholders.

It is too early to say whether Caledonia's fellow shareholders in Blanket will be looking to divest their stakes, at what prices such transactions might occur and what the timing might be. However, the relaxation of indigenisation laws creates opportunities for Caledonia to both increase its stake in Blanket, should it be able to conclude a transaction at agreeable terms, and to consider purchasing other assets where it believes these are value accretive. It seems reasonable that Caledonia, with its existing presence in Zimbabwe, should have a strategic advantage over other foreign investors that do not have a successful track record of operating in what can be a challenging jurisdiction. Our expectation is that the relaxation of the indigenisation laws should be beneficial to Caledonia over the longer term although it is too early to quantify this.

Currently Caledonia is trading at a discount to NAV, whereas most TSX-listed gold companies are trading at par value. We believe that this discount is a result of the 'Zimbabwe factor' or, more accurately, the 'Mugabe factor' and fails to take into account the fundamental strength of the business. However, with Mr. Mugabe's departure, and signs that more business-friendly policies are coming through, we see the potential for this discount to narrow.

## Increasing production and margins

The Blanket mine produced marginally in excess of revised guidance in 2017 (56.1 koz), which is an increase of 11% on 2016. The mine has increased gold production each year since 2014.

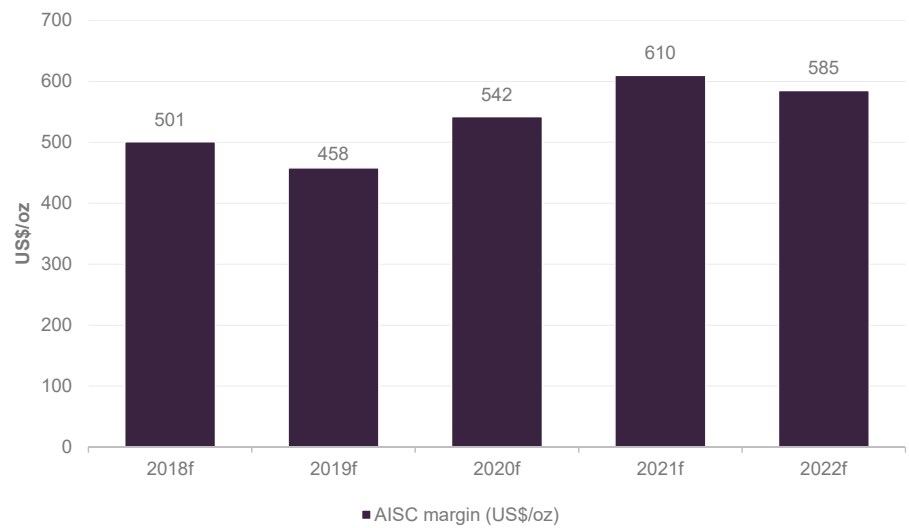
Through a major expansion programme at the mine, production is targeted at 80koz by 2021.

As the Central Shaft and associated level development opens up the deeper areas of the resource base, the efficiency of mining and rock transport is expected to improve, which will have a beneficial effect on unit operating costs.

The grade of resources in the deeper areas of the mine is higher than reserves and this too should have a positive impact on operating costs.

Overall, with increased gold production, unit costs are expected to fall and thus margins are expected to increase.

Figure 1: AISC margin (US\$/oz)



Source: Marten & Co

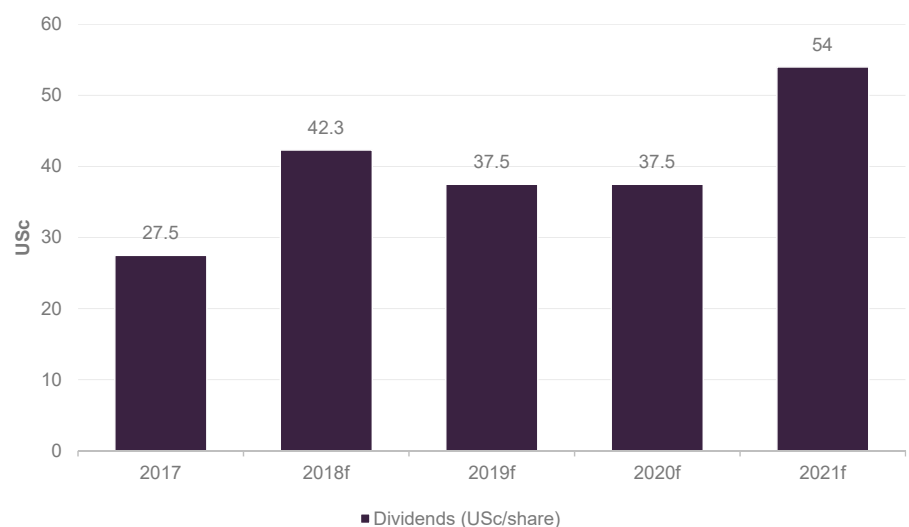
## High dividend yield

Caledonia has been paying a quarterly dividend since the beginning of 2014.

In July and October 2017 (post a five-for-one share consolidation), Caledonia declared quarterly dividends of US\$6.875c per share. The company’s policy is to maintain dividends at this level, suggesting an annual dividend totalling US\$27.5c per share. Based on the current share price of US\$8.63, this represents an indicative yield of 3.2%.

With forecast robust cash flow after the completion of the internally funded capital-expansion programme, we believe that the company will have the financial strength to increase dividends.

Figure 2: Forecast dividends (USc/share) assuming dividends are covered at four times attributable earnings



Source: Marten & Co

Caledonia is currently paying dividends at a ratio covered four times by attributable earnings. Based on this ratio, we estimate that dividends could rise to US\$42.3c per share in 2018, an indicative yield of almost 4.9%. However, this in part reflects the increased cash flow that Caledonia benefits from as a result of the export credit incentive being increased to 10% for 2018. Given Caledonia's capex requirements, an increase in the dividend could be delayed until 2019. However, we believe that, once the major capital spending on the Central Shaft is completed, the company can potentially increase its dividends substantially. Although the government has not suggested extending the increase in the export credit incentive beyond 2018, it stands to reason that should this remain above the long-term 2.5% level, this would be positive for Caledonia's cash flow and also increase its dividend paying capacity further.

The dividend-to-revenue ratio is currently around 4% and our conservative projections assume that Caledonia pays at a ratio of 5-7% throughout the forecast period.

## Supportive partners

In 2012, the Zimbabwean government passed legislation requiring companies to allow indigenous groups to participate to the extent of 51% in any gold-mining operations.

Caledonia instituted an innovative mechanism and structure that complies fully with the legislation but, importantly, allows the company to retain a majority share of cash flow (77%) from Blanket for a number of years.

Representatives from the respective individual indigenous partners, including Government, (see Appendix 1) sit alongside Caledonia personnel on the management board of Blanket. These representatives have been fully supportive of the expansion plans although it meant that they had to forego dividends for 2015 and 2016 when cash flow was redirected to the expansion programme.

The minority shareholders remain supportive of the new investment plan that will ultimately create more value for all shareholders. It is apparent that the company receives broad support from the local community as well.

## Resource estimate increased

In 2017, Caledonia increased the resource estimate for Blanket. Much of the increase came from new Inferred resources in the deeper areas of the mine where the company has conducted drill programmes using recently developed winzes and levels.

Inferred resources are up 47%, to 5.5Mt at a grade of 4.99g/t gold, for 887koz of gold contained, reflecting increased drilling and development below the 750m level where most of the Inferred resources are located.

The resources in the deep areas of the mine are of a higher grade than current reserves (4.99g/t against 3.66g/t) and although Inferred resources have lower confidence, when these resources are brought into the mine plan in 2023, they are expected to have a positive impact on mined grade.

The expansion of resources has also increased the expected mine life by four years.



## Valuation

We value Caledonia on a sum-of-the-parts NAV basis through a discounted cash flow (DCF) analysis, taking into account the after-tax NPV of the future dividend stream and repayment of facilitation loans from Blanket mine at a discount rate of 15%, which we feel is appropriate to reflect the risk of operating in Zimbabwe.

We use a long-term real (2018) gold price of US\$1,300/oz (previously US\$1,350/oz).

This approach leads to a NPV<sup>15%</sup> for Caledonia's share of Blanket mine dividends of 785.14p per Caledonia share and a NAV for the company of 884.7p per share, suggesting that Caledonia is currently trading in London at a discount of 29.4% to that NAV. Historically, our valuations have included a management fee but this is in the process of being phased out by the company. Our valuation includes a management fee for Q1 2018 and not beyond. Caledonia says that the management fee has become quite tax inefficient, which has driven its decision to cancel it. Removing the management fee reduces Blanket mine's costs which allows Caledonia to benefit from a higher dividend from Blanket mine instead. Our previous valuation of Caledonia (prior to the share consolidation, adjustment for the 2018 export incentive credit and change in the management fee) was 218.0p per share, equivalent to 1,090p per share after adjusting for the consolidation.

Our NAV for the company has benefitted from a declining capital spending programme, against the background of increasing gold production and revenue, and the increased export credit incentive for 2018. However, these benefits have been more than offset by the reduction in the long-term gold price and strengthening of sterling against the US-dollar.

Blanket mine dividends are defined as free cash flow (i.e. after all expenses and capital) and we assume that 100% is paid out each year to the shareholders.

Caledonia will receive 77% of Blanket mine dividends until the vendor loans are repaid, which will be in 2022, according to the base case in our model.

Despite only holding a 49% equity interest in the Blanket mine, through the mechanics of the indigenisation process completed five years ago, currently Caledonia receives over 77% of the dividend flow (including facilitation loan repayments) from the mine, while the vendor loans it made are being repaid. We project that the repayment of the loans should happen in 2027 in our base case. At the higher price-sensitivity analyses that we conducted, Caledonia's interest will revert to the basic 49% earlier as higher dividend payments facilitate faster loan repayment.

Our revenue forecast assumes that the company continues to enjoy the export credit incentive. The government awarded and paid this for 2016, at a rate of 3.5% of gold sales, which then reverted to its previous level of 2.5% before the government then announced this has been increased to 10% for the 2018 year. We assume that this reverts to its 2.5% level thereafter.

Our valuation is summarised in the table below.

Figure 3: Base case valuation model for Caledonia

	US\$m	£m	p/share
NPV <sup>15%</sup> Blanket Mine dividends	112.4	83.2	785.1
NPV <sup>15%</sup> Blanket Mine management fee	0.9	0.6	5.9
Net cash (31 Mar 2018)	13.4	9.9	93.6
<b>NAV</b>	<b>126.6</b>	<b>93.8</b>	<b>884.7</b>

Source: Marten & Co

£/US\$ exchange rate = 1.35

## Mine models - inputs and outputs

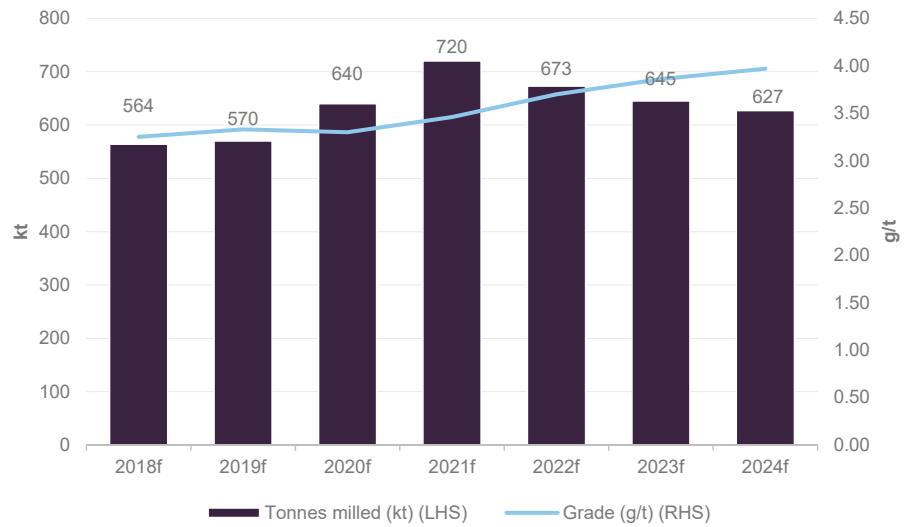
Figure 4: Caledonia model assumptions and parameters

Parameter	Value	Source
Reserves	336koz @ 3.66g/t	Caledonia
Measured and indicated resources (M&I)	715koz @ 3.95g/t	Caledonia
Inferred resources	887koz @ 4.99g/t	Caledonia
Life of mine	15 years	Caledonia
Average production rate	581kt/y	Caledonia/Marten & Co
Average annual gold production	71koz	Caledonia/Marten & Co
Maximum annual gold production	80koz	Caledonia
Average LOM milled (production rate)	581kt/y	Caledonia/Marten & Co
Average LOM grade	3.91 g/t	Caledonia/Marten & Co
Average LOM recovery	93%	Caledonia/Marten & Co
Average total cash cost	US\$681/oz	Caledonia/Marten & Co
Average LOM AISC	US\$715/oz	Caledonia/Marten & Co
Average LOM AIC	US\$826/oz	Caledonia/Marten & Co
Total expansion capital (2018-2022)	51	Caledonia
Total LOM sustaining capex	87	Caledonia/Marten & Co
Long-term gold price*	US\$1,300	Marten & Co
Corporate taxation rate (Zimbabwe)	25.75%	Government
Royalty on gold sales (not allowable for tax)	5.0%	Caledonia
Capital allowance	100% in year expended	Caledonia
US\$/£ exchange rate	1.35:1	Marten & Co
Depreciation	Straight line, LOM	Marten & Co
Export credit incentive for 2018	10%	Caledonia
Export credit incentive post 2018	2.5%	Caledonia

Source: Caledonia Mining, Marten & Co \*Note: See pages 25 and 26 for a discussion of the gold market and long-term gold price.

Figure 5 shows how the tonnes milled are expected to increase over the next eight years. In the initial years, all ore is sourced from above 34 level (1,110m) but then from 2023 this ore is replaced by higher-grade ore from below the 1,110m level.

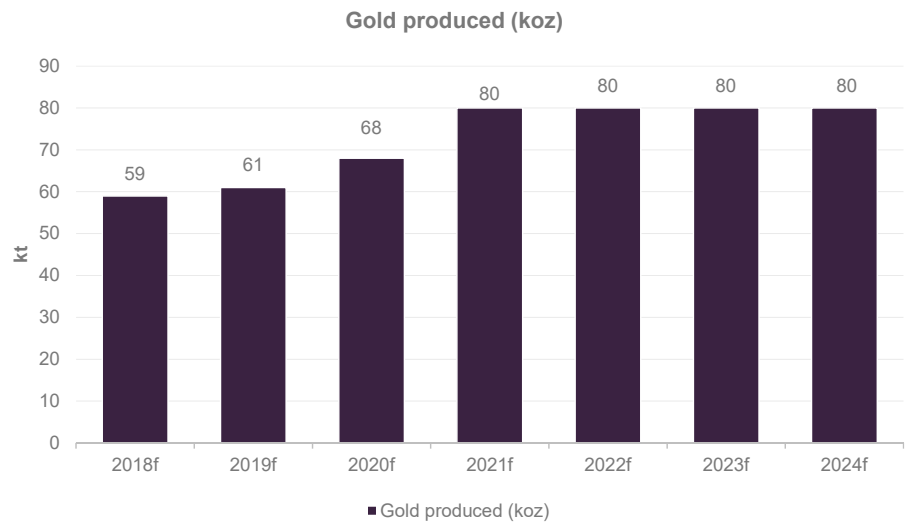
Figure 5: Tonnage and grade forecasts



Source: Caledonia Mining, Marten & Co

The higher grade from 2021 means that the mine can maintain the gold production rate at 80koz/y despite a slightly lower milling rate, as shown in Figure 6.

Figure 6: Gold production forecasts

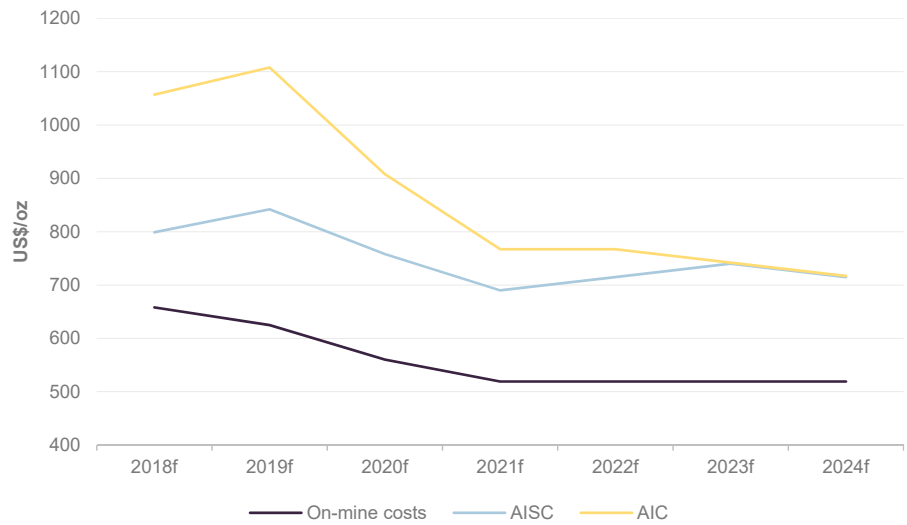


Source: Caledonia Mining, Marten & Co

The 45% increase in gold production from 2020 to 2021 has a noticeable beneficial impact on unit costs as the chart below demonstrates. Thereafter, AISC costs increase slightly for a short period as a result of an increase in sustaining capital.

AISC and AIC start to converge as the capital for the investment programme ceases.

Figure 7: Gold cost forecasts

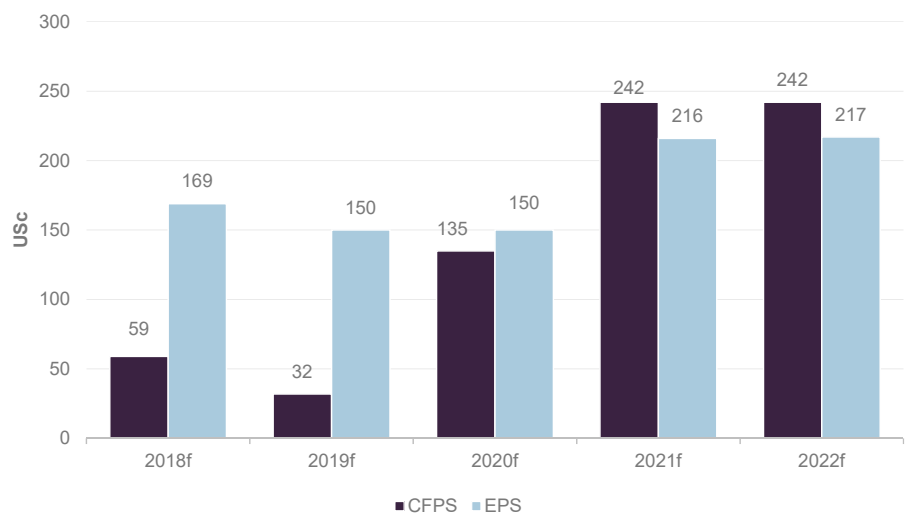


Source: Marten & Co

Using our base case assumptions and forecasts, we project per share cash flow and attributable earnings for Caledonia in US cents, as shown in Figure 8 below.

The sharp jump in EPS in 2021 is due to the increased gold production from 68koz in 2020 to 80koz in 2021 and arises despite an increase in depreciation charges as the Central Shaft project starts to be depreciated on completion.

Figure 8: Operational cash flow after capex and earnings forecasts (USc/share)



Source: Marten & Co

## Sensitivity analysis

We have used a 15% discount rate in our base case modelling, but for comparison we show below NAV values at other discount rates.

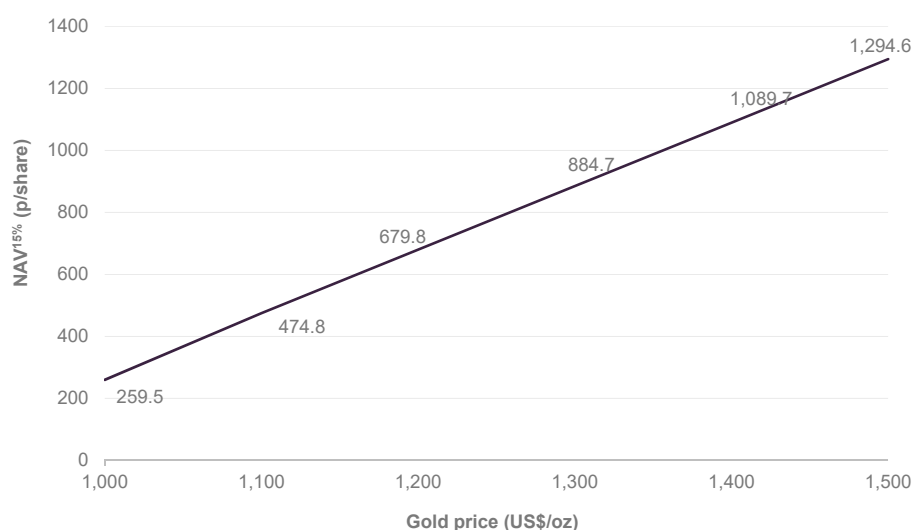
**Figure 9: Sensitivity of NAV at US\$1,300/oz gold price to various discount rates**

Discount rate	NAV (p/share)
8%	1,165.2
10%	1,070.5
12%	988.5
<b>15%</b>	<b>884.7</b>
18%	799.5
20%	750.9

Source: Marten & Co

We have also stress-tested the project against volatility in the gold price, which is the most critical variable as far as profitability is concerned. Figure 10 shows how the NAV varies with gold prices.

**Figure 10: Caledonia NAV<sup>15%</sup> at various gold prices (p/share)**



Source: Marten & Co

## Comparative valuation

It is usually instructive to gain a comparative valuation of a company by considering the value the market places on similar companies in terms of enterprise value per resource ounce of gold (EV/oz).

There are very few single-asset African mining companies who bear comparison with Caledonia in terms of size and type of gold production.

Comparison with Zimbabwean gold producers is difficult as most of the gold companies are only listed on the Zimbabwe Stock Exchange or are privately held and so there is insufficient data to perform a full analysis. Zimbabwean ASA Resources, which is listed in London and produces around 60 koz/y of gold from its 85%-owned Freda Rebecca gold mine, is currently in administration.

We have compiled a list of some of the African gold companies to give an idea of relative rating in terms of EV/oz.

**Figure 11: Comparative valuation for selected African gold producers**

Company	M&I resources (Moz)	Mkt. cap (US\$m)	Enterprise value (US\$m)	EV/oz	Country
Asanko Gold	6.6	234.8	355.1	53.8	Ghana
Pan African Resources	22.3	203.7	201.7	9.0	South Africa
Shanta Gold	0.9	54.3	132.8	147.6	Tanzania
<b>Caledonia Mining</b>	<b>0.7</b>	<b>90.6</b>	<b>76.0</b>	<b>108.6</b>	<b>Zimbabwe</b>

Source: Marten and Co

Despite its large resource base, Pan African trades at a very low valuation through a heavy discount

Shanta Gold is another gold producer that bears some comparison with Caledonia, as it has a similar gold output to Blanket and has one operating asset. However, it mines high-grade gold by open-pit methods and is thus low cost, which accounts for its relatively high valuation.

Looking at a wider universe of gold producers on the TSX, most are currently trading at 1x NAV (against 0.71 x NAV for Caledonia) and very few pay a dividend (against Caledonia's dividend yield of 3.2%).

## Blanket gold mine

### Location

The Blanket mine is located 150km from Bulawayo and approximately 15km from the town of Gwanda, in Matabeleland South, Zimbabwe.

Access is by way of a tarred road from Gwanda, which connects with the national highway to Bulawayo and to the South African border at Beit Bridge, some 196km to the south east. Consumables and materials are imported by road from South Africa.

Water is supplied from a nearby dam and power is supplied from Zimbabwe's national grid. The mine has an "uninterrupted power supply" agreement with the state electricity supplier, ZESA. As a back-up in case of any power outages, the company has four 2.5 MW diesel generators, which can produce sufficient power to run both the mine and the plant.

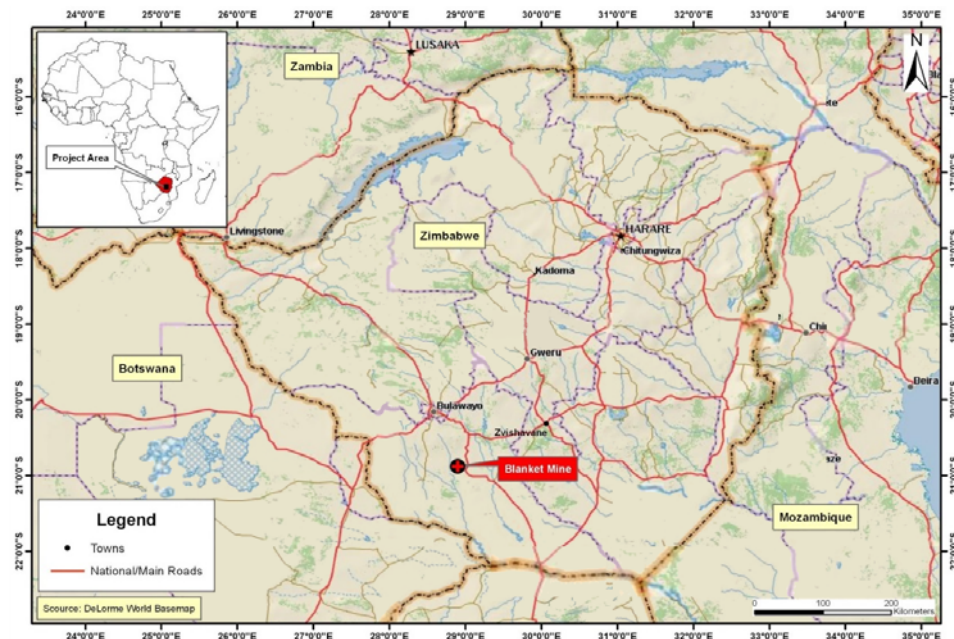
Figure 12: No. 4 Shaft and the mill at Blanket



Source: Caledonia Mining

Production in 2017 was disrupted by an inconsistent supply of electricity from the national grid, so management has installed equipment to regulate the incoming electricity supply. It has also put two stand-by generator farms in place, which were operational by the end of 2017.

Figure 13: Location of the Blanket mine



Source: Caledonia Mining

The mining licence covers the Jethro, Blanket Section, Feudal, AR, Sheet, Eroica and Lima claims over an area of 2,540 ha.

## Geology and mineralisation

Blanket is situated in a typical basaltic greenstone terrain; the 70km long by 15km wide Gwanda Greenstone Belt. The Blanket property is the largest of the three remaining large gold producers (the others being the neighbouring Vubachikwe mine and the Jessie mine to the far east of the belt) from a gold resource area that has supported no less than 268 gold mines in the past.

Blanket is part of the group that makes up the North Western Mining camp. This extends from Sabiwa and Jethro in the south, through Blanket itself, to the Feudal, AR South, AR Main, Sheet, Eroica and Lima ore bodies.

The geological sequence strikes north-south, dips vertically and consists, from east to west, of a basal felsic unit (which is not known to carry mineralisation), a higher ultramafic unit that includes a banded iron formation (which hosts the eastern dormant cluster of mines and the ore bodies of the adjacent Vubachikwe mine complex belonging to Duration Gold), and finally the mafics that host the active Blanket ore bodies. An andesitic unit, which lies to the west, caps this whole stratigraphy.

Ore bodies at Blanket are epigenetic (i.e. formed later than the surrounding or underlying rock formations) and were formed by mineralised fluids filling the gaps caused by the shearing of the host rocks. The wider ore bodies are located within the highly sheared rocks.

There are two main types of mineralisation; a disseminated sulphide replacement type, which comprises the bulk of the ore shoots; and quartz veins that tend to have long strikes but are not uniformly mineralised.

Typically, these zones have a silicified core with fine sprays of disseminated arsenopyrite hosting the best grades. Disseminated sulphide replacement ore bodies range up to 50m in width with a strike between 60m and 90m. Free-milling gold constitutes up to 50% of the total metal content with the remainder occluded within the arsenopyrite.

The second type of mineralisation, quartz veins, are less consistent and grade fluctuates widely but they are generally higher grade. Blanket mines the Blanket Quartz Reef and the Eroica Reef.

## Reserves and resources

Caledonia updated its resource estimates in October 2017.

M&I resources show a 6% increase in gold content since the previous estimate in December 2016.

Caledonia declared its latest reserves in December 2016 but, in October 2017, it updated its resource estimates based on assay results from development sampling and diamond drilling to the end of August 2017.

As at 31 December 2016, reserves were 2.86Mt at a grade of 3.66g/t for 336koz of gold contained (using a gold price of US\$1,300/oz and a cut-off grade of 1.81 g/t). However, Caledonia's October 2017 update advises M&I resources are 5.6Mt at a grade of 3.96g/t for 714koz of gold contained, a 6% increase in gold content since the previous estimate in December 2016, despite a 7% decrease in the average grade. Reserves are a subset of measured resources.

Inferred resources are up 47%, to 5.5Mt at a grade of 4.99g/t gold, for 887koz of gold contained, reflecting increased drilling and development below the 750m level where most of the Inferred resources are located.



Figure 14: Reserves and resources\*

	Tonnes (Mt)	Grade (g/t)	Gold (koz)
<b>Reserves (31/12/16)</b>	<b>2.9</b>	<b>3.66</b>	<b>336</b>
<b>Resources (31/8/17)</b>			
Measured	1.8	3.90	227
Indicated	3.8	3.98	488
<b>M&amp;I</b>	<b>5.6</b>	<b>3.95</b>	<b>715</b>
<b>Inferred</b>	<b>5.5</b>	<b>4.99</b>	<b>887</b>

Source: Caledonia Mining Note: The reserves and resource estimates have been calculated based on the resource estimates from October 2014, which comply with Canada's NI 43-101 standards on resource disclosure, after accounting for depletion in the intervening period.

## Mining

As described earlier, mineralisation occurs in near vertical shoots of varying shape aligned along an approximately north-south axis. Blanket mines eight of these ore shoots over a 3km strike length.

AR Main is currently the main ore source, with a section of the Eroica ore body above 750m level, with an increasing contribution from stopes below 22 level in the Blanket section, which are accessed from No. 6 winze.

AR Main is a massive ore body up to 30m wide and is ideally suited to the long-hole, open-stope mining method, while the remainder of the Blanket ore bodies are tabular and better suited to underhand stoping methods.

Ore is hoisted predominantly through No.4 Shaft. The Central Shaft, now down to 950m, is being used to hoist waste through a mid-shaft loading facility.

Production capacity is currently 1,500 t/d, but this is set to double when the new Central Shaft is commissioned in 2020.

## Processing

Approximately half of the gold mineralisation at the Blanket mine is free-milling, which means that Caledonia can recover this gold at an early stage of the ore treatment process through simple gravity separation, which helps keep costs low. For the remaining gold tied up with arsenopyrite, the mine uses a conventional cyanide leaching process.

The ore is first crushed in the primary crusher located underground below 22 level, 765m below surface. Once crushed, the ore is conveyed to an automated skip loading and hoisting facility at No. 4 Shaft.

On surface, after secondary and tertiary crushing, the ore is ground by rod mills before being passed through a Knelson concentrator, which collects 49% of the gold in a gravity concentrate, which is sent to the on-site smelter.

The gravity tails are reground in a ball-milling circuit and report to the CIL tanks where the remaining gold is recovered by elution and electrowinning before being smelted to produce a 90% doré.

Total recovery has been consistently above 93% in recent years. Mill tailings are pumped to two tailings dams maintained by a specialist contractor. The current mill has sufficient capacity to accommodate the planned expansion in mine output.

## Revised Investment Plan

In November 2014, Caledonia instituted its “Revised Investment Plan”. The plan involved developing new infrastructure designed to expand production by optimising rock-transport logistics, while allowing the exploitation of gold resources below the then deepest working level (22 level) at 750m underground. The company’s target was, and remains, to increase gold production from 43koz in 2015 to 80koz/y by 2021.

The main component of the investment programme is the sinking of the 3,000 t/d, Central Shaft located between the AR Main and AR South ore bodies, in the middle of Blanket’s mining area. In the original plan, the shaft was to be sunk to a depth of 1,080m below surface and completed in 2018 but in November 2017 the company announced that it would continue sinking to extend the shaft by a further 250m to a depth of 1,330m.

Management took this decision after successful exploration in 2017 led to a significant increase in resources below 750m. With resources now potentially capable of extending the mine life by four years, to 2031, management decided it was expedient to develop the infrastructure necessary to exploit the resources while the shaft was in construction phase. Although it places an additional capital burden on cash flow over the next couple of years, overall it will be cheaper and less disruptive than trying to deepen the fully-commissioned and operating shaft in some years’ time.

Importantly, the acceleration should not affect the mine’s ability to ramp up to target gold production of 80koz by 2021 as originally planned.

**Figure 15: Headgear of the Central Shaft**



Source: Marten & Co

The additional cost for the shaft deepening and an additional two production levels (level 34 at 1,110m and level 38 at 1,230m) is estimated at US\$18m, which, as with the capital spent thus far on the expansion project, will be funded from Blanket’s cash flow. In total, spending on the investment plan over the period 2018-2022 is forecast at US\$51m. This is not expected to have any adverse effect on Caledonia’s dividend.

The shaft is currently at a depth of 950m. Lateral development is underway on the first of the additional production levels (26 level at 870m) and the mine will develop further levels at 30 level (990m), 34 level (1,110m) and 38 level (1,230m).

The Central Shaft will not only increase ore-hoisting capacity, but it will also facilitate better access to the deeper resources to the north and to the south along approximately 3km of strike length. It will also improve haulage and drilling logistics and, ultimately, lead to lower costs. The major components of the expansion capital programme are shown in Figure 16.

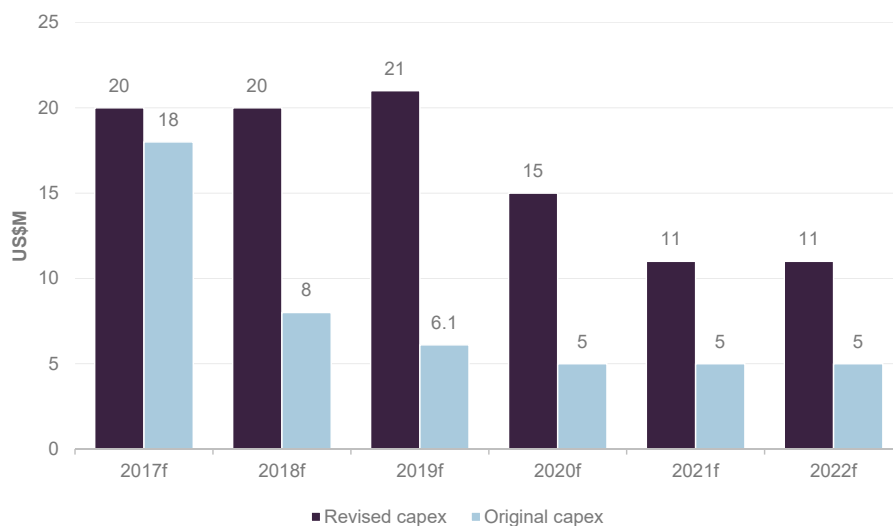
**Figure 16: Breakdown of capital spending (2018-2022)**

Item	US\$m	Period
Central Shaft sinking	19	2018-2020
Equipping	14	2018-2020
Lateral development	12	2019-2022
Other	6	2019-2021
<b>Total expansion capital</b>	<b>51</b>	
Deep level drilling	11	2022-2026
Sustaining capital	25	2018-2022
<b>Total</b>	<b>87</b>	

Source: Caledonia Mining, Marten & Co

Figure 17 shows the revised capital expenditure forecast, which takes into account the additional shaft sinking along with the previous forecast.

**Figure 17: Forecast capital expenditure (US\$m)**

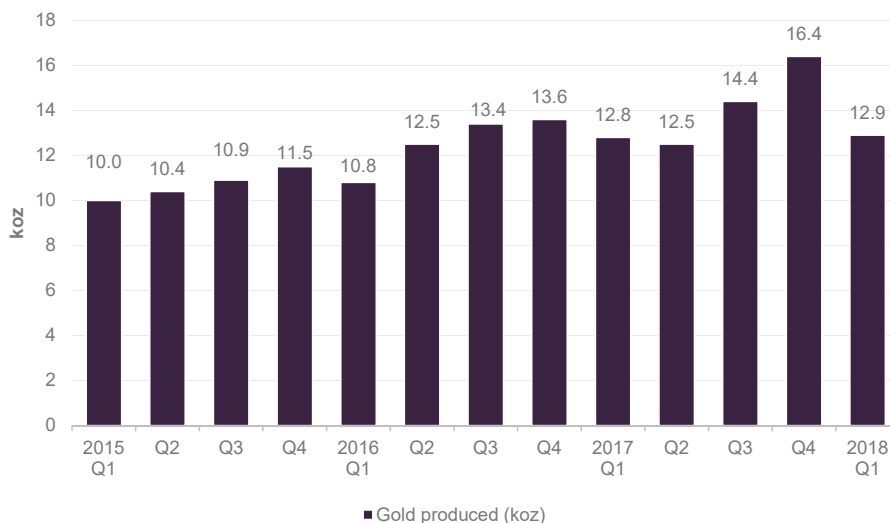


Source: Caledonia Mining, Marten & Co

## Production history

In 2017, the company produced 56.1koz of gold from the mining of 547kt of ore (2016 gold production was 50.4koz) with the increased gold production the result of both higher tonnes milled and a higher grade. Q1 2018 saw Caledonia produce 12.9koz of gold (marginally ahead of Q1 2017 production of 12.8koz).

Figure 18: Historical quarterly gold production



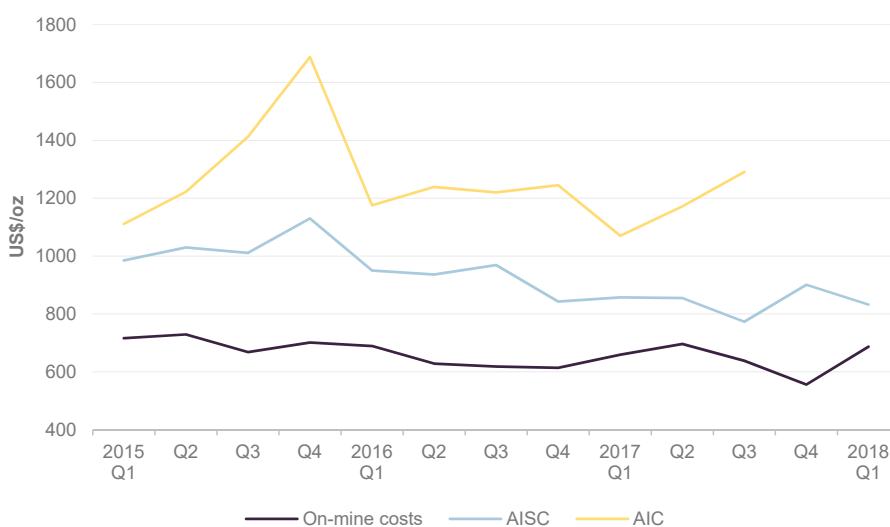
Source: Caledonia Mining

Underground logistics constraints have been alleviated; Caledonia is using the new Central Shaft to hoist waste from 26 level.

Q1 and Q2 2017 saw production adversely affected by underground logistical issues. In Q3 2017, tonnes mined were below plan as mining operations were constrained by waste transport logistics on the main haulage level; 22 level. Management took steps to alleviate the problem and Q3 and Q4 2017 saw the company post record production records. To alleviate the problem, the company started to use the new Central Shaft for hoisting waste from the recently-developed 26 level, in November 2017. This reduces the amount of waste that needs to be moved along 22 level and allows No. 4 Shaft to be used solely for ore hoisting.

It also means that No. 6 winze can concentrate on ore hoisting (loading and hoisting in the Central Shaft is being carried out by a mid-shaft loading system) and allows horizontal development at the 870m level to catch up with plan. However, this has required the company to suspend shaft sinking for six months, to allow for the loading, and it cautions that, despite these measures, the logistical issues on 22 level will not be fully resolved until the Central Shaft is commissioned.

Figure 19: Historical quarterly gold unit costs (US\$/oz gold sold)



Source: Caledonia Mining

The mill head grade rose substantially in Q3 2017.

Power supply issues are being addressed.

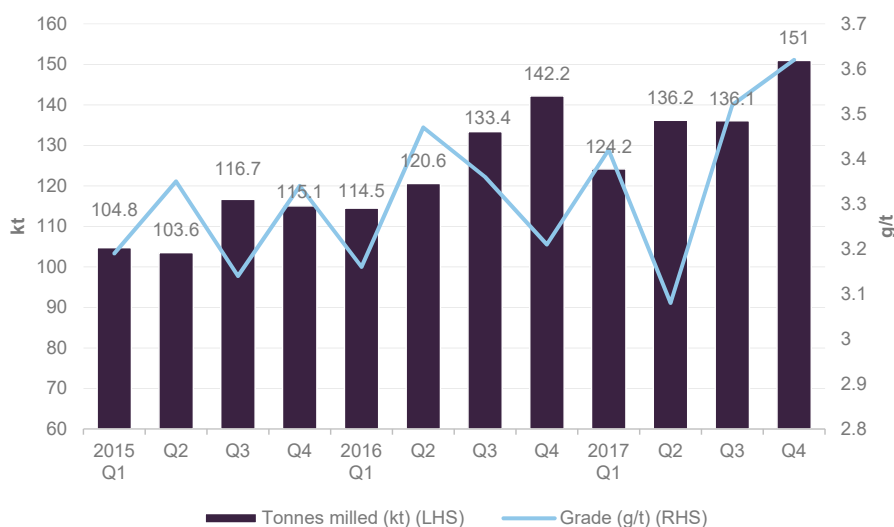
Mid-shaft loading will accelerate the horizontal development on 26 level.

Despite the lower tonnage milled in Q3 2017, the mill head grade rose substantially to 3.52g/t as a result of increased tonnage from higher grade areas. These areas are below 750m, from the Blanket and AR South declines.

Production in 2017 was also disrupted by inconsistent supply of electricity from the national grid, so management has installed equipment to regulate the incoming electricity supply and now has two stand-by generator farms operational that were brought on line at the of 2017. However, management says that there has been no increase in the electricity tariff and limited use of the stand-by generators as the grid-power has stabilised.

The introduction of the mid-shaft loading will have the added benefit of accelerating the horizontal development on 26 level from Central Shaft towards the Blanket ore body and will allow the rapid opening of the AR Main and AR South ore bodies on 26 level.

Figure 20: Historical quarterly tonnes milled and grade



Source: Caledonia Mining

Caledonia is also undertaking new projects to enhance the mine’s flexibility until the Central Shaft has been completed.

Caledonia is also undertaking new projects to enhance the mine’s flexibility until the Central Shaft has been completed. Decline 1 into AR South is being extended from 785m below surface to 870m below surface, while Decline 2 will provide improved access to the AR Main ore body below 750m. Caledonia says that both declines will allow the exploitation of deeper level ore bodies until the Central Shaft is operational.

Metallurgical recoveries continue to be affected by an unreliable oxygen supply. Liquid oxygen is being used as a temporary measure pending the installation of a new plant although this is likely to be delayed due to foreign exchange shortages.

## Gold sales

All gold production in Zimbabwe is required by law to be sold to the government agency, Fidelity Printers and Refiners (Fidelity) in Harare, which undertakes final refining and sale onto the international markets.

Fidelity pays Blanket for 98.75% of the value of the gold contained, based on the London gold fix, and the US-dollar proceeds are paid directly into Blanket’s foreign currency account with its commercial bank in Zimbabwe within seven days of receipt of the gold by Fidelity.

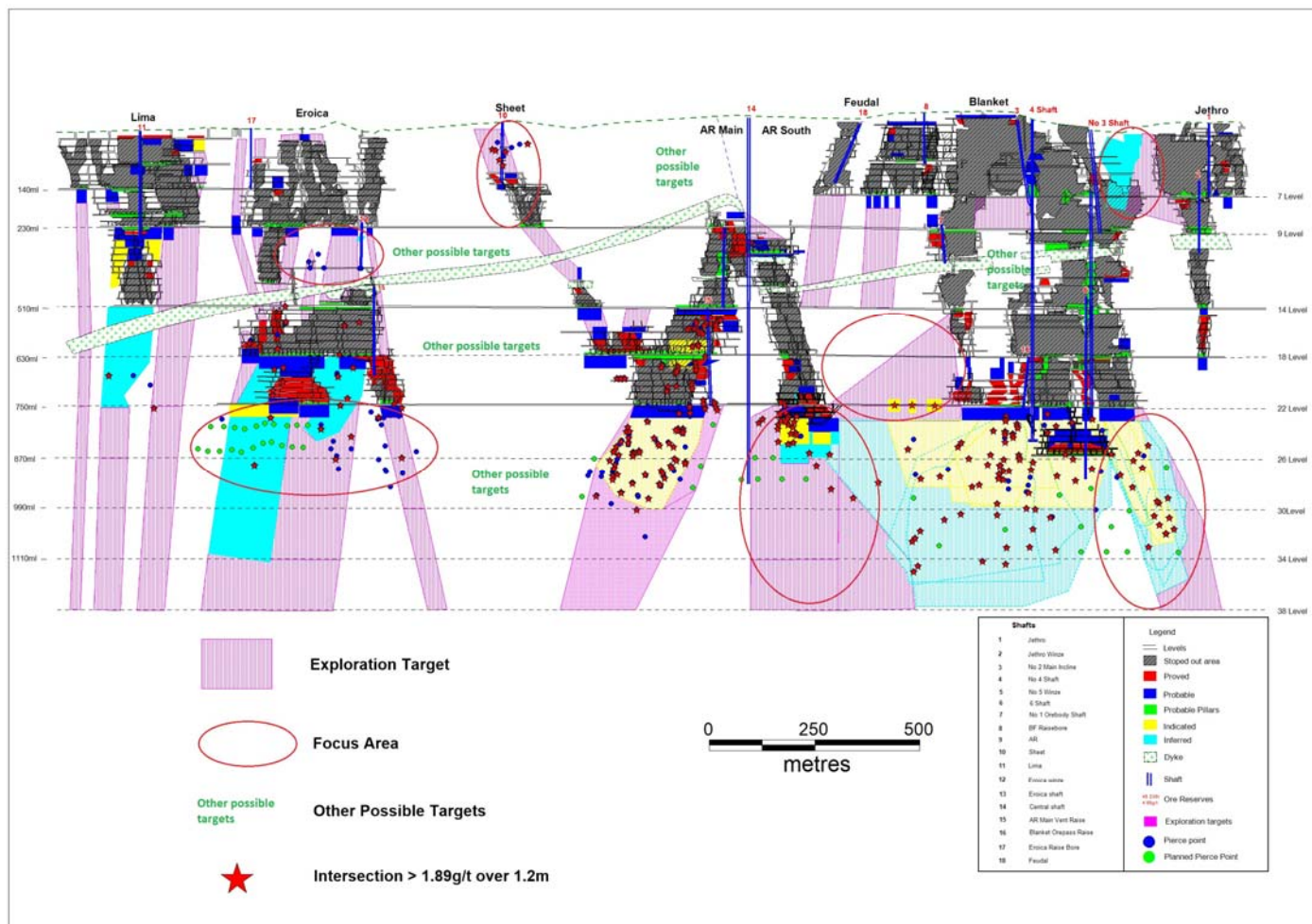
Reflecting the recent announcement by the Reserve Bank of Zimbabwe, our model recognises a 10% export credit incentive for 2018. This reverts to our long-term assumption of a 2.5% export credit incentive thereafter. This is still against a 5% royalty.

## Exploration

### On-mine exploration

Caledonia is currently drilling over 6,000m a quarter at the mine, concentrating on areas below 750m. At the Blanket section, results indicate that mineralisation continues to depth. Results at AR Main indicate continuity of mineralisation to 30 Level but ore body thinning to sub-economic levels below this. Drilling of the AR South North-South limb has only recently commenced. Geological interpretation of the drilling that has been performed to date, on the AR South East-West limb, is currently under way.

Figure 21: Long section of Blanket ore bodies showing exploration target areas



Source: Caledonia Mining

## Near mine targets

A surface drilling programme is underway to investigate “near mine” targets and their potential with the aim of scoping out new resources within easy reach of Blanket Mine plant. Initial drilling has been carried out along the northern strike of Lima (at Old Lima and Smiler) and on the Sabiwa-Jean structure which represents a continuation of the Vubachikwe strike to the north. Drilling has recently focussed on the Sabiwa prospect. Consolidation of the drilling results and their geological interpretation is currently underway.

Figure 21 shows the Indicated and Inferred resource areas, which are mainly below the 750m (22 level) in the Eroica, AR Main/AR South and Blanket areas. Note also the extensive zones as yet undrilled, which Caledonia has marked as exploration targets. We discuss on pages 18 and 19 how Caledonia intends to exploit these resources.

## Exploration on satellite deposits

Caledonia management suspended off-mine exploration in 2016 to concentrate on the AR South decline and reopening the Sheet ore body where it is expected there will be better returns on the capital investment. Work is expected to resume on the GG (7 km from Blanket) and Mascot (42 km from Blanket) prospects when Blanket has excess capital. The mineralisation at GG and Mascot is refractory in nature and will require metallurgical test work to ascertain recoveries.

## Capital structure

The company has 10.6 million shares issued (10.6 million fully diluted) with a market capitalisation on AIM of £66.3m as at 3 July 2018. Over the past year the company's shares have traded on AIM between 415.0p and 702.5p.

In July 2017, the company listed on the NYSE American (an exchange that describes itself as being designed for growing companies) under the ticker CMCL. As part of this listing, Caledonia completed a five-for-one share consolidation in order to comply with NYSE American's US\$5 minimum share-price criteria.

On the TSX, Caledonia's shares have traded between C\$6.80/share and C\$9.80/share during the last year.

## Share register has a strong retail presence

The bulk of the shares (74.1%) are held by retail shareholders, mainly in North America (UK registered shareholders account for 11.2%). The major institutional shareholder is South African fund, Allan Gray, which holds a 19.8% interest, while VP Bank AG holds 8.9%. Directors and officers own 2.3% of the issued capital.

## Directors and management

### Directors

Caledonia's non-executive chairman is Leigh Wilson. Mr Wilson has an international business and financial services background. He currently serves as the Independent Chairman of Victory Fund Board on its Board of Trustees and as Chief Executive Officer of New Century Home Health Care Inc. He was first appointed to Caledonia's board in 2008.

Steve Curtis is chief executive officer and a director. He is a chartered accountant with over 30 years' experience and has held a number of senior financial positions in the manufacturing industry. He joined Caledonia in 2006 and became a board member in 2008.

Chief financial officer and a director is Mark Learmonth, a chartered accountant. Prior to joining Caledonia in July 2008, Mr Learmonth was a Division Director of Investment Banking at Macquarie First South in South Africa. He has over 17 years' experience in corporate finance and investment banking, predominantly in the resources sector in Africa. Mr Learmonth joined Caledonia in July 2008 and was appointed chief financial officer in November 2014.

In July 2016, Caledonia appointed John McGloin as an independent non-executive director. Mr McGloin was most recently executive chairman and chief executive officer of Amara Mining PLC, which was focused on the Yaoure gold project, in Côte d'Ivoire, West Africa. In April 2016, Amara merged with Perseus Mining Limited. Mr McGloin now serves on the board of Perseus. He is a geologist with a Masters degree in Mining and Exploration Geology. Prior to joining Amara in 2012, he spent 10 years working in the City of London, initially as a mining analyst and latterly as head of the mining teams at various London-based stockbrokers.

Other, non-executive directors include John Kelly, who has 30 years of experience in the financial services industry in the USA and international markets and Johan Holtzhausen, a retired partner of KPMG South Africa with 42 years of audit experience, of which 36 years were as a partner focused on the mining sector.

### Management

Caledonia's chief operating officer is Dana Roets. Mr Roets is a qualified mining engineer with over 26 years of operational and managerial experience in the South African gold and platinum industry. He joined the company as chief operating officer in August 2013.

Paul Matthews is vice president, exploration, and the company's qualified person (as defined by National Instrument 43-101 for the Standards of Disclosure for Mineral Projects within Canada). Mr Mathews obtained a BSc (Hons) Geology degree at The University of Southampton, United Kingdom in 1990. He has 25 years' broad-based experience in the mineral exploration and mining industry in Africa, Australasia and East Asia. This ranges from grass-roots exploration to resource definition, drilling and mining. Over the last 14 years, Mr. Matthews' experience has been weighted towards GIS and database management, 3D geological modelling, resource evaluation and project management.



Adam Chester joined the management team in January 2017 as general counsel, company secretary and head of risk and compliance. Mr Chester is a dual-qualified lawyer (England and Jersey, Channel Islands) and previously worked as a solicitor of the Supreme Court of England and Wales at international law firms in the City of London. More recently, he has worked as an advocate of the Royal Court of Jersey at an international offshore law firm, CGI Legal, in which he was a partner. He has approximately 15 years' experience advising businesses and individuals on a variety of commercial and corporate legal issues.

Caxton Mangezi is general manager at Blanket mine with full responsibility for day-to-day operations. He has worked at Blanket since 1969 in a range of roles including geological technician, overseer miner and underground manager. He has been general manager since 1993.

Maurice Mason joined the company in June 2016 as VP corporate development and investor relations. He was previously a securities analyst in the mining sector for six years, following a spell working for Anglo American in its platinum and coal divisions.

## Risk factors

### Zimbabwean economic crisis?

In 2009, Zimbabwe adopted the US dollar as its currency after the Zimbabwe dollar lost all value and the country experienced hyperinflation.

The country's economy possibly faces a similar crisis now. With a limited supply of dollars in the banking system, and spending on imports in 2016 leading to an outflow of dollars, the Treasury's coffers are severely constrained.

In a move that is somewhat reminiscent of its actions in 2009, although with a seemingly lower likelihood of a successful outcome, the government issued 'bond notes' in late 2016. It has been stated that these are not to be pegged to a currency, but it would appear that they have been designed to serve that purpose. They are a form of banknote, released by the Reserve Bank of Zimbabwe, that are pegged to the US dollar and have par values denominated in US dollars. Unfortunately, the bond notes cannot be used to pay for imports and are thus losing value continually. Commercial banks have placed severe limitations on cash withdrawals in an effort to control the situation.

Caledonia receives payment for its gold sales in US dollars and has not been materially affected by the introduction of the bond notes.

In fact, the government of Zimbabwe has been very supportive of Caledonia's plans to increase gold production (and thus exports). In 2016, it awarded the mine an export credit incentive of 2.5% on gold sales (increased to 3.5% in January 2017). The government also reduced the royalty rate applicable to large-scale gold producers in Zimbabwe from 5% to 3% for sales in 2016 that exceeded the sales made in 2015.

## Gold price

Since publishing our last note on Caledonia in April 2017, we have lowered our base case long-term gold price at US\$1,300/oz. This reflects the fact that gold faces a considerable array of headwinds at the moment (soaring stock markets, Bitcoin and

US-dollar strength). However, in the long term, we believe that the price will be governed in the main by physical demand (in the form of jewellery and for investment purposes). Although demand in China and the Far East has proved to be relatively weak over the past year, ETF demand in the west has recovered strongly from 2015 and the underlying global macroeconomic factors remain bullish for gold. Figure 22 shows the gold price over the last three years (since May 2015).

Figure 22: Gold price (London PM fix, US\$/oz) over three years



Source: World Gold Council

## Risks

### Country risk

The overwhelming risk factor for Caledonia is country/political risk. The company's fortunes are totally dependent on continued economic and political stability.

We have discussed the political and economic issues in some length in preceding sections. However, to summarise, there will be significant challenges for all businesses through to the 2018 elections. However, following Mr. Mugabe's departure, the upside after the lifting of sanctions and the prospect of renewed inward investment and economic stimulus, could lead to a swift and dramatic recovery in the country's fortunes.

### Technical risk

Caledonia is embarking on a major capital infrastructure programme and there is always a significant execution risk with any technical mining project of this scale. The company is using its own workforce and, so far, the programme is on schedule and within budget.

Attainment of mining, milling and gold production targets is dependent on the operator achieving the predicted ore grades, throughputs and recovery rates. Management has a long track record of successful operation of the mine and mill (the mine manager has been working there since 1969) and understands the ore body and its mineralogy.

Much of the expansion is predicated on the exploitation of Inferred resources and, by definition, these resources are of the lowest confidence.

## Power supply problems

The gold-mining industry has been plagued by power-supply problems that have hampered operations and caused loss of production since 2008.

The country only produces about half the power it requires and, although it imports some, the shortfall has led to forced interruptions to reduce the load on generators.

Caledonia has sought to overcome these problems by negotiating a guaranteed supply with ZESA, the state electricity supplier, and through installing its own generating facilities.

However, such moves may only be temporary (and expensive) solutions as the fundamental problem is the severe shortage of generating capacity within the country. There is a need to refurbish old power stations and to build new capacity.

## Single asset

Investors should be aware that Caledonia is a single-asset company. All the value of the company derives from the Blanket mine. Continued revenue, earnings and dividends are dependent on the mine remaining in operation. Long-term growth will be dependent on how successful the company is in developing and exploiting existing reserves and additional resources on the property.

## Exchange rates

The company pays wages and buys its consumables and materials in US dollars. As it receives the same currency for its gold sales, there is little exchange-rate risk to the core Blanket mine operations. Furthermore, despite being registered in Jersey, the company holds the vast majority of cash funds in US dollars and so avoids any further exchange-rate risk.

## Gold prices

We have assumed a long-term gold price of US\$1,300/oz. We believe that the gold price has entered a new bull phase and price risk is largely on the upside (see page 25 and 26 for a discussion on the gold market and prices).

## Inferred resources

Most production from 2023 is from Inferred down to 38 level.

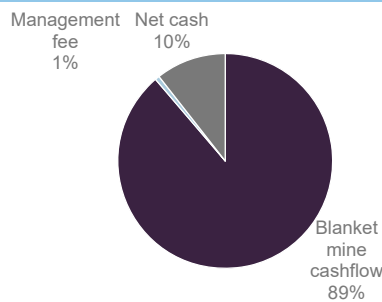
## Political

"I have sworn in a new cabinet just to finish the term of the former president, which is a period of six to seven months," Mr. Mnangagwa said after the new ministers took the oath of office at State House on 4 December 2017.

Figure 23: Caledonia Mining summary

Sum-of-the-parts DCF valuation March 2017	US\$m	p/share
NPV <sup>15%</sup> of Blanket mine cash flow	112.4	785.1
NPV <sup>15%</sup> of Blanket mine management fee	0.9	5.9
Investments	0.0	0.0
Subtotal	113.3	791.0
Net cash	13.4	93.6
<b>NAV</b>	<b>126.6</b>	<b>884.7</b>

Asset valuation summary



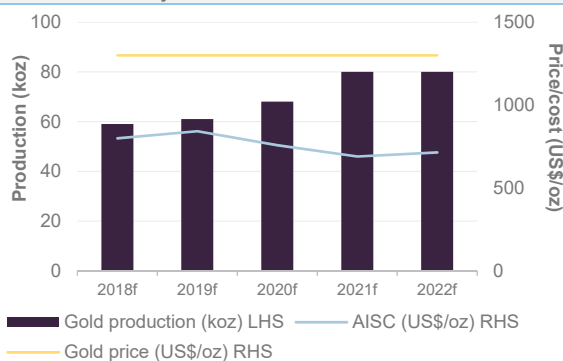
Caledonia Mining share price (p/share)



NAV sensitivity analysis (p/share)

Disc. rate	Gold price (US\$/oz)					
	1,000	1,100	1,200	1,300	1,400	1,500
8%	363.3	637.9	901.6	1165.2	1428.8	1692.5
10%	328.2	690.7	826.7	1070.5	1314.3	1558.2
12%	297.9	638.6	761.8	988.5	1215.1	1441.8
15%	259.5	474.8	679.8	884.7	1089.7	1294.6
18%	228.2	425.4	612.4	799.5	986.5	1173.6
20%	210.4	397.2	574.0	750.9	927.7	1104.5

Production summary



Gold reserves & resources (Dec 2016)	Tonnes (mt)	Grade (g/t)	Gold (koz)
2P reserves	2.86	3.66	336
M&I resources	4.94	4.23	671
Inferred resources	3.76	4.99	604

Y/E 31 December, all figures in US\$m unless otherwise stated

Forecast assumptions	2018f	2019f	2020f	2021f	2022f
Gold price (US\$/oz)	1,300	1,300	1,300	1,300	1,300
<b>Production and costs summary</b>					
<b>Production</b>					
<b>Above 1,110m level</b>					
Tonnes milled (kt)	564	570	640	720	673
Gold grade (g/t)	3.25	3.33	3.30	3.46	3.70
<b>Below 1,110m level</b>					
Tonnes milled (kt)	0	0	0	0	0
Gold grade (g/t)	0.00	0.00	0.00	0.00	0.00
<b>Total tonnes milled (kt)</b>	<b>564</b>	<b>570</b>	<b>640</b>	<b>720</b>	<b>673</b>
<b>Gold grade (g/t)</b>	<b>3.25</b>	<b>3.33</b>	<b>3.30</b>	<b>3.46</b>	<b>3.70</b>
<b>Recovery (%)</b>	<b>93.0</b>	<b>93.0</b>	<b>93.0</b>	<b>93.0</b>	<b>93.0</b>
<b>Gold production (koz)</b>	<b>59.0</b>	<b>61.0</b>	<b>68.0</b>	<b>80.0</b>	<b>80.0</b>
<b>Costs</b>					
Minesite costs (US\$/oz)	(658)	(625)	(560)	(519)	(519)
Total cash costs (US\$/oz)	(828)	(791)	(716)	(661)	(661)
<b>AISC (US\$/oz)</b>	<b>799</b>	<b>842</b>	<b>758</b>	<b>690</b>	<b>715</b>
AIC (US\$/oz)	(1057)	(1108)	(908)	(767)	(767)
<b>Profit &amp; loss summary (consolidated basis)</b>					
<b>Revenues</b>	<b>83.3</b>	<b>80.3</b>	<b>89.5</b>	<b>105.3</b>	<b>105.3</b>
Cost of production	(39.0)	(38.3)	(38.3)	(41.7)	(41.7)
Royalty	(3.8)	(3.9)	(4.4)	(5.1)	(5.1)
Corporate G&A	(6.0)	(6.0)	(6.0)	(6.0)	(6.0)
<b>EBITDA</b>	<b>32.5</b>	<b>30.0</b>	<b>38.8</b>	<b>50.4</b>	<b>50.4</b>
Depreciation & amortisation	(3.6)	(4.1)	(12.7)	(12.8)	(12.7)
Interest	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
Other (net)					
Taxation	(8.6)	(8.1)	(8.3)	(11.4)	(11.4)
<b>Net income (consolidated)</b>	<b>26.2</b>	<b>23.7</b>	<b>23.7</b>	<b>32.1</b>	<b>32.1</b>
Average shares outstanding (m)	10.6	10.6	10.6	10.6	10.6
<b>EPS (US\$) (consolidated)</b>	<b>209.4</b>	<b>186.4</b>	<b>186.5</b>	<b>265.3</b>	<b>266.0</b>
<b>EPS attributable to Caledonia shareholders(US\$)</b>	<b>169.4</b>	<b>150.1</b>	<b>150.2</b>	<b>216.2</b>	<b>216.7</b>
<b>Dividend (USc per share)</b>	<b>42.3</b>	<b>37.5</b>	<b>37.5</b>	<b>54.0</b>	<b>54.2</b>
<b>Abridged balance sheet Y/E (consolidated basis)</b>					
Cash & equivalents	18.5	17.9	28.2	48.0	67.9
Fixed assets	98.2	115.1	117.4	109.6	101.9
<b>Total assets</b>	<b>127.9</b>	<b>144.2</b>	<b>156.7</b>	<b>168.8</b>	<b>181.0</b>
Current liabilities	9.7	9.7	9.7	9.7	9.7
Long-term debt	1.6	1.6	1.6	1.6	1.6
Other long-term liabilities	28.0	32.3	32.9	32.4	32.0
<b>Total liabilities</b>	<b>39.3</b>	<b>43.6</b>	<b>44.2</b>	<b>43.7</b>	<b>43.3</b>
Shareholders' equity	88.6	100.6	112.6	125.1	137.7
<b>Cash-flow summary (consolidated basis)</b>					
Cash from operations	26.2	24.4	29.2	36.6	36.6
Capital expenditure	(20.0)	(21.0)	(15.0)	(11.0)	(11.0)
Cash from investing activities	(20.0)	(21.0)	(15.0)	(11.0)	(11.0)
Dividends	(4.5)	(4.0)	(4.0)	(5.7)	(5.7)
Cash from financing activities	(4.5)	(4.0)	(4.0)	(5.7)	(5.7)
<b>Cash at end</b>	<b>18.5</b>	<b>17.9</b>	<b>28.2</b>	<b>48.0</b>	<b>67.9</b>
<b>Profitability</b>					
EBITDA margin (%)	39	37	43	48	48

Note that financial tables above are summaries and totals may not always agree

Source: Caledonia Mining, Marten & Co

## Previous publications

Readers interested in further information about Caledonia may wish to read our previous notes, which are summarised in Figure 24 below. You can read them by clicking in Figure 24 or by visiting our website.

Figure 24: Marten & Co. previously published notes on Caledonia

Title	Note type	Date
A golden opportunity	Initiation	28 July 2016
Expansion boosts bottom line	Update	15 August 2016
18% production increase boosts earnings	Update	3 April 2017

Source: Marten & Co.

## Appendix 1: Ownership and indigenisation

Caledonia owns a 49% interest in the Blanket mine through its wholly-owned subsidiary, Caledonia Holdings Zimbabwe (Private) Limited.

Caledonia complies fully with indigenisation legislation.

As required by the Indigenisation and Empowerment Act, Caledonia implemented an indigenisation plan in September 2012 by transferring a 51% ownership interest in Blanket mine to various groups for a total of US\$30.1m.

It sold:

- 16% to the National Indigenisation and Economic Empowerment Fund (NIEEF) for US\$11.7m;
- 15% to Fremiro, which is owned by indigenous Zimbabweans, for US\$11.0m;
- 10% to Blanket mine Employee Trust Services (Private) Limited (BETS) for US\$7.3m for the benefit of the present and future managers and employees of Blanket;

Caledonia provided loans to the indigenous buyers to enable the transaction to be completed.

and donated:

- 10% to the Gwanda Community Share Ownership Trust. In addition, Blanket mine paid a non-refundable cash donation of US\$1 million to the Community Trust.

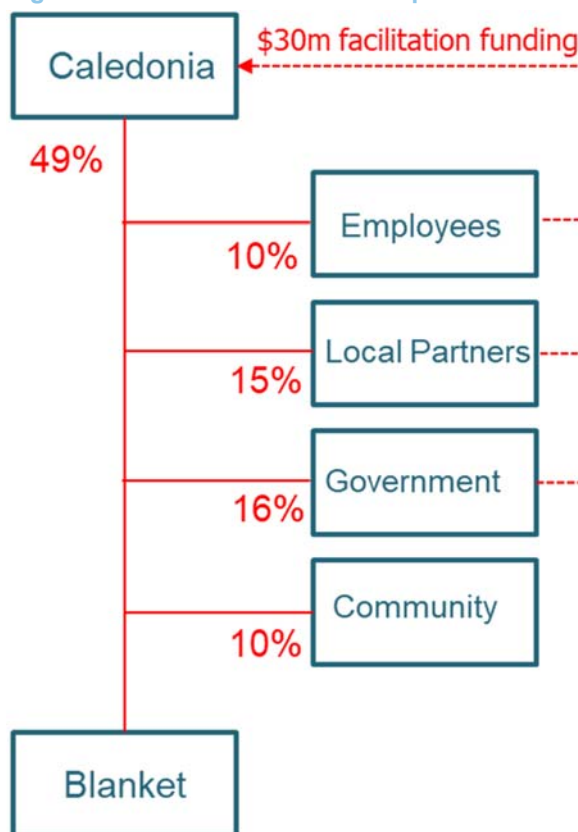
Caledonia facilitated the indigenisation deal by providing finance to the purchasers to enable them to acquire their respective interests. There is no term to the loans, which the vendors will repay by sacrificing a constant 80% of their future entitlement to Blanket mine dividends each year.

Despite only holding a 49% equity interest in the Blanket mine, Caledonia actually receives over 77% of the dividend flow from the mine until the loans are repaid.

Despite only holding a 49% equity interest in the Blanket mine, through the mechanics of the indigenisation process, Caledonia actually receives over 77% of the dividend flow from the mine while the vendor loans it made are being repaid. A worked example is provided in Appendix 2 below.

As at 31 March 2016, the balance of the loans had increased to US\$31.3m with accrued interest. The loans attract interest at LIBOR plus 10% per annum and have no fixed repayment period. Interest is accrued and added to the outstanding capital amount before payment of dividends. Caledonia treats the loans as equity instruments and they are not shown on its balance sheet.

Figure 25: Blanket mine ownership structure



Source: Caledonia Mining

In addition, in association with the indigenisation, Blanket mine provided loans totalling US\$5.8m as advance dividends to NIEEF and the Community Trust. The outstanding balance on these loans was US\$3.2m as at 31 March 2016.

Caledonia consolidates Blanket mine in its statutory accounts and recognises non-controlling interests at the level of 16.2% of net assets and net profit of Blanket mine.

Management for the Blanket mine is supplied by Caledonia Mining South Africa Proprietary Limited, a 100%-owned South African subsidiary of Caledonia, through a fixed-fee contract worth US\$4 million per year. The fee attracts withholding tax at 15%.

### Indigenisation laws have been relaxed

Relaxation of Zimbabwe’s indigenisation laws could allow Caledonia to increase its shareholding in Blanket mine.

It would consider purchasing the government and Fremiro stakes but would like to retain the workers and community trusts as shareholders.

Zimbabwe’s indigenisation laws were relaxed in April 2018 (see page 6 for further discussion). This creates the possibility that Caledonia could purchase the stakes in Blanket mine, which it currently does not own, in the event that these shareholders wish to dispose of their shares. Caledonia has that it would consider buying the government and Fremiro stakes, but it would like to keep the workers’ and community trusts in place as shareholders.

If Caledonia were to purchase some or all of the remaining Blanket stakes, this would almost certainly affect the mechanics by which Caledonia participates in Blanket’s cash flows. However, it is expected that Caledonia would have the choice and not the obligation to purchase a stake and so it seems reasonable that it would only do this on terms that would be value enhancing to Caledonia and its shareholders.

## Appendix 2: Blanket mine's dividends explained

Dividends from Blanket mine are defined as free cashflow (i.e. after all expenses and capital spending) and we assume that 100% is paid out each year to the shareholders from the second half of 2016 onwards. In 2015, and the first half of 2016, Blanket mine management suspended dividend payments to fund the capital expansion programme.

Despite only holding a 49% equity interest in the Blanket mine, through the mechanics of the indigenisation process completed four years ago, Caledonia actually receives 77% of the dividend flow from the mine while the vendor loans it made are being repaid.

The following worked example shows the mechanics of distribution to Caledonia and the indigenous groups, who own in total a 51% equity interest, of a theoretical US\$10m dividend.

Caledonia receives a net US\$4.66m from its 49% interest and then receives loan repayments from each of the groups it financed to make their acquisitions and so ends up with a US\$7.74m share out of the original US\$10m.

**Figure 26: Worked example of a theoretical Blanket mine US\$10m dividend payout**

	US\$M
<b>Blanket mine total dividend</b>	10.00
Caledonia nominal share (49%)	4.90
Less withholding tax at 5%	(0.25)
<b>Net to Caledonia</b>	<b>4.66</b>
NIEEF nominal share (16%)	1.60
Less withholding tax at 15%	(0.24)
Net to NIEEF	1.36
<b>Paid to Caledonia towards loan repayment (80%)</b>	<b>1.09</b>
Retained by NIEEF	0.27
Fremiro nominal share (15%)	1.50
Less withholding tax at 15%	0.00
Net to Fremiro	1.50
<b>Paid to Caledonia towards loan repayment (80%)</b>	<b>1.20</b>
Retained by Fremiro	0.00
BETS nominal share (10%)	1.00
Less withholding tax at 0%	0.00
Net to BETS	1.00
<b>Paid to Caledonia towards loan repayment (80%)</b>	<b>0.80</b>
Retained by BETS	0.20
Gwanda nominal share (10%)	1.00
Less withholding tax at 15%	(0.15)
Net to Gwanda (retained to offset advance dividends)	0.85
<b>Total paid to Caledonia</b>	<b>7.74</b>
<b>Total retained by minorities</b>	<b>1.62</b>

Source: Caledonia Mining, Marten & Co

Caledonia recognises non-controlling interests (NCI) in the portion of shareholding upon which dividends declared by Blanket mine accrue unconditionally to equity holders as follows:

- 20% of the 16% shareholding of NIEEF;
- 20% of the 15% shareholding of Fremiro; and
- 100% of the 10% shareholding of the Community Trust.

This effectively means that NCI is recognised at Blanket mine level at 16.2% of the net assets and only reverts to 51% after full payment of the vendor loans.

## Appendix 3: Glossary of terms

Additional information on mining terms can be found at [www.QuotedData.com](http://www.QuotedData.com). A summary of some of the terms used in this note is provided here.

<b>AIC</b>	All-in costs
<b>AISC</b>	All-in sustaining costs
<b>Ball mill</b>	A rotating horizontal cylinder in which ore is ground by steel balls
<b>CIL</b>	Carbon-in-leach – a process to extract gold from ground ore using a cyanide leach and absorption of gold onto carbon granules
<b>Doré</b>	Bullion bar produced at a mine smelter, usually about 90-95% gold and 5-10% silver
<b>Elution</b>	Recovery of the gold from the activated carbon into solution before zinc precipitation or electrowinning
<b>Electrowinning</b>	A process of recovering gold from solution by means of electrolytic chemical reaction, into a form that can be smelted easily into gold bars.
<b>G&amp;A</b>	General and administrative costs
<b>Greenstone</b>	Metamorphosed volcanic rocks with a green hue that are important hosts of gold deposits
<b>IFRS</b>	International financial reporting standards
<b>Ore body</b>	A deposit of valuable minerals
<b>Reserve</b>	Economically mineable part of a resource (see Appendix 4)
<b>Resource</b>	Gold deposit with estimated quantity and grade that gives it a reasonable prospect of being mined (see Appendix 4)
<b>Stratigraphy</b>	Chronological sequence of bedded rocks
<b>TSX</b>	Toronto Stock Exchange
<b>Winze</b>	An internal shaft that is sunk downwards, connecting two levels in an underground mine



## Appendix 4: Definition of reserves and resources

### Reserves

Reserves are that part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve determination. Reserves are customarily stated in terms of ore when dealing with metalliferous minerals. There are two categories of reserves: proven ore and probable ore.

#### Proven ore

Proven ore is material for which tonnage and grade are computed from dimensions revealed in outcrops, trenches, underground workings or drill holes. Grade is computed from the results of adequate sampling, and the sites for inspection, sampling and measurement are so spaced and the geological character so well-defined that size, shape and mineral content are established.

#### Probable ore

Probable ore is material for which tonnage and grade are computed partly from specific measurements, samples or production data and partly from projection for a reasonable distance on geological evidence; and for which the sites available for inspection, measurement and sampling are too widely or otherwise inappropriately spaced to outline the material completely or to establish its grade throughout.

### Resources

A mineral resource is a concentration or occurrence of material of economic interest in or on the earth's crust in such form, quality and quantity that there are reasonable and realistic prospects for eventual economic extraction. The location, quantity, grade, continuity and other geological characteristics of a mineral resource are known, estimated from specific geological evidence and knowledge, or interpreted from a well-constrained and portrayed geological model. Mineral resources are subdivided, in order of increasing geological confidence, into Inferred, Indicated and measured categories. The mineral resources are inclusive of those resources which have been modified to produce ore reserves.

Resources can be divided into three categories.

#### Measured resource

A Measured resource is that part of a resource for which quantity, grade or quality, densities, shape and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

### ■ Indicated resource

An Indicated resource is that part of a resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

### ■ Inferred resource

An Inferred resource is that part of a resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

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123a Kings Road, London SW3 4PL  
0203 691 9430

[www.martenandco.com](http://www.martenandco.com)

Registered in England & Wales number 07981621,  
2nd Floor Heathmans House  
19 Heathmans Road, London SW6 4TJ

## Sales:

Edward Marten  
([em@martenandco.com](mailto:em@martenandco.com))

David McFadyen  
([dm@martenandco.com](mailto:dm@martenandco.com))

## Research contacts:

Paul Burton

Matthew Read  
([mr@martenandco.com](mailto:mr@martenandco.com))

James Carthew  
([jc@martenandco.com](mailto:jc@martenandco.com))

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