

12 December, 2019

Last price: £0.0796

Target price: £0.12

### Initiating Coverage: Price Target £0.12/share

The investment case for Petra is based around three central pillars. Firstly, the company is only now reaching nameplate capacity on the two ambitious expansion plans at Finsch and Cullinan. This is resulting in the company becoming cashflow positive for the first time in 9+ years. Secondly the lacklustre diamond market is accelerating optimization of the operations which will extend this capacity delivering further margin growth. Thirdly there is a new management and a refreshed board in place. Of course, it would be a huge help if the diamond market would improve and we note the restraint on supply being forced through by Alrosa and De Beers. We start with a price target of 12pps. Key points:

#### Operations on the Glide Path to Full Delivery with More to Come

This year both Cullinan and Finsch will be operating at full capacity. This has a number of benefits for production and costs. Our model delivers a sector beating 2016-2021 diamond production CAGR of 6.1%. As an aside it should also mean that management's guidance issues are a thing of the past. We also remind investors that the company has the 4<sup>th</sup> largest diamond reserve and resource base in the world and we examine a number of NPV enhancing projects going forward that take our NPV from 16pps to 27pps.

#### Enhanced by Project 2022

Management have identified a number of areas at both Cullinan and Finsch where throughput can be enhanced by 10-15%. At Cullinan there is potentially additional shaft throughput allowing the company to leverage off the spare capacity at the plant. At Finsch ore handling improvements are already seeing success with a 9% increase in output in the last quarter. With c.60% of costs fixed, this additional production will offset inflationary pressure on costs and more.

#### Balance Sheet Starts to Destress as a Result

Despite the fall in diamond prices, we forecast a step up in cashflow this year from US\$(39) million in FY2019 to US\$50 million in FY2020. This in turn allows the company to reduce the net debt on the balance sheet to US\$528.6 million (excluding BEE guarantees) in FY2020 falling to US\$444 million in 2022. As such we believe the company can avoid any covenant issues. This will also improve the ability of the company to refinance the US\$650 million bond in May 2022.

#### Likelihood of Specials Grows as Does a Recovery in the Diamond Market.

The US\$5+ million "specials" are mainly found on the western side of the Cullinan pipe which the company is only now starting to draw fully so it is no surprise they are finding more. As for the rest of the market there are some signs of stabilization/recovery. It has taken a herculean effort by De Beers and Alrosa who have both reduced supply by 10%. We believe this heralds a c.50% reduction in production of diamonds over the next 5 years. Surely this has to have some positive effect?

#### Valuation is Comfortable

Our NPV of Petra is 16pps rising to 27pps with new projects. EV/EBITDA of 4.5x FY2020 and 4.1x FY2021 is attractive, albeit in line with the sector. However, Petra is the only comp where the market is forecasting some growth in EBITDA and cashflow from FY2020 into FY2021. Overall, we believe a near term PT of 12pps or c.50% higher than the current share price is appropriate (noting that not many mining stocks are trading at parity with NPV).

**Analysts:** David Butler  
David Baker

#### Summary

Last price:	7.96p
Target price (GBP)	12p
Projected return (%)	88%

#### Project Details

Commodity	Diamonds
Production (m carats)	3.8
Operating NPV <sub>10%</sub> (US\$m)	732
Company NAV <sub>10%</sub> (US\$m)	172

#### Share Data

Shares o/s (mm)	856
52 week high/low (GBP)	0.05 / 0.11
3-mth avg. daily vol (mm)	8.9
3-mth avg. daily vol (GBP)	699k
Market cap (US\$m)	88
Net cash/(debt) (US\$m)	(593)
Enterprise value (US\$m)	681

Financial Data	2019	2020	2021
Revenue	464	446	471
EBITDA	153	144	157
Net income	(23)	(3)	10
EPS	(0.03)	(0.00)	0.01
P/E	-	-	8.3
EV/EBITDA	4.3	4.5	4.1

#### Share Price Performance



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## Summary of the Investment Case

### Introduction

Petra is well known to the UK investment market. Its corporate history follows a familiar pattern seen elsewhere in the sector: too much debt taken on to deliver production growth that fell behind schedule and cost more than planned. This coincided with a weakening diamond market and put increasing pressure on the balance sheet resulting in last year's US\$170 million rights issue. Diamond prices have continued to deteriorate over 2019 (see Figure 1) adding further stress to the balance sheet which is carrying c.US\$592.8 million at end-September in net debt exclusive of \$52.1m of loan guarantees for the company's BEE partners and diamond debtors.

In response, new CEO Richard Duffy has launched Project 2022. This aims to generate US\$150-200 million FCF from across all four mining operations, and off-mine operations, over the three year period. It is a testimony to the operational expertise of the company that they are not only surviving this environment but generating material amounts of cash (Tamesis estimate US\$50 million FCF, post interest payments).

Exact details for Project 2022 are still to be released but most of it will come through increased throughput, which we examine later in the note, and we have incorporated this in our modelling.

**These events, plans and background provide a classic opportunity for a value investor**

Figure 1 – PolishedPrices.com Composite Rough Diamond Index (100= price as of January 2004)

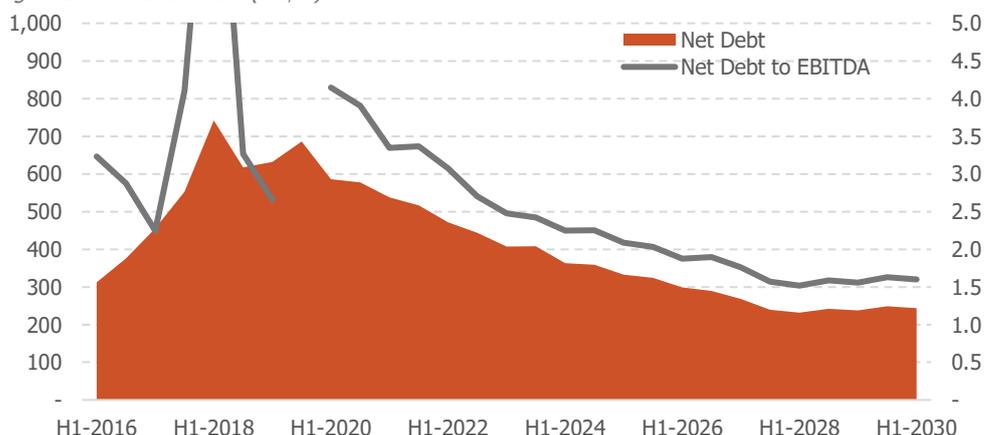


Source: Bloomberg

These events, plans and background provide a classic opportunity for a value investor. Our model delivers EBITDA forecasts of US\$144.1 million and US\$157.1 million for FY2020 and 2021 respectively leaving the company trading on an EV/EBITDA of 4.5x and 4.1x, and a 2021 PER of 9.4x. Critically our consolidated net debt to EBITDA falls to 3.3x and 2.8x in 2021 and 2022 which should help with respect to the refinancing of the US\$650 million bond.

**A DCF derived target price (of 12pps) is somewhat academic however; if the company can generate enough cash to ensure the balance sheet is under control the share price will go up a lot**

Figure 2 – Net Debt Table (US\$m)



Source: Tamesis

Our base case NPV is US\$200 million or 16pps. There are a number of permutations that lift this to US\$329 million which we discuss later. This is somewhat academic however; if the company can generate enough cash to ensure the balance sheet is under control the share price will go up a lot.

## Balance Sheet Analysis

The strength of the balance sheet remains core to the investment case. The share price reflects market concern over liquidity and whether the bond can be refinanced and ultimately repaid before end of LoM. For this to happen we believe net debt to EBITDA needs to be heading below 3x by the time the US\$650 million bond comes up for redemption in May 2022.

In summary our rolling Net Debt to consolidated EBITDA in 2020, 2021 and 2022 is 4.0x, 3.3x and 2.8x respectively, and by 2025 is 2.1x. In our minds that makes refinancing difficult but not impossible by any means (assuming too that the credit rating agencies upgrade) although leaves little wriggle room if diamond prices were to fall further.

As an aside, we don't really see covenants as a material issue as they currently relate to undrawn banking facilities which we assume do not get drawn down to the extent it triggers remedial action. However, it is clearly not healthy to announce breaking these covenants and we would imagine it would have a negative impact to the share price. Our analysis suggests they won't be breached.

## Current Capital Structure – Liquidity is Manageable

We look at Petra's current financial position which comprise five elements – see table below:

Figure 3 – Net Debt Calculation

		30-Sept-19	30-Jun-19	31-Mar-19	31-Dec-18
<i>Exchange rate used for conversion</i>		<i>R15.16:US\$1</i>	<i>R14.07:US\$1</i>	<i>R14.48:US\$1</i>	<i>R14.35:US\$1</i>
Cash at bank	US\$M	57.2	85.2	96.9	90.7
Diamond inventories	US\$M	92.4	57.5	64.9	76.3
	Carats	1,145,274	666,201	674,632	811,718
Diamond debtors	US\$M	7.2	23.8	46.4	4.4
US\$650 million loan notes (issued April 2017)	US\$M	650	650	650	650
Bank loans and borrowings	US\$M	-	-	-	-
Net debt	US\$M	592.8	564.8	553.1	559.3
South African bank facilities undrawn and available	US\$M	98.9	106.6	103.6	104.5
Consolidated net debt for covenant measurement purposes <sup>1</sup>	US\$M	637.7	595.2	580.8	627.4

Source: Tamesis

**US\$650 million senior secured bond.** We note this is trading at 68.2c or a yield to maturity of 25% having fallen from near parity at the end of June. The bond pays a coupon of 7.25% semi-annually and matures on the 1<sup>st</sup> May 2022. S&P have downgraded their credit ratings, lowering to CCC+ recently. The latter was centred around the weakness in the diamond markets whilst noticing that pricing appears to have levelled off for now leading to a stable outlook from S&P.

**R790.4 million BEE loan** valued at US\$52.1 million at 30 September 2019, or approximately US\$53.8 million as of the date of this report. At the preliminary results it was revealed that Petra has negotiated a less strenuous repayment schedule for the BEE loan it has effectively underwritten. It now comprises US\$5 million (R70.35m) in November, followed by four equal biannual instalments of US\$12.3 million (R173 million) starting May 2020. We imagine there may be more flexibility if required.

**R1.5 billion undrawn revolving credit facility.** The company has R1.5 billion (US\$102 million) in South African banking facilities undrawn and available

**It also leaves management with US\$159 million of liquidity so we don't see that as a problem**

**Cash.** The company reported US\$57.2 million of cash at bank at 30 September 2019.

**Working Capital.** The company reported US\$92.4 million of diamond inventories and US\$7.2 million of diamond debtors at as 30 June 2019. Petra does not hold strategic inventories; these amounts reflect timing differences between auction dates and cash receipts.

Overall this equates to a net debt position of US\$592.8 million, or US\$637.7 million consolidated net debt for covenant measurement purposes (see appendix for explanation of difference). It also leaves management with US\$159 million of liquidity so we don't see that as an immediate problem.

### Covenants under pressure

We have examined our forecasts versus the main banking covenants as per table below. These are covenants relating to the company's bank lending facilities. At the moment they are undrawn and as such they carry less relevance. There was some suggestion at the results that if diamond pricing falls further, i.e. another 5-10%, then management may access the facility between tenders. At the moment pricing seems to have stabilized since the results as well as the discovery of a 20Ct blue stone which brought in an additional US\$15 million to the revenue line.

Figure 4 – Petra bank debt covenants

Maintenance Covenants	12 months to 30 Jun 19	12 months to 31 Dec 19	12 months to 30 Jun 20	12 months to 31 Dec 20	12 months to 30 Jun 21
Consolidated Net Debt to Consolidated EBITDA	≤4.5x	≤4.25x	≤3.5x	≤3.25x	≤3.0x
Consolidated EBITDA to Consolidated Net Finance Charges	≥2.5x	≥ 2.5x	≥ 2.75x	≥ 3.0x	≥ 3.25x
Consolidated Net Senior Debt to Book Equity	≤0.4x	≤0.4x	≤0.4x	≤0.4x	≤0.4x

Source: Company Filings

On our forecasts we think the company will keep just about on track with both its net debt to EBITDA and the EBITDA to finance covenant. In FY-2021 we estimate EBITDA of US\$157 million and the finance charge is c.US\$47 million giving cover of 3.3x.

Figure 5 – Net Debt to EBITDA vs Covenant

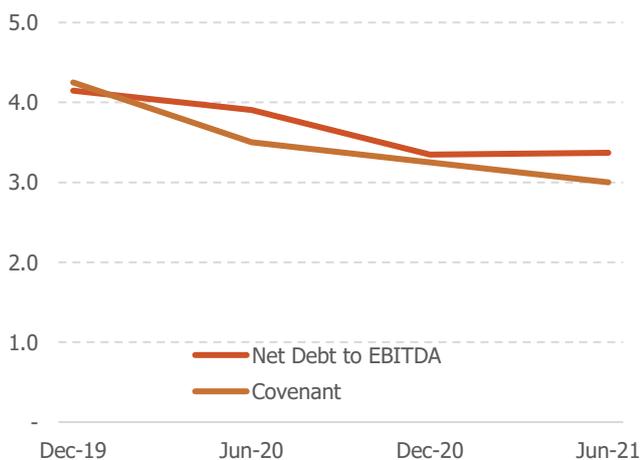
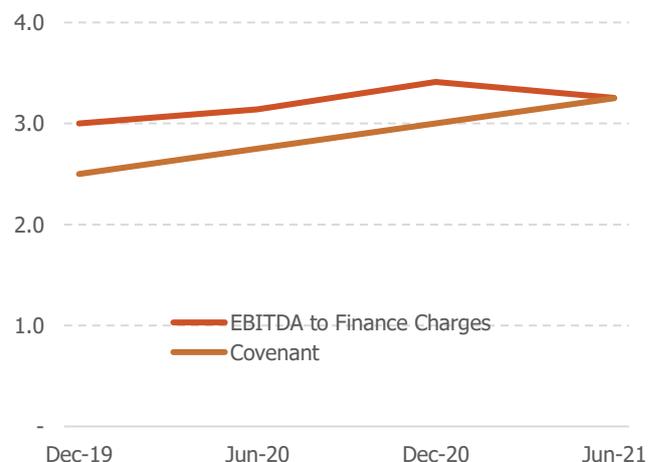


Figure 6 – EBITDA to Finance Charges vs Covenant



Source: Tamesis

### Cash is Flowing

With operations now on a glide path to full delivery and more, we estimate the company can deliver approximately US\$50 million of attributable free cashflow per year – see Figure 7.

Figure 7 – Petra Free Cash Flow Profile (Fiscal Years)



Source: Tamesis

### Assumptions

We assume a flat diamond price from the last tender. Our Cullinan price deck also includes US\$25 million p.a. in sales from specials, and a US\$91/ct price for other diamonds. We also take the spot rand rate flat into perpetuity, and flat costs. The latter is basically a trade-off between productivity improvements and labour costs and power contracts.

Operationally we are assuming Finsch and Cullinan increase output from here by c.10%. Also baked into our model is an estimate on the extension at Finsch but does not include expansion opportunities at Cullinan or Williamson which we discuss later.

Figure 8 – Petra diamond price assumptions

Operation	Diamond Price (US\$ / ct)
Cullinan ex-specials	91
Cullinan total	105
Finsch	87
Koffiefontein	475
Williamson	240

Source: Tamesis

This cashflow profile is aligned with the company's recently announced Project 2022 which has a target of US\$150-200 million free cashflow over a three year period 2020-2022.

### Can Management Deliver On 1 Year Guidance and Beyond?

One of the main problem areas for Petra historically has been guidance and the company’s ability to meet publicly announced targets.

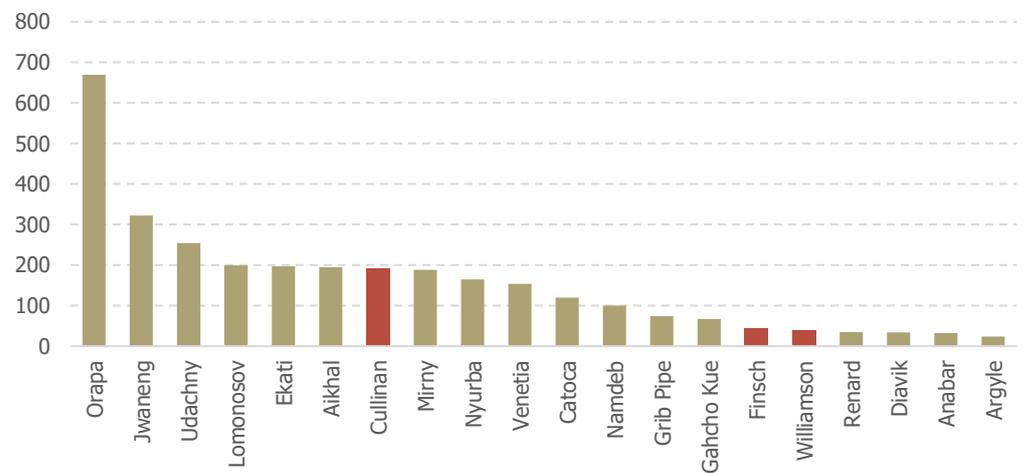
It is unclear to us why and from where the problem arose. However, we did note on a recent site visit to Cullinan that there appears to be a healthy culture of openness for which we suspect Richard Duffy is both responsible and very keen to encourage. Aside from this, there are a number of other reasons why we would hope poor guidance is a thing of the past:

#### Relatively strong and diversified asset endowment now starting to deliver

Petra has four diamond producing assets plus historical tailings, Petra as a group holds the second largest resource pure-play diamonds producers (after Alrosa). Finsch and Cullinan make up 196 million carats grading 59.9cpt and 38.4cpt respectively – see table below and appendix.

**However, we did note on a recent site visit to Cullinan that there appears to be a healthy culture of openness for which we suspect Richard Duffy is both responsible for and very keen to encourage**

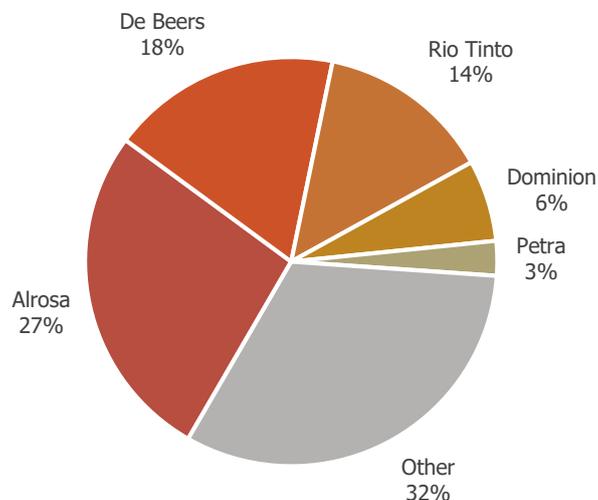
Figure 9 – Global Diamond Mines ranked by Reserves and Resources



Source: Company Filings

In FY2019 Petra produced 3.7 million carats, 88% coming from Finsch and Cullinan, which makes the company the 4th largest listed producer in the world. It’s worth noting too that Cullinan has produced more than a quarter of the world diamonds that are greater than 400 carats.

Figure 10 – Global Diamond Companies as a Percentage of Global Production



Source: Company Filings

We see this technical and geographical diversity as a risk mitigant.

## Potential to meet and exceed nameplate capacity

Block caving is difficult – ask Rio Tinto, considered by many to be the best mining company in the world, who have issues at their flagship copper project Oyu Tolgoi. It takes a large amount of capital upfront. Petra has spent more than US\$1.5 billion capex on its mines on top of the US\$330 million acquisition tag. Variations in rock quality and the stresses therein mean that there is no guarantee, having spent a lot of money up front, that it will actually cave properly.

However, if there is a geology that is suitable to this bulk mining method it's the kimberlite pipe. Moreover, the company has already conducted block caving at Cullinan further mitigating the risk. More than 360Mt of kimberlite ore has been extracted over the last 115 years. It may come as a surprise to long-suffering shareholders that actually the C Cut has been the most successful of the block caves so far at Cullinan in terms of development work and timing.

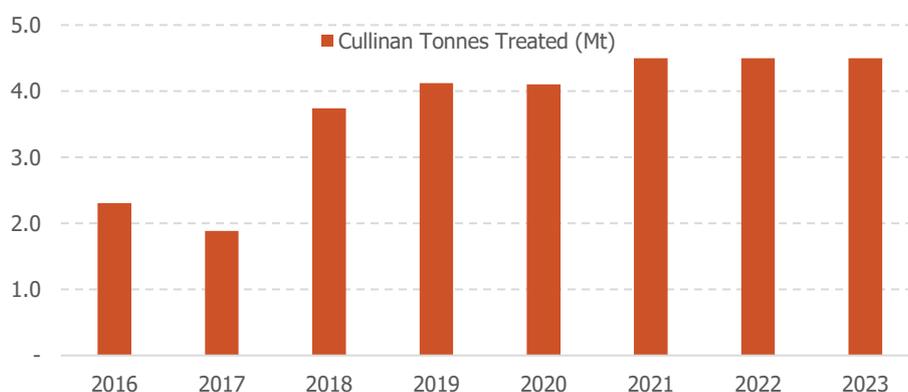
Moreover, once in production block caves are considered the most consistent of all mining methods including open cut. The trick for the team now is to fully utilize the new infrastructure as per any bulk mining method. In order to do that underground you need enough flexibility to ensure continuous ore feed and that the ore transportation systems are working as efficiently as possible.

So far 75% of production has come from just 25% of the face at the C-Cut. That now changes with the last draw point scheduled for November. Petra has also installed a third crusher around the pipe allowing ore to be drawn in nearly every direction and a fourth one is on its way. They have also strengthened the conveyor belt systems that had been causing some teething issues in H1 FY2019.

Management have indicated this “honing of throughput” is central to Project 2022. We believe that for Cullinan it could deliver an extra 10-15% to guided throughput rates of 4.1Mt p.a. which the mine will reach in H2 FY2020 – we have assumed capacity rises to 4.5Mt p.a. by FY2022 and go into more detail on where this is achieved in our Mine Review section.

**We are assuming that the company delivers c.10% more than its nameplate capacity**

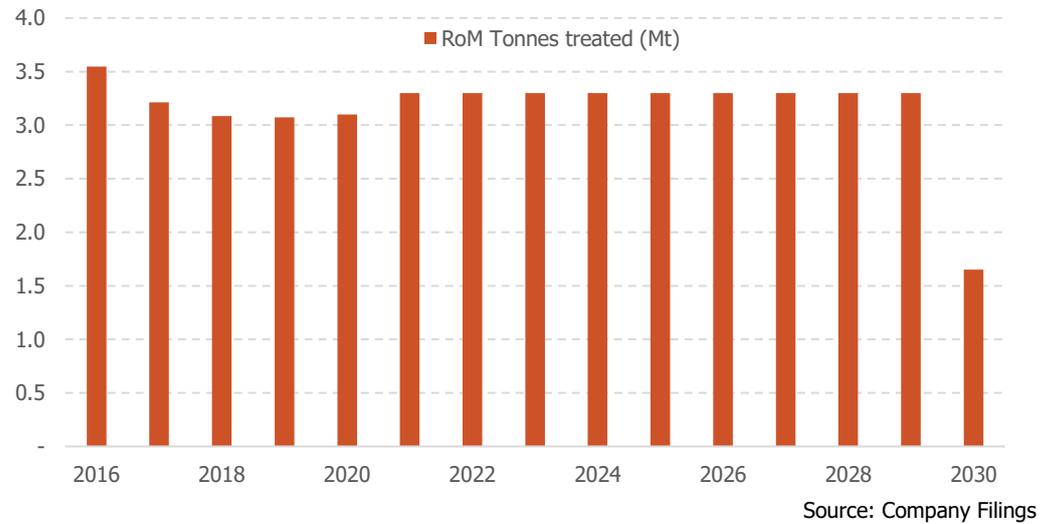
Figure 11 – Cullinan Throughput



Source: Company Filings

Equally at Finsch the Block 5 SLC ramp up is now just running into nameplate capacity and will achieve steady state production in H2 FY2020. We assume production increase to 3.3Mtpa as part of Project 2022. We have modelled throughput as shown below:

Figure 12 – Finsch Throughput



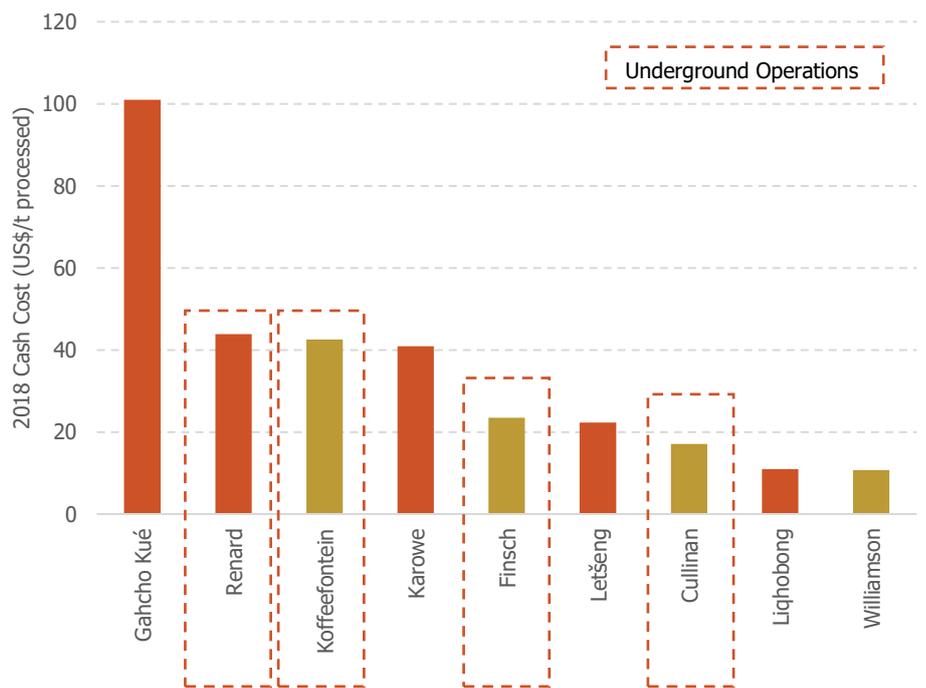
We discuss the potential areas where the company can extract more tonnage in the mine by mine review.

### Whilst delivering lower unit costs

As throughput is maximised this should deliver lower operating cost. In block caving, using gravity and the rock to move and crush itself results in the lowest cost of all mining methodologies theoretically. Again, this is only really achieved as operators manipulate the draw back and forth over the entire extent of the draw points.

This results in lower secondary blasting rates and delivers full utilization across the fixed cost (60% of total costs) of new and extensive underground infrastructure. We note too that at c.US\$20/t processed at Cullinan and c.US\$25/t at Finsch these are two of the lowest cost diamond mines in the world already despite being underground operations – see chart below.

Figure 13 – Listed Small Cap Diamond Mine Cash Costs



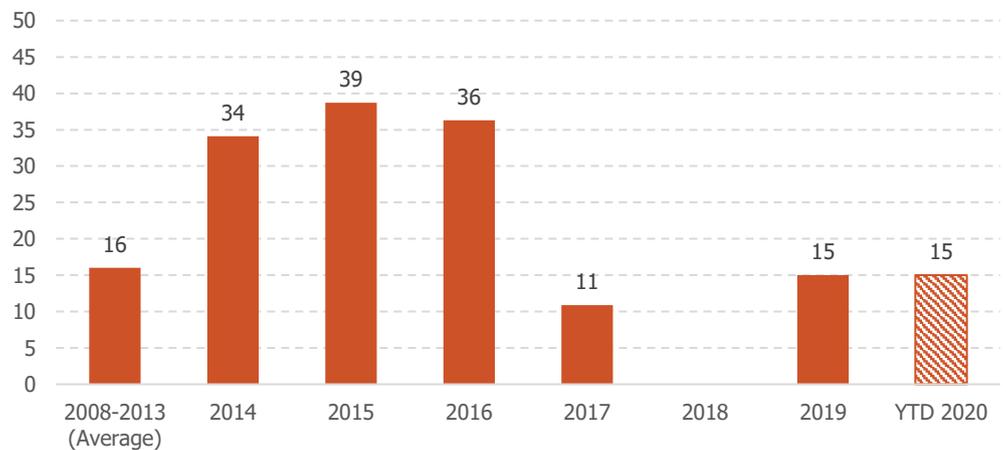
**Grade & Specials**

**As far as specials are concerned, they are primarily recovered from the western side i.e. the C-Cut.**

So far both mines are running at reserve grades so we would not expect any change there. However, it is noticeable the company has found two specials in 2019 as it goes across the C-Cut. Diamonds are considered "special" if they sell for US\$5 million or more. The geology of the pipe at Cullinan is simple on one level i.e. kimberlite surrounded by host rock but within the kimberlite there are a number of different ore facies. As far as specials are concerned, the larger blue stones are thought to be primarily recovered from the western side i.e. the C-Cut.

As such no specials were recorded in 2018 as the company transitioned from the previous block cave. However, in 2019 Petra discovered two significant stones; a 424.89 carat D colour Type IIa 'Legacy of the Cullinan Diamond Mine' which was sold for approximately US\$15 million and a 20.08 carat Type IIb blue diamond which has just been sold for US\$14.9 million. If the company sells more than US\$10 million of specials during the remainder of the fiscal year it will be ahead of its historical run rate.

Figure 14 – Revenue from Exceptional Stones (US\$m)



Source: Company Filings

**Increasing the likelihood of the company meeting guidance regularly**

We think the above all points to the company now meeting and even potentially exceeding guidance going forward. It is also underpinned by what we believe is a more open and inclusive culture as well as a more direct route from operations management to the market.

## Can the Company Extend its Life of Mine?

This is a somewhat rhetorical question. As noted by the company on its website: *Petra Diamonds Limited manages one of the world's largest diamond Resources of c.250 million carats ("Mcts"). This major Resource implies that the potential mine lives of Petra's core assets could be considerably longer than the current mine plans in place at each operation or could support significantly higher production rates. So yes of course but how and where and most importantly, for the bondholders, how much will it cost.*

We briefly look at the various options for Petra to extend its life below and tabulate the financials for each in Figure 15. The development of the remaining C-Cut at Cullinan and the extension at Finsch are the two projects that are both the most critical.

Whilst neither of them are urgent we would expect management to start guiding more firmly in the next 6-12 months and to have full feasibility studies in time for the bond refinancing in 2022. We would reiterate the capex for these numbers are very much a best guess with very little guidance from management:

Figure 15 – Petra Mine Life Extensions

Finsch												
	Surface Footprint (ha)	Depth (m)	BCM	SG	Dilution %	Tonnes (mt)	Grade (cpht)	Contained (Mct)	Throughput (Mtpa)	Years	Annual Production (Mct)	Capex (US\$m)
Block 5	3.2	180.0	5.8	2.7	90%	14.0	57.7	8.1	3.3	4.2	1.9	100
Beyond	2.6	100.0	2.6	2.7	90%	6.2	57.7	3.6	3.3	1.9	1.9	TBC

Cullinan												
	Surface Footprint (ha)	Depth (m)	BCM	SG	Dilution %	Tonnes (mt)	Grade (cpht)	Contained (Mct)	Throughput (Mtpa)	Years	Annual Production (Mct)	Capex (US\$m)
C-Cut Phase 2	7.8	150.0	11.7	2.7	70%	22.1	39.9	8.8	4.5	4.5	1.8	50
Remaining C Cut	20.0	250.0	50.0	2.7	90%	121.5	45.0	54.7	4.5	27.0	2.0	200

Williamson				
	Throughput (Mtpa)	Grade (cpht)	Production (kcts)	Capex (US\$m)
Open Pit Expansion	5.0 (↑100%)	7.0 (↓10%)	642 (↑77%)	100

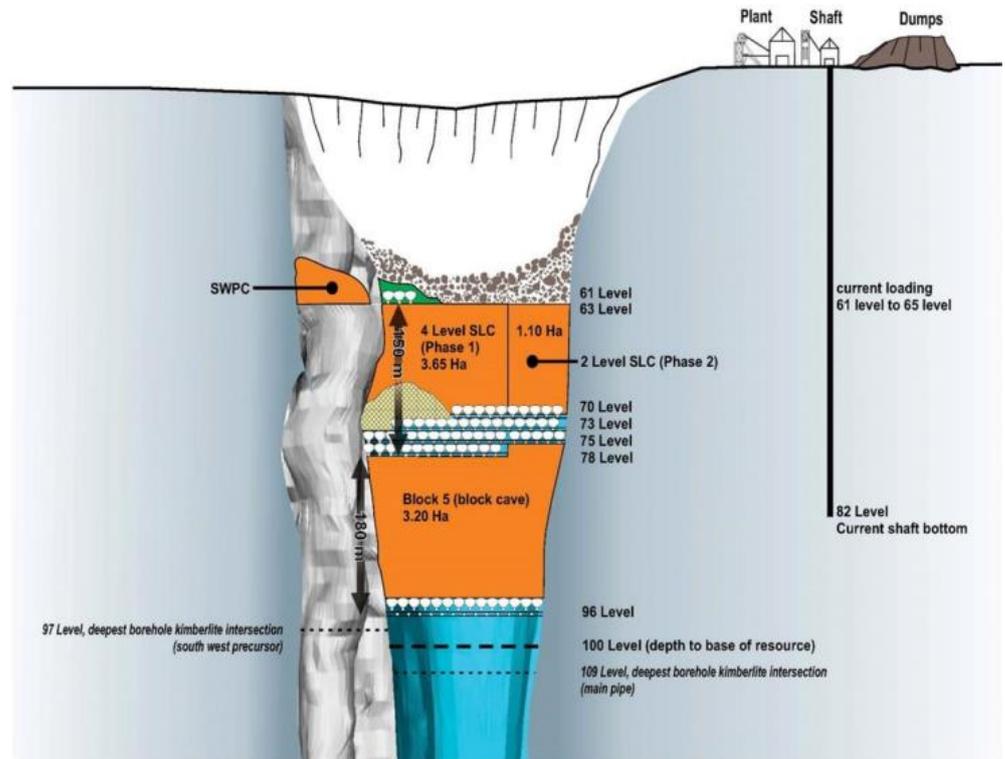
Source: Tamesis

**Finsch Extension.** At the moment the company is conducting sub-level caving down to 78 level at the Finsch Pipe in the Block 5 section (see Figure 16). This lasts until 2026. A decision will then be needed to exploit the rest of Block 5. This will be a classic case of capex vs opex i.e. the higher capital intensity lower opex features of a block cave vs the lower capex higher opex of a sub level caving operation. Given current financial constraints and, as the Finsch pipe descends so its surface area shrinks and the pipe splits, it makes the decision highly likely to be a sub-level cave.

Such is the likelihood of this happening, we have included it in our base case at a cost of US\$100 million spent over 18 months which delivers a life of mine extension to H1/2030.

**Finsch – beyond Block 5.** Block 5 currently extends down to 96 level, with the depth of resource down to 100 level. Whilst the pipe appears to be pinching off at depth, we don't think it unreasonable to consider the possibility that diamondiferous kimberlites extend beyond this point. A further 100 vertical metres at an 80% smaller footprint could add a further 6.2 million tonnes of ore, extending mine life for a further ~2 years .

Figure 16 – Finsch Mine Schematic

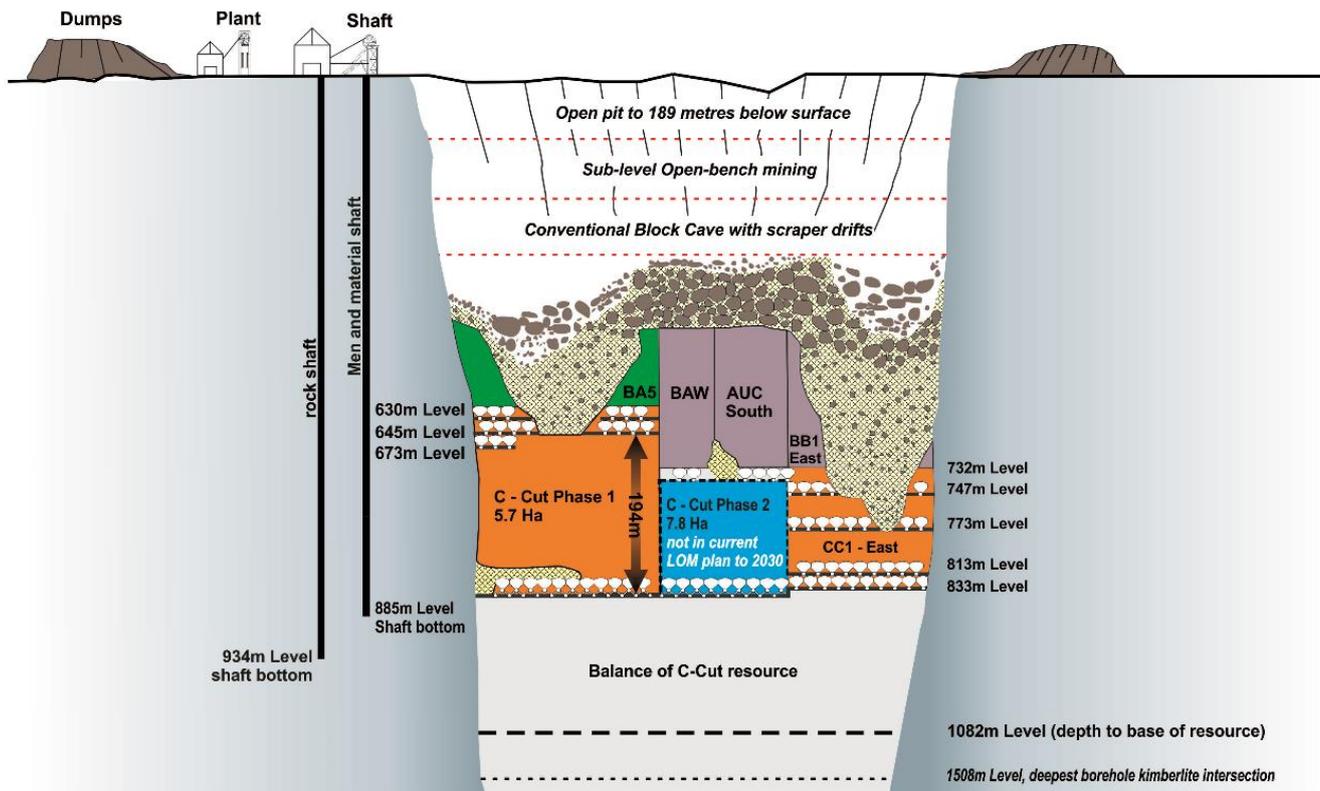


Source: Company Filings

**C-Cut Phase 2 Cullinan.** As Figure 17 below shows; this is an obvious area of LOM extension at Cullinan – additional capex would be minimal as the infrastructure is all in place. It was not in the original plan because it was thought that the Waterberg Quartzite intrusion extended at depth but in fact it stops – quite where exactly is not known but it certainly doesn't extend below 835m. We would imagine the main issue around this would be the rock mechanics associated with block caving below the quartzite although we were told on our site visit that it was very doable.

A quick estimate using presentation materials, after deducting 70% due to the impact of the intrusion, suggests this block is approximately 22Mt which equate to 5.3 years of mine life extension assuming 4.4Mtpa throughput.

Figure 17 – Cullinan Mine Schematic



Source: Company Filings

**Remaining Cullinan C-Cut.** Petra has a further c.250 vertical metres of resource at Cullinan outside of the current shaft infrastructure. Clearly there would be some material capital expenditure to bring these resources into the mine plan (to be spent after 2030), but this represents a further c.121Mt of ore containing c.55 million carats at current resource grade. This is clearly highly conceptual but reinforces our view that there is going to be mining at Cullinan for the foreseeable future.

**Williamson expansion.** The easiest asset for the company to expand operationally is Williamson. However, they are naturally cautious in investing in Tanzania given the refusal of the Government to return VAT and also the US\$15 million parcel of diamonds seized last year. Moreover, at an indicated resource grade of 5cpht the value of the ore - US\$11.55/t (using FY19 average price received of US\$230/ct) – delivers a skinny margin. We note right now they are mining at ~8cpht.

However, ease and cost of doing business in Tanzania appears to be changing for the better. Barrick has finally signed a deal to settle all disputes and we also note that Shanta Gold has received a VAT refund of US\$1.4 million (out of a total of US\$28 million VAT Receivable on their balance sheet).

### Financial Impact of the Expansions

We look at the NPV accretion from these expansions in the valuation section but combined, Cullinan and Williamson, as US\$129 million or 11pps to the underlying company value.

We show our base case financials in the table below. EBITDA remains broadly the same in turn delivering enough cash to pay down debt to more comfortable levels. Free Cash Flow declines from 2022 to 2024 as the company adds capex to build Finsch but this is offset at a net debt level by the incoming payments associated with the current BEE loan which will have accrued to c.US\$210 million by 2022. Hence net debt/EBITDA continues to decline to sub 2.0x.

Figure 18 – Base Case

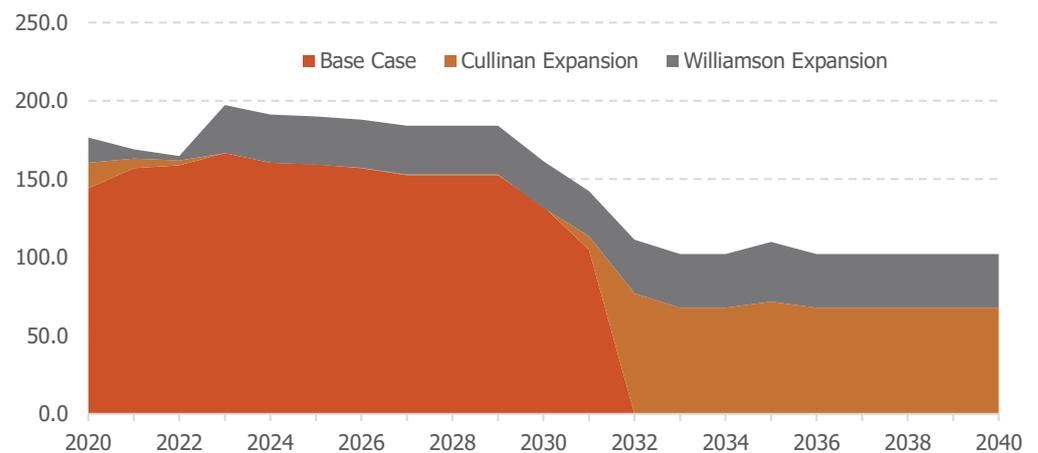
Base Case	2020	2021	2022	2023	2024	2025
EBITDA	144.1	157.1	158.9	166.6	160.5	159.4
Operating Cashflow	86.2	72.1	79.8	100.3	67.1	30.4
Free Cashflow to Firm	49.7	36.7	47.9	35.5	49.7	34.8
Net Debt	577.8	516.5	444.0	408.5	358.8	324.0
Net Debt/EBITDA	4.0	3.3	2.8	2.5	2.2	2.0

Source: Tamesis

We illustrate the potential impacts of the various expansions on our EBITDA forecasts below. Clearly the main expansion of Cullinan will simply extend the life of mine out to 2040 and beyond.

It is notable too that Williamson, which is the easiest to do, would add 19% or c.US\$31 million to EBITDA at a cost of c.US\$100 million. For illustrative purposes we have shown the additional EBITDA if the company have the go-ahead now. In reality we could see it kicking in towards the end of the 2020s.

Figure 19 – Expansion Impact on EBITDA (US\$m)



Source: Company Filings

## Will Diamond Prices Recover?

The easiest route to financial safety for Petra would be via a recovery in diamond pricing. This can come from two sources: underlying market conditions and/or the discovery of more specials. The balance of risk is that both improve from here, but timing is everything.

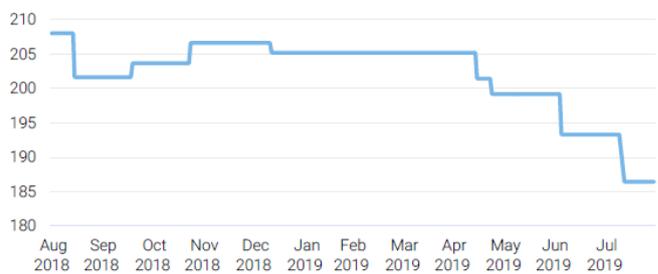
### Broader Market Conditions

As Petra pointed out in their recent trading update diamond prices are weak. They have slid quite sharply this year and now stand at 10 year lows. One could argue that it has been a perfect storm of a strong increase in supply in 2017/18 into fundamental changes in demand/retail alongside the ramp up in synthetics, a trade war and Hong Kong protests. However, there is no other commodity where the producers can slam the breaks on so hard as they have done this year with over a 10% reduction in supply from Alrosa and De Beers. Moreover, this heralds a deeper supply change as Argyl comes to the end of its life.

Figure 20 – PolishedPrices.com Rough Diamond Index Since 2004



Figure 21 – Company supplied BBG rough diamond index – 1 Year

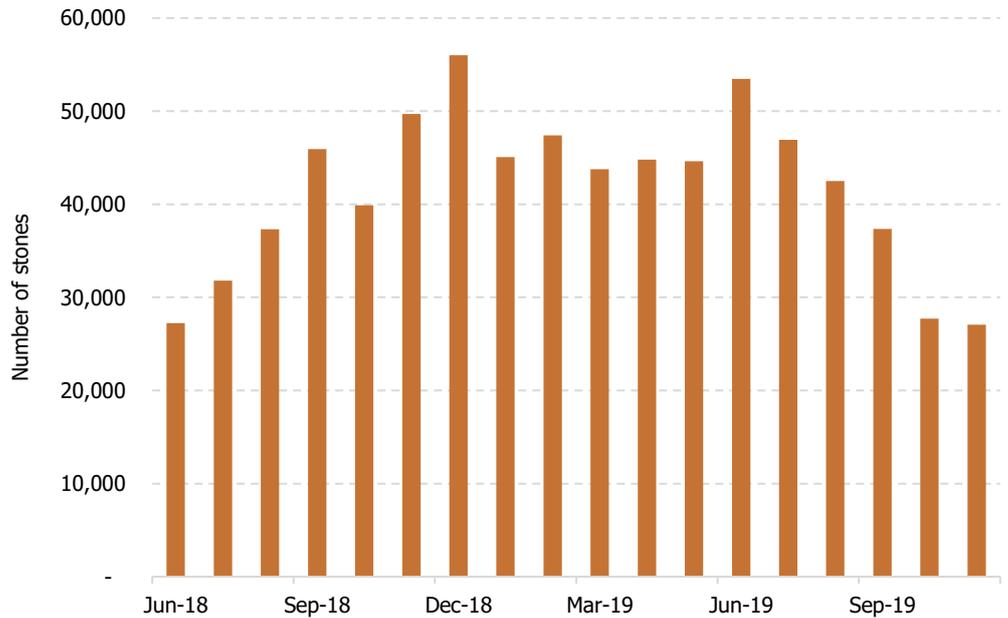


Source: Bloomberg & Company

#### Key points to note:

1. Bank lending to the diamond cutting and polishing industry was already under increasing scrutiny but the Nirav Modi – Mehul Choksi scam last year (see [www.polishedprices.com](http://www.polishedprices.com)) has accelerated this. India is by far the biggest diamond polishing country in the world (over 90% of the world's diamonds are cut and polished in the country – mainly in Surat) and a big section of the Indian banking industry has been devoted to providing collateral to this industry both domestically and worldwide. The US\$2 billion case has highlighted compliance vulnerabilities in the system which has led to new legislation including setting limits on lending, enforcing a change in corporate structure to enable more visibility (and tax collection), and inter related party transactions.
2. This has in effect forced through destocking within the cutting and polishing industry as well as tightening up legislation. Of course, over time this is a good thing on both fronts. The question is how much destocking has to happen before some pricing tension kicks in. We note imports of rough and exports of polished diamonds are down c.25% YTD in India. A recent Rapaport presentation highlighted their own stock levels are down 46% now YTD.

Figure 22 – RapNet Inventory for 0.3ct, D-G, IF-VS2 diamonds



Source: Rapaportgs

**Cutting and trading is destocking in the face of a perfect storm in retail.**

3. The retail end is suffering for a number of reasons: large scale reduction in high street stores and associated inventories in US as customer base continues to move on line, fallout from the US China trade war, Hong Kong protests and some substitution from lab grown diamonds (LGDs). This is all despite global GDP & US growth running at a healthy pace of c.3% for the last two years which has generally been a reasonable guidance for demand. The US economy in particular, which is the biggest market for diamonds, has been going from strength to strength with record unemployment and consumer confidence indices near or at all-time highs. Following a poor selling season (Thanksgiving to Christmas) in the US last year all eyes will be on the market during this period in 2019. Rapaport notes some positive signs in their latest presentation to the market.
4. A more positive picture is developing upstream. The miners grew supply aggressively in 2017 as De Beers brought on and ramped up Gahcho Kue (51% owned) as well as expanding elsewhere as did Alrosa. It should not be forgotten that De Beers and Alrosa control c. 60% of global supply (and 65-70% of value) of rough diamonds which is a material positive for the industry. Both are keen proponents of value over volume with both seemingly happy to take an industry guardian role. They are currently affecting a large scale withdrawal of volume at sights which should be a positive for the industry. Moreover, it heralds a reduction in industry supply in general from c.150Mcts to just over 100Mcts in 2026 with 30Mcts of that reduction coming in the next three years – see fig below. We can't think of any other commodity where that can happen without a positive effect on pricing.
5. This recent action by Alrosa and De Beers seems to be having a positive effect on pricing with recovery noted in the 0.3-0.5ct quality range – Rapaport A3. The key question is can that be sustained into next year. It will in our mind require a continuation of the discipline displayed by Alrosa and De Beers.

**Large scale withdrawal of sales further upstream by Alrosa and De Beers.**

Figure 23 – Rapaport Est of Global Production and Sales

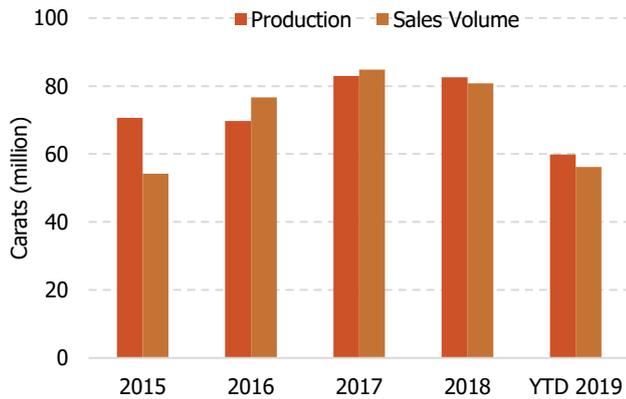
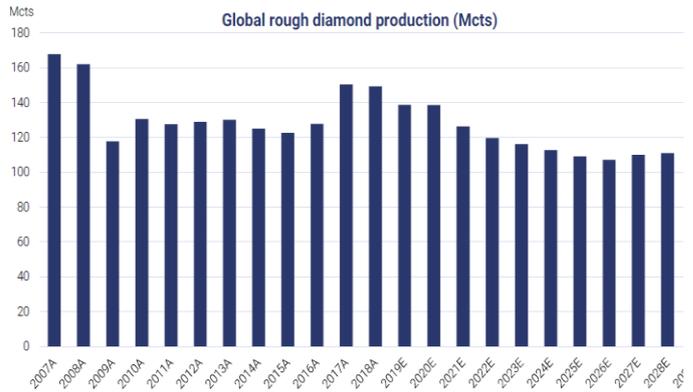


Figure 24 – Global rough diamond production

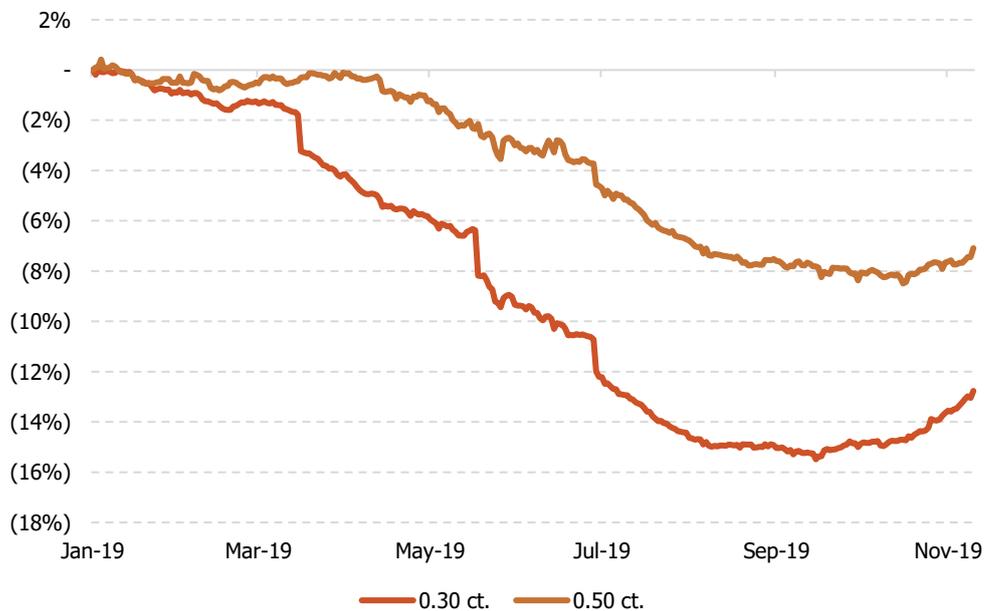


Source: Rapaport and Petra

**Signs of stabilization and even recovery in pricing.**

- We also note that De Beers has been steadily ramping back up their marketing expenditure over the last few years. It is now standing at US\$180 million p.a. which was where it was before they tried to push the cost of advertising onto their sight holders as part of their Supplier of Choice strategy initiated in the early noughties. The latest Diamond Insight report hints perhaps at where their campaigns will be aimed at – basically expressions of modern-day love whether it be love gifting of natural diamonds by cohabiting couples, same sex or otherwise, or more traditional commitment diamonds. We have always believed, as have many diamond commentators, that well informed, directed and budgeted advertising is an essential and proven way of increasing demand.

Figure 25 – RapNet Diamond Index



Source: Rapaport

Note the RapNet Diamond Index (RAPI) is the average asking price in hundred \$/ct. of the 10% best-priced diamonds, for each of the top 25 quality round diamonds (D-H, IF-VS2, GIA-graded, RapSpec-A3 and better) offered for sale on RapNet® - The Diamond Market.

- There is still interest in the downstream sector too highlighted by the US\$14.5 billion bid from LMVH (PAR: MC) for Tiffany (NYSE: TIF).

## **Sales of Specials**

Petra have only recently started finding specials again at Cullinan (which has supplied 25% of all the world's 400ct+ diamonds) see Figure 14. We note that the recent 20.08 carat blue sold recently for US\$14.9 million.

As discussed, we are assuming that price received ex specials is 91/ct and they find US\$25 million pa our overall price is US\$105/ct. We admit this is not the most conservative approach but given a) the company is only just starting to mine the full face of Cullinan and b) the base price assumed going forward is off a ten year low we believe such an approach is justified.

## **Rand**

We don't try to forecast the Rand so have set it at ZAR15:USD into perpetuity. Right now, there appears some stress in the SA economy with the World Bank recently downgrading GDP forecasts (to 0.8% this year), Moody's downgrading the country's credit rating and PMIs below 50. A key issue with the economy remains power availability with the Govt reluctant to resolve Eskom's balance sheet issues.

This would all augur for a weaker Rand although some are now suggesting the bad news is priced in. As with the rest of the world much will depend on the state of play in the China/US negotiations.

South Africa has also recently suffered load shedding through lack of available power from ESKOM, the national power utility. Assuming that the baseload power returns in the near term, we don't expect any material impacts to earnings as the company should be able to utilise excess milling capacity to catch up any production shortfall.

## Valuation

We have looked at a DCF valuation on a base case and analyse the valuation effect of the expansion opportunities at existing assets. We have also put together a matrix of valuation metrics based off earnings and cashflow forecasts and compare with Petra peer group although the latter is now somewhat meagre in size.

The accuracy within the valuation debate is perhaps not the most critical element to the Petra Diamonds story. If they can steer their balance sheet back onto safe ground, then the price of its shares should improve dramatically.

## DCF Valuation and Target Price

Our DCF valuation comes to 16pps. If the company were to expand Williamson as we describe it would add a further 5.2pps and then the Cullinan extension 5.9pps taking the total to 27pps. At the moment the shares are trading on 4.8x EV/EBITDA for 2020 which is in line with the rest of the sector (what's left of it). Putting this all together leaves us in mind to set a Price Target of 12pps, 50% higher than the current share price.

Figure 26 – Sum of the Parts Valuation

Valuation	US\$m	GBPm
Finsch	156.9	122.6
Cullinan	480.7	375.5
Koffiefontein	0.8	0.6
Williamson	93.4	73.0
Net Debt	(592.8)	(463.1)
PV of BEE Receivable	102.5	80.1
PV of S&GA	(69.8)	(54.5)
<b>Total NAV</b>	<b>171.7</b>	<b>134</b>
NAV/share	0.20	0.16

Source: Company Filings

Our current NPV for Petra is £0.16. This a base case and assumes flat currency of ZAR15 to the USD, flat diamond pricing across the four operations and flat costs. Our discount rate used is 10%, which we feel is appropriate for primarily South African operations (SA 10yr yield is 9.13%) and considering the debt coupon of 7.25%.

## Expansion Opportunities

As discussed, we have included the Finsch SLC mine life extension but no others in the above analysis.

### Williamson Expansion

An expansion at Williamson is the most immediate transformational growth opportunity for the company, constrained to date by the political situation in Tanzania. Petra recently has had issues with VAT reclamation (US\$32.9 million receivable as of 30 June 2019, and the seizing of a parcel containing 71,654 carats with an estimated value c.US\$15 million in 2017), however the recently announced US\$300 million settlement between Barrick Gold (TSX/NYSE: ABX/GOLD) and the Government of Tanzania suggests that the investment climate in country may be thawing.

The current mine life at Williamson to 2032 is constrained not by the resource base but by the mining licence duration. Assuming an improvement in country we see little challenges in renewing the mining licence.

We estimate that doubling the throughput would require c.US\$100 million of expansion capital. We reduce grades mined slightly (resulting in 75% greater production), reduce operating costs 15% on a unit basis reflecting greater economies of scale and double our sustaining capital estimate.

This results in a 68% increase in Williamson NPV 10% to US\$156.6 million, or an incremental 5.2pps to our valuation.

### Cullinan

Expanding Cullinan beyond the current life beyond 2032 would require substantial investment including C-Cut phase 2 and beyond with new block cave infrastructure. Whilst this is still at a conceptual stage, using a US\$200 million capital expenditure estimate over 2 years from 2031, and a mine life extension to 2040 would add 15% or US\$70 million to our Cullinan valuation – representing a 5.9pps increase to our valuation

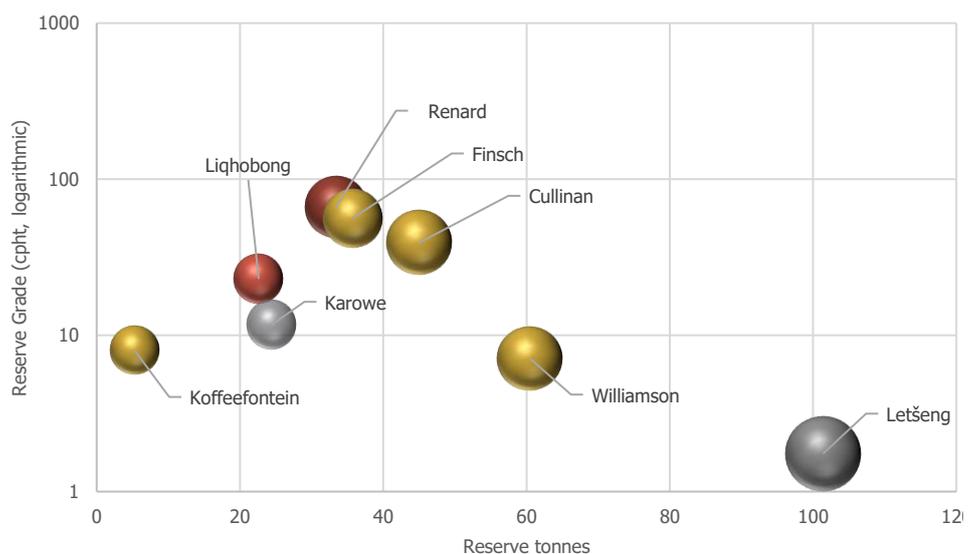
Both the Williamson Expansion and the Cullinan mine life extension are not included in our base case valuation, however clearly demonstrate that if Petra are in a position to deploy capital to their existing operations then there is material upside. In the event we included these two projects in our valuation our target price would increase 75% to 27pps.

### Comparables – survival of the fittest.

The number of junior diamond companies with which one can compare Petra is small and shrinking. Much of the world’s supply is controlled by larger diversified companies such as De Beers – Anglo American and Rio Tinto. Dominion Diamonds is no longer relevant following its takeover by the Washington Companies in 2017, nor Stornoway following its delisting.

Moreover, market conditions are leaving some juniors in such a state it’s difficult to compare against them such as Firestone. Survival of the fittest is the current modus operandi for the industry at large.

Figure 27 – Producing mines owned by listed diamond companies



Source: Company Filings

Note: Letšeng 2015 Resource adjusted for depletion

We have used Gem, Lucara, Mountain Province and Mountain Province. We have also included the world's largest diamond producer by volume, ALROSA, not as a true comp but as an interesting relative measure for valuation purposes. It's such a small set - we see the table below of interest only rather than a useful comparison tool.

Figure 28 – Diamond Company Comps (Calendar Year)

	Market Cap	EV	EBITDA			Net Income			EV/EBITDA			P/E			EBITDA Margin
			2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019
Gem	95	98	38	58	57	5	13	13	2.5x	1.7x	1.7x	20.7x	7.3x	7.4x	55.7%
Lucara	240	235	68	83	94	13	22	30	3.4x	2.8x	2.5x	18.2x	10.8x	8.0x	34.5%
Mountain Province	179	451	71	116	153	-13	14	41	6.3x	3.9x	2.9x	-	13.0x	4.4x	44.3%
ALROSA	9,405	10,376	1,498	1,837	2,047	894	1,136	1,309	6.9x	5.6x	5.1x	10.5x	8.3x	7.2x	51.9%
Average									4.8x	3.5x	3.1x	8.9x	9.9x	6.7x	34.5%
<b>Petra</b>															
Tamesis Est.	88	645	156	144	157	-13	-3	11	4.1x	4.5x	4.1x	-	-	8.3x	39.9%
Consensus			156	151	176	-13	-7	7	4.1x	4.3x	3.7x	-	-	12.1x	

Source: FactSet

Some points to note:

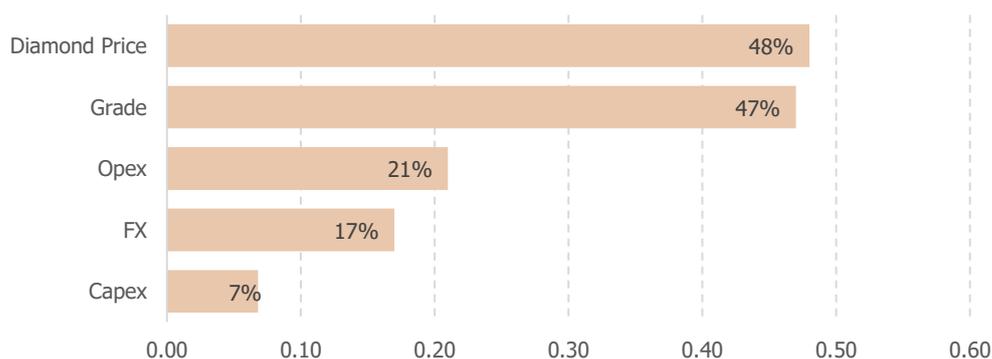
- Suffice it to say the biggest standout when looking at the comparatives is the size of the net debt at Petra. As such the EV/EBITDA metrics for Petra look stretched if anything near term. Only Alrosa trades on higher multiples.
- The good news is that the EBITDA is going the right way relative to the consensus forecasts for the rest of the group. This is a function of rising production as both Finsch and Cullinan hit full strength.
- In our view it has always been advantageous to mine in Southern Africa vs Canada not least due to the climate but also quality of diamonds, labour costs etc. Mountain Province are ok by virtue of the fact it is a JV partner on the world class Gahcho Kue mine alongside De Beers.
- The EBITDA margins at all these companies still remain ok despite the dreadful conditions and Petra scores moderately well.

## Sensitivities

As expected, due to the high levels of leverage, Petra is most sensitive to diamond prices, with an estimated 24% change in 2020 EBITDA and a 48% change in NAV with a 10% change in diamond prices.

The company is nearly as sensitive to changes in Run of Mine grade, with a 22% and 47% change respectively.

Figure 29 – NAV Sensitivity to 10% improvement in key improvement



Changes in operating costs and USD:ZAR exchange rates have a 12% and 7% on FY2022 EBITDA and a 21% and 17% impact on target price respectively. This reflects our assumption that ~75% of direct and indirect costs are Rand denominated.

Naturally the company's FY-2020 EBITDA forecast is not sensitive to a change in capital expenditure, however a 10% decrease in capital expenditure would have a 7% improvement in our target price

Figure 30 – FY2020 EBITDA Sensitivity

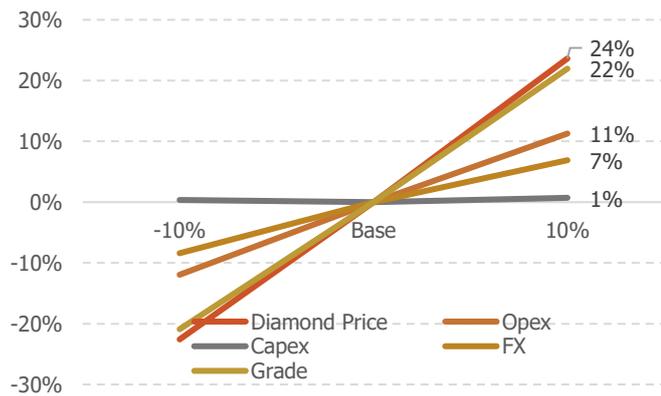
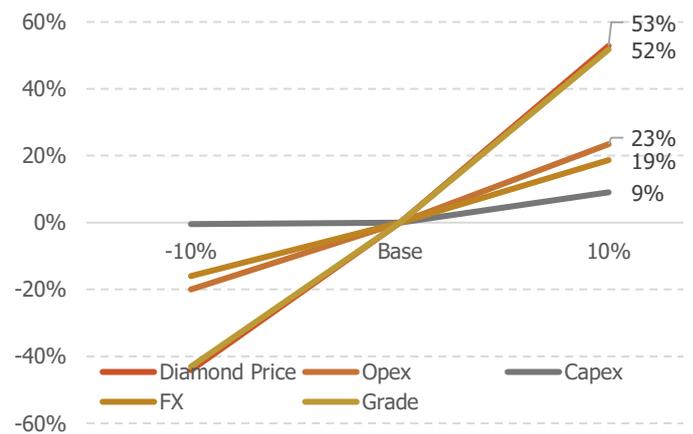


Figure 31 – Target Price Sensitivity



Source: Tamesis

We have tested in further detail sensitivities to the key inputs for our financial model below:

Figure 32 – NAV sensitivities to Diamond Prices and Exchange Rates

	FX (USD:ZAR)									
	0	12	13	14	15	16	17	18	19	20
-25%	(0.67)	(0.55)	(0.44)	(0.35)	(0.28)	(0.21)	(0.15)	(0.10)	(0.06)	
-20.0%	(0.55)	(0.43)	(0.32)	(0.24)	(0.16)	(0.10)	(0.05)	(0.01)	0.02	
-15.0%	(0.43)	(0.31)	(0.21)	(0.12)	(0.05)	(0.00)	0.04	0.07	0.11	
-10.0%	(0.31)	(0.19)	(0.09)	(0.01)	0.04	0.08	0.12	0.16	0.19	
-5.0%	(0.19)	(0.08)	0.01	0.07	0.12	0.17	0.21	0.25	0.28	
0.0%	(0.07)	0.03	0.10	0.16	0.21	0.25	0.29	0.33	0.37	
5.0%	0.04	0.12	0.18	0.24	0.29	0.34	0.38	0.42	0.45	
10.0%	0.12	0.20	0.27	0.33	0.38	0.43	0.47	0.51	0.54	
15.0%	0.21	0.29	0.35	0.41	0.46	0.51	0.55	0.59	0.63	
20.0%	0.29	0.37	0.44	0.50	0.55	0.60	0.64	0.68	0.71	
25.0%	0.38	0.46	0.53	0.58	0.64	0.68	0.73	0.76	0.80	

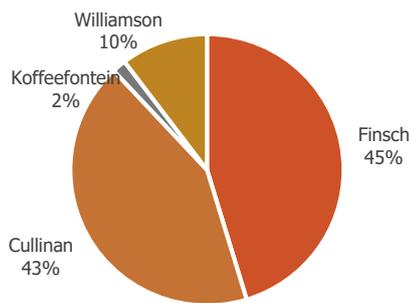
Source: Company Filings

## Mines Overview

We discuss the plans for each of the company's four mines below.

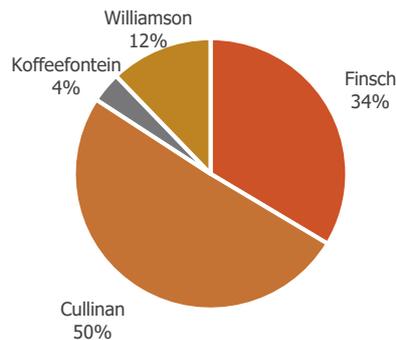
Clearly Finsch and Cullinan are the most important generating 88% of life of mine production, 84% of group life of mine EBITDA, and containing 82% of group resources as of 30 June 2019.

Figure 33 – LoM Production by Mine



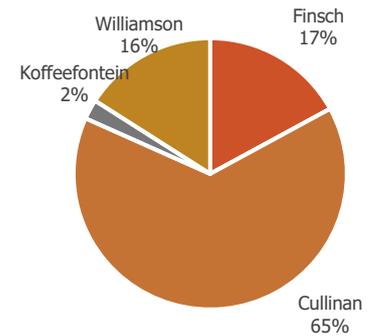
Source: Tamesis

Figure 34 – LoM EBITDA by Mine



Source: Tamesis

Figure 35 – Total Resource by Mine

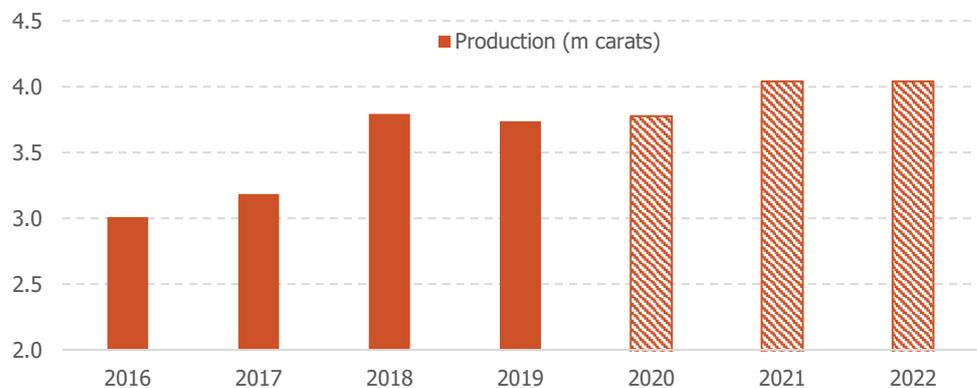


Source: Tamesis

Beyond the recent production expansion from the commissioning of the Cullinan block cave, the company is delivering a growth profile from these existing assets with a CAGR 2016-2021 of 5.9% in carats – see Figure 36 below.

Part of this is stemming from the implementation of Project 2022 as discussed below.

Figure 36 – Petra Diamonds growth profile



Source: Tamesis

## Project 2022

Overarching the plans for all the mines is the recently formed Project 2022 initiative. Most mining operations exceed nameplate capacity and management's focus on this is at the centre of the US\$150-200 million net cashflow resulting from the Project, 75% of which is from additional output.

Figure 37 – Project 2022 Cost Savings



Source: Petra

**At Cullinan management are focussing on shaft capacity to increase production and at Finsch it is the underground ore handling system where recent improvement have already resulted in a 9% YoY increase.**

In determining a nameplate capacity of a mine, it is normally an iterative process between the financial returns, capital spend on infrastructure and technical limits of the ore body. For a mine there are generally 5 steps in the process:

1. **Orebody:** The tonnage which the ore body can deliver which is normally a function of the number of draw points and the footprint of the ore body. For example – you cannot design a mine for 10Mtpa if the ore body can just support 6 or 7 Mtpa.
2. **Trackless fleet:** The Trackless machine fleet moves the ore from the draw point to a tipping point. The size of the fleet is a function of the number of draw points, loading tunnels, bucket size, number of machines, turning radius, tunnel size etc. – one can only deploy a certain number of machines to get optimum utilisation. For example, if you have only two tipping points, it will be fruitless to increase the size of your fleet to get more capacity as the machines will only start queuing at the tips so capacity needs to be looked at holistically.
3. **Ore handling system:** The ground handling infrastructure which includes the tips, crushers, conveyors, feeders etc. to get the ground from the point where the trackless machine tips to the shaft.
4. **Shaft:** The hoisting capacity of the shaft is a function of skip size, rope length, winder capacity etc.
5. **Plant:** The plant capacity. For Plants it is simpler as you can build as big a plant as you want, a plant can be designed for the volume it is due to receive.

In the case with Cullinan, the limiting factor has been the shaft capacity which was rated at 4.0 to 4.2 Mtpa based on a five day work week. To increase capacity beyond this would have been generally prohibitive as it basically means a new shaft. There is capacity beyond this at the processing plant – capable of potentially a combination of fresh ore and tailings up to 6Mtpa.

However, we think management have started to realise it is possible to increase the hoisting capacity due to a number of optimisations conducted on the shaft. We suspect this resolves around the principle of marginal gains, or the 1% factor, in the face of massively improved data digitisation techniques but we don't know and are looking forward to more detail as part of Project 2022. If shaft capacity can be improved, then so can everything else.

The plant capacity was designed based on 4Mt ROM and 2Mt tailings. With no significant tailings throughput, there is some spare capacity in the plant. The ore body can deliver more due to the size of the footprint and the company are busy building a fourth crusher underground to uplift the ground handling capacity. The fleet size is adequate. Management will want to be certain before guiding especially given the history, but we believe that there is enough here for us to factor it in in our model.

In the case with Finsch, the limiting factor is mainly the ore body and the mining method (sub-level cave) which is a much more complex mining method than block caving. In a sub level cave, there are two further factors to consider which are drilling capacity and blasting capacity. One needs to be able to drill and blast sufficient rings before a trackless machine can load. Initially Finsch was limited due to insufficient long hole drilling capacity which restricted the build-up. Once that's solved then the ore handling system is the next limiting factor.

The ore handling system was designed to handle 3.2Mtpa, but unfortunately due to low availability it was a constraint. The company is addressing this, and their efforts resulted in a strong Q1 FY2020 showing a 9% increase in ROM tonnes treated. At Finsch the shaft and plant is not a constraint at all and should not be a limiting factor. If Finsch wants to exceed the design capacity

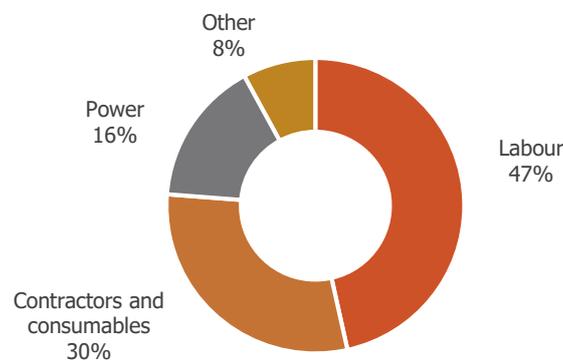
of 3.1Mt, they will have to do further upgrades to the ore handling system which is exactly what they are busy with including a third crusher on 78L.

Koffiefontein’s SLC is very similar to Finsch. The limiting factor currently is the reliability of the trackless fleet and the ground handling system.

Put this all together and we believe that the company can add an extra 10-15% of throughput at both Cullinan and Finsch as suggested in the front section of this note. This would fit with industry trends where mines tend to exceed nameplate capacity once up and running.

We detail more closely our throughput assumptions below in the mine reviews. Other areas of focus are costs and procurement although these don’t have the same impact. Unit costs will come down anyway as a function of the increase in throughput given over 50% of the cost base – see below – is fixed. We have generally taken what we believe is a sensible/conservative approach to cost forecasts which is to simply net off the benefits of Project 22 and increased throughput against the strong inflationary pressures of labour and power.

Figure 38 – FY2019 On-mine cash cost split (South African operations)



Source: Petra

We run through our basic operating assumptions for the mines below:

## Finsch

Petra acquired the Finsch mine from DeBeers in 2011 for US\$200 million. Finsch is a typical diamondiferous kimberlite, with a surface footprint of 17.9 hectares. The country rock is banded ironstones, providing a distinct and welcome contrast to the kimberlite both visually and hardness.

Mining commenced at Finsch in 1963, first transitioning to underground in 1978. At acquisition, block cave mining was taking place at Block 4, which was depleted in 2015. The company initially planned to develop Block 4 as a cave, however due to capital constraints Petra transitioned to sub-level caving, currently mining over 4 levels, below Block 4. The current mine plan has a mine life until 2025. Given the company is already spending expansion capital on below the current mining horizon into Block 5 we have assumed that it is then developed (as an SLC). We note there are additional resources in Block 6 that could add mine life.

## Reserves and Resources

The current resource table at Finsch is as follows

Figure 39 – Finsch Reserves and Resources

	Tonnes (m)	Grade (cpht)	Contained Diamonds (Mct)
<b>Reserves</b>			
Proven	-	-	-
Probable	35.7	56.3	20.1
<b>Total Reserves</b>	<b>35.7</b>	<b>56.3</b>	<b>20.1</b>
<b>Resources</b>			
Measured	-	-	-
Indicated	31.6	67.6	21.3

Inferred	36.5	53.3	19.4
Total Resources	68.1	59.9	40.8

Source: Company Filings

## Production

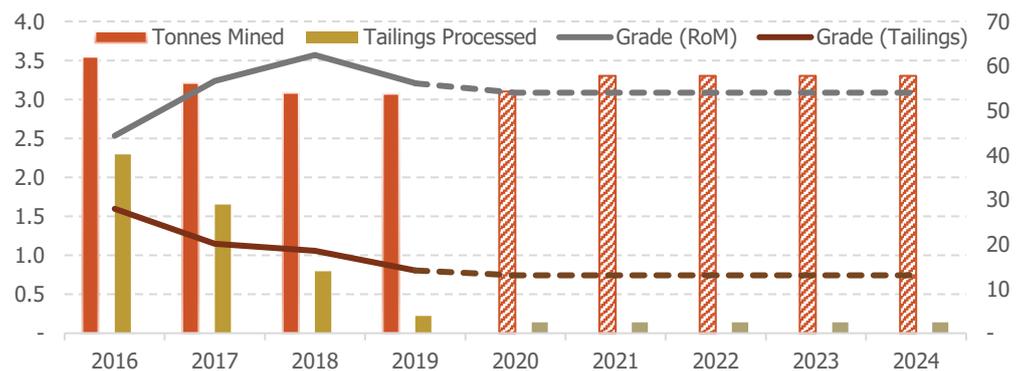
Guidance for the current SLC operation for FY2020 is 2.9-3.0Mts. We take the top end of that guidance for FY2020 and then lift it to 3.3Mtpa production until the proposed Block 5 development comes online beyond FY2024.

We are estimating grades of 54cpt, in line with historical performance in the SLC, with an average price per carat of US\$87/t.

The mine has historically used production from mine tailings to supplement run of mine ores. Prior to FY-2019, the mine was able to use higher grade "pre-79" tailings that were processed prior to the use of DMS sorting technology.

These tailings have now been exhausted with only lower grade material remaining. We are forecasting 140kt per year with grades of c.13cpt being treated essentially as a "filler" for the plant.

Figure 40 – Finsch Production Schedule



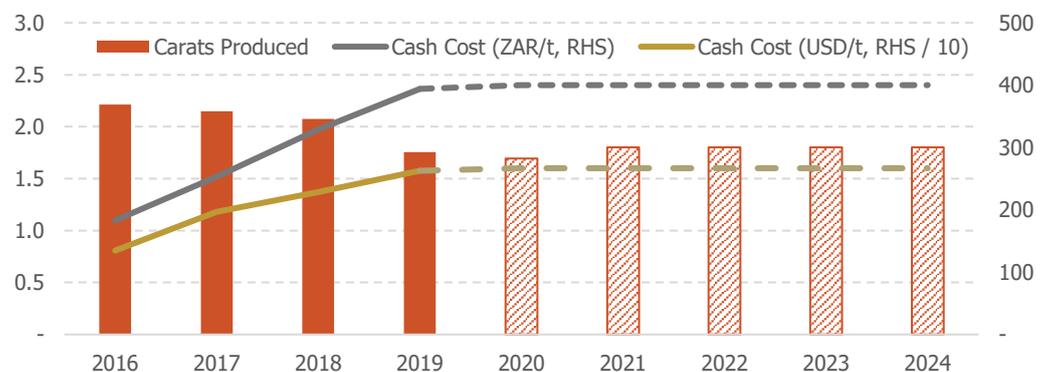
Source: Tamesis

## Opex and Capex

At the forecasted grade/tonnage profile using a SLC mining method, Finsch is expected to continue to produce approximately 1.8Mcts per year. We forecast on mine costs of c.R400/t processed.

The profile in Rand and USD is shown below.

Figure 41 – Finsch Carat Production and Cash Costs



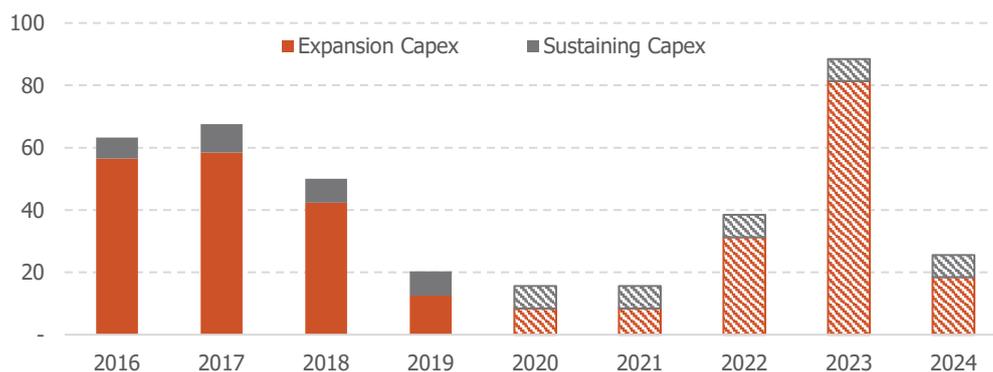
Source: Tamesis

Finsch is not expected to have any material capital requirements until 2023 when the current plan is to cease sub level caving and develop Block 5.

Clearly the business decision on block cave vs SLC does not need to be taken until much further down the line and is ultimately a trade-off between higher capital costs with lower operating costs, and lower initial capital requirements and higher operating costs.

However, given the cash constrained position of the company, we have assumed further SLC development and allowed a capital budget of c.US\$110 million for additional development works following the current plan.

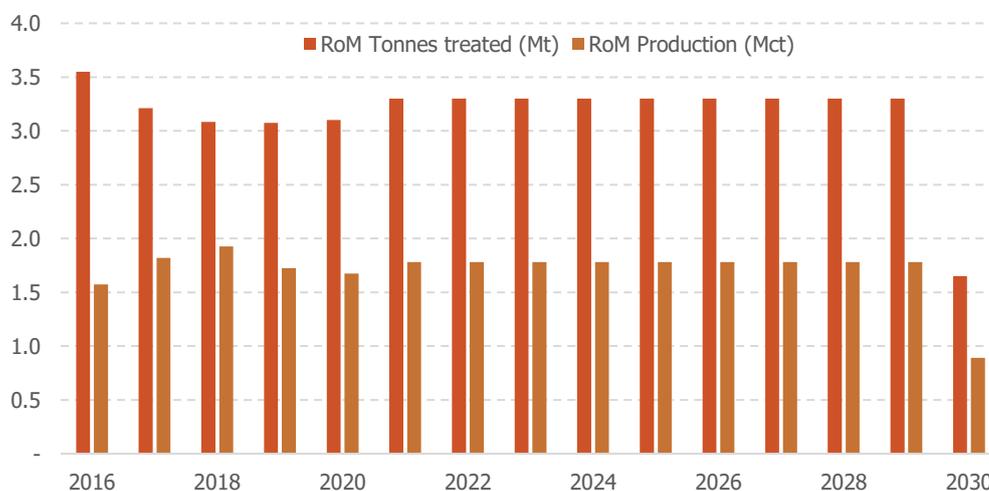
Figure 42 – Finsch Capital Expenditure



Source: Tamesis

This extra spend delivers the following production profile:

Figure 43 – Finsch Mine Life Profile



Source: Tamesis

## Cullinan

Formerly known as the Premier mine, the Cullinan mine was acquired by Petra from DeBeers in 2008. Mining in the area started in 1871, with operations at the Cullinan kimberlite pipe commencing in 1903. DeBeers acquired control in 1930. Open pit mining ceased in 1932 due to the Great Depression, the mine reopened in 1945 and underground development started. Production has come from open cut, SLC and a series of block cave since then with the latest, the C-Cut, now close to full capacity.

The East development was previously considered to be part of a Phase 2 Block Cave but has been brought ahead into the mine plan as a Sub Level Cave (to better manage the waste rock that has fallen into that part of the orebody).

## Reserves and Resources

Currently Cullinan has a resource of 416.5Mt containing 190 million carats. Note the 10cpt grade at inferred level is associated with the tailings.

Figure 44 – Cullinan Reserves and Resources

	Tonnes (m)	Grade (cpt)	Contained Diamonds (Mct)
<b>Reserves</b>			
Proven	-	-	-
Probable	45.0	39.2	17.7
<b>Total Reserves</b>	<b>45.0</b>	<b>39.2</b>	<b>17.7</b>
<b>Resources</b>			
Measured	-	-	-
Indicated	233.9	58.9	137.7
Inferred	169.6	10.1	17.2
<b>Total Resources</b>	<b>403.6</b>	<b>38.4</b>	<b>154.9</b>

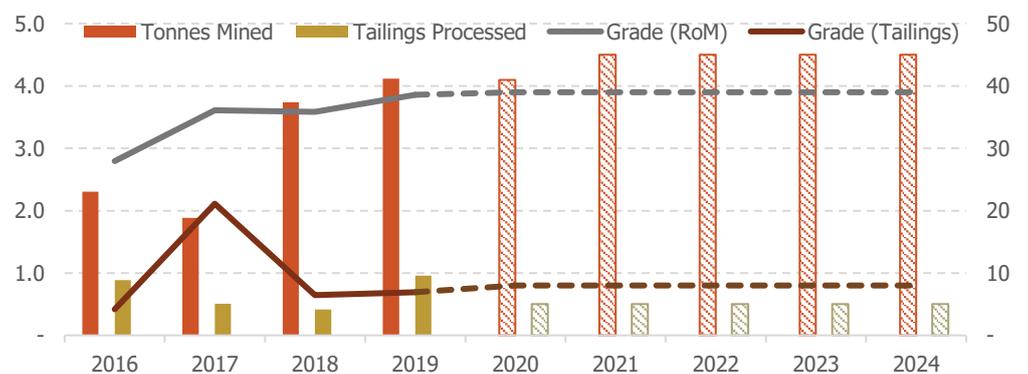
Source: Company Filings

## Production

For 2020 we are assuming 4.1Mtpa (the midpoint of the company guided range) of ore production grading 39cpt from C-Cut Phase 1 and C-Cut Phase 1 East. Thereafter we implement our interpretation of Project 2022 taking production up to 4.5Mt for FY2021 and beyond.

Our base case forecast has an average price per carat of US\$105/ct (c.US\$91/ct excluding specials), in line with historical performance and reflects the normalised frequency of higher value stones now that the block cave is performing as expected.

Figure 45 – Cullinan Production Schedule



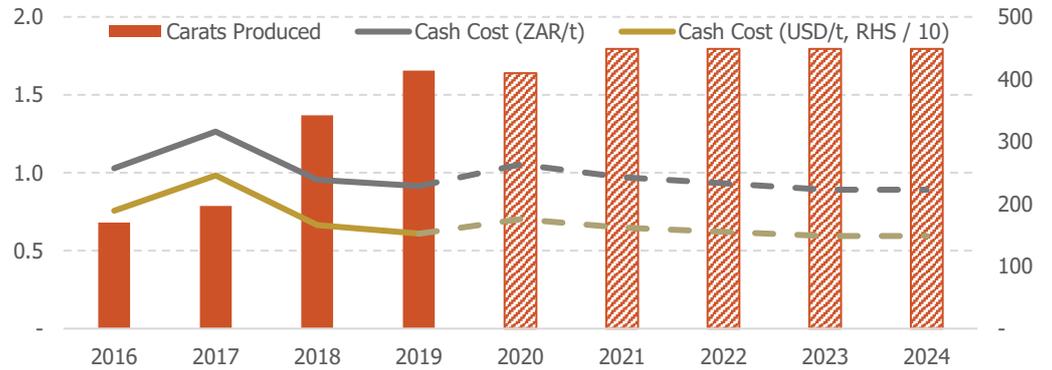
Source: Tamesis

The current mine plan takes production to 2030, beyond this there are plans for C-Cut Phase 2 in the middle of the pipe as discussed elsewhere.

## Opex and Capex

The move to block caving at Cullinan is showing a material increase in diamond production, as a result of increased tonnes mined, and lower cash unit costs in Rand terms. We are forecasting production averaging ~1.6Mcts at an on-mine cash cost of R223/t.

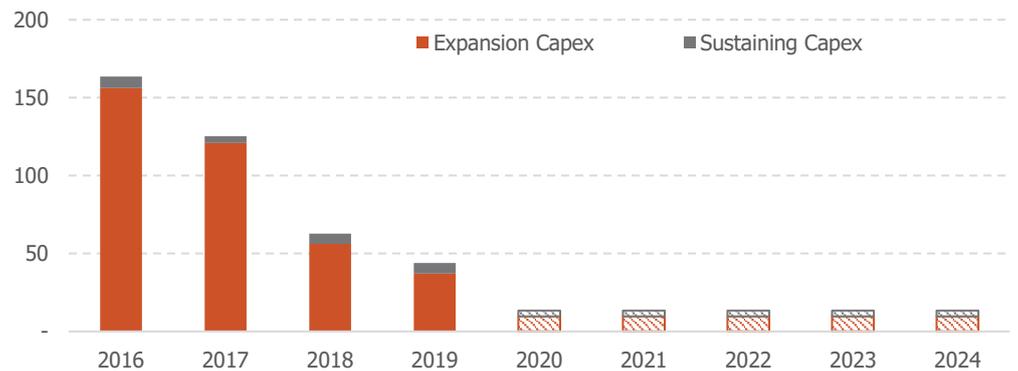
Figure 46 – Cullinan Carat Production and Cash Costs



Source: Tamesis

Following completion of the substantial capital required to develop the C-Cut block cave, we do not foresee any material capital expenditure in the near term. Looking forward, we estimate US\$7 million per year in capital expenditure at Cullinan.

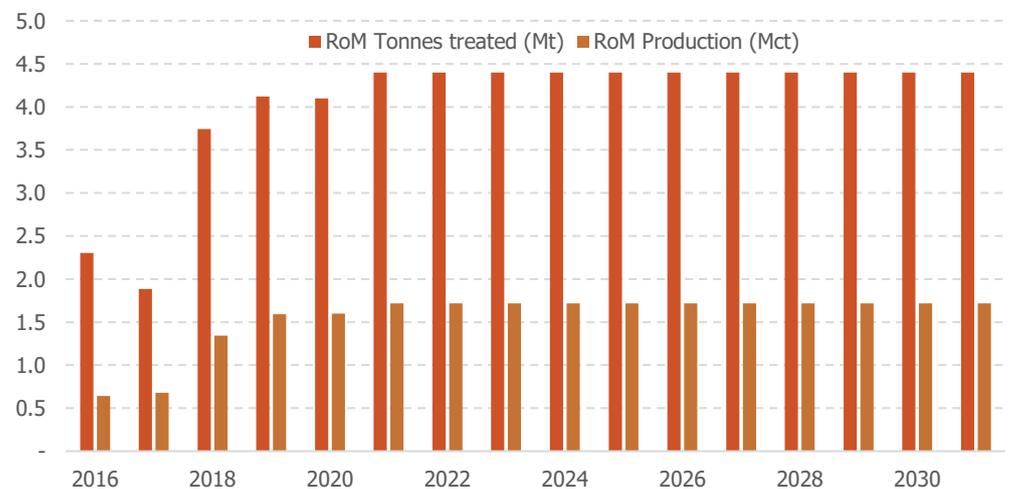
Figure 47 – Cullinan Capital Expenditure (US\$m)



Source: Tamesis

On a base case, we see production at Cullinan continuing to FY-2031 with annual production of c.1.7 million carats from run of mine ore.

Figure 48 – Cullinan Mine Life Profile



Source: Tamesis

## Koffiefontein

Mining has taken place at Koffiefontein since 1870. Currently, mining is taking place from 600 metres depth utilising a Sub Level Caving mining method. Petra acquired the mine in 2007 for R1.9 million (US\$0.3 million at historical exchange rates) after mining had ceased and operations were placed on care and maintenance.

The deposit is low grade relative to Finsch and Cullinan, averaging 8.4cpht for reserves and 3.7cpht resources. However, the value of production is high due to the quality and size of diamonds recovered. The current mine plan is through to 2031, beyond this the company envisages a block cave down to the 720 metre level. The current reserve and resource statement for Koffiefontein is as follows:

Figure 49 – Koffiefontein Reserves and Resources

	Tonnes (m)	Grade (cpht)	Contained Diamonds (Mct)
<b>Reserves</b>			
Proven	-	-	-
Probable	5.3	8.0	0.4
<b>Total Reserves</b>	<b>5.3</b>	<b>8.0</b>	<b>0.4</b>
<b>Resources</b>			
Measured	-	-	-
Indicated	27.1	5.3	1.4
Inferred	126.2	3.3	4.2
<b>Total Resources</b>	<b>153.3</b>	<b>3.7</b>	<b>5.6</b>

Source: Company Filings

Following a capital investment program, we forecast ongoing production of c.1Mtpa at grades of c.8cpht.

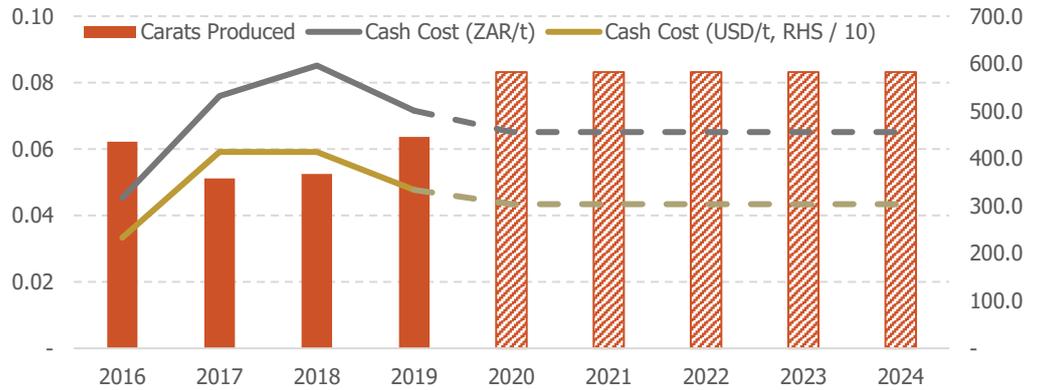
Figure 50 – Koffiefontein Production Schedule



Source: Tamesis

The expansion of production capacity at Koffiefontein has resulted in a commiserate increase in carats produced at lower cost. We forecast production of c.80k carats per annum at on site cash costs of R456/t.

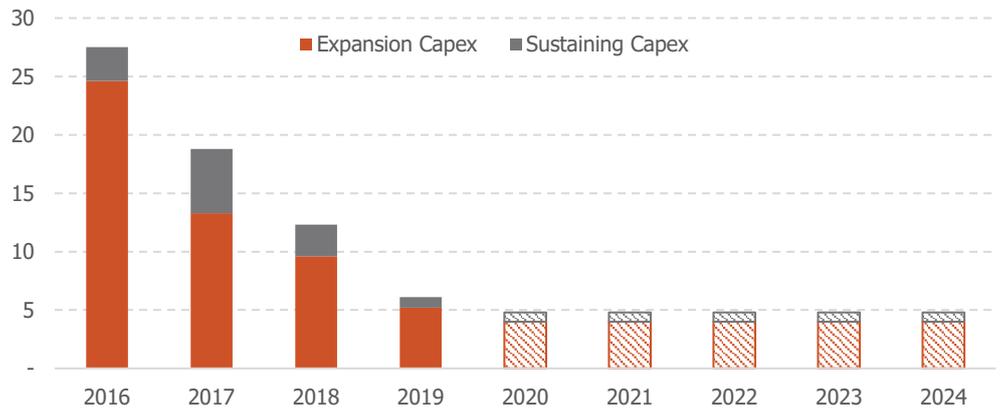
Figure 51 – Koffiefontein Carat Production and Cash Costs



Source: Tamesis

Looking forward, we estimate c.US\$5 million of capital expenditure each year at Koffiefontein:

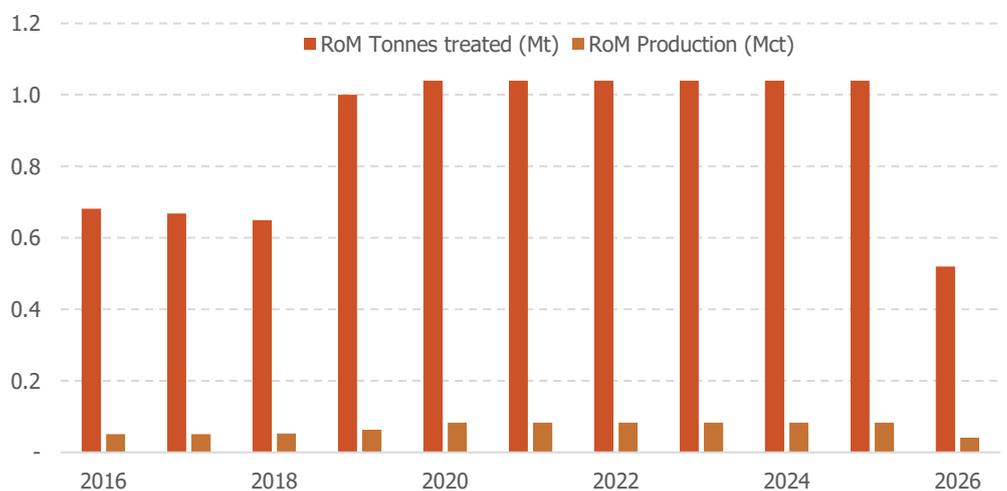
Figure 52 – Koffiefontein Capital Cost



Source: Tamesis

We forecast Koffiefontein to cease mining in FY-2026 and do not expect further mine life extensions in the base case.

Figure 53 – Koffiefontein Mine Life Profile



Source: Tamesis

## Williamson

The Williamson mine is the only significant diamond mine in Tanzania. Petra acquired the mine from DeBeers in 2009 for US\$10 million.

Still an open-pit operation, the mine has been in continuous production since 1940. Similar to Koffiefontein, grades are low, however the mine remains profitable due to the low cost mining nature and the quality of the produced diamonds, particularly large pink stones.

Williamson has a resource base of over 38 million carats, nearly as large as Finsch, albeit primarily in the inferred category and at low grades. We discuss later on the prospects for production expansion at the mine, although we have reservations about the current difficult operating environment in Tanzania.

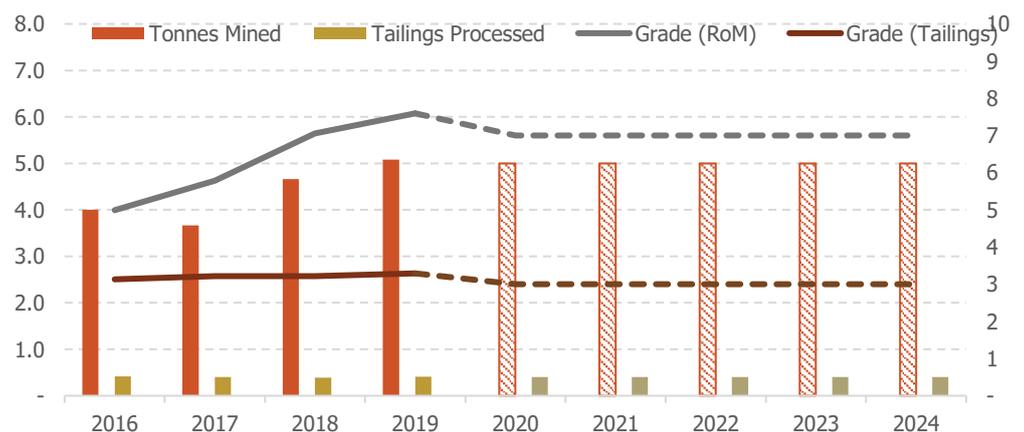
Figure 54 – Williamson Reserves and Resources

	Tonnes (m)	Grade (cpht)	Contained Diamonds (Mct)
<b>Reserves</b>			
Proven	-	-	-
Probable	60.5	7.1	4.3
<b>Total Reserves</b>	<b>60.5</b>	<b>7.1</b>	<b>4.3</b>
<b>Resources</b>			
Measured	-	-	-
Indicated	66.2	5.0	3.3
Inferred	959.4	3.6	34.8
<b>Total Resources</b>	<b>1025.6</b>	<b>3.7</b>	<b>38.2</b>

Source: Company Filings

Williamson is a high tonnage and throughput open-pit mine, unlike the company's South African operations. We estimate the mine can process 5Mtpa at grades of 7cpht. Historically this feed has been supplemented by c.400ktpa of tailings, we assume this continues at lower grades averaging 3cpht.

Figure 55 – Williamson Production Schedule

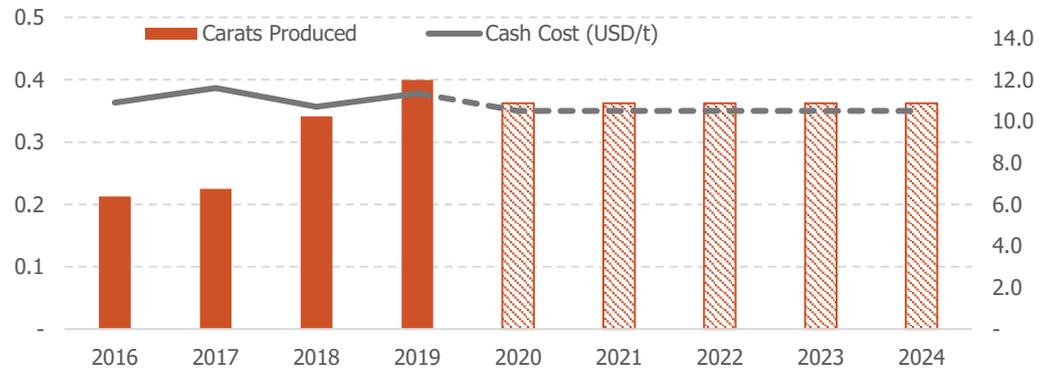


Source: Tamesis

At current diamond price levels and the current political situation in Tanzania we do not forecast any further expansion capital requirements at Williamson. We include US\$7 million of sustaining capital per year in our model.

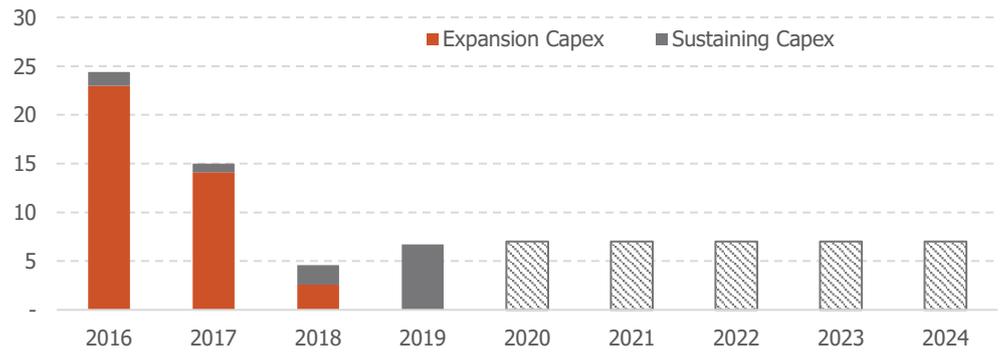
We estimate Williamson to produce c.320k carts per annum at on-site cash costs of US\$10.5/t.

Figure 56 – Williamson Sales and Cash Costs



Source: Tamesis

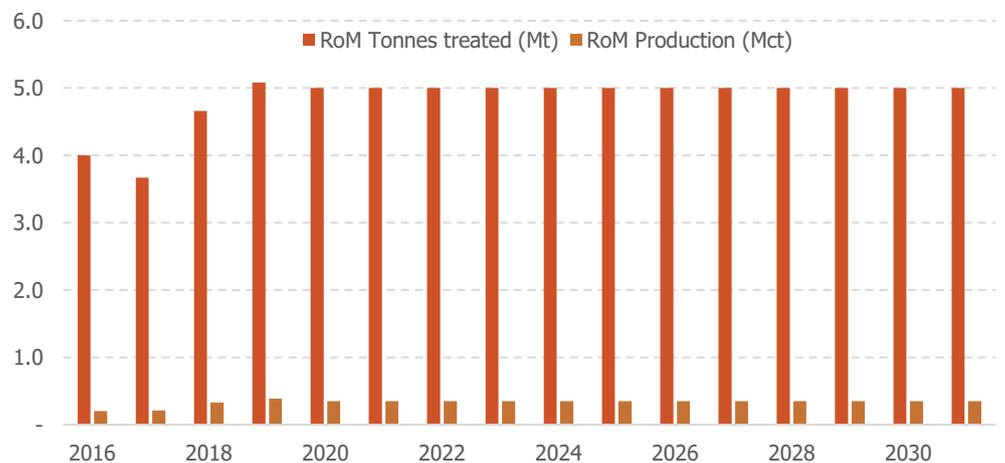
Figure 57 – Williamson Capital Expenditure



Source: Tamesis

Our base case forecast assumes mining finishes at Williamson in FY2031 at the expiry of the current mining lease. Of course, given political improvements in Tanzania there will be the opportunity to renew the mining lease and even consider expansion – as discussed elsewhere.

Figure 58 – Williamson Mine Life Profile



Source: Tamesis

## KEM Joint Venture

Petra disposed of the KEM JV to the company's joint venture partner, Ekapa Mining, in 2018 for a total consideration of R300 million (c.US\$21 million).

In addition, the company loaned the acquirers US\$8 million to fund needed capital expenditure works. We have no expected economic interest for Petra in the KEM JV

## Financials

Figure 59 – Summary Financials (YE June)

Key Financials	2019A	2020E	2021E	2022E	2023E	2024E
Revenue	463.6	445.7	471.5	471.5	471.5	471.5
Mining/Processing Costs	(301.7)	(292.2)	(305.1)	(303.2)	(295.6)	(301.7)
Corporate	(9.0)	(9.3)	(9.3)	(9.3)	(9.3)	(9.3)
<b>Consolidated EBITDA</b>	<b>153.0</b>	<b>144.1</b>	<b>157.1</b>	<b>158.9</b>	<b>166.6</b>	<b>160.5</b>
Depreciation	(106.3)	(101.4)	(101.4)	(101.4)	(86.6)	(86.6)
Finance Expense	(49.2)	(32.7)	(31.0)	(30.3)	(21.6)	(23.6)
Tax	(6.4)	(13.3)	(14.7)	(11.9)	(6.1)	(24.2)
Other	(53.5)	0.0	-	-	-	-
<b>Net Profit/(Loss)</b>	<b>(62.4)</b>	<b>(3.2)</b>	<b>10.0</b>	<b>15.3</b>	<b>52.3</b>	<b>26.0</b>
Minorities	31.3	0.7	(2.8)	(4.1)	(13.7)	(6.9)
Attributable Profit/(Loss)	(31.1)	(2.6)	7.3	11.2	38.5	19.1
CFO	99.0	86.2	72.1	79.8	100.3	67.1
CFI	(137.9)	(36.5)	(35.3)	(31.8)	(64.8)	(17.4)
CFE	(102.7)	-	-	(150.0)	-	-
<b>Net Change in Cash</b>	<b>(151.3)</b>	<b>49.7</b>	<b>36.7</b>	<b>(102.1)</b>	<b>35.5</b>	<b>49.7</b>
Cash End of Period	71.7	121.4	158.1	56.0	91.5	141.2
Consolidated Net Debt	638.8	577.8	516.5	444.0	408.5	358.8
Net Debt/EBITDA	4.2	4.0	3.3	2.8	2.5	2.2

Source: Company Filings

As discussed earlier, we assuming a flat forward foreign exchange rate and diamond pricing. We assume the US\$650 million loan notes due 2022 are refinanced with a US\$500 million loan on broadly similar terms. We expect Petra to start seeing repayments of the loans from their BEE partners in FY-2022, once the bank debt has been repaid.

Some of the basic inputs for modelling the cashflow of Petra:

## Royalties

### South African Operations

Royalties at the South African operations are calculated utilising a formula based on the ratio of EBIT to gross revenue. We calculate this on a South African group level and attribute back the costs to the three operations.

### Tanzanian Operations

Diamond royalties in Tanzania are a flat 6% on gross revenues. Currently, export of and payment for a parcel of c.71,000cts is still being blocked over two years after the event. We believe the valuation estimate for this parcel was c.US\$15 million – albeit this is prior to recent diamond sector weakness.

There are also US\$32.9m of VAT receivables still to be paid. We have not modelled repayment of either although note that there appears to be some thawing of the relationship between the mining industry and the government. But it is clearly material and would lead to Net Debt/EBITDA falling to 3.1x for 2021 for instance.

## Tax

### South Africa

The corporate tax rate in South Africa is 28% on profits. These taxes can be offset against capital allowances or assessed losses brought forward. As of July 2019, Cullinan has a tax shield of R7,000 million and Koffiefontein has a tax shield of R1,900 million. WE estimate that the Cullinan tax shield will be utilised until 2024, and the Koffiefontein tax shield will exist beyond our forecast life of mine.

### Tanzania

Tanzania has a corporate tax rate of 30%. Williamson has a tax shield of US\$30 million that can be used to offset taxable profits. Whilst the tax shield is being utilised there is a payment required of 0.3% of revenues.

## Debt

### Loan Notes

Petra currently has US\$650 million in senior secured loan notes outstanding due May 2022. These were issued in 2018 as part of a refinancing package which increased the note sizing from US\$300 million alongside a US\$178 million 5 to 8 rights issue.

The coupon on the notes is 7.25%, resulting in annual servicing payments of US\$47 million.

We are assuming that the company will refinance these notes ahead of expiry, on broadly similar terms.

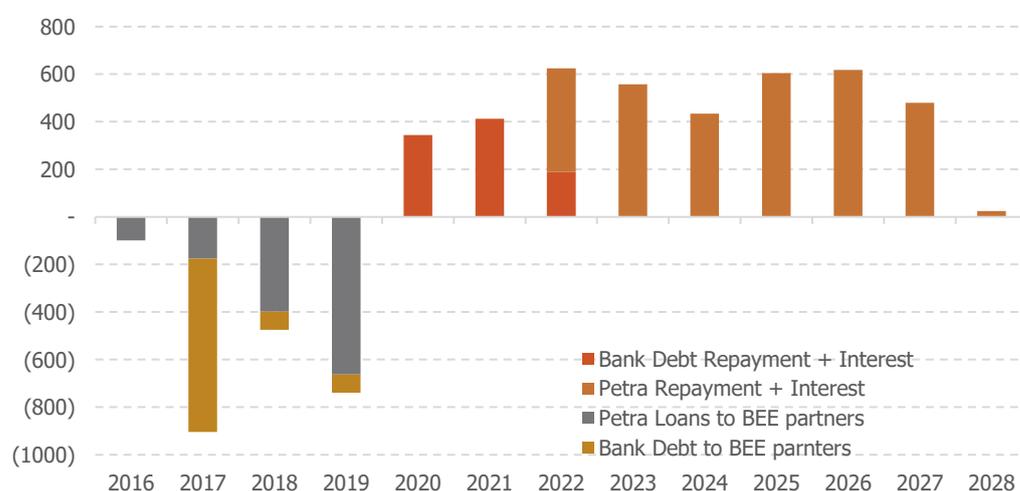
### BEE Loans

In South Africa, mining companies are required to have a 26% shareholding from previously disadvantaged citizens, a process known as Black Economic Empowerment (BEE). Petra sold this share in their South African mines to two groups. The sale was financed through loans to South African banks, guaranteed by Petra. This guarantee, currently standing at approximately US\$54.2 million, is treated as a liability to Petra. The group has a US\$120.5 million loan payable to Petra's BEE partners, as part of the initial acquisition loan financing of Finsch and Cullinan.

As part of Petra's capital investment programme, the company also loaned its Black Empowerment subsidiaries the cash required to meet their share. The current balance stands at approximately US\$109.6 million and is treated as a loan receivable to Petra.

Petra will be repaid for these loans through their BEE partners receiving their share of mine cashflows, and the majority of this cash swept out and repaid to Petra once the BEE bank debt has been repaid. We have modelled the present value of these cashflows to Petra and have included them in the valuation.

Figure 60 – BEE Bank Debt Profile



Source: Tamesis

At present we do not forecast any additional cash outflows to BEE partners, mine cash flow should provide enough liquidity to service the obligations on the loans.

**Other Costs**

**Group Marketing Costs**

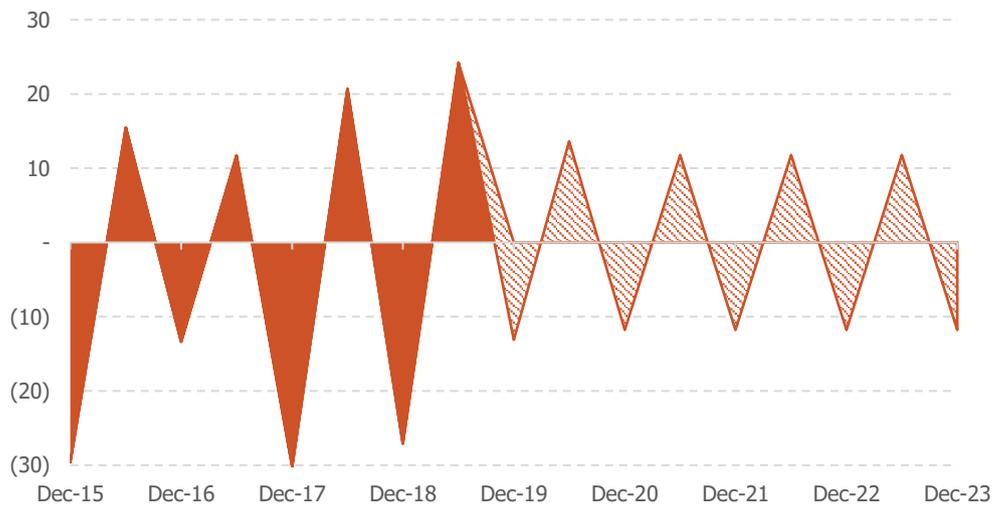
Petra has run its own marketing and sales process in-house since formation and does not pay any commissions to third parties. Sales take place on a tender process, held in Johannesburg for diamonds from South African operations and in Antwerp for sales from Williamson.

We assume a cost to the company of US\$6/carats to estimate the total cost of group marketing, technical and support costs.

**Diamond Inventory and Stockpiles**

Whilst Petra doesn't maintain a diamond stockpile, the timing of tenders and payment receipts has an impact on the cost base of the business. There is a historical trend for this effective working capital movement, resulting in cash outflows in the first half of the financial year and cash inflows at the second half. For the purposes of cashflow forecasting we estimate this trend to continue.

*Figure 61 – Diamond Inventory and Stockpile Movement (US\$m)*



Source: Tamesis

## Management

Petra has been reinvigorated by the arrival of a new CEO in February 2019. Richard Duffy arrives from AngloGold Ashanti (JSE: AAS) and looks to be the right person to reclaim the balance sheet and deliver further operational improvements.

The board was also strengthened in 2019 with the appointment of diamond industry executive Varda Shine who has over thirty years experiences including as CEO of the De Beers Trading Company. We note that the Chairman, Adonis Pouroulis, is scheduled to step down by the end of March 2020 – we expect a new chair to be announced shortly.

## Board of Directors and Senior Management

### Adonis Pouroulis Non-Executive Chairman

Mr. Pouroulis leads the Board of Directors and works with the Executive Directors on strategy and other matters. He graduated from the University of Witwatersrand, South Africa, with a degree in mining engineering. He is a mining entrepreneur whose expertise lies in the discovery and exploration of natural resources across Africa, including diamonds, precious/base metals, coal and oil and gas, and bringing these assets into production. Mr Pouroulis founded the Company in 1997 and it became the first diamond company to float on AIM. He has since chaired the Company as it has developed into a mid-tier diamond producer of global significance and London's largest quoted diamond mining group. Mr. Pouroulis is a non-executive director of Chariot Oil & Gas plc and is non-executive chairman of Rainbow Rare Earths Limited. He will be stepping down by the end of March 2020

### Richard Duffy Chief Executive

Mr. Duffy leads the management of the Company, implements the agreed strategy and runs the business on a day-to-day basis. He has 27 years of global mining industry experience, initially with Anglo American plc and then AngloGold Ashanti Limited, from its inception in 1998. In 2008 he was appointed Executive Vice President, Africa Region and continued in this role until January 2010 when he took charge of the Continental Africa Region, with operations in Namibia, Tanzania, Guinea, Ghana and Mali and a Joint Venture in the Democratic Republic of the Congo. In 2013 he was appointed Chief Financial Officer with direct responsibility for all financial matters including the formulation and execution of financial business strategy, debt and equity financing. In 2015 Richard became a co-founder and director of Africa Energy Management Platform, a private energy company targeting industrial and mining clients in sub-Saharan Africa.

Mr Duffy holds a B. Com degree from the University of Witwatersrand and an MBA from Henley Management College in the UK.

### Jacques Breytenbach Finance Director

Mr. Breytenbach assumed the role of Finance Director in February 2018. He leads the financial management of the Company and is responsible for financing, treasury, financial controls, reporting, legal, investor relations, compliance and corporate governance. Prior to this appointment, Mr. Breytenbach previously held the role of Finance Manager – Operations at the Company since 2006, with responsibility for financial management across the Group's operations, before becoming Chief Financial Officer of the Group in June 2016. He joined Petra from Anglo Platinum, where he held various roles, culminating in his position as Finance Manager – Capital Projects, with oversight for Anglo Platinum's extensive capital expansion programmes. He is a Chartered Accountant and a member of the South African Institute of Chartered Accountants.

### Tony Lowrie Senior Independent Non-Executive Director

Mr. Lowrie received a Royal Commission from the Sandhurst Military Academy. He has over 45 years' association with the equities business and is an experienced non-executive director. He has had a lengthy and distinguished career, which included senior positions with the Hoare Govett group and HG Asia Securities. Between 1996 and 2004 he was chairman for ABN AMRO Asia Securities and was formerly a managing director of ABN AMRO Bank. He has been a non-executive director of Allied Gold Mining Plc, Kenmare Resources plc, Dragon Oil plc, J. D. Wetherspoon plc, as well as several quoted Asian closed end funds.

### **Dr Pat Bartlett Independent Non-Executive Director**

Dr. Bartlett is a member of the South African Institute of Mining and Metallurgy and a registered Professional Natural Scientist. He was formerly chief geologist for De Beers until his retirement in 2003 and is an acknowledged leading expert on kimberlite geology and block caving. Dr Bartlett has extensive experience working across southern Africa and has an in-depth knowledge of several of the mines acquired by the Company, having previously worked at Finsch, Koffiefontein, Kimberley Underground and Cullinan. Since retiring from De Beers, he has consulted on block caving projects for BHP Billiton, Anglo American and Rio Tinto.

### **Gordon Hamilton Independent Non-Executive Director**

Mr. Hamilton is an FCA qualified chartered accountant with ICAEW. He retired from Deloitte & Touche LLP in 2006 after more than 30 years as a partner primarily responsible for multinational and FTSE 350 company audits, mainly in the mining, oil and gas, and aerospace and defence industries, as well as heading the Deloitte South Africa desk in London. He served for nine years until 2011 as a member of the U.K. Financial Reporting Review Panel. Mr. Hamilton has extensive experience as a non-executive director across a wide range of businesses. He is non-executive director of Nedbank Private Wealth Limited and other related companies within the Nedbank Group, and Atrium Underwriting Group Limited, a Lloyd's of London insurance underwriter. He was formerly a director of Barloworld Limited and Beazley plc.

### **Octavia Matloa Independent Non-Executive Director**

Ms Matloa is a chartered accountant who completed her articles with PwC in South Africa in 2000 before joining the Department of Public Transport, Roads and Works, first as deputy chief financial officer, followed by chief director management accountant. Since this time, Mrs Matloa has founded a number of businesses, including Tsidkenu Chartered Accountants Inc and Mukundi Mining Resources, and is a non-executive director of eXtract Group Limited. She brings broad business, financial and auditing experience to the Board.

### **Varda Shine Independent Non-Executive Director**

Varda Shine is a CEO mentor and a diamond industry Advisor. Previously, she was CEO of De Beers Trading Company where she worked with stakeholders across the supply chain (producing governments to luxury retailers) and delivered record sales and profits. She currently sits on the Boards of the Mineral Development Company Botswana and Sarine Technologies. She is also a Governing Board member of the Diamond Empowerment Fund (DEF) and a trustee of the Teenage Cancer Trust. Mrs Shine has completed business and management courses at Templeton College, Oxford, Cranfield and INSEAD. During her thirty years of work in the diamond industry, she became the first woman to be awarded honorary lifetime membership of the Israel Diamond Exchange (IDE) and in 2011 she received the Women's Jewellery Association (WJA) Hall of Fame Lifetime Achievement Award. In 2014 Mrs Shine was made an honorary member of the London Diamond Bourse.

### **Bernard Pryor Independent Non-Executive Director**

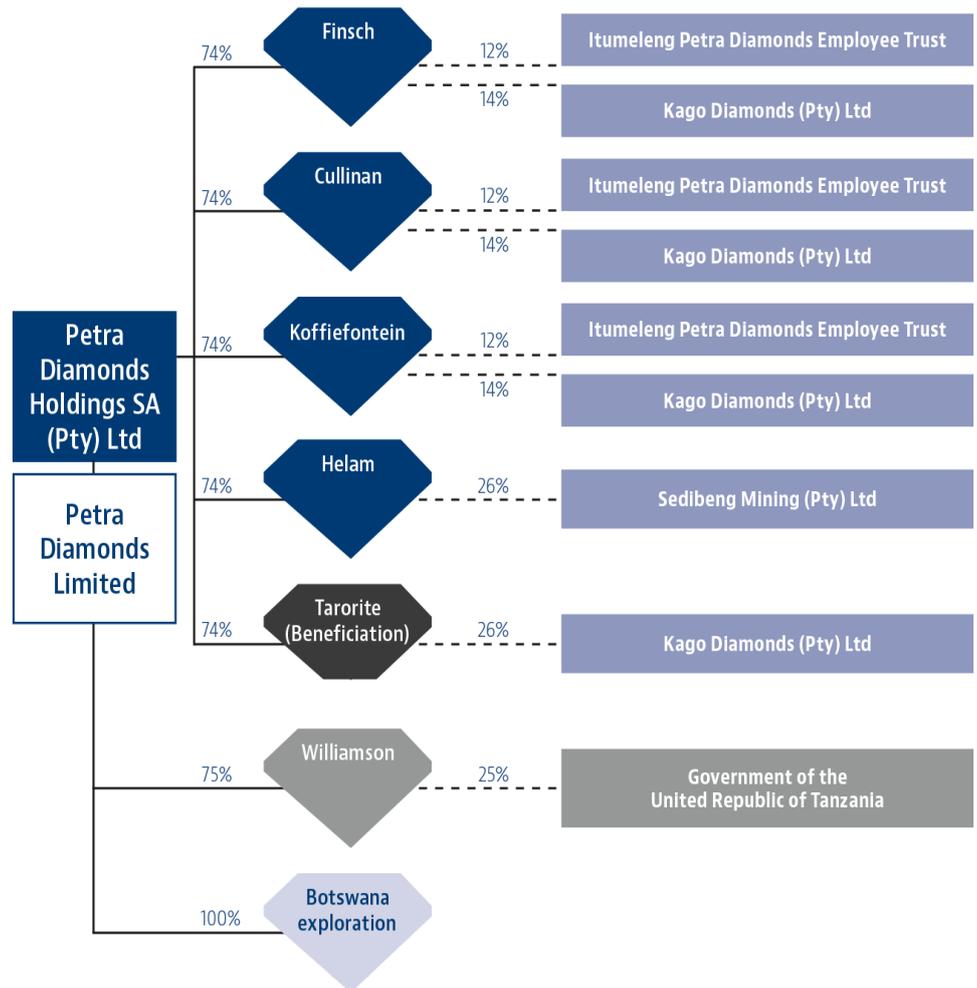
Bernard Pryor is a Metallurgical Engineer with over thirty-five years' experience in the international mining industry. He has held senior executive positions across a range of disciplines including project acquisition, development and construction and has run large scale, fully operational mining assets. His experience also includes international commercial and general management, most notably in Australia, Brazil, West and Southern Africa, the Middle East and Russia. He is currently CEO of Alufer Mining and Non-Executive Chairman of MC Mining Limited. Mr Pryor was previously CEO of African Minerals Limited and Q Resources plc. Between 2006 and 2010 he held senior positions within Anglo American Plc as Head of Business Development and was CEO of Anglo Ferrous Brazil Inc. Prior to that he was COO at Adastra Minerals Inc in the DRC.

**Appendix**

**Corporate Structure**

The corporate structure of Petra is as follows (post KEM JV disposal):

Figure 62 – Corporate Structure



Source: Company Filings

**Register**

Petra has a strong group of core shareholders on the register, with identified funds comprising over 35% of the issued capital:

Figure 63 – Shareholder Register

Shareholder	% of Voting Rights Held (as updated: 29 Jul 2019)
Standard Life Aberdeen plc	15.20%
M&G Plc	10.20%
Cobas Asset Management, SCIIC, S.A.	5.00%
Lazard Asset Management	4.90%
Directors	2.00%

Source: Company Filings

## Block Model

Petra Diamonds Limited		PDL LSE	
As at	10-Dec-19		
<b>Share Price (GBP)</b>	<b>7.96</b>	<b>Target Price (GBP)</b>	<b>12</b>
Model Derived: NAV (US\$m, 12%)	172	Model Derived: NAV (GBP/share, 10%)	134
Ordinary Shares (M)	865		
Fully Diluted	866		
Market Cap (US\$m)	88	Market Cap (GBPm)	69
Enterprise Value (USm)	681	Enterprise Value (GBPm)	532
	593		

Price Assumptions		2017A	2018A	2019A	2020E	2021E
Finsch	US\$/ct	101	108	99	87	87
Cullinan	US\$/ct	120	125	110	105	105
Koffeefontein	US\$/ct	507	524	479	475	475
Williamson	US\$/ct	258	270	231	240	240
South African Rand	ZAR:USD	13.6	12.9	14.2	15.0	15.0

FINANCIAL SUMMARY - USDm		2017A	2018A	2019A	2020E	2021E
<b>Revenue</b>		<b>477</b>	<b>495</b>	<b>464</b>	<b>446</b>	<b>471</b>
EBITDA		157	195	153	144	157
Profit before Tax		29	2	(9)	(3)	10
<b>Profit after Tax</b>		<b>21</b>	<b>(99)</b>	<b>(23)</b>	<b>(3)</b>	<b>10</b>
Earnings per Share		0.02	(0.11)	(0.03)	(0.00)	0.01
<b>Operating Cashflow per share</b>		<b>0.18</b>	<b>0.08</b>	<b>0.11</b>	<b>0.10</b>	<b>0.08</b>
Free Cash Flow (unlevered) per Share		(0.24)	(0.04)	0.04	0.10	0.12
<b>P/E</b>		<b>4.3x</b>	-	-	-	<b>8.8x</b>
<b>EV/EBITDA</b>		<b>4.3x</b>	<b>3.5x</b>	<b>4.5x</b>	<b>4.7x</b>	<b>4.3x</b>
Price / Operating Cash Flow		0.6x	1.3x	0.9x	1.0x	1.2x
Price / unlevered FCF		-	-	2.6x	1.0x	0.9x

PROFIT AND LOSS STATEMENT - USDm		2017A	2018A	2019A	2020E	2021E
Sales Revenue		477	495	464	446	471
Operating Costs		(399)	(495)	(664)	(402)	(415)
<b>Gross Profit</b>		<b>78</b>	<b>1</b>	<b>(201)</b>	<b>43</b>	<b>56</b>
Interest expense		(35)	(86)	(54)	(33)	(31)
Other expenses		(8)	(77)	(256)	(9)	(9)
<b>PBT</b>		<b>47</b>	<b>(85)</b>	<b>(254)</b>	<b>11</b>	<b>25</b>
Taxation		(26)	(14)	46	(13)	(15)
<b>NPAT</b>		<b>21</b>	<b>(203)</b>	<b>(258)</b>	<b>(3)</b>	<b>11</b>
<b>EBITDA</b>		<b>157</b>	<b>195</b>	<b>153</b>	<b>144</b>	<b>157</b>
						3.3347

VALUATION		US\$m	GBPm
Finsch		157	123
Cullinan		481	376
Koffeefontein		1	1
Williamson		93	73
Net Debt		(593)	(463)
PV of BEE Recievable		102	80
SG&A		(70)	(55)
<b>TOTAL NAV</b>		<b>172</b>	<b>134</b>
NPV per Share		0.20	0.16

CASH FLOW ANALYSIS - USDm		2017A	2018A	2019A	2020E	2021E
<b>Cash Flows From Operating Activities</b>		<b>153</b>	<b>68</b>	<b>99</b>	<b>86</b>	<b>72</b>
Cash from Operations		156	143	130	136	141
Net Interest		(45)	(47)	(47)	(47)	(36)
Tax		(13)	(10)	(11)	(9)	(5)
<b>Cash Flows From Investing Activities</b>		<b>(293)</b>	<b>(202)</b>	<b>(138)</b>	<b>(36)</b>	<b>(35)</b>
Acq.of Property, Plant and Equip.		(283)	(175)	(86)	(36)	(35)
Exploration		-	-	-	-	-
Net Investment in Subsidiary		(13)	(31)	(48)	-	-
<b>Cash Flows From Financing Activities</b>		<b>291</b>	<b>170</b>	<b>(103)</b>	-	-
Proceeds from Equity Offering		1	167	-	-	-
Net Change in Borrowings		290	3	(103)	-	-
Transaction Costs		-	-	-	-	-
Other		-	-	-	-	-
<b>Net Increase In Cash Held</b>		<b>151</b>	<b>36</b>	<b>(142)</b>	<b>50</b>	<b>37</b>
Cash At End of Year		190	223	72	121	158

BALANCE SHEET ANALYSIS - USDm		2017A	2018A	2019A	2020E	2021E
<b>Current Assets</b>		<b>355</b>	<b>414</b>	<b>205</b>	<b>254</b>	<b>294</b>
Cash and cash equivalents		204	236	85	121	158
Trade and other receivables		76	99	34	45	47
Inventories		76	78	86	87	89
Other assets		-	1	2	3	4
<b>Non-Current Assets</b>		<b>1,500</b>	<b>1,329</b>	<b>1,088</b>	<b>928</b>	<b>876</b>
Mining tenements & PP&E		1,441	1,244	968	908	848
Other assets		59	85	120	20	29
<b>Current Liabilities</b>		<b>295</b>	<b>284</b>	<b>101</b>	<b>87</b>	<b>89</b>
Trade and other payables		137	131	53	87	89
Current debt		159	154	47	-	-
Other liabilities		-	-	-	-	-
<b>Non-Current Liabilities</b>		<b>913</b>	<b>910</b>	<b>867</b>	<b>699</b>	<b>675</b>
Long term debt		599	601	604	650	650
Other liabilities		215	199	263	49	25
<b>Equity</b>		<b>646</b>	<b>567</b>	<b>519</b>	<b>396</b>	<b>407</b>
Net Cash/(Debt)		(553)	(519)	(565)	(529)	(492)

DIVISIONAL EBITDA - USDm		2017A	2018A	2019A	2020E	2021E
Finsch		124	129	82	60	64
Cullinan		35	87	94	90	106
Koffeefontein		2	(3)	(6)	8	8
Williamson		7	10	25	25	25
<b>Total</b>		<b>169</b>	<b>223</b>	<b>196</b>	<b>183</b>	<b>202</b>

PRODUCTION (kct)		2017A	2018A	2019A	2020E	2021E
Finsch		2,142	2,153	1,711	1,692	1,800
Cullinan		761	1,336	1,563	1,639	1,795
Koffeefontein		56	52	60	83	83
Williamson		226	254	402	362	362
<b>Total</b>		<b>3,185</b>	<b>3,794</b>	<b>3,737</b>	<b>3,776</b>	<b>4,040</b>
<b>On site costs (ZAR/t)</b>						
Finsch		253	329	394	400	400
Cullinan		316	239	229	263	243
Koffeefontein		532	596	501	456	456
Williamson (US\$/t)		11.6	10.7	11.3	10.5	10.5

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