

Alkane Resources

Staged DZP plan de-risks financing and off-take

DZP progress

Metals & mining

Alkane's (ALK's) recently announced revised execution plan for the DZP provides for a significant re-rating of the project's value. We calculate that the new modular design, where two trains of 0.5Mtpa will be constructed between end 2017 and 2023, will yield the same 1Mtpa size project as before but by using a staged capex spend will result in a c 16% uplift to our fully diluted (at a share price of A\$0.40) DDF value of ALK's shares. We view this plan as pivotal to the DZP's successful execution and something that reduces risk in a multitude of areas, such as lower financing risk and construction costs from building components in lower-cost jurisdictions. Customer participation should also be improved by lowering commitments in off-take agreements geared to initially smaller production.

Year end	Revenue (A\$m)	PBT* (A\$m)	EPS* (c)	DPS (c)	P/E (x)	Yield (%)
06/15	101.8	0.1	1.0	0.0	39.0	N/A
06/16	109.6	11.0	2.2	0.0	17.7	N/A
06/17e	116.8	13.0	1.2	0.0	26.7	N/A
06/18e	102.5	(11.8)	(1.1)	0.0	N/A	N/A

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

TGO, Q117 4x average rainfall to affect guidance

Unseasonal rainfall at the Tomingley Gold Operation (TGO) in Q117 resulted in just 10koz Au being sold (although 10.4koz was produced), driving up C1 and AISC unit costs to A\$1,841/oz and A\$2,139/oz respectively. Current FY17 gold production guidance is 65koz-72koz; we conservatively reduce our FY17 estimate to 62koz and raise costs by A\$50/oz (Alkane plans to announce revised guidance in Q3 FY17). Our reduced assumption of 62koz requires c 18koz of Au each quarter to year end, which will need Wyoming 1, Caloma 1 and 2 to yield grades seen in resource estimations.

Valuation: DZP revisions de-risk financing and offtake

Our previous A\$0.75 per share valuation was based on the DZP's previous single-phase A\$1.3bn capex development plan to build out a 1Mtpa capacity mill and processing plant. This valuation includes TGO production through to 2024, a 10% discount rate, and our old gold price assumptions. It also included a 10% equity sell-down at the DZP project level, and A\$194m raised in equity at A\$0.30/ALK share. Revising for the modular DZP development concept, which requires stage 1 capex of US\$480m/A\$636m (including contingency) to build out a 0.5Mtpa plant, and stage 2 capex of US\$360m/A\$480m to complete the 1Mtpa mine design by 2023. Factoring in this new capex profile in our model, assuming a 65/35 debt/equity split and adjusting our equity raise price from A\$0.30 to A\$0.40 (to reflect ALK's current share price level) and using our new gold price assumptions for valuing the TGO, results in our revised valuation for Alkane's shares becoming A\$0.78. The DZP revisions are therefore relatively neutral to our valuation, but we consider the greatest benefits are the qualitative de-risking of DZP's project financing and off-take partner participation for its Zr/REE/Hf output (future niobium output sales are already secured). All other operating cost values were maintained as per our previous valuation until a new DZP BFS is released in April 2017.

19 December 2016

Price **A\$0.32**
Market cap **A\$162m**

A\$/US\$:0.75

Net cash (A\$m) at 30 September 2016 14.5

Shares in issue 505.2m

Free float 51%

Code ALK

Primary exchange ASX

Secondary exchange OTCQX

Share price performance



% 1m 3m 12m

Abs (43.9) (11.1) 45.5

Rel (local) (45.8) (14.2) 32.2

52-week high/low A\$0.64 A\$0.18

Business description

Alkane Resources is a multi-commodity explorer and developer, with projects in the central west region of New South Wales in Australia. It owns the Tomingley Gold Operation (TGO) and the Dubbo Zirconia Project (DZP) rare metal, zirconium chemicals and rare earths projects (both 100%). TGO entered production in January 2014 and DZP is planned for first production during 2019.

Next events

Q2 quarterly activities report January 2017

Two-stage DZP BFS April 2017

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Dubbo Zirconia Project: Staged concept reduces numerous risks

Alkane's revised two-stage development concept underlines the continuing commitment to build out its flagship diversified rare metals and chemicals project. Recent announcements concerning the signing of Memorandums of Understanding (MoUs) (Siemens), due diligence at Vietnam Rare Earths, as well as strategic partner alliances with major engineering firm Outotec to progress development, among others, highlight a period of heightened activity and point to the likelihood of a successful conclusion to the DZP's development.

We have always considered the DZP, with its mix of products including zirconium chemicals, heavy and light rare earth concentrates, ferro-niobium and the highly valuable hafnium output (plus TGO gold output), as a project that through its diversification should weather the worst of end-market environments. This is all in addition to the gold mine revenues occurring at the TGO, and the realisable extension to that mine's life linked to a highly prospective package of land tenements close to existing TGO infrastructure.

The advantages put forward by Alkane for why a two-stage development concept of the DZP would benefit shareholders are:

- A significant 35% total reduction in capex from A\$1,300m to A\$840m, split 57:43 over two stages, in 2017 and 2023. All numbers include contingency. The eventual DZP operation is still maintained at a throughput capacity of 1Mtpa, after both stages are completed.
- Although the current financing environment was restrictive for a capex requirement of A\$1.3bn, an initial outlay of US\$480m/A\$636m should reduce financing risk.
- Management states that the two-stage concept increases the percentage of revenue in the first stage covered by offtake contracts, memorandums of understanding and letters of intent held in place with its strategic partners.
- As certain DZP products have nascent end-markets (namely hafnium, but also the ever-changing landscape of rare earth element applications), a smaller 0.5Mtpa initial mine size reduces the commitment required by Alkane to secure project revenues, thereby reducing the scale of required commitment by off-take partners. Further, as confidence grows between off-takers and Alkane, product amounts can increase alongside developing stage 2 and completing the full capacity 1Mtpa mine.

2017: Remaining hurdles and catalysts

The past 12 months have seen a number of agreements put in place to complement existing arrangements, all with a focus on getting the DZP into production. We note that no major approval or mining licences are outstanding and the project is effectively 'shovel ready' save for certain off-take agreements being finalised and DZP's project financing being put in place. Over 2016 Alkane announced the following agreements and arrangements, all of which relate to the DZP:

- Vietnam Rare Earths toll milling letter of intent (April 2016)
- Zirconium marketing and sales agreement with UK based firm Minchem (August 2016)
- Memorandum of understanding with European firm Siemens over certain DZP product off-take and supply/maintenance of equipment (October 2016).

An agreement is already in place for the DZP's output of ferro-niobium, with a commercial off-take and JV agreement signed with Austrian firm Treibacher Industrie AG (TIAG), signed 2013. This agreement will see TIAG have sole marketing rights for DZP FeNb and it will also allow Australia

Zirconia Ltd the right to use TIAG's proprietary processing technology to produce FeNb from DZP concentrates at a new plant located either in Australia or elsewhere to be developed within a separate company. TIAG will be able to buy 50% in this new downstream processing company three years after commissioning.

To get the DZP into the construction phase Alkane needs to:

- Agree commercial off-take agreements for its REE and zircon-based product output
- Secure ECA and conventional debt funding of c A\$325m (as per our modelling assumptions) for stage 1, and c A\$272m for stage 2 by FY23
- Commence construction by end CY17. Note all permits and project licences are already in place for the DZP. All land required for development has been purchased. Changes to our DZP valuation

Alkane announced changes to the DZP development plan at the end of October that included the aforementioned capex reductions and the two-stage development. However, accurate cost and working capital data have yet to be finalised; the company has stated that it expects to provide details to the market in early in June quarter of 2017.

As such, we have limited the changes to our DZP valuation to the size and stage nature of development. We have adjusted our capex profile to reflect development over the five-year period from 2017 to 2023, but keep operating costs as per our original valuation and as per the company's published definitive feasibility and front end engineering design (FEED) studies for the DZP.

We have made the following changes to our financing assumptions for the DZP:

- With stage one planned capex of US\$480m, management has stated that the split between debt and equity is likely to be c 65/35. Debt will be sourced at commercial rates via conventional debt providers, but also at more favourable rates as provided by private or quasi-governmental export credit agencies.
- A sell down in Australia Zirconia (AZL), the wholly owned subsidiary of Alkane, which holds the Dubbo Zirconia Project. Our previous valuation assumed a 10% sell down in AZL linked to the NPV₁₀ of the single-phase development plan, which was around A\$1bn, resulting in a 10% sale for A\$100m. We now link our 10% sell down in AZL equity to the construction value of stage one ie US\$480m (A\$636m), which means a sale of 10% in AZL equity for US\$48m (A\$64m). We assume this strategic partner would then maintain its 10% holding in AZL as and when stage 2 is developed.
- We adjust our previous assumption for raising equity for the DZP (via Alkane) from A\$0.30 previously to A\$0.40, broadly reflecting the company's current share price level.

Tomingley Gold Operation

To reflect the impact of the recent high-level of rainfall experienced over the TGO in Q117, we have revised our production model down to 62koz, which is c 10% below the lower end of its current gold production guidance of 65-72koz for FY17. With only 10.4koz produced in Q1, a further 54.6koz to 61.6koz needs to be mined out over the remaining three quarters of FY17. This amounts to an average 18.2koz to 20.5koz per quarter.

The plant at the TGO has capacity of 1.0Mtpa on the basis of a 350-day operating year (including scheduled maintenance shut-downs). To achieve c 18koz of production the following mining needs to occur:

Exhibit 1: Edison's estimate of TGO production Q217–Q417e

	Units	Q117 actual	Q217e	Q317e	Q417e	FY17e
Production						
Waste mined	BCM	1,533,279	1,549,955	1,549,955	1,549,955	6,183,144
Implied strip ratio	ratio waste:ore	6.9	7.6	7.6	7.6	7.4
Ore mined	Tonnes	221,139	300,000	300,000	300,000	1,121,139
Ore grade	g/t	1.51	1.51	2.00	2.50	1.88
Ore milled	Tonnes	231,797	300,000	300,000	300,000	1,131,797
Head grade	g/t	1.50	1.51	2.00	2.50	1.88
Recovery	%	90.1%	90.1%	90.1%	90.1%	90.1%
Gold recovered	Ounces	10,435	13,122	17,381	21,726	62,577
Gold sold	A\$/oz	10,000	13,122	17,381	21,726	62,142
Gold revenue	A\$m	16.3	21.9	28.7	36.0	102.79
Implied realised gold price/ actual	A\$/oz	1,627	1,668	1,668	1,668	1,668
Cost of sales	A\$m	19.2	13.1	17.4	21.7	71,353
AISC operating cost	A\$/oz	2,139	1,000	1,000	1,000	1,285
Gross Margin	%	-23.9%	66.8%	66.8%	66.8%	44.1%
Operating profit margin	%	-15.2%	66.8%	65.2%	65.8%	45.7%
Stockpiles						
Ore for immediate milling	Tonnes	661,645	661,645	661,645	661,645	661,645
Bullion on hand	Ounces	3,150	3,150	3,150	3,150	3,150
Value of bullion on hand (based on gold price above)	A\$m	5.12	5.12	5.12	5.12	5.12
Stockpile grade	g/t Au	0.80	0.80	0.80	0.80	0.80
Contained gold in stockpiles	Ounces	17,201	17,201	17,201	17,201	17,201
Value of stockpiled gold ounces at quarter's average price	A\$m	28.0	28.0	28.0	28.0	28.0

Source: Alkane Resources, Edison Investment Research

Changes to our gold price assumptions

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

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

Exhibit 2: Edison's new gold price forecasts CY17 to CY22

Calendar Year				2017	2018	2019	2020	2021	2022	2023	2024
New real gold price (US\$/oz)				1,275	1,220	1,284	1,362	1,344	1,281	1,274	1,257
Financial year (to June) (US\$/oz)				1,259	1,248	1,252	1,323	1,353	1,313	1,278	1,266
Financial year(to June) (A\$/oz)				1,668	1,652	1,658	1,752	1,792	1,739	1,692	1,676
Old gold price - financial year (A\$/oz)				1,740	1,913	1,960	1,917	1,881	1,875	1,866	1,881
Change (%)				-4.1%	-13.6%	-15.4%	-8.6%	-4.7%	-7.3%	-9.3%	-10.9%

Source: Edison Investment Research. Note: US\$/A\$:0.75.

Change in DZP ramp-up assumption

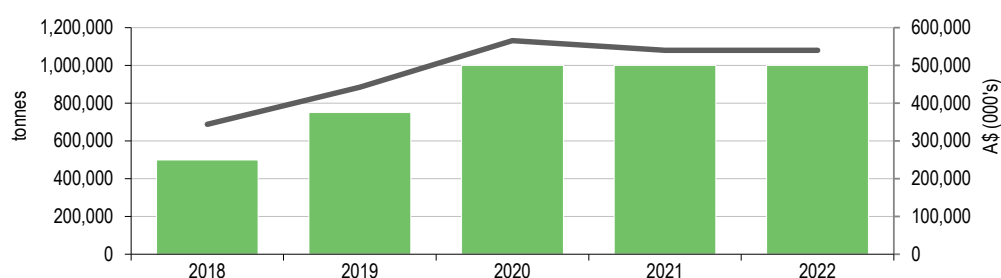
Ahead of a comprehensive revised set of cost input data to be released in a bankable feasibility study for the DZP's two-stage development concept (due around April 2017), we take the view that cost assumptions remain as per the original DZP 1Mtpa single development phase Front End Engineering Design results announced August 2015, and which amended the company's previous DFS published April 2013.

Our DZP and TGO long-term (ie post-FY17) cost assumptions can be seen [here](#). DZP production output will be half the amounts stated in our previous note, reflecting the new two-stage plan – see Exhibit 6.

We consider the two-stage development approach as being positive in that it will reduce start-up costs and lower working capital. In terms of operating costs, the implication of the revised development approach is less clear. The economies of scale that occur at the 1Mtpa level should be greater than at an initial production size of 0.5Mtpa.

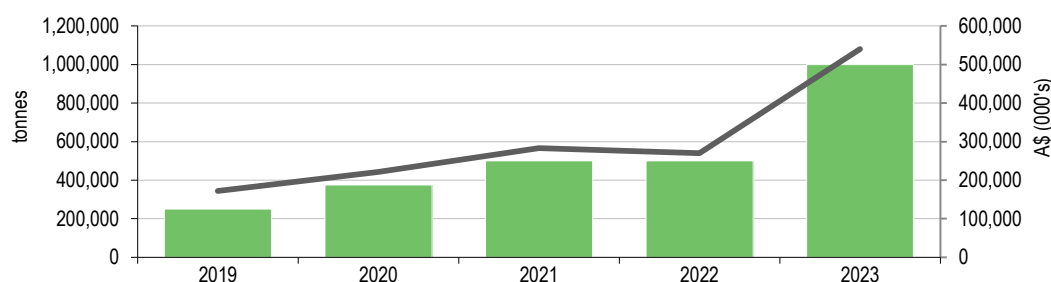
Our valuation of the DZP is therefore based on a revised ramp-up to the 1Mtpa production rate. A comparison of our old and new ramp-up to 1Mtpa is given in Exhibits 3 and 4 below.

Exhibit 3: Old Edison assumption of ramp up to 1Mtpa (grey line = revenue, RHS)



Source: Edison Investment Research

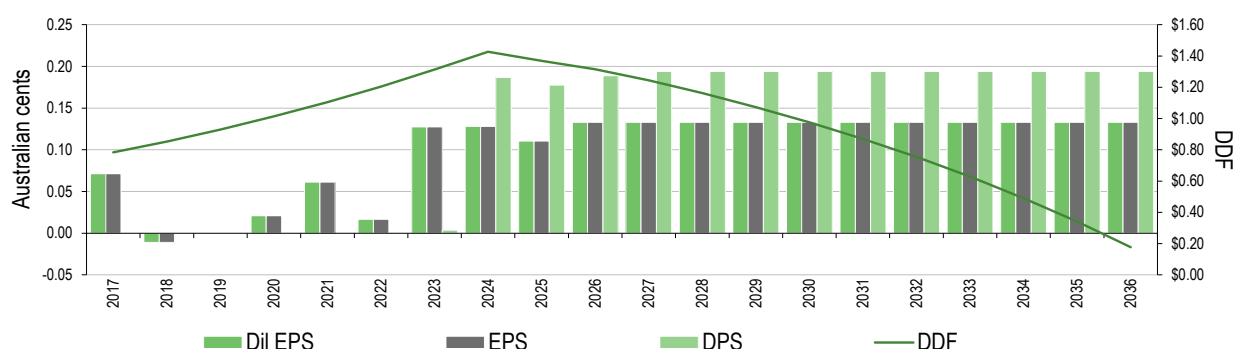
Exhibit 4: New Edison assumption of two-stage development plan ramp up to 1Mtpa



Source: Edison Investment Research

Earnings profile dominated by DZP production

The following exhibit is based on the two-stage development concept for the DZP. It also includes our value for the TGO, though we highlight that the future revenues and profits occurring from the DZP (starting in FY18 under our assumptions) dwarf the relatively small cash generation levels that result from gold mining.

Exhibit 5: Edison's estimate of theoretical, EPS, Diluted EPS, DPS and dividend discount flow (DDF)


Source: Edison Investment Research

As can be seen above, earnings are depressed through to FY22 as production from the DZP ramps up and the project's capital expenditure dominates. Even though maximum gold production of 73koz from the TGO occurs (as per our assumptions) in FY18e, earnings are depressed as a result of the A\$20m in capex required to develop an underground mining phase at Wyoming. A slight rise in earnings is seen over FY19 and FY20 as first DZP profits materialise, but reduce again as stage 2 capex is spent over FY21. The following year (FY22) sees the first full year of mining at the maximum 1Mtpa ore throughput rate.

Breakdowns of discounted earning valuations for the following periods of our valuation horizon are given in the following bullet points:

Exhibit 6: Base case, TGO-only and DZP scenario valuations

	A\$/share
TGO only, without any dilution, financing, costs or revenues associated with the DZP.	0.37
Base case - TGO and DZP fully developed	0.78
The following valuation scenarios include TGO production	
Post stage one capex with stage 2 developed	0.93
Post stage one without stage 2 developed	0.43
Post stage one and two developed	1.31

Source: Edison Investment Research

Illustrative premium rating valuation – A\$3.80 possible

Mining companies, once they are firmly into profitable stable production are usually awarded valuations at a multiple to their NPV. Simply put, once the DZP reaches steady-state stable production and its products are sold into a stable price environment, if we assume that Alkane pays out all its free cash in the form of dividends, we can impute a share price valuation. If we assume a 5% dividend yield (a relatively conservative assumption of long-term mining stock yield levels), Alkane's maiden theoretical dividend of A\$0.19 in FY24 (the first year we estimate the dividend could be paid) could imply a potential A\$3.80 Alkane share price.

Sensitivity to share price

Other than commodity prices, the most notable effect on our valuation stems from our assumption for the price at which Alkane raises capital, which we have adjusted to A\$0.40 per share. Exhibit 7 provides our total valuation (TGO+DZP) given a range of share prices that an equity portion of the DZP's financing might be raised at:

Exhibit 7: Sensitivity to price at which DZP financing raised

Equity raise price (A\$)	0.2	0.3	0.4	0.5	0.6	0.7
NPV10 (TGO+DZP)	0.47	0.64	0.78	0.90	1.00	1.09

Source: Edison Investment Research

DZP product developments and market drivers

The DZP's set of products are all traded using bi-lateral contracts between the supplier (Alkane) and the customer, and also via a third-party marketing agent. As a result, Alkane has had to market the DZP products in advance of the mine opening and production starting. The following is a summary of Alkane's marketing efforts and the types of agreement currently in place:

Zirconium chemicals

Alkane signed a marketing agreement in 2016 with UK chemicals firm Minchem over the marketing and sale of its zircon-based production.

DZP zircon-based products, including zirconium basic carbonate (45% ZrO₂) and chemical zirconium (>99.5% ZrO₂), are targeted for the growing and higher value chemical zirconia, zirconia and ceramics end-markets. Further, the success Alkane has had in removing hafnium from its zirconium-based concentrates makes DZP zircon-based output suitable for the production of refined zirconium metal, used in nuclear reactors.

Hafnium

Hafnia (hafnium oxide) samples were sent to customers for testing, a condition precedent to these customers agreeing to future DZP hafnium products. The samples were generated during the August to September 2016 pilot plant run. Alkane's demonstration pilot plant (DPP) as it is officially known is located at the Australian Nuclear Science and Technology Organisation (ANSTO).

Industry feedback has been especially positive for DZP hafnium output as it is not tied to the vagaries of the nuclear industry. This is because growth in the extremely small (c 50tpa) hafnium market is to be largely linked to high-tech material usage, such as alloys used in the aerospace and industrial gas turbine industries. Current hafnium production is linked to production of neutron transparent zirconium metals used in nuclear fuel-rod casings (hafnium absorbs c 600x the amount of neutrons zircon does and therefore needs to be refined out of zirconium metal – a process Alkane has successfully completed). As such, with the level of depressed activity currently in the nuclear industry and uncertainty persisting on from the Fukushima disaster of 2011, plus the increasing growth in the renewable energy economy, stable hafnium output from nuclear industry sources cannot be depended upon. Further, hafnium production volumes from the nuclear industry are unlikely to meet demand from other industrial sectors.

Rare Earths: VRE due diligence underway

Alkane has a letter of intent in place with private Vietnamese firm Vietnam Rare Earths (VRE JSC). The agreement was announced April 2016. The agreement is to toll process DZP rare earth concentrates into certified quality rare earth end products. VRE has two plants in operation:

- Phu Ly can produce 4,000tpa of separated rare earth oxides for lanthanum, cerium, neodymium, praseodymium, dysprosium and terbium
- Hai Phong can produce 1,200tpa of rare earth metal and rare earth alloys

Alkane is currently completing technical due diligence on VRE plants and is looking to complete this during Q1 CY17.

Neodymium-iron-boron magnets drive REE growth

Alkane's market commentary on rare earths is a good guide to this extremely opaque and Chinese-centric market. The long-held view of Chinese supply dominance persists (it supplies roughly 90% of global rare earths), as does the illegal mining of these metals (which is reportedly still as high as 40% of annual Chinese rare earth production). Alkane also highlights the very healthy demand for

rare earth permanent magnets. The uses of these types of magnets are wide-ranging, and the increasing roll of the electric vehicle is a key driver behind this sector's growth.

Rare earth permanent magnets, specifically neodymium-iron-boron, which will support Alkane's neodymium (Nb) production and commercial off-take signed with German company Treibacher Industrie, are enjoying high rates of growth. Chinese annual production of sintered neodymium-iron-boron alloys in 2015 was 140kt and y-o-y growth reported at 16%, against rest-of-world growth at 12%. China produced 88% of the global supply of sintered NeFeB magnets during 2015.

A sintered magnet is manufactured from grinding a suitable composition into a powder, then compacted and heated to cause densification. Iron-neodymium-boron magnets are all made this way.

Zirconium and lanthanum could improve Li-ion battery performance

An interesting note is made in Alkane's quarterly activities report concerning research currently being undertaken by Michigan University into the use of solid electrolytes in lithium-ion batteries. The research involves the use of a film made of lithium-lanthanum-zirconate, using proportions of lithium hydroxide (20%), lanthanum oxide (53%) and zirconia (27%). The rise of the electric vehicle, either hybrid-electric or pure-electric, would greatly benefit from this battery technology being commercialised as it allows li-ion batteries to operate at higher temperatures as well as having a greater energy density. This would allow for batteries to be made lighter with the potential positive impact on vehicle range – a key anxiety of electric vehicle customers.

Financials

Alkane had A\$22.5m in cash at 20 September 2016, and currently has cA\$6m in debt outstanding (to be used to develop TGO underground development).

We estimate that Alkane will finish with net cash of A\$24.5m at end FY17 (June year-end), which reflects the strength of the gold price over H117 which averaged YTD US\$1,266/oz (A\$1,679/oz at a A\$/US\$ exchange rate of 0.75), and our in-house gold price assumption of US\$1,275/oz (A\$1,688/oz) over the remainder of FY17.

Note: Alkane has a hedge book with MacQuarie bank. At the beginning of FY17 this book had a starting balance of 63,900oz Au. We assume 34,650oz are paid into this book over FY17, fetching a minimum (floor) price of A\$1,690/oz. We have factored these sales and revenues into our cash flow forecasts for the TGO. The remaining 29,250/oz are to be paid over FY18.

Our model also now includes 21.7m shares which is the shortfall of the entitlement offer announced in April 2016 (placed at A\$0.20 and raising A\$4.1m) and 8.3m incentive shares given to Alkane's employees as announced in September 2016.

Exhibit 8: Financial summary

	A\$'000s	2014	2015	2016	2017e	2018e
Year end 30 June		IFRS	IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS						
Revenue		35,474	101,813	109,624	116,841	102,509
Cost of Sales		(25,692)	(74,809)	(76,236)	(72,661)	(50,828)
Gross Profit		9,782	27,004	33,388	44,180	51,681
EBITDA		3,890	26,478	40,913	43,690	47,064
Operating Profit (before GW and except.)		3,890	(79)	10,984	12,494	(16,409)
Intangible Amortisation		0	0	0	0	0
Exceptionals/discontinued		(4,798)	(8,211)	(4,375)	63,581	0
Other		0	0	0	0	0
Operating Profit		(908)	(8,290)	6,609	76,076	(16,409)
Net Interest		(471)	153	54	490	4,617
Profit Before Tax (norm)		3,419	74	11,038	12,984	(11,792)
Profit Before Tax (FRS 3)		(1,379)	(8,137)	6,663	76,566	(11,792)
Tax		(4,893)	4,051	(1,968)	0	0
Profit After Tax (norm)		(1,372)	4,125	9,070	12,984	(11,792)
Profit After Tax (FRS 3)		(6,272)	(4,086)	4,695	76,566	(11,792)
Average Number of Shares Outstanding (m)		373.7	413.4	420.8	1,071.9	1,071.9
EPS - normalised (c)		(0.4)	1.0	2.2	1.2	(1.1)
EPS - FRS 3 (c)		(1.7)	(1.0)	1.1	7.1	(1.1)
Dividend per share (c)		0.0	0.0	0.0	0.0	0.0
Gross Margin (%)		27.6	26.5	30.5	37.8	50.4
EBITDA Margin (%)		N/A	N/A	N/A	N/A	N/A
Operating Margin (before GW and except.) (%)		N/A	N/A	N/A	N/A	N/A
BALANCE SHEET						
Fixed Assets		160,174	162,624	182,691	186,690	772,769
Intangible Assets		53,406	65,251	72,553	75,553	79,553
Tangible Assets		100,032	89,787	102,941	103,940	686,019
Investments		6,736	7,586	7,197	7,197	7,197
Current Assets		40,811	28,342	38,569	333,804	15,131
Stocks		15,391	11,505	12,394	9,696	8,158
Debtors		4,906	1,988	1,720	8,288	6,973
Cash		15,569	14,849	24,455	315,820	0
Other available for sale financial assets		4,945	0	0	0	0
Current Liabilities		(14,726)	(11,251)	(10,448)	(7,675)	(288,873)
Creditors		(13,755)	(9,726)	(8,745)	(5,972)	(4,178)
Short term borrowings		0	0	0	0	(282,992)
Other		(971)	(1,525)	(1,703)	(1,703)	(1,703)
Long Term Liabilities		(12,039)	(9,265)	(20,502)	(20,502)	(20,502)
Long term borrowings		0	0	0	0	0
Other long term liabilities		(12,039)	(9,265)	(20,502)	(20,502)	(20,502)
Net Assets		174,220	170,450	190,310	492,317	478,525
CASH FLOW						
Operating Cash Flow		(3,508)	28,454	37,432	39,146	48,122
Net Interest		(369)	153	54	490	4,617
Tax		0	0	0	0	0
Capex		(95,281)	(32,588)	(40,423)	(35,194)	(649,552)
Acquisitions/disposals		40,534	3,151	416	63,581	0
Financing		9,800	162	12,127	223,342	(2,000)
Dividends		0	0	0	0	0
Net Cash Flow		(48,824)	(668)	9,606	291,365	(598,812)
Opening net debt/(cash)		(64,294)	(15,569)	(14,849)	(24,455)	(315,820)
HP finance leases initiated		0	0	0	0	0
Other		99	(52)	0	0	0
Closing net debt/(cash)		(15,569)	(14,849)	(24,455)	(315,820)	282,992

Source: Company accounts and Edison Investment Research. Note: We forecast DZP financing capex starting in FY17 including the planned sale of 10% of the DZP for A\$64m recorded on the P&L. Assumes capital raise of A\$227m via issue of 596m shares at A\$0.40 each.

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