GMP

Equity Research

Triton Minerals[1,7]

BUY

TON-ASX

October 8, 2015

Last: **A$0.26**

▲ Target: **A$0.88**

A four pronged strategy emerges

Triton's product is fully diversified & of strategic value

Triton has the largest graphite resource in the world at Nicanda Hill and potentially a supply of the coarsest flake (high value) graphite in the world from Ancuabe. With both of these, Triton has the opportunity to develop a flexible, diversified and strategic supply of graphite from its Triton Mozambique Graphite (TMG) product. Test work has shown that TMG can be used in traditional markets, as spherical graphite in the battery market, as expandable graphite and to create the new 'wonder material' graphene.

Vertical integration provides greater diversification and profit

TON's strategy is to complement its flexible and diversified product range of concentrates with enhanced graphite products from factories in China and Mozambique utilizing its strategic partnership with YXGC. This is expected to provide additional markets for TMG product and greater profit margins utilizing its low cost production and technical knowhow.

Strategic partnership for growth

We recently completed a site visit to Triton's strategic partner Yichang Xincheng Graphite Co.Ltd (YXGC)'s factory in China. We viewed the factory, spoke with management and came away confident in the strength of this alliance.

Anticipating growth in the expandable graphite sector

Expandable graphite products include powder, foil, roll, heat resistant insulation foam, replacements for asbestos sheet, ribbon, 3D printing and even yarn. Uses include insulation, foundry, brake linings and lubricants.

Maintain BUY rating and lift price target to A$0.88/sh

Our SOTP valuation based price target has lifted slightly to A$0.88/sh. We have remodelled around the emerging strategy of both concentrate and enhanced product production. We have also taken the opportunity to be more aggressive on flake size and basket price assumptions and applied considerable conservatism. We further discount NAV to reflect technical and funding risk. In addition, we model a small funding event next quarter and have diluted our valuation to reflect this.

What's Changed	Old	New
Rating	BUY	n.c.
Target (A$)	$0.87	$0.88
Graphite Production 2017E (kt)	6.44	6.44
Graphite Production 2018E (kt)	67.28	51.98
Graphite Production 2019E (kt)	163.80	73.80

Share Data	
Share o/s (mm, basic/f.d. itm)*	451.2
52-week high/low (A$)	0.535/0.135
Market cap (A$m)	$115.07
EV (A$m)	$111.07
Net debt (m)	$0.00
Projected return	243%
NAV0%/share	$1.79
NAV10%/share	$0.88
P/NAV0%	0.14
P/NAV10%	0.29

Financial Data			
YE Dec. 31	FY17E	FY18E	FY19E
Graphite production (kt)	6	52	74
Cash costs (US$/t)	$287	$242	$182
Capex (US$m)	-$116	-$84	-$11
Free cashflow (A$m)	$13	-$6	$27
EPS	$0.03	$0.06	$0.12
CFPS	$0.03	$0.07	$0.13
P/E	9.99	4.36	2.18
P/CF	9.49	7.91	1.07
EV/EBITDA	8.32	2.52	1.54

A$ unless otherwise noted. * Post assumed near term equity raise

Current Chart   Previous Research

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China site visit completed and a four pronged strategy is emerging

We recently completed a site visit to Triton's strategic partner Yichang Xincheng Graphite Co.Ltd (YXGC)'s factory in China. We viewed the factory, spoke with management and came away confident in the strength of this alliance. We also have a greater understanding of TON's strategy going forward. In addition, we also gained a better appreciation for the graphite roll, the expandable graphite market and potential innovations in the sector.

A vertically integrated strategy

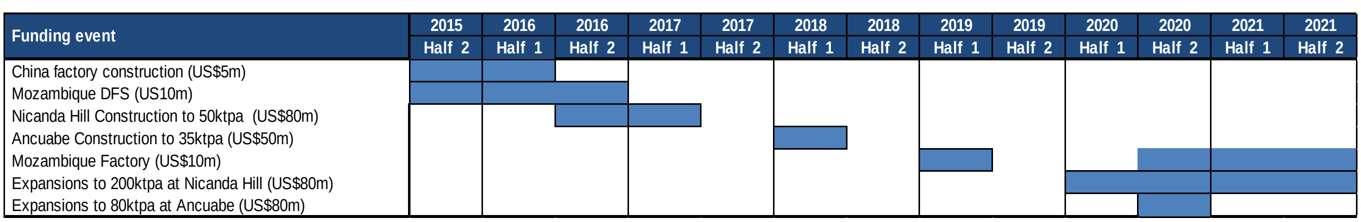
Triton has the largest graphite resource in the world at Nicanda Hill and potentially a supply of the coarsest flake (high value) graphite in the world from Ancuabe. With both of these, Triton has the opportunity to develop a flexible, diversified and strategic supply of graphite from its Triton Mozambique Graphite (TMG) product. TON's strategy involves vertical integration to complement its flexible and diversified product range of concentrates with enhanced graphite products from factories in China and Mozambique utilizing its strategic partnership with YXGC. Triton's four pronged strategy is as follows:

- **Nicanda Hill and P66** – variable graphite concentrate to suit demand for traditional supply, spherical graphite, graphene and expanded graphite. Will also supply concentrate for enhanced product factories.
- **Ancuabe** – Super jumbo and jumbo flake production expected as high value, high demand concentrate.
- **China factory** – 49% owned in partnership with YXGC to produce expanded graphite products using YXGC technology and TMG concentrate (GMPe from FY17). Expected to result in near term revenue, a stronger alliance and technological know-how for TON.
- **Mozambique factory** – 70% owned in partnership with YXGC to produce expanded graphite products. This factory will likely add on to the planned Nicanda Hill operation and require minimal additional capital expenditure that will be funded from existing cash flow.

Timetable and funding

The aforementioned strategy requires a well-planned funding and construction timetable. We have assumed the following timetable and funding based on discussions with management.

Figure 1. Triton Minerals assumed funding and construction timetable



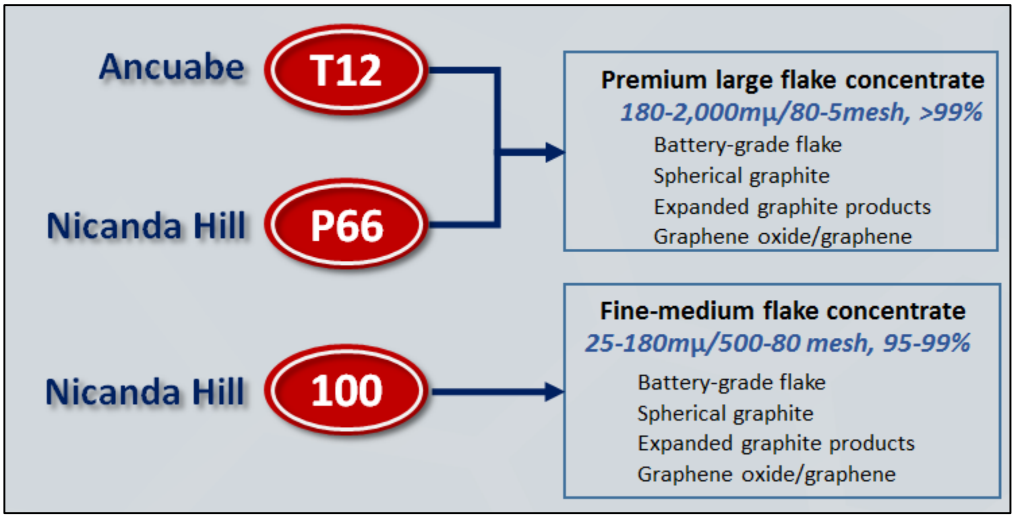
Source: GMP research

As discussed in the valuation section below, we assume Triton will source additional funding for the initial expenditure on the China factory, DFS, Nicanda Hill and Ancuabe construction. We assume later expansions and the Mozambique factory are funded from cash flow. In the near term we assume a US$12m equity financing to fund construction of the Chinese factory and fund Mozambique to a construction decision. We assume a combination of debt and equity for the construction of the Nicanda Hill and Ancuabe operations.

Potential products

The updated strategy assumes a wide range of uses for TMG products. Test work has shown that TMG can be used in traditional markets, as spherical graphite in the battery market, as expandable graphite and to create the new 'wonder material' graphene. Vertical integration enables further flexibility and revenue from this expanding market.

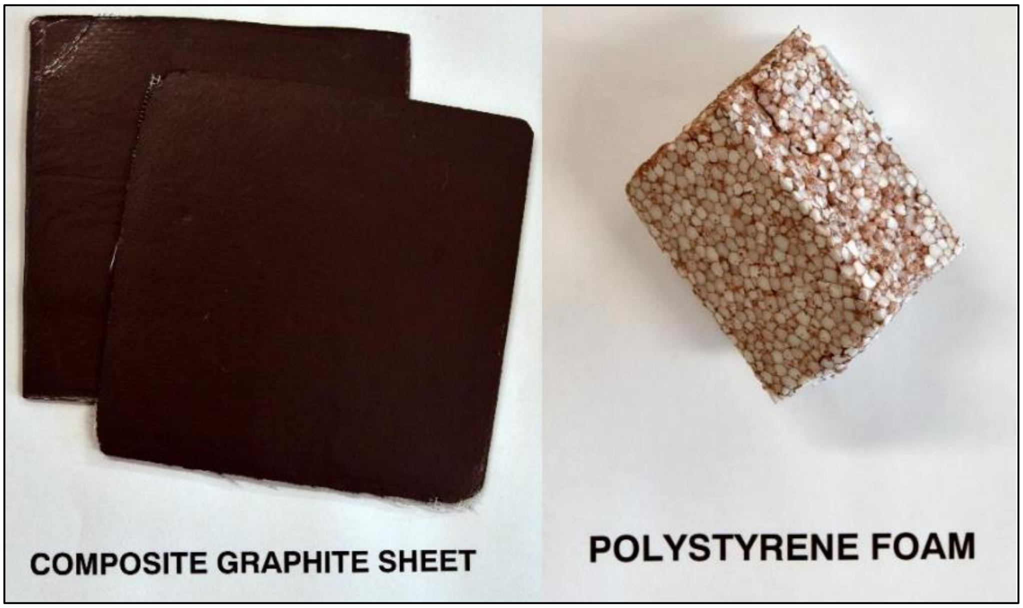
Figure 2. TMG products



Source: TON

Much of the fine flake material from Nicanda Hill could be developed into composite graphite tiles in association with YXGC. This composite graphite tile could replace asbestos, a substantial +200,000tpa market in China alone. This makes use of material that may otherwise have been classed as waste. YXGC are also developing heat resistant insulation products combining expanded graphite with polystyrene. The uses for this material look to be extensive and we expect substantial demand for this new product. The graphite roll and foil market is growing and expandable graphite using YXGC's technology are ideal for producing this high value material.

Figure 3. Composite tile and polystyrene and graphite insulation block at YXGC factory



Source: TON

Offtake and partners

The binding offtake and strategic partnership that triton has agreed with YXGC forms the backbone to TON's plans for vertical integration in the sector. The offtake should be viewed as a strategic partnership to jointly grow offtake of TMG product (and any East African brokered third party product) to average 100ktpa over the outlined 20 year period.

YXGC is currently not in the position to fund the full 100ktpa offtake agreement given it currently produces in the region of 60ktpa of enhanced graphite products. Rather, the strategic alliance represents an opportunity for both TON and YXGC to grow together. YXGC do have a large demand for their products and the staged development approach proposed by Triton will provide Triton and YXGC the means to rapidly grow production from cash flow. On our recent visit we certainly came away with the view that YXGC are fully committed to the alliance with TON. The offtake currently specifies >150 micron flake, with the bulk of this will most likely come from P66 and Ancuabe when resources are identified. However, recent developments of composite tiles (as outlined above) mean there is likely an opportunity to take finer flake material from Nicanda Hill for these tiles as well as the spherical graphite market.

Triton has also signed a letter of intent (LOI) with Chinese equity firm and resources trading house, Shenzen Qianhai Zhongjin Group Co. Ltd (SQZG). SQZG have agreed to provide funding of up to US$200m to build and develop a graphite concentrate operation with initial capacity to produce up to 200kt of graphite concentrate per year at Nicanda Hill. However, this is just a LOI and we will place little value in this agreement unless it becomes binding.

The company has also signed a binding agreement to form a strategic alliance with AMG Mining AG (AMG) through the AMG subsidiary of GK Ancuabe Graphite Mine, SA (GK). The strategic alliance between AMG and Triton is for an initial exclusive period of two years during which the parties will collaborate on the exploration, identification and development of graphite occurrences at the Ancuabe project. This alliance has the potential to fast track and expand development at Ancuabe and could well lead to future offtake agreements and is clearly of value. Should the alliance develop further between Triton and GK, then Triton potentially have the added benefit of access to graphite mining and processing expertise, established infrastructure with a small graphite concentrate plant, grid power and a reasonably short distance of 80kms to the port of Pemba.

The company is still looking for additional offtake partners. The strategic nature of securing a large and flexible source of graphite products with high purity and a range from super jumbo flake down to amorphous graphite is likely to be appealing to many groups.

Vanadium upside

Nicanda Hill mineralisation also hosts vanadium as well as low grade zinc. 3.93Mt of vanadium in the current resource represents one of the largest vanadium deposits in the world. Vanadium and zinc can be viewed as potential by-products and additional upside potential as the company progresses towards becoming a significant graphite producer.

Favourable Infrastructure and regime in Mozambique

Regional infrastructure at Nicanda Hill is favourable. The project is just 8km from a sealed road all the way to the deep-water port of Pemba. Grid power is available in the nearby town of Mapapulo although its reliability is uncertain. The deep-water port at Pemba is growing at a rapid rate due to the discovery of natural gas in the region. This and the advancement of regional graphite production will likely lead to (and already is) the support services required. Access to the port for what we assume would be trucks of graphite concentrate will likely require a new or refurbished road to bypass the city centre. Water for processing looks likely to be sourced from nearby ground water supply.

The Ancuabe project is also only about 80kms from the port of Pemba, with access to grid power and potentially infrastructure of a graphite concentrate plant and GK's expertise in mining and processing graphite.

Mozambique appears to be a favourable and supportive environment for mining. Plans for a vertically integrated operation will be viewed favourably and likely result in tax benefits.

Updated valuation

We continue to value Triton on a sum-of-the-parts basis as shown in the table below.

Figure 4. Triton Minerals sum of the parts valuation

Asset	Discount rate	NAV "X" Factor	NAV Target (A$)	Target Price (A$)
Nicanda Hill (& P66)	10%	0.60 X	$115.4	$0.26
Ancuabe Project	10%	0.30 X	$99.9	$0.22
China factory	10%	0.70 X	$105.9	$0.23
Mozambique factory	10%	0.30 X	$24.3	$0.05
Exploration & Product Upside	n.a	n.a	$28.6	$0.06
Unrealizeed near term equity capital	n.a	n.a	$17.1	$0.04
Cash	n.a	n.a	$4.0	$0.01
Total NAV			**$395.2**	**$0.88**

Source: GMP research

Nicanda Hill and P66 (Balama North), Mozambique

We have modelled the Nicanda Hill Project to commence production in late 2017, using a twenty seven and a half year mine life based on a slow ramp up to the 1.8mtpa operation in the scoping study. This operation utilizes 43mt of the 51mt mining inventory to produce 4.7mt of graphite in concentrate.

Figure 5. Nicanda Hill assumed mine production plan

Mine Plan	FY18	FY19	FY20	FY21
Total Plant Feed (Mt)	0.4	0.4	0.6	0.8
Average Head Grade (% TGC)	12	12	12	12
Metallurgical Recovery (%)	90	90	90	90
Graphite Produced (Kt)	44	47	70	94

Source: GMP research

Our production ramp up (FY18-19) benefits from staged capital expenditure but is constrained only by demand and offtake rather than by mining or processing.

In the following table, we have used assumptions based on TON’s scoping study, advice from management and our observations from other graphite projects in East Africa. The table shows a comparison of our current modelled assumptions against the scoping study and our previous assumptions (November 2014).

Figure 6. Nicanda Hill modelling assumptions (life of mine)

Assumption	Current Model	Previous model	Scoping study
Mining Cost (US$/t)	4.10	4.00	3.97
Processing Cost (US$/t)	19.00	28.00	14.74
G&A Cost (US$/t)	7.00	1.25	3.29
Trucking (US$/wmt)	25.00	50.00	-
Shipping (US$/wmt)	35.00	50.00	-
Costs FOB (US$/t)	362.00	346.00	315.00
Purity (%)	96.00	97.00	97.00
Sustaining Capex (US$mpa)	1.00	1.00	1.00
Government Royalty (%)	3.00	3.00	3.00
Tax (%)	30.00	30.00	Pre-tax
Government Free Carry (%)	-	-	-
LOM basket price (US$/t)	914	806	985
Sales for enhanced product (US$/t)	350	n.a	n.a
V2O5 Price (US$/t)	n.a	n.a	n.a
A$/US$	0.70	0.88	n.a
Initial Capex (US$m)	80.00	110.00	110.00
Project funding (Debt) (US$m)	50.00	-	-
Project funding (Equity) (US$m)	30.00	-	-

Source: GMP research

We have updated our basket price assumptions and assumed a combination of fine and amorphous flake from Nicanda Hill and much coarser flake from the recent P66 discovery to blend as a concentrate product. The basket price can be assumed conservative and is compared I the table below with the microscopic observations used in the scoping study. We assume that once the graphite is mechanically processed the flake size at Nicanda Hill will reduce. This reduction in size is balanced against the increased flake size from P66 in our assumption below.

We also assume that concentrate is sold on a cost-plus basis to the company's enhanced product factories at US$350/t.

Figure 7. Updated flake size assumptions compared to microscopic studies announced by TON

Flake Size	Our Model (%)	Company announced (Nicanda only) (%)
Jumbo	5.0	8.5
Large	5.0	16.0
Medium	40.0	35.2
Small	25.0	17.1
Fine	25.0	23.2
Total	**100.0**	**100.0**

Source: GMP research, TON

We combine these flake size assumptions and consensus pricing, to determine annual basket prices for Nicanda's product. We feel this provides a conservative assumption for our valuation.

The price forecast only takes flake size into account (see table below) and does not account for purity variations, which will likely effect desirability to offtakers and could result in premium pricing. Given Triton expects to produce extremely high purity material, an additional level of conservatism can be assumed.

Figure 8.Basket pricing for graphite product from Nicanda Hill

Year	Jumbo		Large		Medium		Small		Amorphous		Basket (US$/t)
	Price	%	Price	%	Price	%	Price	%	Price	%	
LOM	$2,500	5%	$1,600	5%	$950	40%	$806	25%	$509	25%	$914

Source: GMP research, company data, Stormcrow

We value the Nicanda Hill Project on a post-tax DCF basis, calculating an $NPV_{10\%}$ of **A$192m.** As the project is at the scoping study stage and unfunded we arrive at a risked 0.6xNAV of **A$115m, or A$0.26/share.** We have assumed Triton Minerals' 100% interest after final vendor payment.

We have not modelled any vanadium production from Nicanda Hill.

Ancuabe Project, Mozambique

We have modelled the Ancuabe Project to commence production in late 2018, using a twenty six year mine life based on a 0.8mtpa operation. This operation assumes 19mt of mining inventory is discovered and processed. A resource is yet to be published.

Figure 9. Ancuabe assumed mine production plan

Mine Plan	FY18	FY19	FY20	FY21
Total Plant Feed (Mt)	0.1	0.3	0.3	0.4
Average Head Grade (% TGC)	12	12	12	12
Metallurgical Recovery (%)	90	90	90	90
Graphite Produced (Kt)	8	27	32	43

Source: GMP research

Our slow production ramp up to 0.8mtpa by FY24 also assumes staged capital expenditure.

In the following table, we have used assumptions based on the Nicanda Hill scoping study, advice from management and our observations from other graphite projects in East Africa to determine our modelling assumptions for Ancuabe.

Figure 10. Ancuabe modelling assumptions (life of mine)

Assumption	Our Model
Mining Cost (US$/t)	4.50
Processing Cost (US$/t)	23.00
G&A Cost (US$/t)	12.00
Trucking (US$/wmt)	15.00
Shipping (US$/wmt)	35.00
Costs FOB (US$/t)	490.00
Purity (%)	96.00
Sustaining Capex (US$mpa)	0.75
Government Royalty (%)	3.00
Tax (%)	30.00
Government Free Carry (%)	-
LOM basket price (US$/t)	1,380
Sales for enhanced product (US$/t)	-
V2O5 Price (US$/t)	-
A$/US$	0.70
Initial Capex (US$m)	50.00
Project funding (Debt) (US$m)	30.00
Project funding (Equity) (US$m)	15.00

Source: GMP research

We have updated our basket price assumptions and assumed flake size distribution and taken an extremely conservative view compared to management's preliminary test work.

Figure 11. Ancuabe flake size distribution assumptions

Flake Size	Our Model (%)	Announced Metallurgy (%)*
Jumbo	25.0	72.6
Large	20.0	13.4
Medium	25.0	6.0
Small	15.0	8.0
Fine	15.0	-
Total	**100.0**	**100.0**

*Source: GMP research, TON *intervals vary in announcement which includes super jumbo at 46%*

We combine these flake size assumptions and consensus pricing, to determine annual basket prices for Ancuabe's product of US$1,380/t. We feel this provides a conservative assumption for our valuation.

Figure 12.Basket pricing for graphite product from Ancuabe

Year	Jumbo		Large		Medium		Small		Amorphous		Basket (US$/t)
	Price	%	Price	%	Price	%	Price	%	Price	%	
LOM	$2,500	25%	$1,600	20%	$950	25%	$806	15%	$509	15%	$1,380

Source: GMP research, company data, Stormcrow

We value the Ancuabe Project on a post-tax DCF basis, calculating an $NPV_{10\%}$ of **A$333m.** As the project is still awaiting a resource and unfunded we arrive at a risked 0.3xNAV of **A$100m, or A$0.22/share.**

Enhanced product factory, China

We have modelled the Chinese factory to commence producing expanded graphite products from mid-2016. We assume that this operation runs for 28 years and that it utilizes >500,000 tonnes of TMG material at an average rate of 20ktpa. TON's management would view the assumed production rate as extremely conservative as they expect current demand to lift substantially. This can be viewed as upside on our valuation.

Figure 13. Chinese Factory production plan

Production Plan	FY16	FY17	FY18	FY19
Total Plant Feed (Kt)	3	10	10	18
Production cost (US$/t)	2,184	2,184	2,184	2,184
Average sale price (US$/t)	4,300	4,300	4,300	4,300

Source: GMP research

Our slow production ramp up to 20ktpa by FY20 also assumes staged capital expenditure. Our pricing and costing assumptions are based from observations and feedback during our recent site visit to TON's strategic partner Yichang Xincheng Graphite Co.Ltd (YXGC)'s factory in China.

Figure 14. Chinese factory modelling assumptions

Assumption	Our Model
Sustaining Capex (US$mpa)	0.75
Government Royalty (%)	-
Tax (%)	25.00
Government Free Carry (%)	-
A$/US$	0.70
Ton's 49% Initial Capex contribution (US$m)	5.00
Project funding (Debt) (US$m)	0.00
Project funding (Equity) (US$m)	5.00

Source: GMP research

We value the Chinese enhanced product factory on a post-tax DCF basis, calculating an $NPV_{10\%}$ of **A$151m.** The project is planned, is yet to be funded and its longevity is dependent on TMG production. Consequently we arrive at a risked 0.7x NAV of **A$106m, or A$0.23/share** for TON's 49% holding in the project.

Enhanced product factory, Mozambique

We have modelled the Mozambique factory as an extension of the Nicanda Hill processing facility. We expect the factory to be operational from mid-2019. This operation runs for 25 years and we assume it utilizes 481,000 tonnes of TMG material at an average rate of 20ktpa. TON's management would view the assumed production rate as extremely conservative as they expect current demand to lift substantially. This can be viewed as upside on our valuation.

Figure 15. Mozambique Factory production plan

Production Plan	FY19	FY20	FY21	FY22
Total Plant Feed (Kt)	3	10	10	18
Production cost (US$/t)	1,574	1,574	1,574	1,574
Average sale price (US$/t)	2,750	2,750	2,750	2,750

Source: GMP research

Our slow production ramp up to 20ktpa by FY23 also assumes staged capital expenditure. Our pricing and costing assumptions are based from observations and feedback during our recent site visit to TON's strategic partner Yichang Xincheng Graphite Co.Ltd (YXGC)'s factory in China.

Figure 16. Mozambique factory modelling assumptions

Assumption	Our Model
Sustaining Capex (US$mpa)	-
Government Royalty (%)	-
Tax (%)	30.00
Government Free Carry (%)	-
A$/US$	0.70
Ton's 70% initial capex contribution (US$m)	7.00
Project funding (Debt) (US$m)	0.00
Project funding (Equity) (US$m)	0.00

Source: GMP research

We value the Mozambique enhanced product factory on a post-tax DCF basis, calculating an $NPV_{10\%}$ of **A$81m.** As the project as undergone little study we arrive risked 0.3x NAV of **A$24m, or A$0.05/share** for Ton's assumed 70% holding in the project.

Remaining resources, exploration upside and vanadium and zinc optionality valuation

We have valued the remaining 150Mt of contained graphite resources, exploration potential and the potential for vanadium and zinc credits at US$20m. The scoping study completed by Syrah on vanadium processing gives us a degree of confidence that vanadium production is achievable. The indicated and inferred resources and EM coverage confirm there is much more graphite available should markets require it.

Therefore the valuation of resource, exploration and by-product credit potential within the portfolio is conservatively estimated at **A$29m, or A$0.06/share**.

Cash and assumed unrealized capital

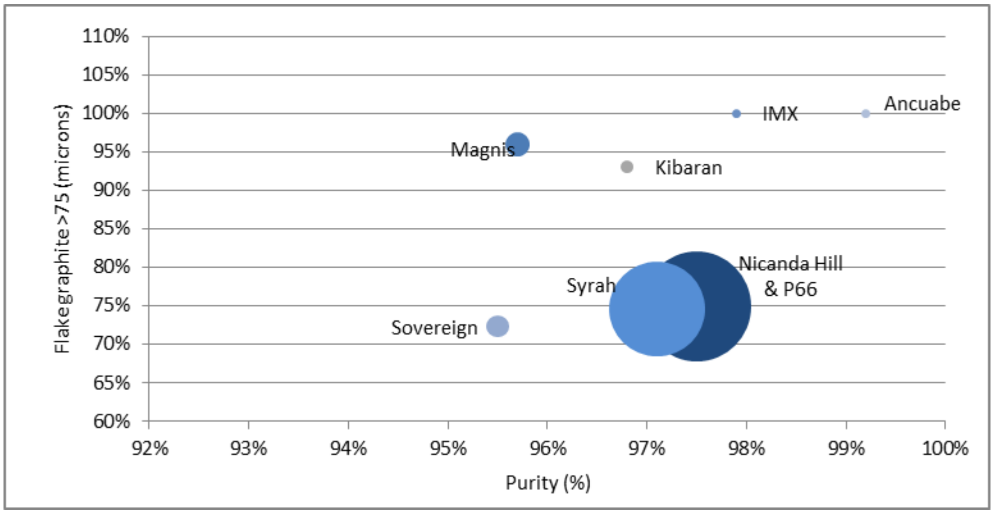
We estimate that the company has net cash of **A$4m** which we value at **A$0.01/share.**

In order to fund progress on its projects we believe TON will require additional funding this calendar year. We have modelled an equity placement to raise US$12m (A$17m) at a 10% discount to the current share price and diluted our modelled shares on issue accordingly to 451m (currently 377m) .

Peer analysis

The following chart compares Triton's TMG product with ASX peers on a resource size (bubble size), flake size distribution and purity basis. TMG consists of the coarsest and purist material at Ancuabe as well as the world's largest resource at Nicanda Hill. Clearly TMG has scope to meet a wide range of potential customer requirements.

Figure 17. East African peers compared on resource size (bubble), purity and flake size



*Source: GMP research. *No resource as yet defined at Ancuabe*

Upcoming news flow

- Ancuabe & P66 resources – 4QCY15
- Nicanda Hill reserves – 4QCY15
- TMG feasibility study – 2QCY16
- Offtake discussion - ongoing

Ticker	TON
Recommendation	**BUY**
Target Share price (A$)	0.88
Current Share price (A$)	0.26
Implied Return (%)	243%
P/NAV (x)	0.14

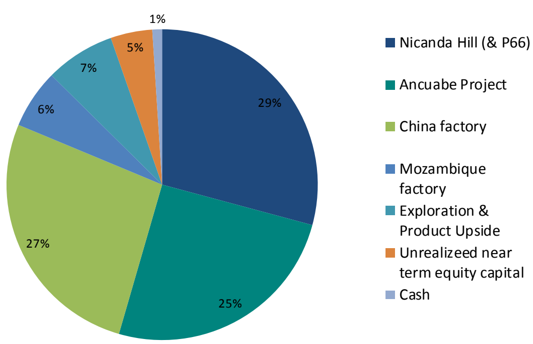
Financial Yr. End	31 December
Shares on issue (m)*	451.2
Market Cap (A$)	115.1
Enterprise Value (A$)	111.1
Cash (A$)	4.0
Ancuabe Project IRR (%)	63%

* after near term equity raise

Valuation

Asset	Discount rate	NAV "X" Factor	NAV Target (A$)	Target Price (A$)
Nicanda Hill (& P66)	10%	0.60 X	$115.4	$0.26
Ancuabe Project	10%	0.30 X	$99.9	$0.22
China factory	10%	0.70 X	$105.9	$0.23
Mozambique factory	10%	0.30 X	$24.3	$0.05
Exploration & Product Upside	n.a	n.a	$28.6	$0.06
Unrealizeed near term equity capital	n.a	n.a	$17.1	$0.04
Cash	n.a	n.a	$4.0	$0.01
Total NAV			**$395.2**	**$0.88**

Valuation Split (%)



Profit & Loss (A$m)

A$M	FY2017	FY2018	FY2019	FY2020
Revenue	$32.8	$86.5	$144.9	$197.9
Cost of Sales	$17.9	$37.9	$66.9	$93.6
Gross Profit	**$14.8**	**$48.6**	**$78.0**	**$104.3**
EBITDA	$13.3	$44.1	$72.0	$97.4
Net Profit before tax	$13.4	$34.8	$63.0	$86.4
Tax Payable	$0.0	(-$4.1)	(-$1.7)	(-$4.1)
Profit after tax	**$13.4**	**$30.7**	**$61.3**	**$82.3**

Balance Sheet

	FY2017	FY2018	FY2019	FY2020
Assets				
Cash	$12.7	$6.8	$33.4	$26.2
PPE & Exp. & Dev.	$143.3	$223.5	$229.5	$290.4
Total Current Assets	$12.9	$6.9	$33.4	$26.3
Total Assets	**$158.4**	**$162.9**	**$185.6**	**$223.3**
Liabilities				
Senior Debt	$71.4	$92.3	$63.6	$32.6
Total Current Liabilities	$71.7	$92.6	$63.9	$32.9
Total Liabilities	**$73.7**	**$94.6**	**$65.9**	**$34.9**

Ratios and Key Financial Data

	FY2017	FY2018	FY2019	FY2020
EPS (AUDc)	2.6c	5.8c	11.7c	15.7c
CFPS (AUDc)	2.7c	6.8c	12.7c	17.5c
FCFPS (AUDc)	2.4c	-1.1c	5.1c	-1.4c
P/E ratio (x)	10.0	4.4	2.2	1.6
P/FCF (x)	10.6	NM	5.0	NM
EV/EBITDA (x)	8.3	2.5	1.5	1.1
Current ratio (x)	0.2	0.1	0.5	0.8
Shares on Issue (M)	524.7	524.7	524.7	524.7

Cashflow Generation

	FY2017	FY2018	FY2019	FY2020
Cashflow generated	$14.1	$35.5	$66.4	$91.7
Equity Placement	$42.9	$21.4	$0.0	$0.0
Debt Funding	$71.4	$42.9	$0.0	$0.0
Debt repayment	$0.0	(-$22.0)	(-$28.7)	(-$31.0)
Capital Expenditure	(-$115.7)	(-$83.8)	(-$11.1)	(-$67.8)
Free cash flow	$12.7	(-$6.0)	$26.6	(-$7.2)

Reserve and Resources Statement (100% of Project)

Status	Tonnes (Mt)	Grade (%)	TGC (t)	EV / t
Total Reserves	-	-	-	-
M&I only	328.0	11%	36,080,000	$3.1
Total Resource	1457.0	11%	155,754,000	$0.7
Production	61.6	12%	6,647,940	$17

Production Profile (TGC tonnes) (100% of Project)

Operation	FY2017	FY2018	FY2019	FY2020
Nicanda Hill (& P66)	6,435	43,875	46,800	70,200
Ancuabe Project	0	8,100	27,000	32,400
Total	**6,435**	**51,975**	**73,800**	**102,600**

Balama North Cash Cost (US$)

USD / t	FY2017	FY2018	FY2019	FY2020
Basket Price	$310	$596	$319	$358
C1 Cash costs	$287	$242	$182	$196
C3 Production Cost	$393	$354	$243	$239
FOB Pemba Cost	$479	$422	$380	$346
Landed Cost	$497	$450	$395	$372

Basket Price Dynamics(US$)

USD / t	Jumbo (>300mu)	Large(>180mu)	Medium(>106mu)	Small(>75mu)
Flake Size (Balama North)	5%	5%	40%	25%
Flake Size (Ancuabe)	25%	20%	25%	15%
Long Term	$2,500	$1,600	$950	$806

Ancuabe Cash Cost (US$)

USD / t	FY2017	FY2018	FY2019	FY2020
Basket Price	$0	$1,380	$1,380	$1,380
C1 Cash costs	$0	$401	$401	$401
C3 Production Cost	$0	$459	$432	$428
FOB Pemba Cost	$0	$597	$574	$547
Landed Cost	$0	$635	$612	$585

Factory Dynamics (US$)

	FY2017	FY2018	FY2019	FY2020
China Production (t)	10,000	10,000	18,000	20,000
Mozambique production (t)	0	0	3,000	10,000
Production cost (China)	$2,184	$2,184	$2,184	$2,184
Production cost (Mozambique)	$0	$1,574	$1,574	$1,574
Sale price (China)	$4,300	$4,300	$4,300	$4,300
Sale price (Mozambique)	$0	$2,750	$2,750	$2,750

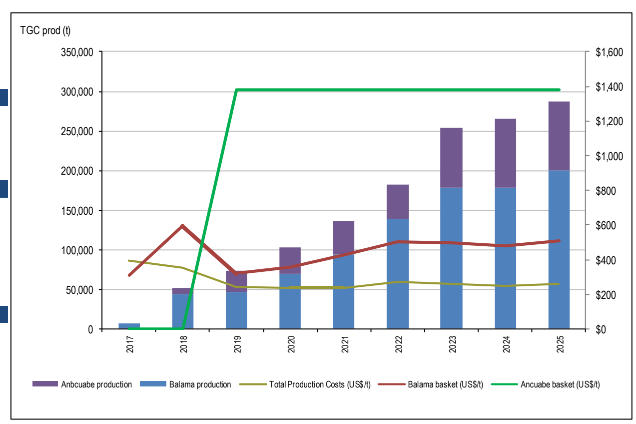
Directors & Management

Chairman	Chris Catlow
Managing Director	Brad Boyle
Executive Director	Alfred Gillman
Non-exec director	Alan Jenks
Non-exec director	Paula Ferreira

Major Shareholders

Directors	11.0%
Top 20	42.0%

Forecast Graphite Production



Source: GMP research

Source: Company data, GMP estimates

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