

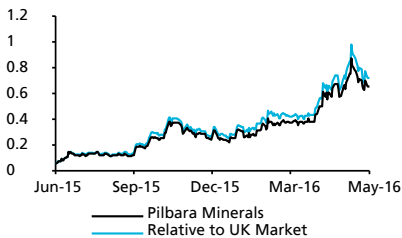
2 June 2016

BUY

Current Share Price	AUc65
Target Price	AUc85
Market Capitalisation	AUD744.2m
Shares In Issue	1,145m
RIC/BLBG	PLS.ASX/PLS.AU
Avg. Daily Volume (3M)	10,075,165
Net Cash/(Debt) (m) (06/16F)	AUD165.0m

Current share price(s) timed at 4:30pm on 31/05/16

Share Price



Performance (%)	1M	3M	12M
Absolute	2	81	1,275
Relative	2	79	1,432

Source: Datastream (relative to UK-DS Market index)

Analysts

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Pilbara Minerals

Initiating Coverage

Mining a piece of the future

Pilbara Minerals is developing the Pilgangoora lithium deposit in Western Australia that should be developed into a 2Mt/year mine producing 330kt/year of high grade spodumene. We expect initial capex of A\$184 million with opex of A\$252/t of concentrate compared to a LOM assumed spodumene price of US\$550/t. Lithium is a key component in batteries for both electric vehicles and domestic and industrial power storage. We value the project at 1.0x our 7% NAV and initiate coverage with a BUY recommendation and a target price of A\$0.85/share.

- High grade hard rock lithium in a low risk jurisdiction** - PLS owns a 100% interest in the high grade Pilgangoora lithium tantalite project in Western Australia, which is the world's second largest spodumene-tantalite Resource hosting more than 1Mt of lithium oxide. The project is located within 120 km from Port Headland near to both rail infrastructure and the Great Northern Highway. The project should be developed as an open pit mine with annual production of approximately 330kt/year of 6% spodumene concentrate (48kt/year Lithium Carbonate Equivalent) and 274klb of tantalite over an initial life of 15 years. Based on the company's PFS, opex should be US\$205/t, compared to an assumed LOM spodumene concentrate price of US\$456/t and a spot price of US\$600/t. The company has signed offtake MOUs with both technical and chemical grade customers that would account for all of the mine's planned production.
- Lithium demand undergoing secular growth** - Lithium is principally used in the manufacture of glass and ceramics (33%) and in rechargeable batteries (32%) with growth of the latter growing significantly due to the increased production of electric vehicles and static electric storage devices. The recent announcement of the production of the Tesla Model 3, which is being followed by the several other auto manufacturers releasing models in the same <US\$40k pricing bracket, heralds the movement of electric vehicles into the mainstream with each using up to 80Kg of lithium carbonate equivalent. The Tesla Powerwall unit that provides energy storage for the domestic market could have a similarly transformational impact for that market. In aggregate total lithium battery production could treble from 30GWh at present over the medium term with the Tesla Gigafactory in Nevada alone accounting for 35GWh with a further 15GWh from the planned Foxconn facility in China.
- DFS should be near term catalyst, with commercial production in 2018** - The DFS at Pilgangoora should be completed in Q3 CY16 with construction scheduled to commence before the end of 2016 and commissioning by the end of CY17. We initiate coverage with a BUY recommendation and an A\$0.85/share target price based on 1.0x NAV. We expect the shares to re-rate as the company publishes an updated Resource, completes the DFS and moves towards commencing development before the end of 2016. Following the recent A\$100 million fund raising, the company should have cash of approximately A\$105 million; we expect the A\$184 million of project capex to be funded through equity and A\$60m of debt.

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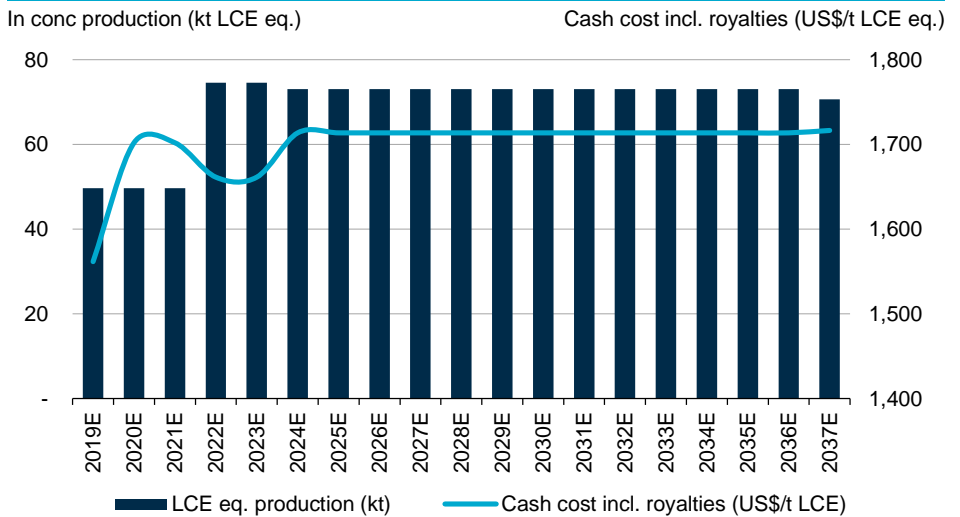
Pilbara Minerals – Key Questions

How sustainable is the increase lithium prices?	We believe that the lithium market has experienced a secular change in demand dynamics due principally to the current growth in demand for electric vehicles and, over the medium term, the potential for static power storage devices. Whilst prices may pull back from the current high as new lithium supply is brought into production, we expect them to remain elevated compared to historic levels. We have used a lithium concentrate price of US\$550/t vs. the current spot contract price of US\$600/t. We would note that the company has already secured MOU's with offtakers for 100% of planned production, which is indicative of the degree of tightness in the lithium market.
Is the development schedule for Pilgangoora realistic?	Despite being one of the world's largest hard rock lithium projects, Pilgangoora will be a modest scale (2Mt/year-3Mt/year) open pit operation producing a concentrate that should not pose any material challenges from a technical perspective. In addition, as Western Australia is a mining friendly jurisdiction, we do not expect delays to the permitting process to impact the company's current timeline, which would see commissioning commence towards late CY 2017. We have conservatively modelled an 18-month construction period with commissioning in early CY 2018 and commercial production in mid-2018. We believe that the company should be able to fund the A\$184 million capital cost of the mine through a combination of equity, debt and offtake financing. Even assuming A\$80 million of debt financing (vs. our assumption of A\$60m), net debt would peak at 1.4x EBITDA in September 2018 before returning to net cash in March 2019 based on a concentrate price of US\$550/t.
What is the potential scale of the Resource at Pilgangoora?	The PFS completed by the company delineated a Resource of 80Mt on a Measured, Indicated and Inferred basis with 1Mt of contained lithium oxide with a Reserve of 29.5Mt hosting 273kt of lithium oxide. Pilbara is carrying out a further 15,000 metres of drilling in connection with the DFS, which should increase the mineable inventory to 53.9Mt; this would increase the mine life and justify an expansion of the operation to 3Mt/year.

Investment Thesis – Mining a Piece of the Future

Pilbara Minerals holds a 100% interest in the Pilgangoora lithium project that hosts a Resource of 80Mt at 1.26% Li₂O to host 1Mt of Li₂O, within which there is a Reserve of 29.5Mt at 1.31% Li₂O hosting 273kt of Li₂O. The deposit is the second largest spodumene tantalite Resource in the world and, as it is located in Western Australia, has a low associated political risk and good access to infrastructure.

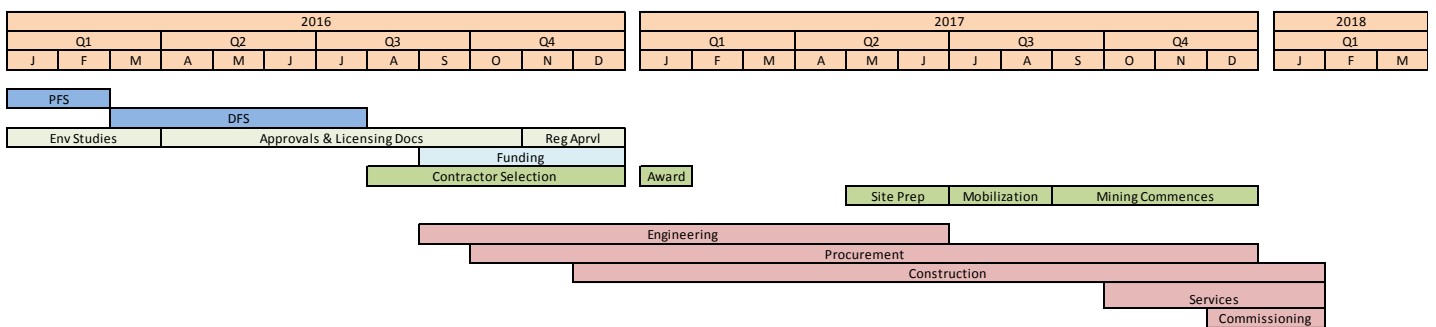
Figure 1: Major emerging lithium miner with a Tier I project



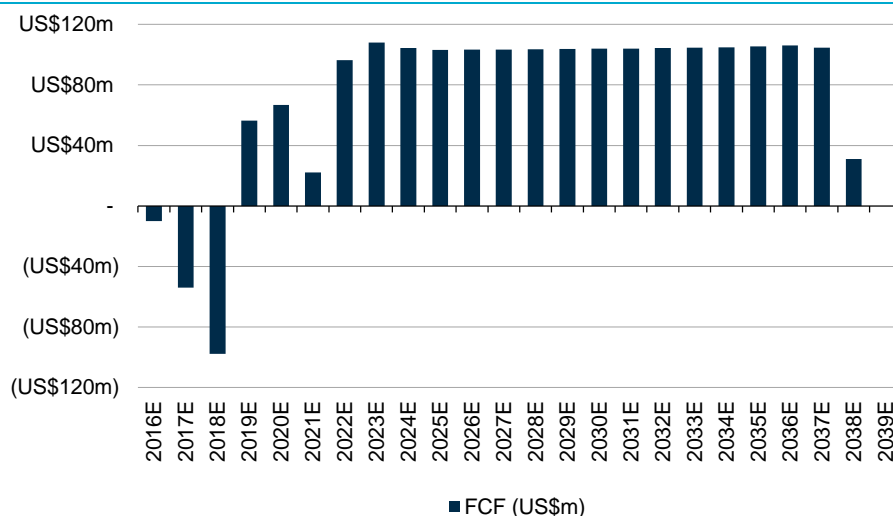
Source: Company & Numis Securities Research

PLS plans to initially develop a 2Mt/year open pit mine that should produce 330kt/year of 6% spodumene concentrate (48kt/year on a Lithium Carbonate Equivalent basis) and 274klb/year of tantalite. Capex should be A\$184 million with cash costs of US\$252/t. We believe that Pilgangoora has sufficient resource to reserve conversion potential to warrant an increased throughput rate and have thus modelled an expansion to 3Mpta in year 3 of production at capex of A\$50m. With an assumed concentrate price of US\$550/t, compared to a spot price of US\$600/t, the project has an NAV of US\$791 million (A\$0.81/fully diluted, fully funded share), with first production scheduled from mid CY 2018 following an 18-month build starting in 2017. We expect the shares to re-rate as the feasibility and permitting process is completed and initiate coverage with a Buy recommendation and a target price of A\$0.85/share.

Figure 2: Construction to commence by YE 2016 with commissioning in late 2017



Source: Company

Figure 3: Solid FCF generation throughout the mine life

Source: Company & Numis Securities Research

Lithium is principally used for glass-ceramics applications and in the manufacture of rechargeable batteries. Lithium based rechargeable batteries are the basis for the current revolution in both electric vehicles and static domestic battery technology with a trebling of battery production capacity planned over the medium term including the 35GWh Tesla-Panasonic facility in Nevada.

We expect PLS to generate average annual EBITDA of A\$157 million with an average EBITDA margin of 52% over the life of the mine. We expect aggregate FCF of A\$1,832 million under our base case scenario.

Catalysts

Resource update – PLS has completed a 15,000 metre drill programme at the project as part of the DFS with a Resource update expected over the coming quarter. This could result in both an extension of the mine life from 15 years to 30 years and could potentially justify an increase in mining from 2Mt/year to 3Mt/year.

Definitive Feasibility Study – The DFS should be completed and published in Q3, which should give a higher degree of confidence on project capex and opex.

Financing, Permitting and Construction – Management expect the permitting process to be completed by the end of 2016 and for financing to be completed concurrently. Heritage surveys have been completed with no issues identified and we have modelled a 1% native title access royalty. We have assumed additional funding of A\$50m in equity, raised at A\$0.85, A\$60m of 5% debt, and the exercise of currently issued in the money options, leaving the company with a significant cash buffer to production.

Construction & Commissioning – Construction is scheduled to commence in December 2016 with a build period of 12-15 months and with commissioning commencing before the end of CY2017. We have conservatively modelled an 18 month build with commissioning in early CY2018 and mid-2018 commercial production.

M&A Potential – With a scalable Tier I lithium resource we believe that Pilbara could be an attractive target either for an established specialty metals group such as SQM or FMC or one of the Chinese lithium processing businesses, which may seek to vertically integrate to guarantee quality supply of material.

Valuation

We value a developer such as Pilbara based on 1x NAV using a 7% discount rate, which accounts for Pilgangoora's location in Western Australia, one of the world's top mining jurisdictions. We have used a long term 6% spodumene concentrate price of US\$550/t compared to a current spot price of US\$600/t. Whilst this is higher than the US\$456/t that was used in the pre-feasibility study, we believe that this is defensible on the basis of our expectation of the continued strength of the lithium market and current offtake contracts, which have been signed at US\$600/t. We have also used a 7% discount rate and assumed that the A\$ strengthens over the long term from 0.75:US\$ to 0.9:US\$. This generates an NAV for Pilbara of A\$1,094 million or A\$0.84 per share, 29% above the current share price. We have attributed no value to the Tabba Tabba project, the development of which has now been postponed indefinitely due to low tantalum price.

Using the spot spodumene concentrate prices and A\$ exchange rate would generate an NAV of A\$1,545 million, which would increase our target price to A\$1.20/share.

Table 1: Pilbara base case NAV breakdown

	Disc Rate	US\$m	US\$/sh	PNAV	A\$/sh
Pilgangoora	7%	791	0.61	1.0x	A\$0.81
Cash		77	0.06	1.0x	A\$0.08
Debt		(5)	(0.00)	1.0x	A\$0.00
Cash from options		23	0.02	1.0x	A\$0.02
SG&A and central	7%	(66)	(0.05)	1.0x	-A\$0.07
Valuation (fd)		821	0.63		A\$0.84
Current NAV Multiple (Implied)					0.77x
Valuation					
NAV valuation	Target multiple		0.75x - 1.0x		A\$0.84

Source: Numis Securities Research

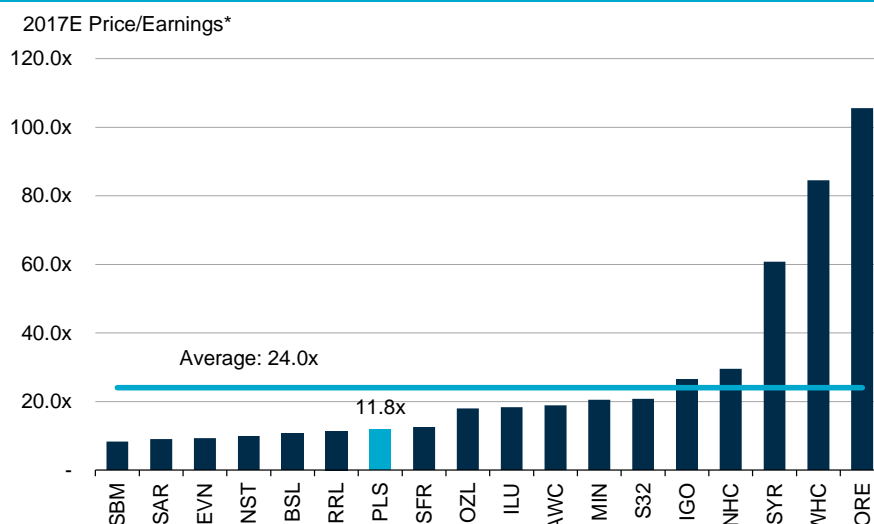
Table 2: Diversified Peer Group

Company	Commodity(s) Produced	Ticker Symbol	Share Price (A\$/sh)	Market Cap (A\$m)	EV (A\$m)	Trading Performance		
						1 Month (%)	3 Month (%)	1 Year (%)
South32	Al/Ni/Mn/Ag/Pb/Zn/Coal	S32	1.56	8,305	6,123	(6%)	18%	(29%)
Alumina	Al/Bauxite	AWC	1.42	4,075	3,049	(5%)	4%	(20%)
Bluescope Steel	Steel	BSL	6.26	3,577	5,426	(3%)	13%	78%
Evolution Mining	Au	EVN	2.03	2,981	3,434	4%	20%	73%
Northern Star Resources	Au	NST	4.31	2,587	2,396	11%	15%	83%
Iluka Resources	Ti	ILU	6.45	2,701	2,695	0%	(11%)	(28%)
Oz Minerals	Cu	OZL	5.46	1,657	1,104	(7%)	3%	16%
Regis Resources	Au, Ni	RRL	2.92	1,459	1,405	1%	14%	147%
Mineral Resources	FeO/Mn/Li	MIN	8.22	1,536	1,381	11%	32%	8%
Independence Grp	Au/Ni/Cu/Zn/Ag	IGO	2.87	1,468	1,603	(6%)	5%	(41%)
St Barbara	Au	SBM	2.63	1,302	1,495	13%	46%	460%
Syrah Resources	Graphite, Vd	SYR	5.47	1,266	1,257	16%	26%	24%
New Hope Corp	Coal	NHC	1.48	1,226	208	2%	11%	(29%)
Saracen Minerals	Au	SAR	1.13	901	868	6%	12%	137%
Sandfire Resources	Cu/Au	SFR	5.56	875	906	(6%)	(8%)	4%
Orocobre	Li	ORE	4.54	951	952	37%	92%	73%
Whitehaven Coal	Coal	WHC	0.85	867	1,793	10%	34%	(43%)

Source: Numis Securities Research, Company Data, Bloomberg

To understand how Pilbara will be valued once in production (NUMe FY2019), we have selected a peer set of Australian-listed mining and mining services companies, with a market cap between A\$500m and A\$10bn, as a proxy for mid to mid/large cap miners. The largest of these peers is South32, a diversified mining company comprised of assets spun out from BHP Billiton in May 2015. We believe that the above peer set provides insight into how PLS will trade on an earnings and cash flow basis, once in operation, as we detail below.

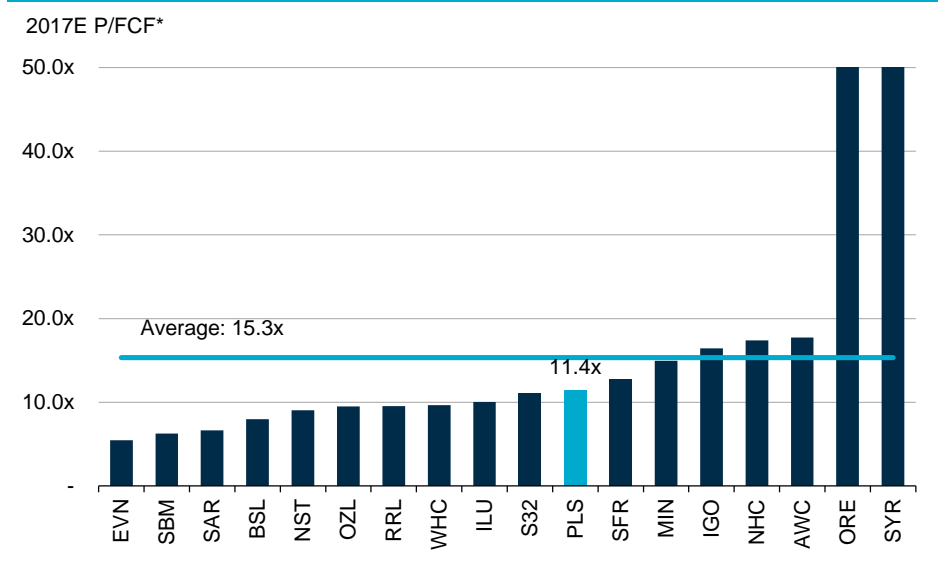
Figure 3: PE (2017E for Peers, 2020E for PLS)



Source: Numis Securities Research, Company Data

To quantify Pilbara's potential, we have applied a price to FY+1 forward earnings basis to PLS's FY 2020E EPS (the second full year of production) and compared it against FY2017E consensus multiples of Australian mid-tier miners. On this basis, PLS trades at 11.8 P/E, below the peer average (excluding the high and low multiple) of 24.0x P/E. Using the adjusted peer average multiple of 24.0x P/E to 2020 NUMe EPS of A\$0.055, PLS would trade at an implied A\$1.32 in 2018, or an annualised return of 27%. The median peer multiple of 18.4x would imply a 2018E value of A\$1.01 per share or an annualised 3-year return of 16%. Analysing the peer group, it is also worth noting that the lowest P/E multiples belong to relatively large gold producers (St. Barbara (SBM), Saracen Minerals (SAR), Evolution Mining (EVN) Northern Star Resources (NST)) and a mature steel producer (Bluescope Steel (BSL)), while coal (New Hope (NHC) and Whitehaven Coal (WHC)) and renewable commodity plays Syrah Resources (SYR) and Orocobre (ORE) trade at higher multiples, which demonstrates a greater market growth expectation in those sectors.

Figure 4: P/CF (2017E for Peers, 2020E for PLS)



Source: Numis Securities Research, Company Data

On a FY+1 price to free cash flow basis, PLS is slightly more fully valued relative to peers, though a similar overall theme emerges. Applying the adjusted (removing the highest and lowest) peer average multiple of 15.3x to our NUMe 2020 FCFPS estimate of A\$0.057 would imply a 2018E share price of A\$0.87, implying an annualised 3-year return of 10%. Also notable is the distribution of peer multiples, with the lower end of the spectrum generally populated by mature gold / steel (Au: Evolution Mining (EVN), St. Barbara (SBM), Saracen Minerals (SAR) and Northern Star (NSM); Steel: Bluescope Steel (BSL)) producers whilst the two highest multiples (Orocobre (ORE) and Syrah (SYR)) are attributed to a lithium and graphite focused companies. This supports our thesis that increased value should be attributed to emerging suppliers of the lithium-ion battery process, given the potential for end user growth and the near term supply shortage.

Table 3: Lithium Peer Group

Company	Ticker Symbol	Main Project	Location	Type	Stage	Market		Trading Performance		
						Cap (US\$m)	EV (US\$m)	1 Month (%)	3 Month (%)	1 Year (%)
Pilbara	PLS AU Equity	Pilgangoora	WA, Australia	Hard Rock	Feas Study	537	458	13%	86%	1,200%
Orocobre	ORE AU Equity	Olaroz	Jujuy, Argentina	Brine	Ramp Up	688	671	45%	91%	66%
Galaxy Resources	GXY AU Equity	Mt. Cattlin	WA, Australia	Hard Rock	Ramp Up	437	508	12%	158%	1,157%
Nemaska	NMX CN Equity	Whabouchi	QC, Canada	Hard Rock	Offtake/Finance	307	306	61%	381%	988%
Neometals	NMT AU Equity	Mt. Marion	WA, Australia	Hard Rock	Construction	194	195	16%	132%	438%
Lithium Americas	LAC CN Equity	Cauchari Olaroz	Jujuy, Argentina	Brine	Financing	185	181	(8%)	110%	(1%)
General Mining	GMM AU Equity	Mt. Cattlin	WA, Australia	Hard Rock	Ramp Up	169	156	33%	163%	1,216%
Altura Mining	AJM AU Equity	Pilgangoora	WA, Australia	Hard Rock	Offtake/Finance	159	170	(15%)	165%	1,400%
Bacanora	BCN CN Equity	Sonora	Mexico	Clay	Feas Study	139	131	11%	39%	17%
Critical Elements	CRE CN Equity	Rose	QC, Canada	Hard Rock	Feas Study	57	57	79%	293%	157%
Pure Energy Minerals	PE CN Equity	Clayton Valley	NV, USA	Brine	Resource	28	27	(44%)	(5%)	104%

Source: Numis Securities Research, Company Data, Bloomberg

We have included publicly listed lithium pure plays with market caps greater than US\$25m to benchmark Pilbara against a lithium specific peer group. We have identified companies as possessing either brine or hard rock primary assets, which is an important distinction, as brine projects tend to have much larger resources but are more technically difficult, whereas hard rock deposits tend to have smaller resources but much higher grade. Brine projects tend to occur in high altitude salt lakes and the brine projects in our comp set are located in Argentina and Nevada. The hard rock projects in our comp set tend to be clustered in Western Australia (PLS, GXY, GMM, NMT) and Quebec, Canada (CRE, NMX).

Orocobre (ORE.AX) is an Australian-listed producer currently ramping up its flagship Olaroz brine project located in Jujuy Province, Argentina. Operating cost breakeven was achieved and deliveries commenced in Q1 2016. Current production capacity is 17.5tpa LCE and a scoping study to double production has been approved, envisioning capex of ~US\$140m.

Galaxy Minerals (GXY.AX) has restarted production at its Mt. Cattlin spodumene mine with its 50% earn-in JV partner, General Mining (GMM.AX, see below). GXY underwent three years of restructuring from 2013-2015 which reduced net debt from a peak of A\$207m to A\$20m at 30 December 2015 after the sale of its Jiangsu LCE Plant, located in China, to Tianqi, a Chinese company. GMM is the operator of Mt. Cattlin and will make three annual payments of A\$6m to GXY as per the terms of the A\$25m earn-in agreement. GXY and GMM have recently agreed to a corporate takeover in which GXY will acquire GMM for ~A\$216m in shares subject to typical closing conditions including 90% GMM shareholder approval. Mt. Cattlin has a capacity of 137ktpa of spodumene concentrate. Post the Mt. Cattlin production ramp up, GXY will turn its focus to its 100%-owned flagship Sal De Vida project, located between Salta and Catamarca Provinces, Argentina. A 2013 PFS on Sal De Vida identified potential for a >40 year mine producing 25ktpa of LCE and 95ktpa of potash with development capex of US\$369m and operating costs of US\$2,200/t net of potash credits. GXY also has an exploration project located near James Bay, QC, Canada, making it the only one of our peer groups to have projects in the three major lithium development centres (Western Australia, Argentina, and Quebec) and a mix of material brine and hard rock projects.

Nemaska (NMX.V) is developing a hard rock spodumene mine in the James Bay region of Quebec, Canada, and a hydromet lithium processing plant in Shawnigan, QC, which will process spodumene concentrate and produce LCE and lithium hydroxide. Based on 2016 feasibility study results, the Whabouchi mine is expected to produce 213ktpa of 6% spodumene concentrate while the plant is expected to produce 27.5tpa of lithium hydroxide and 3,245tpa of lithium carbonate.

Lithium Americas (LAC.V), formerly known as Western Lithium, is advancing its Cauchari-Olaroz project, located in Jujuy Province, Argentina. A 2012 DFS on the project delineated a mine plan for production of 20ktpa LCE and 40ktpa of potash over a 40-year mine life with upfront capital costs of US\$314m. Sociedad Quimica y Minera (SQM.US ADR), a Chilean chemical producer with a 27% market share in 2015 global LCE production, acquired a 50% interest in the project in 2015.

Neometals (NMT.AX) is currently in construction of the Mt. Marion hard rock spodumene project along with partners Mineral Resources Ltd (MIN.AX) and Ganfeng Jiangxi Ltd. NMT has a 27% interest in Mt. Marion (Mineral Resources 30%, Ganfeng 43%) and a 70% interest in the downstream Eli processing facility which will produce 15-20ktpa of LCE in the form of lithium hydroxide. Mt. Marion is expected to produce more than 200ktpa of 6% spodumene concentrate.

Altura Mining (AJM.AX) recently completed a feasibility study on its 100% owned Pilgangoora hard rock spodumene project (separate from Pilbara’s Pilgangoora project) located in Western Australia. The FS defined a mine life of 14 years with steady state annual production of 215ktpa of 6% spodumene concentrate at a cash cost of A\$298/t of concentrate and capital cost of A\$129m.

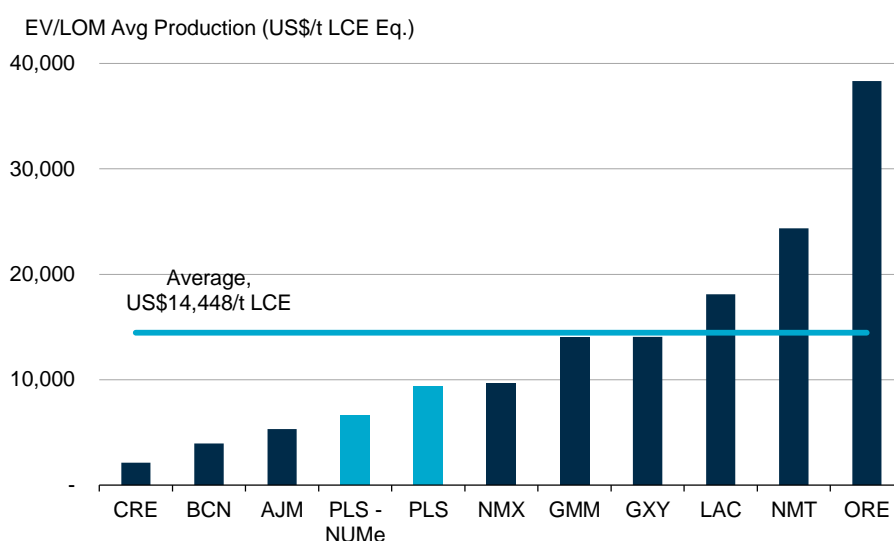
General Mining (GMM.AX) will earn into 50% ownership of Mt. Cattlin for A\$25m consisting of A\$7m in capital commitments and three annual instalments of A\$6m. GMM is the operator of the project, has already satisfied its A\$7m capital commitment and is currently receiving 50% of project cash flows. GXY and GMM have recently agreed to a corporate takeover in which GXY will acquire GMM for ~A\$216m in shares subject to typical closing conditions including 90% GMM shareholder approval. Assuming completion of the merger, GMM shareholders will hold 29% of outstanding GXY shares.

Bacanora (BCN.L / BCN.V) recently completed a PFS on its Sonora Lithium Project located in Sonora, Mexico, which identified a two-phase development plan with phase 1 (years 1-2) production of 17.5ktpa LCE and phase 2 (year 3 onwards) production of 35ktpa LCE for initial capital of US\$240m. Sonora is a lithium clay based deposit and the PFS envisaged open pit mining, with the potential to produce up to 50ktpa of potassium sulphate as a by-product.

Critical Elements (CRE.V) is advancing the Rose lithium-tantalum project located in Quebec, Canada. Work on the feasibility study is ongoing and CRE signed a take-or-pay offtake agreement with an undisclosed leading chemical company in September 2015. A PEA on the project, completed in December 2011, outlined a 17-year mine life with average annual production of 26.6ktpa LCE and 206.7klbs of tantalum at an cash cost per tonne LCE of US\$2,900 and initial capex of US\$269m.

Pure Energy Metals (PE.V) is currently undergoing resource definition drilling on its Clayton Valley South brine project located near Silver Peak, Nevada. PEA work is ongoing with engineering consults engaged. A maiden Inferred Resource of 816mt LCE at a weighted average grade of 102mg/L was filed in July 2015.

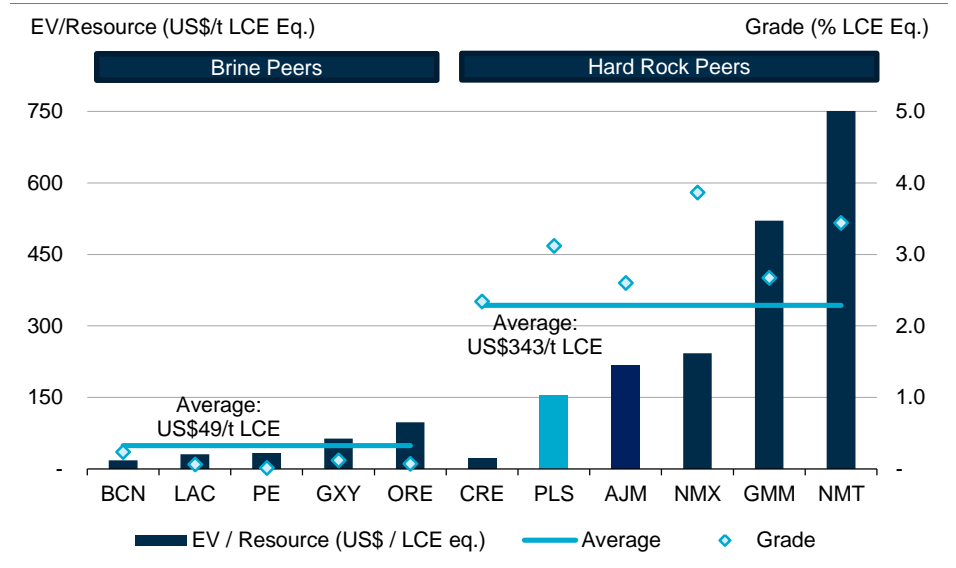
Figure 5: EV/LCE equivalent annual production



Source: Numis Securities Research, Bloomberg

Above we have compared Western-listed lithium producers/developers on a production basis using publicly available economic studies. Based on PFS production of 49tpa LCE eq, Pilbara currently trades at US\$9,365/t LCE eq, at a 35% discount to our peer average of US\$14,448/t LCE eq. Unlike on a resource basis (see below), the market does not appear to discriminate between brine and hard rock based deposits on a unit of production valuation basis, with brine based producer Orocobre (ORE) trading at the greatest premium per t of LOM average annual LCE eq production. Instead, the market has placed a clear premium on near-term production; the four companies currently trading at the highest production multiples have either recently entered production (Orocobre (ORE), Galaxy Resources (GXY) & General Mining (GMM)) or are currently in construction (Neometals (NMT)).

Figure 6: EV/LCE equivalent tonne Resource



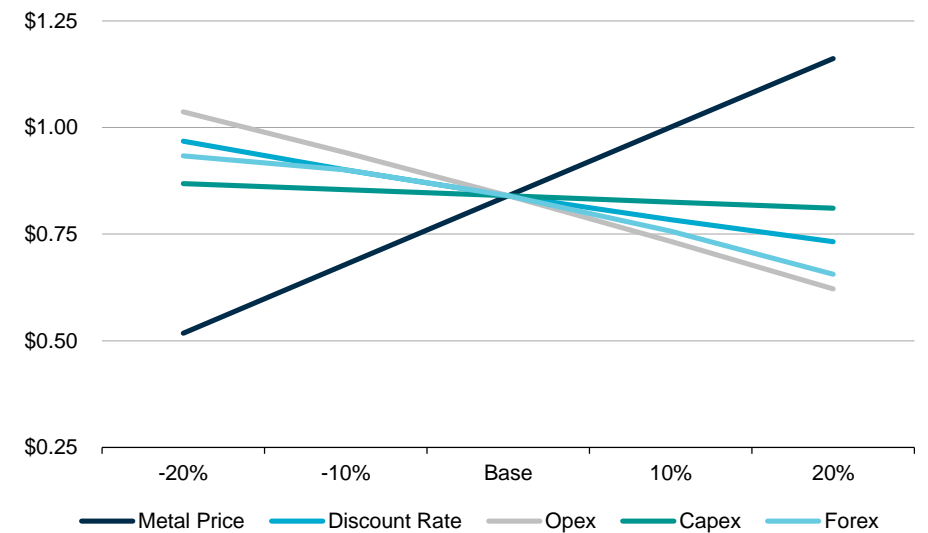
Source: Numis Securities Research, Bloomberg

Above we have compared PLS to both hard rock and brine based peers who are publicly traded on a major western stock exchange. On an LCE eq. basis, it is clear that the hard rock deposits trade at a premium to the brine based deposits, which typically contain very large resources but at lower grades and a higher degree of technical risk. At US\$153/t LCE eq, Pilbara trades at a 55% discount to the hard rock peer average of US\$343/t LCE eq. The highest peer multiples belong to Neometals, which has a 27% JV interest in the under-construction Mt. Marion Mine, and General Mining (GMM), which has a 50% earn-in JV agreement with Galaxy Resources (GXY) with regards to the Mt. Cattlin hard rock spodumene mine, which recently re-entered production in April 2016 after being placed on care and maintenance in 2013. Critical Elements (CRE) trades well below other hard rock lithium peers, including Nemaska (NMX), another Quebec-based hard rock spodumene developer. We have included Galaxy Resources (GXY) in the brines, despite GXY's 50% share in Mt. Cattlin (soon to be 100% assuming successful GMM merger completion), as the majority of its Resource is in the Sal da Vida brine project in Argentina.

Sensitivities

The key sensitivity for Pilbara is the metal price with a 10% change in the price of the metal having a 19% impact on our NAV. A 10% change in operating costs has a 13% impact with a 10% change in capex and discount rate having a 2% and 7% impact, respectively. The A\$ is also significant with a 10% move having a 10% impact.

Figure 7: Sensitivities – Spodumene price is the most sensitive input



Source: Numis Securities Research

Lithium – Batteries to Charge Growth

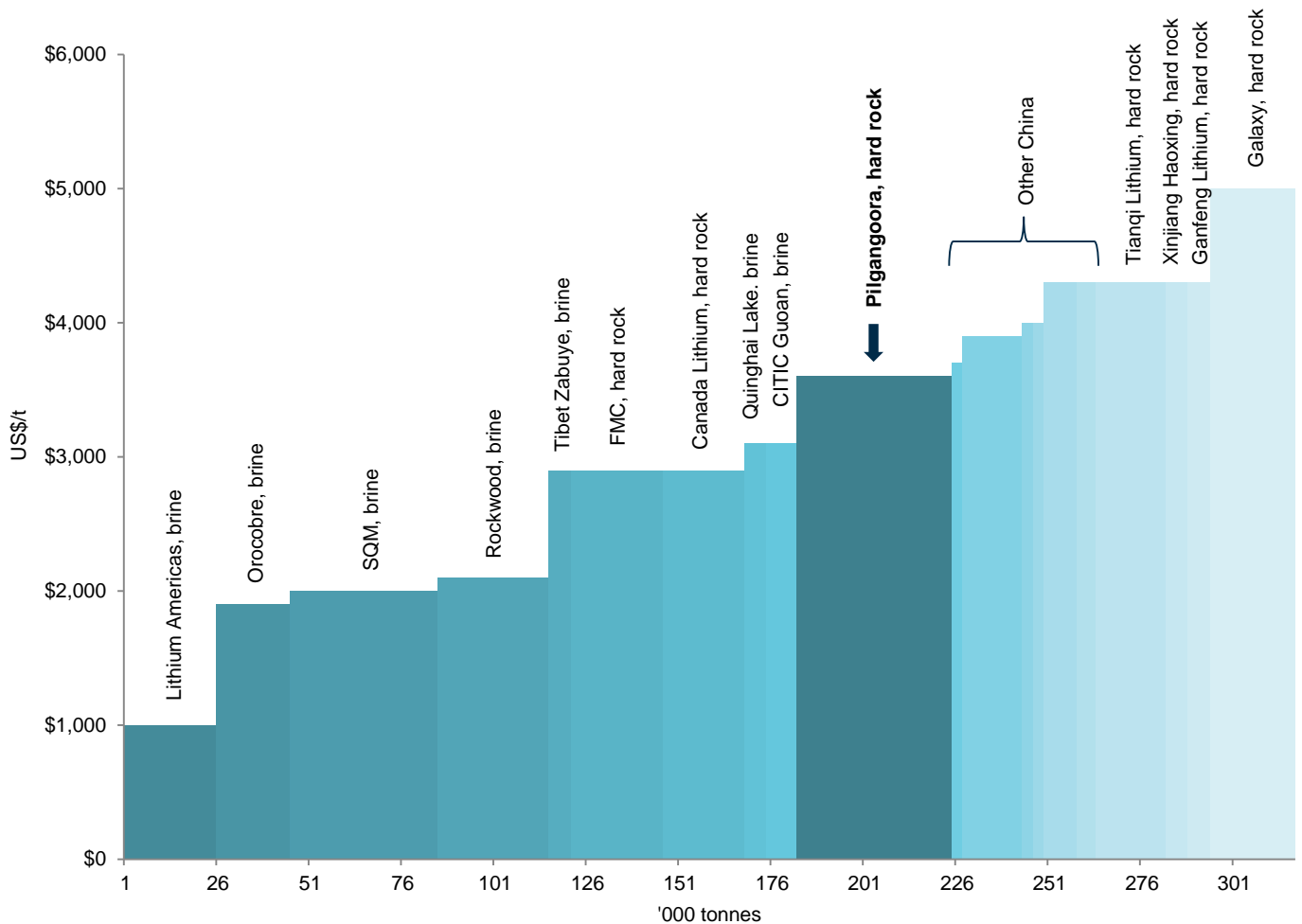
Lithium is a light and relatively common metallic element that is found in hard rock pegmatite deposits, such as Pilgangoora, and in evaporite style salar deposits, such as Orocobre’s Olaroz deposit in Argentina. From an operational perspective the principal difference between the two is that the hard rock deposits are lower capex and higher opex with the evaporites being the reverse of this. In terms of the hard rock deposits Pilgangoora should be at the lower end of the cost curve. We would note that the Roskill cost curve is based on expected costs and production rather than actual current costs and production.

Table 4: Lithium product conversion rates

		to Li	to Li2O	to spodumene 6% conc	to LCE
Lithium	Li	1.000	2.153	35.883	5.323
Lithium oxide	Li2O	0.464	1.000	16.667	2.473
Spodumene 6% concentrate	6% Li2O	0.028	0.060	1.000	0.148
Lithium carbonate equivalent (LCE)	Li2CO3 Eq.	0.188	0.404	6.741	1.000

Source: Company & Numis Securities Research

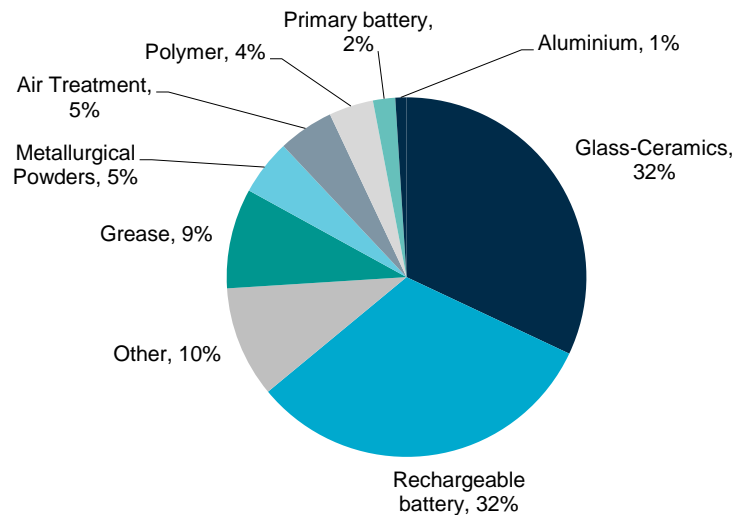
Figure 8: Pilgangoora should be near the middle of the cost curve, but lower than most hard rock peers



Source: adapted from Roskill, Pilbara Minerals

The two largest end uses for lithium are Glass-Ceramics (33%) and Rechargeable Batteries (32%) due to the material’s high energy density. The metal is used in ceramics and glass for its heat resistant properties. Growth in this segment is likely to be in line with general economic growth. By contrast, the use of lithium in rechargeable batteries is undergoing a period of secular demand growth due to the rapid expansion of the electric vehicle market, and the potential development of large scale domestic power storage units, such as the Tesla Powerwall. Lithium ion batteries now account for the majority of batteries produced, having displaced NiMH and NiCd batteries over the past decade with costs per kWh declining by 14% per year over the past 15 years to approximately US\$50/kWh (Nature Climate Change 2015) with further declines likely as technology continues to improve. Whilst lithium prices have risen significantly, the cost of the Li metal component accounts for less than 5% of the cost of a typical battery, which makes substitution less likely at present. We also note that as the cost curve is based on Roskill and company provided data, and actual costs experienced by producers may vary from the curve shown above.

Figure 9: Glass - Ceramics and Rechargeable Batteries the largest demand segments...



Source: Roskill, Jan 2016

A typical hybrid electric vehicle uses 5kg of lithium, with a plugin or full battery electric vehicle using between 40kg and 80kg. This compares to between 5g-7g of lithium used in a mobile phone and 20g-30g used in a tablet. At present approximately 50% of lithium used for rechargeable batteries is used in vehicle batteries, however, this segment is predicted to grow at between 20% and 30% annually according to Albemarle, a major speciality metals producer that has lithium mining and downstream processing businesses within its portfolio, including a 49% interest in the Greenbushes mine in Australia, which is the world’s largest producer of hard rock lithium.

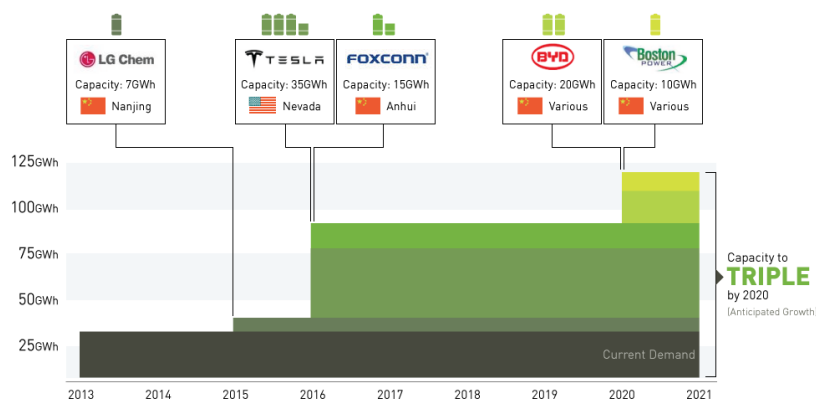
Table 5: Lithium requirements across end use applications

	2014 Sales M units	Li Content (LCE)	2014 Total Li Content (LCE)	Projected CAGR 2014-2024
Smartphone	1,200.00	5g-7g	8,400Mt	8%-10%
Tablet	260	20g-30g	7,800Mt	8%-10%
Notebook	170	35g-45g	7,650Mt	8%-10%
Power Tools	65	40g-60g	3,900Mt	>15%
Hybrid Electric Vehicles	1.8	5kg	9,000Mt	20%-30%
Plugin Electric Vehicles / Battery Electric Vehicles	0.3	40kg-80kg	18,000Mt	20%-30%
Stationary	650MWh Installed	1,500kg	1,000Mt	>30%

Source: Albermarle

At present the stationary battery market accounts for only 1,000t/year of use with 650MWh of installed capacity. This has the potential to offer even greater growth rates than the vehicle battery market, as the installation of power storage facilities has economic benefits for domestic and industrial consumers that are able to 'harvest' cheap energy generated at off-peak times. In addition, one of the principal challenges posed by the growth of renewable power, such as solar or wind, raises the problem of how to match variable generation due to the weather with the need to maintain a stable level of base power supply. Globally there was 1.1GW of grid storage installed as of January 2015, which could increase to >15GW by 2025. As with other rechargeable battery types, lithium batteries are the principal technology in energy storage, accounting for more than 80% in terms of revenue.

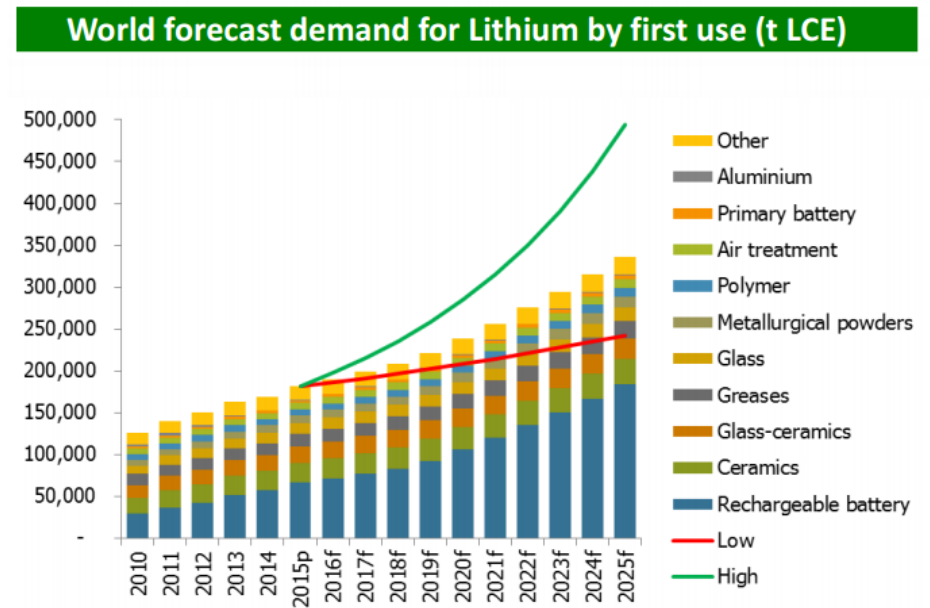
Figure 10: Lithium battery production is scheduled to treble over the next five years...



Source: Benchmark Market Intelligence

We believe that lithium is in the process of undergoing a secular and material upward shift in demand driven by the growth in the use of rechargeable batteries for both automotive and static storage based applications. As lithium is a relatively common element from a geological perspective we would expect prices to moderate as additional production is brought on stream. In the absence of a new battery technology that either replaces or results in the use of significantly less lithium, demand levels and prices appear likely to remain at well above historical levels and could, if static battery technology does experience the level of growth that electric vehicles now appear to be undergoing, potentially move materially higher.

Figure 11: ...and total lithium demand could more than double over the long term



Financials

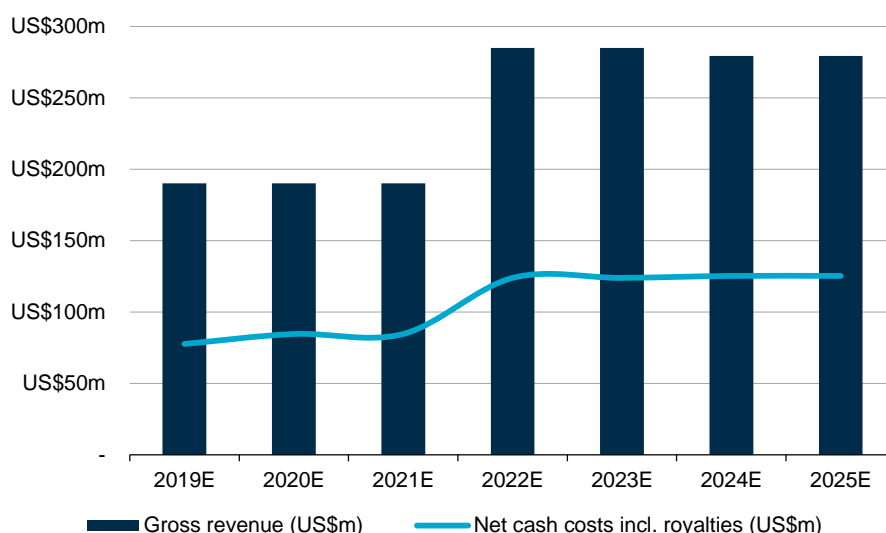
PLS's historic financials reflect the company's status as an explorer and developer with no revenues, which has been funded through a series of equity issues, including the recent placing and fully underwritten share purchase plan through which the company raised A\$100 million at A\$0.38/sh, taking number of issued shares to 1.114 billion. Following the fund raising, management expected to have A\$106 million of cash, including existing funds and net of costs. The company plans to use the funds to complete the Resource and Reserve drilling, complete the feasibility study, progress offtake agreements, and place long lead time orders for project development and for general and working capital purposes.

Table 6: Spodumene, Tantalum and A\$ assumptions

Assumptions	2016F	2017F	2018F	2019F	LT
Spodumene Price (US\$/t technical 6% conc)	550	550	550	550	550
Tantalum Price (US\$/t lb)	60	60	60	60	60
Exchange Rate (A\$:US\$)	0.75	0.75	0.83	0.90	0.90

Source: Numis Securities Research

Figure 12: Revenues and Cash Costs US\$/t 2019E – 2025E



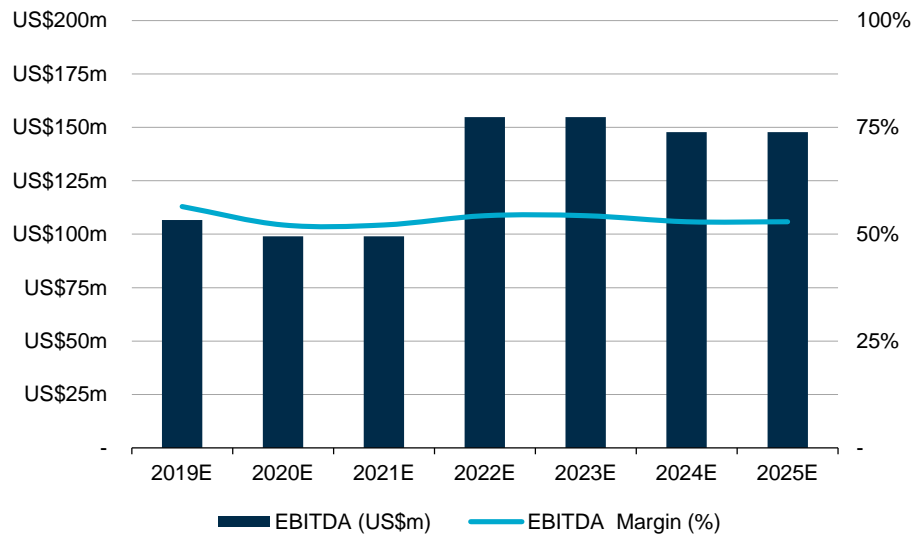
Source: Numis Securities Research

As noted we have assumed a spodumene concentrate price of US\$550/t (A\$733/t) and a tantalite price of US\$60/t (A\$80/t) with the latter being used as by-product credit. The tantalite price is in line with the numbers used in PLS's feasibility study. On this basis we assume net cash costs of US\$247 per tonne of spodumene concentrate.

Once the mine has achieved steady state production, we expect revenues to be US\$279 million with an average EBITDA margin of 53%. The company should pay a state royalty of 5%, a 2.5% royalty to a third party and we expect it to pay Australian corporate tax at 30%. We have assumed annual G&A expenditure of A\$5 million at a corporate level with A\$2 million of expensed exploration expenditure. PLS should generate annual net profit of A\$100 million which would place the company on a 2019 PEx of 10.1x and a 2020 PEx of 11.8x.

At this point we have made no assumption about the payment of a dividend in our model, however, if the company were to distribute 50% of earnings then this would result in an annual distribution of US\$32 million (A\$36 million) or A\$0.028/share in FY2020 (year ended 30 June 2020).

Figure 13: EBITDA and EBITDA margin 2018E – 2024E

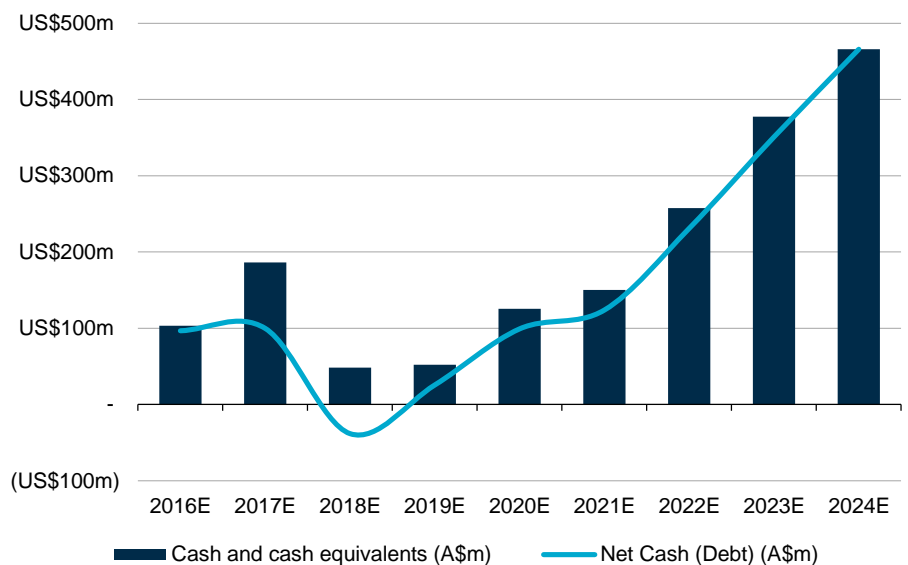


Source: Company & Numis Securities Research

Balance Sheet – Clean balance sheet but with significant debt capacity if needed

PLS has no current debt, however, given the robust cashflows that the mine should generate has the capacity to carry significant debt. If we were to assume a peak debt level of 2.5x Net Debt:EBITDA once fully operational then Pilgangoora could carry up to US\$375 million (A\$500 million) of debt. We assume that the company only raises US\$45 million (A\$60 million) and that this is prepaid over a 3 year term with an interest rate of 5%. We also assume a further equity raise of A\$50m at A\$0.85/share and the exercise of in the money options, giving PLS a sizable cash buffer to production. This would result in gearing peaking at a modest 0.6x in 2018 with net debt:EBITDA of 1.4x peaking in September 2018.

Figure 14: Pilbara cash position 2016E – 2024E

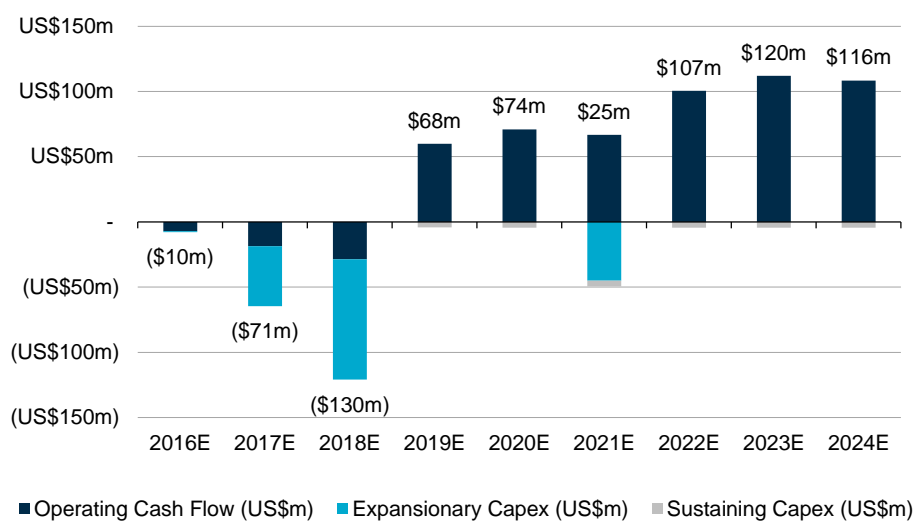


Source: Company & Numis Securities Research

Cashflow – Solid FCF once Pilgangoora is developed

We expect average annual FCF of US\$94 million (A\$103 million) once the mine is developed. We have assumed that the initial capex to develop Pilgangoora is A\$184 million with average annual sustaining capex of A\$5 million. The company has flagged that it could potentially scale up the project to 3Mt/year from 2Mpta proposed in the PFS; we have assumed that this scale up will occur in year three of operation and cost A\$50 million. We believe that PLS should be in a position to fund it out of cashflows without the need for further external capital. We have made no assumption about further investment in the Tabba Tabba tantalum project, which is currently on hold, beyond a nominal holding cost.

Figure 15: Cashflow evolution 2016E – 2024E



Source: Company & Numis Securities Research

Figure 16: Pilbara Summary Financials

Pilbara	Ticker	PIL	Market Capitalisation	A\$809m	Financial Year End	June
BUY	Share Price	A\$0.65	Enterprise Value (EV)	A\$712m	Reporting Currency	A\$
A\$0.85	Implied Return	31%	Net Debt (Cash)	-A\$97m	Shares in Issue	1,244m

Valuation						Ratio analysis				
	Disc Rate	US\$m	US\$/sh	PNAV	A\$/sh	2015	2016F	2016F	2017F	2018F
Pilgangoora	7%	791	0.61	1.0x	A\$0.81	Average shares out (m)	-	-	1,303	1,303
Cash		77	0.06	1.0x	A\$0.08	Adj. EPS (A¢\$/sh)	(0.01)	(0.02)	(0.01)	(0.01)
Debt		(5)	(0.00)	1.0x	A\$0.00	EPS growth (%)	-	-	-	-
Cash from options		23	0.02	1.0x	A\$0.02	PE (x)	-	-	-	10.1x
SG&A and central	7%	(66)	(0.05)	1.0x	-A\$0.07	CFPS before w/c (A\$/sh)	-	(0.00)	(0.01)	(0.01)
Valuation (fd)		820	0.63		A\$0.84	P/CF (x)	-	-	-	11.0x
Current NAV Multiple (Implied)					0.77x	FCF/FCPS	-	(0.01)	(0.06)	(0.10)
Valuation						FCF yield (%)	-	-	(9%)	(15%)
NAV valuation	Target multiple		0.75x - 1.0x		A\$0.84	FCF margin (%)	-	-	-	29%

Other data			
Basic shares (m)	1,144.9		12M high: A\$0.08
Fully diluted shares (m)	1,244.3		12M low: A\$0.05
NUMe Fully funded shares (m)	1,303.2		

Sensitivity Analysis		NAVPS (A\$)
Base case Li price forecast		0.84
Base case +10%		0.15
Base case -10%		0.07
Spot Li price (US\$2.20/lb Li, US\$1230/oz Au)		0.02

News Catalyst (CY)	CY2016 H1	CY2016H2	CY2017F	CY2018F	CY2019F
DFS Results					
Finance and Offtake					
Construction					
Commissioning					
Commercial Production					

Resource / Reserve	Tonnes	(%Li ₂ O)	Kt Li ₂ O	Mlbs Ta ₂ O ₅	EV/t LiEq
Reserves (R&R)	29.5 Mt	1.31%	737	4.09	\$725
Resources (M&I)	80.2 Mt	1.25%	2,493	18.19	\$214

Production (100% basis)	2016F	2017F	2018F	2019F	2020F
Chem grade spodumene conc price (US\$/t)	550	550	550	550	550
Production (kt spodumene conc)	-	-	335	335	335
Production (LCE Eq)	-	-	-	50	50
C1 cash cost (ex royalties, \$/t conc)*	-	-	179	200	200
AISC (US\$/t concentrate)	-	-	247	267	267

*C1=site mining costs

Assumptions	2016F	2017F	2018F	2019F	LT
Spodumene Price (US\$/t technical 6% conc)	550	550	550	550	550
Tantalite Price (US\$/t lb)	60	60	60	60	60
Exchange Rate (A\$:US\$)	0.77	0.75	0.75	0.83	0.90

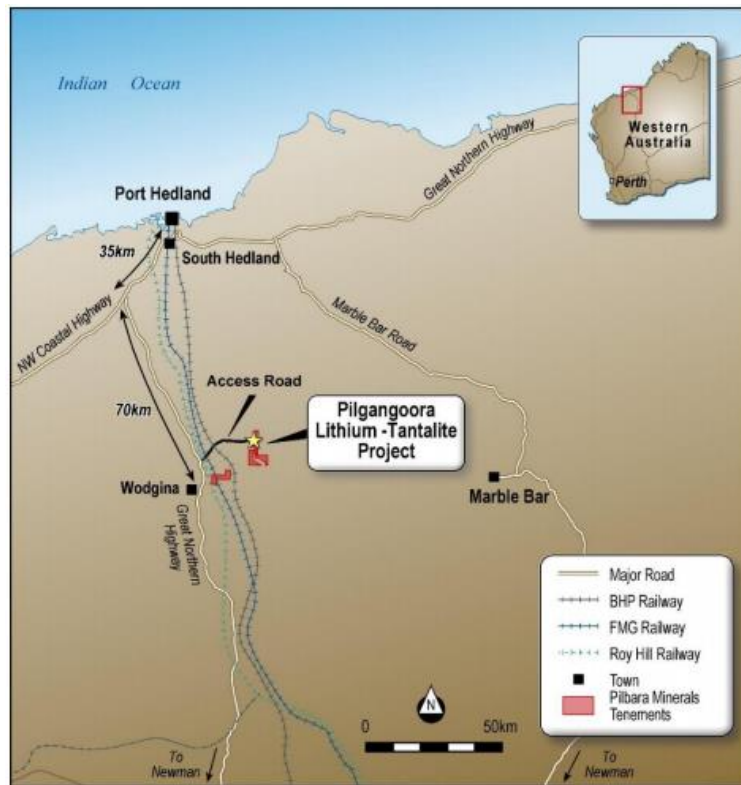
	2015	2016F	2017F	2018F	2019F
Income statement (A\$m)					
Revenue	0.1	-	-	-	232.2
Cost of sales	-	-	-	-	(72.6)
D&A	(0.0)	-	-	-	(7.1)
Gross profit	0.1	-	-	-	152.5
Exploration	-	(7.1)	(7.6)	(7.6)	(2.0)
Admin expense	(1.0)	(3.3)	(3.5)	(3.5)	(5.0)
Net interest	(0.2)	(0.1)	(2.2)	(4.3)	(3.7)
Other	(4.4)	(7.1)	(2.5)	(0.0)	(21.5)
Tax	0.1	0.0	-	-	(36.1)
Net income	(5.5)	(17.6)	(15.8)	(15.4)	84.2
EBITDA	(5.3)	(17.5)	(13.5)	(11.0)	131.1
Cash flow (A\$m)					
Net (loss) income :	(5.5)	(17.6)	(15.8)	(15.4)	84.2
Non-cash adjustments	4.0	-	-	-	7.1
Working capital movements	(1.8)	-	-	-	(22.5)
Net interest & other	6.5	120.7	202.0	63.6	(16.8)
Cash flow from operations	(1.5)	(13.3)	(11.0)	(11.0)	72.5
PP&E	(0.5)	(0.9)	(61.3)	(122.7)	(5.0)
Exploration	-	-	-	-	-
Other	-	-	-	-	-
Cash flow from investing	(0.5)	(3.9)	(61.3)	(122.7)	(5.0)
Interest received / (paid)	-	-	2.2	4.3	3.7
Share issue	5.2	117.5	80.3	-	-
Debt drawn down	1.7	4.0	80.0	-	-
Debt repaid	-	(0.2)	-	-	(60.0)
Cash flow from financing	6.9	117.1	155.5	(4.3)	(63.7)
Forex	-	-	-	-	-
Net change in cash	-	99.9	83.1	(138.0)	3.8
Cash at end of period	3.2	103.1	186.3	48.2	52.0
Balance sheet (A\$m)					
Cash	3.2	103.1	186.3	48.2	52.0
AR	0.9	0.9	0.9	0.9	17.3
Inventories	1.6	1.6	1.6	1.6	17.3
PPE	0.1	1.0	62.3	185.0	182.9
Other	3.0	6.0	6.0	6.0	6.0
Total assets	8.9	112.6	257.1	241.7	275.6
AP	0.7	0.7	0.7	0.7	10.4
Debt	2.6	6.4	86.4	86.4	26.4
Deferred tax	-	-	-	-	-
Other	0.0	3.0	3.0	3.0	3.0
Total liabilities	3.4	10.2	90.2	90.2	39.9
Shareholders equity	5.4	102.4	166.9	151.5	235.7
Retained earnings	-	-	-	-	-
Liabilities + equity	8.9	112.6	257.1	241.7	275.6

Source: Company & Numis Securities Research

Asset Summary - Pilgangoora (100% attributable)

Pilbara acquired the Pilgangoora project from Global Advanced Metals in 2014 and GAM retains a 2.5% royalty over the project. The deposit is located in northern Western Australia, 120km to the south of Port Hedland, with good access to road and other infrastructure. The deposit is located within the Archean North Pilbara Craton and consists of a system of multiple pegmatites intruded into amphibolites and mafic and ultramafic schists proximal to a granitic body. Mineralisation is hosted in a number of pegmatite bodies up to 1.2km in length and extending over 7km with a north south strike, dipping to the east at 30°-70°.

Figure 17: Tier I lithium project in a low risk jurisdiction next to infrastructure....



Source: Company data

The current Resource is 80Mt at 1.26% Li₂O to host 1Mt of Li₂O, within which there is a Reserve of 29.5Mt at 1.31% Li₂O hosting 273kt of Li₂O. For the purposes of the ongoing Definitive feasibility study management have assumed an ultimate Reserve of 53.9Mt at 1.29% Li₂O and 128ppm Ta₂O₅.

Table 7: Pilgangoora Mineral Resources

		(Mt)	Ta ₂ O ₅ (ppm)	Li ₂ O (%)	Ta ₂ O ₅ (tonnes)	Ta ₂ O ₅ (Mlb)	Li ₂ O (t)
Indicated	Ta ₂ O ₅	17.9	182		3,225	7.2	
	Li ₂ O	35.7		1.32			469,400.00
Inferred	Ta ₂ O ₅	24.3	205		4,995	11	
	Li ₂ O	44.5		1.21			538,600.00
	Ta ₂ O ₅	42.3	195		8,250	18.2	
	Li ₂ O	80.2		1.26			1,008,000.00

Source: Company data

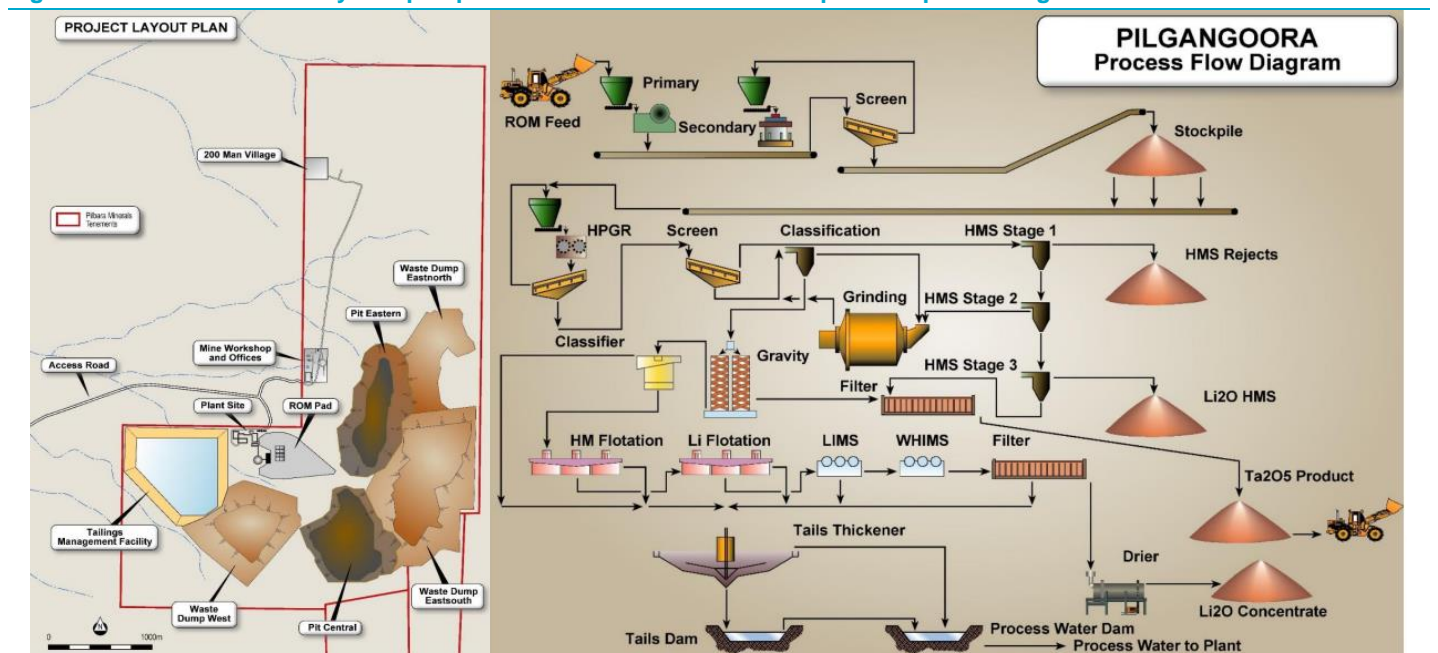
Development

The estimated capital cost to develop the 2Mt/year project at Pilgangoora is A\$184 million (+/-25%) including a 15% contingency. Management are engaged with the relevant aboriginal groups and have presented initial economic terms for review.

The PFS considered the development of a conventional 2Mt/year open pit mine with a 3.47:1 strip ratio, with a lower strip ratio of 2.87:1 during the first five years of operations. The larger Reserve being considered for the DFS, which is evaluating both owner and contractor mining, would have a slightly high SR of 3.5:1.

Ore would be fed into a 250t/hour plant with a flowsheet based on three stage crushing followed by the use of a high pressure grinding roll followed by heavy media and gravity separation followed by flotation, magnetic separation and dewatering.

Figure 18: Conventional 2Mt/year open pit mine with flotation and HMS plant for processing



Source: Company

Based on metallurgical test work carried out to date in both Germany and Australia with lithium recovery of 77% and tantalite recovery at 47%. The plant should produce three product streams:

- Chemical grade spodumene at 6% Li_2O and with medium iron content
- Technical grade spodumene with 6.5% Li_2O and with a low iron content
- Tantalite concentrate at 4%-5% Ta_2O_5

Tailings from the heavy media circuit will be filtered and dry stacked and disposed of in the mine waste stockpiles with flotation tailings stored in a facility to the west of the ROM pad. The concentrate will be transported for Port Hedland for onward shipment to conversion plants, most of which are located in China. Here the concentrate is leached to produce either lithium sulphate or lithium carbonate, and further purified to produce a battery grade lithium carbonate.

Table 8: Pilgangoora PFS Capex Estimate

	A\$ million
Study Cost	A\$5.8
Mine Development	A\$3.0
Process Plant	A\$104.2
TMF	A\$6.5
Non Process Infrastructure	A\$34.6
Owners Costs	A\$8.0
Contingency	A\$22.0
Total	A\$184.1

Source: Company

Table 9: Pilgangoora PFS Operating & Cost Parameters

Cost Inputs		
Mining Ore	A\$6.8	t/ore
Mining Waste	A\$6,365.0	t/waste
Dry Stacked Tails	A\$1.7	million per year
Crusher Feed	A\$0.8	t/plant feed
Mining Overhead	A\$5.1	million per year
Processing	A\$20.2	t/feed
Product Transport	A\$33.6	t/transported
Corporate & Admin	A\$5.0	million per year
3rd Party Royalty	2.5	%
State Royalty	5	%
Mine Parameters		
LOM Mine	15	years
LOM ore mined	29.5	Mt
LOM Waste	102.4	Mt
LOM SR	3.5	ratio
Plant Feed	2	Mt
Average Li Head Grade	1.31	%
Average Li Recovery	76.7	%
Average Spodumene Con Production	330	kt/year
Average Tantalite Production	274	k lb year
Chem Grade Spodumene Price	456	US\$
Tantalite Price	60	US\$
A\$ exchange rate	0.75	A\$:US\$
Capital Cost	184	A\$ million
LOM Operating Costs	339	A\$/t
LOM Operating Costs net Ta	273	A\$/t

Source: Company

Numis Development Assumptions

We have conservatively assumed that Pilgangoora is developed with an extra quarter of construction relative to the timescale as set out by the company and that the mine commences commissioning in early CY2018 with an initial capital cost of A\$184 million. We have however assumed that the mine operates for 19 years rather than 15 that is assumed in the PFS. In addition, we have assumed that throughput is expanded in year 3 from 2Mt/year to 3Mt/year at a cost of A\$50 million. This results in post year three production of 495kt/year of spodumene concentrate, vs 330kt. We have also assumed a higher spodumene concentrate price of US\$550/t vs US\$456/t assumed in the study, which is partly offset by our assumption that the A\$ strengthens over time from 0.75:US\$ to 0.90:US\$. We have assumed a tantalite price of US\$60/t, which results in our net operating cost assumptions coming in higher those in the PFS at A\$281/t, US\$253/t. This includes royalties of 5% at the state level, a 2.5% third party NSR and a 1% native title royalty which we have estimated. This results in a project NAV of A\$1,055 million compared to an NAV of A\$407 million in the PFS.

Table 10: Numis Development Assumptions

Cost Inputs		
Mining Ore	A\$6.8	t/ore
Mining Waste	A\$3.65	t/waste
Dry Stacked Tails	A\$1.7	million per year
Crusher Feed	A\$0.8	t/plant feed
Mining Overhead	A\$5.1	million per year
Processing	A\$20.2	t/feed
Product Transport	A\$33.6	t/transported
Corporate & Admin	A\$5.0	million per year
3rd Party Royalty	2.5	%
State Royalty	5.0	%
Native Title Royalty	1.0	%
Mine Parameters		
LOM Mine	19	years
LOM ore mined	53.9	Mt
LOM Waste	188.6	Mt
LOM SR	3.5	ratio
Plant Feed	2Mt - 3Mt	Mt
Average Li Head Grade	1.29	%
Average Li Recovery	76.7	%
Average Spodumene Con Production	330-502	kt/year
Average Tantalite Production	274-416	k lb year
Chem Grade Spodumene Price	550	US\$
Tantalite Price	60	US\$
A\$ exchange rate	0.75-0.90	A\$:US\$
Capital Cost	184+50(expansion)	A\$ million
LOM Operating Costs	338	A\$/t
LOM Operating Costs net Ta	281	A\$/t

Source: Company & Numis Securities Research

Directors

Tony Leibowitz – Non Executive Chairman, is a Fellow of The Institute of Chartered Accountants in Australia, has over 30 years professional experience and was previously a senior partner with PriceWaterhouseCoopers focused on corporate finance and investment banking.

Ken Brinsden – Managing Director & CEO, is a Mining Engineer with over 20 years' experience in surface and underground mining operations, including roles in mine management, production, brown-fields and green-fields development roles. Most recently, he was Managing Director at Atlas Iron, contributing to the substantial growth of the company from a junior explorer to a significant Pilbara iron ore producer.

Neil Biddle, Executive Director, is a geologist and Corporate Member of the Australasian Institute of Mining and Metallurgy. He has over 30 years professional and management experience in the exploration and mining industry, and since 1987 has served on the Board of several ASX listed companies.

Robert Adamson, Non-Executive Director & Consultant Geologist, has served as the Company's consultant geologist and has been managing the exploration program for the Company's tenements in the West Pilbara, WA. His professional career spans some 43 years, (1966-present), the first 25 of which he was employed in a range of technical and managerial positions with international mining houses, and in managerial and board positions with several publically-listed exploration and mining companies. He has been operating as an independent mineral industry consultant since 1993.

John Young, Technical Director, is a geologist, with experience in exploration and production projects in the gold, uranium and specialty metals sub sectors. From 2002 to 2006 he was Exploration Manager for Haddington Resources Limited and was responsible for resource exploration and resource definition for their Bald Hill Tantalum mine. His corporate experience has included appointments as CEO of Marenica Energy Limited and CEO and director of Thor Mining PLC.

In aggregate the board and senior management hold 10% of the company's shares.

Risks

- **Commodity prices:** The future price realisable for the company's product will have a significant effect on the future profitability of the company. Some companies will use hedging to mitigate some of this risk, although most prefer to retain full upside exposure to the underlying commodity. A downturn in commodity prices may lead to lower investment in the industry, which may impact the company's earnings and/or growth potential.
- **Costs:** Cost inflation above our assumptions could have a greater than anticipated impact on group earnings. The cost of raw materials, power, and labour are often dependent on factors outside the company's control. Mining costs are highly dependent on factors such as rock strength and characteristics, as well as the mining method.
- **Production & construction:** All mines have risk of disruption to production due to unforeseen issues regarding health and safety, geology and engineering. Risks to production forecasts can come from delays in the commissioning process for a new project. There are risks to production from the application of new technology that may not perform within the design criteria.
- **Political & logistics:** Mining companies operate globally and often in areas of high political risk. Changes to the government and/or legislation may impact production and/or earnings in future years. The supply of materials, plant, equipment and personnel may be affected by local issues beyond the company's control. Some countries may be more challenging in this respect than others.
- **Personnel:** The success of an operation and/or company often depends on key management and/or highly skilled operations staff, who may be in short supply and/or leave the employ of the company. This may impact operations and/or future growth prospects. Management expertise may also become stretched if the company attempts to grow too rapidly.
- **Geological:** Reserve and resource estimates are subject to statistical uncertainty and as such carry a risk that earnings could be significantly affected by unexpected changes in throughput, grade and cost.
- **Financing:** Mining is often highly capital intensive. There is often a risk, especially with a development company, that the necessary debt and/or equity funding may not be available, or may be detrimental to project economics.
- **Permitting:** Significant delays to the permitting processes could have a material impact on development projects.
- **Environmental:** Mining carries a risk of damage to the environment and consequent risk of litigation.
- **Currency & inflation:** Variations in the local exchange rate versus the currency in which revenues are paid (usually US Dollars) can impact earnings significantly.

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Buy	>= +20%
Add	>= +10% to +19.99%
Hold	0% to +/-9.99%
Reduce	<= -10% to -19.99%
Sell	<= -20%

Upon the initial establishment of a recommendation and target price for a company, an additional 10 % deviation in the price from the default bands set out above is permitted before the recommendation has to be changed in subsequently published research documents.

Distribution of Ratings

	US Requirement 01/04/2015 - 31/03/2016		UK Requirement 01/01/2016 - 31/03/2016	
	All Securities	Corporate Clients	All Securities	Corporate Clients
Buy	42.7%	68.1%	47.2%	73.7%
Add	26.9%	24.1%	25.3%	19.8%
Hold	25.8%	7.8%	22.8%	6.5%
Reduce	3.5%	0.0%	3.0%	0.0%
Sell	1.1%	0.0%	1.7%	0.0%
Total	100%	100%	100%	100%

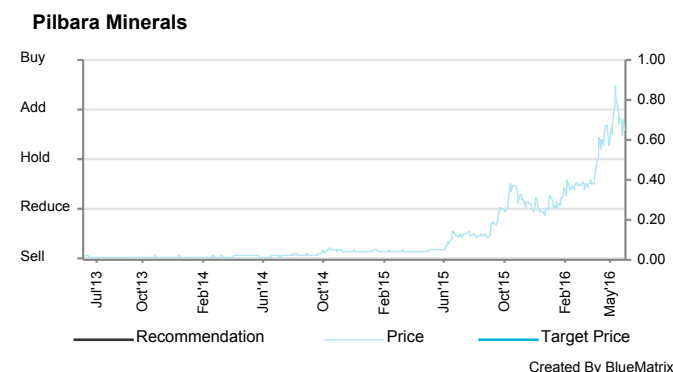
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Three Year - Recommendation, Target Price, Share History



Source: Numis Securities Research