



AUSTRALIA

Upgrading to Outperform

Pilbara Minerals – PLS AU

Galaxy Resources – GXY AU

Upgrading to Neutral

Altura Minerals – AJM AU

Macquarie Battery Minerals Coverage

Company	Code	Mkt Cap	Price Rec	TP	TSR
		A\$m		A\$/sh	A\$/sh
Orocobre	ORE	737	N	3.50	3.17 -9%
Galaxy Resources	GXY	648	OP	1.64	2.1 22%
Neometals	NMT	149	OP	0.27	0.40 32%
Pilbara Minerals	PLS	479	OP	0.38	0.50 33%
Altura Mining	AJM	216	N	0.14	0.16 13%
Syrah Resources	SYR	683	OP	2.59	3.6 28%
Magnis Resources	MNS	308	OP	0.56	1.05 47%
CleanTeq	CLQ	449	OP	0.78	1.10 29%

Source: Company data, Macquarie Research, June 2017

Analyst(s)

Ben Crowley

+61 8 9224 0839 ben.crowley@macquarie.com

Andrew Hodge

+61 2 8237 0321 andrew.hodge@macquarie.com

Hayden Bairstow

+61 8 9224 0838 hayden.bairstow@macquarie.com

Hai Le

+61 8 9224 0886 hai.le@macquarie.com

Andrew Bowler

+61 8 9224 0846 andrew.bowler@macquarie.com

19 June 2017

Macquarie Securities (Australia) Limited

Upgrading the outlook Australian Battery Materials

Event

- The Macquarie Commodities team has upgraded our lithium price forecasts by 19% in CY20/21, 29% in FY22 and 17% long-term. We have also upgraded our cobalt forecasts. We upgrade PLS and GXY to Outperform and AJM to Neutral.

Impact

- Upgrading PLS and GXY to Outperform, AJM to Neutral.** Our key upgrade is PLS, which we upgrade from Underperform to Outperform with a \$0.50/sh target price representing a 33% TSR. Whilst our more bullish price forecasts are a key driver of improved earnings the company has significantly de-risked the funding and technical delivery of the project. We now see its Pilgangoora project as a significant contributor to the future supply mix. We also upgrade GXY to Outperform and AJM to Neutral.
- Upgrading our battery raw material forecasts.** The Macquarie Commodities team has upgraded our [lithium and cobalt price forecasts](#). We believe that increased Chinese EV production driven by the recently announced [NEV credit system](#) will continue to drive medium-term lithium and cobalt demand. We remain cautious that policy will immediately translate to Chinese consumer uptake, but in conjunction with the slower ramp of new entrants we see a supply deficit extending to the early 2020s.
- Pilbara Minerals – Fully funded and closing in on construction.** PLS recently announced the successful closing of a US\$100m senior secured bond issue and has also recently completed an A\$80m equity placement. An A\$15m SPP is also underway but funding for its Pilgangoora project is now effectively complete. Preparatory site work at Pilgangoora has been underway for some time. Final environmental approvals have been received and Final Investment Decision is expected in the near-term. We model a staged ramp of production at Pilgangoora along with a staged build up of sales. We also assume that the mooted sales of DSO commence in the 1QFY18.

Outlook

- The ASX-listed battery material sector remains a highly volatile one. The landscape is continually changing but developments appear to be trending in a clearer direction. Demand drivers, principally Chinese policy and more commitments from the likes of BMW, Daimler and other European auto manufacturers, are firming. Meanwhile new supply from both incumbents and new hopefuls is taking longer than expected to eventuate and the time scale of a deficit looks likely to extend.
- In our view the Australian spodumene sector is the most likely to fill this deficit. Chilean brine production continues to trend sideways with little in the way of expansions on the near term horizon. Whilst progress is being made the ramp up of new supply at Mt Marion and Mt Cattlin has been slower than anticipated. It appears that technical difficulties at the mines and potentially in integrating new concentrate feed into existing conversion capacity are abundant. That being said we expect these to be overcome in time but the door for additional development projects like Pilgangoora remains open.

Upgrading PLS and GXY to Outperform, AJM to Neutral

- The ASX listed battery material sector remains a highly volatile one. The landscape is continually changing but developments appear to be trending in a clearer direction. Demand drivers, principally Chinese policy and more commitments from the likes of BMW, Daimler and other European auto manufacturers, are firming. Meanwhile new supply from both incumbents and new hopefuls is taking longer than expected to eventuate.

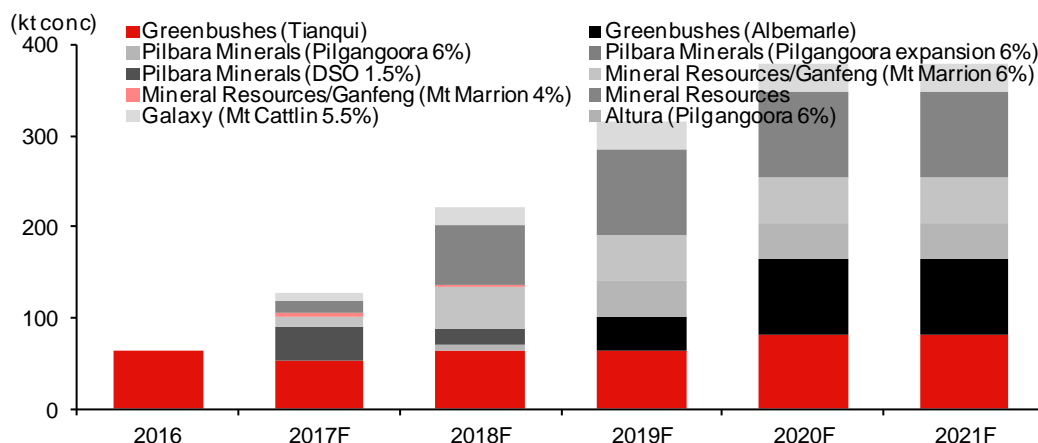
Fig 1 We upgrade PLS, GXY and AJM

Company	Code	Recommendation		Target price		Change	TSR
		Old	New	Old	New		
Orocobre	ORE	Neutral	Neutral	\$3.17	\$3.17	0%	-10%
Galaxy Resources	GXY	Neutral	Outperform	\$2.29	\$2.10	-8%	22%
Neometals	NMT	Outperform	Outperform	\$0.40	\$0.37	-8%	27%
Pilbara Minerals	PLS	Underperform	Outperform	\$0.38	\$0.50	33%	26%
Altura Mining	AJM	Underperform	Neutral	\$0.14	\$0.16	14%	13%
Syrah Resources	SYR	Outperform	Outperform	\$3.60	\$3.60	0%	28%
Magnis Resources	MNS	Outperform	Outperform	\$1.05	\$1.05	0%	47%
CleanTeq	CLQ	Outperform	Outperform	\$1.00	\$1.10	10%	29%

Source: Company data, Macquarie Research, June 2017

- Our key upgrade is PLS, which we upgrade from Underperform to Outperform with a \$0.50/sh target price representing a 33% TSR. Whilst our more bullish price forecasts are a key driver of improved earnings forecast the company has significantly de-risked the funding and technical deliver of the project. We now see its Pilgangoora project as a significant contributor to the future supply mix.
- We also upgrade GXY to Outperform and AJM to Neutral. We retain our Outperform rating for NMT. We lift our target prices for lithium developers for PLS by 33% and AJM by 14%. The increase in our long-term cobalt price increases our target price for CLQ by 10%.

Fig 2 Current and potential Australian spodumene concentrate production



Source: Company data, Macquarie Research, June 2017

- Given our preference for hard rock projects over brine developments we increase our discount for GXY's Sal De Vida project which results in an 8% reduction in our target price. We also revert to an equity share valuation of NMT given the failed sale of its share of the Mt Marion project which results in a similar 8% downgrade to our target.
- We leave our recommendations and target prices unchanged for SYR and MNS the two graphite developers in our battery coverage universe.

Upgrading our battery raw material forecasts

- The Macquarie Commodities team has upgraded our [lithium and cobalt price forecasts](#). We believe that increased Chinese EV production driven by the recently announced [NEV credit system](#) will continue to drive medium-term lithium and cobalt demand. We remain cautious that policy will immediately translate to Chinese consumer uptake, but in conjunction with the slower ramp of new entrants we see a supply deficit extending to the early 2020s.
- In our view the Australian spodumene sector is the most likely to fill this deficit. Chilean brine production continues to trend sideways with little in the way expansions on the near-term horizon. Whilst progress is being made, the ramp up of new supply at Mt Marion and Mt Cattlin has been slower than anticipated. It appears that technical difficulties at the mines and potentially in integrating new concentrate feed into existing conversion capacity are abundant. That being said, we expect these to be overcome in time.

Fig 3 We still see lithium coming down from current peaks but the medium term looks strong

Y/E December	1Q2017A	2Q2017E	3Q2017E	4Q2017E	CY17e	CY18e	CY19e	CY20e	Long-term
Lithium (US\$/t) - old	10,200	10,500	9,500	8,000	9,550	7,500	7,000	6,750	6,000
Lithium (US\$/t) - new	11,000	10,900	9,800	8,000	9,925	7,500	7,500	8,000	7,000
Change (%)	8%	4%	3%	0%	4%	0%	7%	19%	17%

Source: Macquarie Research, June 2017

- Our largest upgrade is to **lithium** pricing, where we have increased 2020-21 and long-term pricing by 15-20%. This is to reflect higher spodumene prices than predicted due to a slower ramp up of new supply, which when fed through Chinese conversion facilities will push the top end of the cost curve higher. Given Australian lithium output is all but doubling this year; we still see pressure on pricing into H2, with Q4 pricing at \$8,000/t versus \$10,900/t in the current quarter.

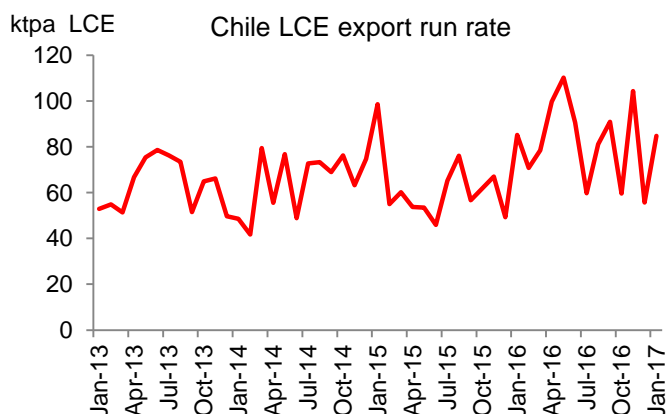
Fig 4 Material upgrades to our near-term and long-term cobalt forecasts

Y/E December	1Q2017A	2Q2017E	3Q2017E	4Q2017E	CY17e	CY18e	CY19e	CY20e	Long-term
Cobalt (US\$/lb) - old	21.20	22.00	20.00	20.00	20.80	18.00	16.50	18.00	12.50
Cobalt (US\$/lb) - new	21.20	27.90	27.00	24.00	25.03	20.00	16.50	18.00	16.50
Change (%)	0%	27%	35%	20%	20%	11%	0%	0%	32%

Source: Macquarie Research, June 2017

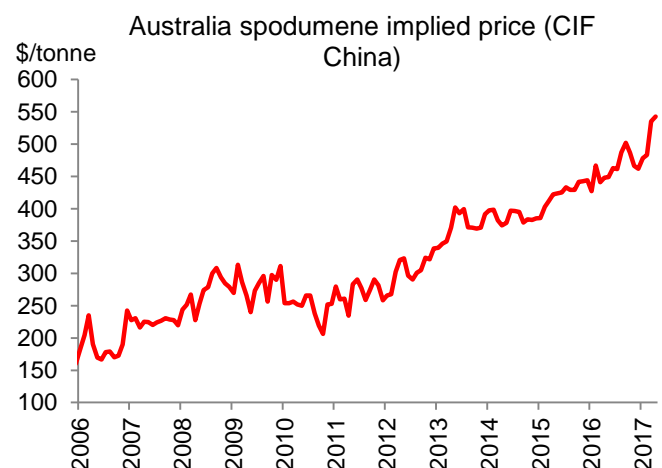
- The **cobalt** market continues to surprise on the upside in terms of pricing, hence we raise our 2017 forecast by 20% to \$25/lb and 2018 by 11% to \$20/lb. We have also raised our LR price by 32% to reflect the lack of high quality potential projects which will be needed to balance the market.

Fig 5 Chilean exports continue to trend sideways



Source: Customs data, Macquarie Research, June 2017

Fig 6 Australian spodumene price continues to rise



Source: Customs data, Macquarie Research, June 2017

Incorporating our new lithium and cobalt price forecast results in some significant changes to our earnings forecasts. We note we continue to model DSO production from PLS’s Pilgangoora project hence expect earnings in FY18 although we don’t expect the concentrate project to be in production until FY19. Our forecasts for ORE increase 3% in FY17 and FY18 and 13% and 52% in FY19 and FY20. Earnings for GXY in FY17 and FY18 are unchanged due to the contracted nature of sales.

Fig 7 Earnings forecast changes

Company	2017e	2018e	2019e	2020e
ORE	3%	3%	13%	52%
GXY	0%	0%	13%	36%
NMT	nmf	nmf	nmf	nmf
PLS	nmf	82%	52%	73%
AJM	0%	0%	10%	34%

Source: Company data, Macquarie Research, June 2017

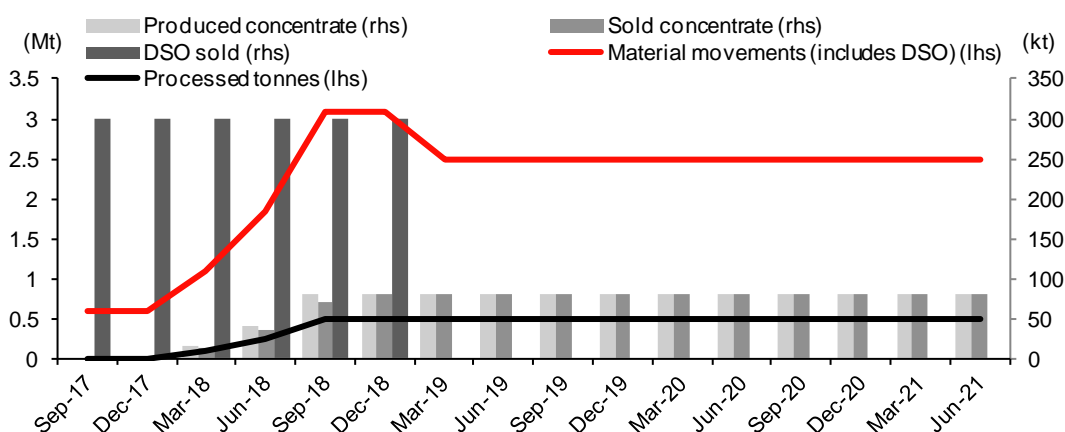
Pilbara Minerals – Fully funded and closing in on construction

- PLS recently announced the successful closing of a US\$100m senior secured bond issue and has also recently completed an A\$80m equity placement. An A\$15m SPP is also underway but funding for its Pilgangoora project is now effectively complete.
- The bonds have a 12% coupon and a 5-year maturity date to June 2022. The bonds are interest-only for the first 3 years, straight line amortisation of 50% of the balance over years 4 and 5 and a bullet payment at the maturity date. PLS may buy back the bonds at any time subject to a premium; covenants include the usual customary default terms and financial ratios and no dividends can be paid before 31 December 2018.

Working towards Final Investment Decision and major construction

- Preparatory site work at Pilgangoora has been underway for some time. As mentioned above the company recently extended the Stage 1 engineering program with its EPC contractor to allow further value engineering work to be completed. Final environmental approvals have been received and FID is expected in the near-term. We model a staged ramp of production at Pilgangoora along with a staged build up of sales. We also assume that the mooted sales of DSO commence in the 1QFY18.

Fig 8 Modelled production and sales ramp up



Source: PLS, Macquarie Research, June 2017

Fig 9 ORE summary financials

Orocobre														
ASX: ORE	Price: (A\$ps)	3.50		Year end: Jun			Rating: Neutral		Up/dn	TSR				
	Mkt cap: (A\$m)	733		Diluted shares (m)			Target: 3.17		-9%	-9%				
ASSUMPTIONS														
		FY14	FY15	FY16e	FY17e	FY18e	FY19e	FY20e						
Exchange Rate	A\$/US\$	0.91	0.84	0.73	0.76	0.74	0.74	0.74						
Lithium Carbonate	US\$/t	5020	4919	6099	10466	8300	7400	7750						
Lithium Hydroxide	US\$/t	7206	7213	8395	12036	9545	8510	8913						
Borax	US\$/t	609	618	531	458	502	510	522						
RATIO ANALYSIS														
		FY14	FY15	FY16e	FY17e	FY18e	FY19e	FY20e						
Diluted share capital	m	132	152	209	210	210	210	210						
EPS (diluted and pre sig. items)	A¢	-4.5	-5.0	-11.9	10.0	8.4	8.3	13.9						
P/E	x	-78.4x	-69.6x	-29.5x	35.1x	41.7x	42.1x	25.1x						
CFPS	A¢	(5.2)	(6.3)	(1.1)	2.6	9.1	9.2	13.9						
P/CF	x	-67.0x	-55.6x	-332.4x	134.6x	38.3x	38.1x	25.2x						
DPS	A¢	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
Dividend yield	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%						
Franking Level	%	100%	100%	100%	100%	100%	100%	100%						
Book value per share	x	1.14	0.83	0.73	1.01	0.86	0.94	1.08						
P/Book value	x	3.1x	4.2x	4.8x	3.5x	4.1x	3.7x	3.2x						
R.O.E. (pre sig items)	%	-4%	-6%	-13%	10%	10%	9%	13%						
R.O.A. (pre sig items)	%	-3%	-5%	-5%	-4%	-4%	-5%	-5%						
Interest Cover	x	49.9x	-7.4x	-18.0x	4.8x	5.1x	5.4x	16.0x						
EBITDA per share	A\$ps	-0.03	-0.04	-0.03	-0.04	-0.05	-0.05	-0.05						
EV/EBITDA	x	-160.5x	-121.2x	#####	-80.7x	-64.6x	-67.7x	-64.5x						
P&L														
		FY14	FY15	FY16e	FY17e	FY18e	FY19e	FY20e						
Sales Revenue	A\$m	26	21	19	18	21	21	21						
Other Revenue	A\$m	0	0	0	0	0	0	0						
Total Revenue	A\$m	26	21	19	18	21	21	21						
Operating Costs	A\$m	(18)	(16)	(11)	(15)	(18)	(19)	(19)						
Operational EBITDA	A\$m	7	5	8	3	2	2	2						
Exploration Expense/Write-offs	A\$m	0	0	(0)	(0)	(0)	(0)	(0)						
Corporate & Other Costs	A\$m	(12)	(11)	(15)	(12)	(12)	(13)	(13)						
EBITDA	A\$m	(4)	(6)	(7)	(9)	(10)	(11)	(11)						
D&A	A\$m	(1)	(1)	(2)	(1)	(2)	(2)	(2)						
EBIT	A\$m	(6)	(7)	(9)	(10)	(12)	(12)	(13)						
Net finance expense	A\$m	0	(1)	(0)	2	2	2	1						
SDJ JV profit/loss	A\$m	(0)	(0)	(11)	27	25	25	38						
Profit Before Tax	A\$m	(6)	(9)	(20)	19	15	15	26						
Tax Expense (excl abn'l's)	A\$m	(0)	1	1	2	3	3	4						
Minorities	A\$m	0	0	(0)	0	0	0	0						
Adjusted NPAT	A\$m	(6)	(8)	(19)	21	18	18	30						
Significant Items (post tax)	A\$m	(0)	9	(3)	(0)	0	0	0						
Reported NPAT	A\$m	(6)	1	(22)	21	18	18	30						
CASHFLOW														
		FY14	FY15	FY16e	FY17e	FY18e	FY19e	FY20e						
Net Profit	A\$m	(6)	(8)	(19)	21	18	18	30						
Interest/Tax/D&A	A\$m	3	2	5	1	1	2	1						
Working Capital/other	A\$m	(4)	(4)	12	(16)	1	(0)	(2)						
Net Operating Cashflow	A\$m	(7)	(10)	(2)	5	19	19	29						
PP&E	A\$m	(7)	(3)	(5)	(4)	(2)	(2)	(2)						
Investments	A\$m	0	(2)	(3)	4	1	1	1						
Sale of PPE and Other	A\$m	2	1	(6)	(0)	3	(62)	(10)						
Free cash flow	A\$m	(12)	(14)	(17)	5	21	(44)	18						
Dividends Paid	A\$m	0	0	0	0	0	0	0						
Debt	A\$m	(3)	(43)	(36)	(0)	0	0	0						
Equity Issuance	A\$m	28	38	82	1	0	0	0						
Other	A\$m	0	0	0	0	0	0	0						
Net Financing Cashflow	A\$m	26	(5)	46	0	0	0	0						
Net change in cash	A\$m	14	(19)	29	5	21	(44)	18						
BALANCE SHEET														
		FY14	FY15	FY16e	FY17e	FY18e	FY19e	FY20e						
Cash	A\$m	25	7	36	40	61	17	36						
PP&E & Mine Development	A\$m	13	13	15	13	12	12	11						
Exploration	A\$m	9	9	6	6	6	6	6						
Total Assets	A\$m	177	156	179	256	290	249	271						
Debt	A\$m	4	3	3	2	2	2	2						
Total Liabilities	A\$m	26	31	26	43	109	51	44						
Total Net Assets / Equity	A\$m	151	126	153	213	181	198	228						
Net Debt / (Cash)	A\$m	(21)	(4)	(33)	(38)	(59)	(15)	(33)						
Gearing (net debt/(nd + equity))	%	(16%)	(3%)	(28%)	(22%)	(49%)	(8%)	(17%)						
Gearing (net debt/equity)	%	(14%)	(3%)	(22%)	(18%)	(33%)	(8%)	(15%)						
ATTRIBUTABLE MINE OUTPUT														
		FY13	FY14	FY15	FY16e	FY17e	FY18e	FY19e	FY20e					
Lithium Production (ORE equity share)														
Olaroz Phase 1	t	0	0	82	4,487	7,849	8,775	10,400	10,400					
Olaroz Phase 2	t	0	0	0	0	0	0	0	3,413					
Lithium Hydroxide	t	0	0	0	0	0	0	0	0					
Total lithium sales	t	0.0	0.0	82	4,487	7,849	8,775	10,400	13,813					
Unit Cash Cost	US\$/t	n/a	n/a	4,021	3,711	3,551	3,463	3,259	3,271					
FOB Cash Cost	US\$/t	n/a	n/a	4,199	3,966	3,855	3,710	3,481	3,504					
Notional Cash Margin	US\$/t	na	na	1,684	4,404	10,002	7,487	6,519	4,368					
AISC cash cost	US\$/t	na	n/a	4,206	3,973	4,472	4,327	4,097	4,121					
OPERATIONAL OUTLOOK (ORE share)														
		FY13	FY14	FY15	FY16e	FY17e	FY18e	FY19e	FY20e	FY21e	FY22e	FY23e	FY24e	FY25e
RESERVES AND RESOURCES (ATTRIBUTABLE)														
Lithium Resources														
		Measured	Indicated	Inferred	Total									
Project	Mt	Mt	Mt	Mt	Mt									
Olaroz	1.44	5.00	0.00	6.4										
Cauchari	0.00	0.00	0.47	0.5										
Salinas Grandes	0.00	0.00	0.24	0.2										
Total	1.4	5.0	0.7	7.2										
Borax Resources														
		Measured	Indicated	Inferred	Total									
Project	Mt	Mt	Mt	Mt										
Borax Argentina	0.0	6.9	13.8	20.7										
Total	0.0	6.9	13.8	20.7										
EQUITY DCF VALUATION														
Projects														
Olaroz									336	1.60				
Olaroz Phase 2									121	0.58				
Borax									0	0.00				
Undeveloped Resources									33	0.16				
Corporate									(100)	(0.48)				
Unpaid Capital									2	0.01				
Cash									53	0.25				
Debt									(4)	(0.02)				
Net equity value at 10% WACC									442	2.10				
Target price									(1x NPV)	3.17				

Source: ORE, Macquarie Research, June 2017

Fig 10 GXY summary financials

Galaxy Resources							Year end:	Jun	Rating:	Outperform	Up/dn	TSR			
ASX: GXY	Price: (A\$ps)	1.64					Diluted shares (m)	1,928	Target:	2.10	28%	28%			
	Mkt cap: (A\$m)	3,163													
ASSUMPTIONS		FY15	FY16	FY17e	FY18e	FY19e	FY20e	ATTRIBUTABLE MINE OUTPUT							
Exchange Rate	A\$/US\$	0.75	0.74	0.75	0.74	0.74	0.75	LCE (kt)							
Lithium Carbonate Equivalent	US\$/t	5228	8406	10400	7500	7500	8000	Mt Cattlin	kt	1.1	14.9	24.7	28.2	28.2	28.2
Spumene	US\$/t	420	679	904	648	646	689	Sal De Vida	kt	0.0	0.0	0.0	0.0	8.5	23.0
Potash	US\$/t	245	224	235	251	269	275	Total	kt	1.1	14.9	24.7	28.2	36.7	51.2
Tnatalum	US\$/lb	60	60	60	61	63	64	By-products (k lb/kt)							
RATIO ANALYSIS		FY15	FY16	FY17e	FY18e	FY19e	FY20e	Mt Cattlin Tantalite	k lb	0.0	0.0	0.0	0.0	0.0	0.0
Diluted share capital	m	1,975.7	1,928.5	405.5	405.5	405.5	405.5	Sal De Vida KCl	k lb	0.0	0.0	0.0	0.0	32.3	87.4
EPS (diluted and pre sig. items)	A¢	-0.8	2.5	9.6	28.8	20.6	31.1	Total	k lb	0.0	0.0	0.0	0.0	32.3	87.4
P/E	x	-208.0x	66.4x	17.1x	5.7x	8.0x	5.3x	Sales							
CFPS	A¢	(0.4)	0.0	9.5	39.2	33.1	43.5	LCE	kt	0.6	7.9	13.1	15.0	19.3	26.5
P/CF	x	-450.4x	3497.5x	17.3x	4.2x	5.0x	3.8x	Tantalite	k lb	0.0	0.0	0.0	0.0	0.0	0.0
DPS	A¢	0.0	0.0	0.0	0.0	0.0	0.0	KCl	kt	0.0	0.0	0.0	0.0	32.3	87.4
Dividend yield	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Total	kt	0.6	7.9	13.1	15.0	51.6	113.9
Franking Level	%	0%	0%	0%	0%	0%	0%	Production cost							
Book value per share	x	0.05	0.25	1.43	1.72	1.92	2.28	FOB Costs	(A\$/t)	999	448	361	322	324	324
P/Book value	x	31.5x	6.7x	1.1x	1.0x	0.9x	0.7x	All in Cash Costs	(A\$/t)	1,867	634	450	391	396	396
R.O.E. (pre sig items)	%	-15%	10%	7%	17%	11%	14%	FOB Costs (LCE)	(US\$/t)	10,212	6,589	5,061	4,703	4,540	4,097
R.O.A. (pre sig items)	%	-6%	-1%	9%	20%	13%	15%	All in Cash Costs (LCE)	(US\$/t)	-	7,365	5,820	5,285	5,172	4,755
Interest Cover	x	-1.2x	-0.9x	183.9x	-102.7x	nmf	-104.4x	OPERATIONAL OUTLOOK							
EBITDA per share	A\$ps	0.00	0.00	0.15	0.43	0.32	0.48								
EV/EBITDA	x	-387.3x	-404.9x	49.9x	17.8x	24.3x	15.6x								
EARNINGS		FY15	FY16	FY17e	FY18e	FY19e	FY20e	RESERVES AND RESOURCES (ATTRIBUTABLE)							
Sales Revenue	A\$m	0	0	132	270	225	335	Reserves							
Other Revenue	A\$m	0	0	0	0	0	0	Mt Cattlin							
Total Revenue	A\$m	0	0	132	270	225	335	Period (years)	Tonnes Li (kt)	LiCo3e q (kt)	Ta2O5 (ppm)	Ta2O5 (kt)	Ta2O5 (Mlbs)	Ta2O5 (Mlbs)	
Operating Costs	A\$m	(0)	(0)	(64)	(90)	(89)	(135)	Proved	2.4	1.1%	27.0	0	0.3	0.8	
Operational EBITDA	A\$m	(0)	(0)	68	180	136	200	Probable	7.5	1.02%	76.9	152	1.1	2.5	
Exploration Expense/Write-offs	A\$m	(0)	(0)	0	0	(1)	(1)	Total	10.0	1.04%	103.9	152.0	1.0	2.1	
Corporate & Other Costs	A\$m	(8)	(8)	(6)	(6)	(6)	(6)	Sal De Vida							
EBITDA	A\$m	(8)	(8)	62	174	129	193	Period (years)	Tonnes Li (kt)	LiCo3e q (kt)	K (kt)	KCL eq (kt)	KCL eq (kt)		
D&A	A\$m	(0)	(0)	(6)	(9)	(12)	(14)	Probable	1-6	34.0	181.0	32.2	633.0		
EBIT	A\$m	(8)	(8)	56	165	117	179	Total	7-40	180.0	985.0	1,869.0	3,564.0		
Net Interest	A\$m	(7)	(9)	(0)	2	2	2	Proved	40.0	214.0	1166.0	1901.2	4197.0		
Profit Before Tax	A\$m	(16)	(17)	56	167	119	180	Resources							
Tax Expense	A\$m	0	65	(17)	(50)	(36)	(54)	Mt Cattlin Lithium							
Minorities	A\$m	0	0	0	0	0	0	Measured	2.5	1.2%	30	152	0.4	0.9	
Adjusted NPAT	A\$m	(16)	48	39	117	83	126	Indicated	9.5	1.06%	101	170	1.6	3.6	
Significant Items (post tax)	A\$m	70	75	0	0	0	0	Inferred	4.3	1.07%	46	132	0.6	1.3	
Reported NPAT	A\$m	55	123	39	117	83	126	Total	16.4	1.08%	178	157	3	6	
CASHFLOW		FY15	FY16	FY17e	FY18e	FY19e	FY20e	Brine volume (m3 x 10^6)							
Net Profit	A\$m	55	123	39	117	83	126	Avg Li (mg/L)	7.2	787.0	565	3,005	6,241	11,902	
Interest/Tax/D&A	A\$m	(2)	(59)	17	53	44	68	In situ Li (kt)	2.6	768.0	197	1,048	2,186	4,169	
Working Capital/other	A\$m	(60)	(62)	(17)	(11)	7	(18)	LiCo3 eq (kt)	8.3	717.0	597	3,180	6,692	12,762	
Net Operating Cashflow	A\$m	(7)	1	38	159	134	176	Total	18.1	751	1,359	7,233	15,119	28,833	
Capex	A\$m	(2)	(21)	(5)	(164)	(172)	(98)	EQUITY DCF VALUATION							
Investments	A\$m	47	8	0	0	0	0	Projects							
Sale of PPE and Other	A\$m	0	0	0	0	0	0	Mt Cattlin							
Free cash flow	A\$m	38	(12)	34	(5)	(38)	78	Sal De Vida							
Dividends Paid	A\$m	0	0	0	0	0	0	Undeveloped Resources							
Debt	A\$m	(50)	15	(27)	(14)	0	0	Corporate							
Equity Issuance	A\$m	(0)	2	67	0	0	60	Unpaid capital							
Other	A\$m	0	0	0	0	0	0	Net cash (debt)							
Net Financing Cashflow	A\$m	(50)	17	40	(14)	0	60	Net Equity Value (@ 10% WACC)							
Net change in cash	A\$m	(12)	5	74	(18)	(38)	138	Price Target							
BALANCE SHEET		FY15	FY16	FY17e	FY18e	FY19e	FY20e	(1x NPV)							
Cash	A\$m	5	9	84	65	27	165	853							
PP&E & Mine Development	A\$m	2	343	342	497	657	742	2.10							
Exploration	A\$m	124	123	129	135	138	138								
Total Assets	A\$m	140	554	654	831	937	1,200								
Debt	A\$m	28	40	13	0	0	0								
Total Liabilities	A\$m	37	81	75	135	158	274								
Total Net Assets / Equity	A\$m	103	473	579	696	779	926								
Net Debt / (Cash)	A\$m	24	31	(70)	(65)	(27)	(165)								
Gearing (net debt/(nd + equity))	%	19%	6%	(14%)	(10%)	nm	nm								
Gearing (net debt/equity)	%	23%	7%	(12%)	(9%)	(4%)	(18%)								
Total asset/debt	(x)	4.9	13.8	49.3	nmf	nmf	nm								

Source: GXY, Macquarie Research, June 2017

Fig 11 PLS summary financials

Pilbara Minerals									
ASX: PLS	Price: (A\$ps)	0.38		Year end:	Jun	Rating:	Underperform	Up/dn	TSR
	Mkt cap: (A\$m)	485			Diluted shares (m)	1,277	Target: 0.50	33%	33%

ASSUMPTIONS		FY17e	FY18e	FY19e	FY20e	FY21e	FY22e
Exchange Rate	A\$/US\$	0.76	0.74	0.74	0.74	0.75	0.75
Lithium Carbonate Equivalent	US\$/t	10,466	8,300	7,400	7,750	8,000	8,250
Spodumene (6% CIF)	US\$/t	868	812	757	720	743	767

RATIO ANALYSIS		FY17e	FY18e	FY19e	FY20e	FY21e	FY22e
Diluted share capital	m	1,541.3	1,543.0	1,543.0	1,543.0	1,543.0	1,543.0
EPS (diluted and pre sig. items)	A¢	-0.9	0.6	5.2	5.6	5.8	6.2
P/E	x	-40.2x	66.9x	7.3x	6.8x	6.6x	6.1x
CFPS	A¢	(0.9)	(0.5)	8.4	7.0	7.2	7.6
P/CF	x	-40.1x	-82.0x	4.5x	5.4x	5.3x	5.0x
DPS	A¢	0.0	0.0	0.0	0.0	0.0	0.0
Dividend yield	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Franking Level	%	0%	0%	0%	0%	0%	0%
Book value per share	x	0.15	0.16	0.21	0.24	0.30	0.36
P/Book value	x	2.5x	2.4x	1.8x	1.6x	1.3x	1.1x
R.O.E. (pre sig items)	%	-5%	4%	25%	23%	20%	17%
R.O.A. (pre sig items)	%	-7%	5%	26%	23%	21%	20%
Interest Cover	x	6.3x	2.9x	9.6x	12.2x	16.4x	42.4x
EBITDA per share	A\$ps	-0.01	0.02	0.10	0.10	0.10	0.10
EV/EBITDA	x	-22.0x	24.5x	3.0x	2.4x	1.7x	1.0x

ATTRIBUTABLE MINE OUTPUT		FY17e	FY18e	FY19e	FY20e	FY21e	FY22e
Spodumene (kt)							
Pilgangoora	kt	-	56	319	319	319	319
Pilgangoora 1.5% DSO	kt	-	1,200	600	-	-	-
Total	kt	-	1,256	919	319	319	319
Tantalite (k lb)							
Pilgangoora	k lb	-	-	97	97	97	97
Total	k lb	-	-	97	97	97	97
Sales							
Spodumene	kt	-	-	311	319	319	319
Tantalite	k lb	-	-	97	97	97	97
Total	kt	-	-	408	416	416	416
Total LCE production	kt	-	6.2	35.5	35.5	35.5	35.5
CFR cash costs	(A\$/wmt)	-	3,048	669	438	449	462
CFR AISC	(A\$/wmt)	-	7,334	705	469	481	494
CFR cash costs LCE	(US\$/t LCE)	-	3,995	4,044	4,148	4,296	4,424
CFR AISC LCE	(US\$/t LCE)	-	4,181	4,230	4,334	4,484	4,612

OPERATIONAL OUTLOOK									
Spodumene (kt)	Tantalite (k lb)	CFR cash costs (A\$/t)							

EARNINGS		FY17e	FY18e	FY19e	FY20e	FY21e	FY22e
Sales Revenue	A\$m	0	191	408	338	345	355
Other Revenue	A\$m	0	0	0	0	0	0
Total Revenue	A\$m	0	191	408	338	345	355
Operating Costs	A\$m	0	(153)	(237)	(170)	(174)	(180)
Operational EBITDA	A\$m	0	38	171	168	170	175
Exploration Expense/Write-offs	A\$m	(8)	(2)	(5)	(1)	(1)	(1)
Corporate & Other Costs	A\$m	(9)	(12)	(12)	(13)	(13)	(13)
EBITDA	A\$m	(16)	24	153	154	156	161
D&A	A\$m	(0)	(5)	(26)	(20)	(20)	(20)
EBIT	A\$m	(16)	19	127	134	136	141
Net Interest	A\$m	3	(6)	(13)	(11)	(8)	(3)
Profit Before Tax	A\$m	(14)	13	114	123	128	137
Tax Expense	A\$m	1	(4)	(34)	(37)	(38)	(41)
Minorities	A\$m	0	0	0	0	0	0
Adjusted NPAT	A\$m	(12)	9	80	86	89	96
Significant Items (post tax)	A\$m	(10)	0	0	0	0	0
Reported NPAT	A\$m	(22)	9	80	86	89	96

CASHFLOW		FY17e	FY18e	FY19e	FY20e	FY21e	FY22e
Net Profit	A\$m	(22)	9	80	86	89	96
Interest/Tax/D&A	A\$m	(8)	6	51	23	21	23
Working Capital/other	A\$m	15	(22)	(1)	(1)	0	(2)
Net Operating Cashflow	A\$m	(15)	(7)	130	108	111	117
Capex	A\$m	(50)	(215)	(12)	(11)	(11)	(11)
Investments	A\$m	(5)	0	0	0	0	0
Sale of PPE and Other	A\$m	0	0	0	0	0	0
Free cash flow	A\$m	(70)	(223)	118	97	100	106
Dividends Paid	A\$m	0	0	0	0	0	0
Debt	A\$m	(0)	128	(0)	(1)	(26)	(33)
Equity Issuance	A\$m	97	0	0	0	0	0
Other	A\$m	0	0	0	0	0	0
Net Financing Cashflow	A\$m	96	128	(0)	(1)	(26)	(33)
Net change in cash	A\$m	27	(94)	118	96	74	73

BALANCE SHEET		FY17e	FY18e	FY19e	FY20e	FY21e	FY22e
Cash	A\$m	127	33	151	247	321	394
PP&E & Mine Development	A\$m	104	314	300	290	281	273
Exploration	A\$m	6	8	13	13	13	13
Total Assets	A\$m	241	379	497	584	648	714
Debt	A\$m	0	128	128	128	102	68
Total Liabilities	A\$m	8	137	175	216	191	161
Total Net Assets / Equity	A\$m	233	241	321	368	457	553
Net Debt / (Cash)	A\$m	(127)	96	(23)	(120)	(220)	(326)
Gearing (net debt/(nd + equity))	%	(120%)	28%	(8%)	(48%)	(93%)	(143%)
Gearing (net debt/equity)	%	(54%)	40%	(7%)	(33%)	(48%)	(59%)
Total asset/debt	(x)	nm	nm	nm	nm	nm	nm

RESERVES AND RESOURCES (ATTRIBUTABLE)									
Reserves									
Pilgangoora	Mt	Li2O (%)	Li2O (kt)	Ta2O5 (ppm)	Ta2O5 (kt)	Ta2O5 (Mlbs)			
Proved	17.5	1.3%	229.3	0	2.5	5.6			
Probable	52.3	1.25%	653.8	134	6.7	14.8			
Total	69.8	1.27%	883.0	134.0	5.7	12.5			
Tabba Tabba									
Probable	32.0	0.0%	0.0	1420	0.5	278.1			
Total	101.0	0.0%	0.0	1249	1.3	378.3			
Proved	133.0	0.0%	0.0	1290.0	1.1	0.0			
Resources									
Pilgangoora Lithium	Mt	Li2O (%)	Li2O (kt)						
Measured	18.0	1.4%	245						
Indicated	65.6	1.24%	813						
Inferred	45.0	1.15%	518						
Total	128.6	1.23%	1,576						
Pilgangoora Tantalum									
Measured	0.0	0	0.0	0.00					
Indicated	17.9	182	3.3	7.18					
Inferred	24.3	205	5.0	10.98					
Total	42.2	195.2	8.2	18.2					

EQUITY DCF VALUATION										
Projects										
Pilgangoora									A\$m	A\$ps
Tabba Tabba									702	0.45
Undeveloped Resources									4	0.00
Other Projects & Investments									72	0.05
Corporate									(63)	(0.04)
Unpaid capital									0	0.00
Net cash (debt)									62	0.04
Net Equity Value (@ 10% WACC)									777	0.50
Price Target									(1x NPV)	0.50

Source: PLS, Macquarie Research, June 2017

Fig 12 CLQ summary financials

Clean TeQ Holdings								
ASX: CLQ	Price: (A\$ps)	0.78		Year end: Jun		Rating: Outperform	Up/dn	TSR
	Mkt cap: (A\$m)	449		Diluted shares (m)		576.2	Target: 1.10	41%
ASSUMPTIONS		FY17e	FY18e	FY19e	FY20e	FY21e	FY22e	FY23e
Exchange Rate	A\$/US\$	0.76	0.74	0.74	0.74	0.75	0.75	0.75
Nickel Price	(US\$/lb)	4.60	4.39	5.05	5.33	5.67	6.01	6.46
Cobalt Price	(US\$/lb)	18.81	22.75	18.00	17.50	19.50	21.00	20.00
RATIO ANALYSIS		FY17e	FY18e	FY19e	FY20e	FY21e	FY22e	FY23e
Diluted share capital	m	624.2	1,207.6	1,204.1	1,203.1	1,203.1	1,203.1	1,203.1
EPS (diluted and pre sig. items)	A¢	-2.6	-1.5	-1.6	-3.3	2.0	16.7	22.9
P/E	x	-29.5x	-51.5x	-49.1x	-23.3x	38.8x	4.7x	3.4x
CFPS	A¢	(1.2)	(1.2)	(1.5)	(3.3)	2.3	21.2	27.6
P/CF	x	-67.0x	-67x	-50.6x	-23.7x	33.2x	3.7x	2.8x
DPS	A¢	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dividend yield	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Franking Level	%	0%	0%	0%	0%	0%	0%	0%
Book value per share	x	0.18	0.36	0.36	0.32	0.34	0.51	0.74
P/Book value	x	4.4x	2.1x	2.2x	2.4x	2.3x	1.5x	1.1x
R.O.E. (pre sig items)	%	-12%	-3%	-4%	-10%	6%	33%	31%
R.O.A. (pre sig items)	%	-11%	-3%	-2%	-1%	6%	20%	25%
Interest Cover	x	65.6x	8.0x	-8.1x	-0.8x	2.0x	8.7x	16.1x
EBITDA per share	A\$ps	-0.02	-0.01	-0.01	-0.01	0.08	0.30	0.39
EV/EBITDA	x	-29.1x	-16.4x	-42.2x	-68.8x	12.4x	2.6x	1.3x
Free cash flow yield	%	(5%)	(25%)	(47%)	(50%)	(2%)	25%	33%
EARNINGS		FY17e	FY18e	FY19e	FY20e	FY21e	FY22e	FY23e
Sales Revenue	A\$m	0	0	0	0	235	611	753
Other Revenue	A\$m	0	0	0	0	0	0	0
Total Revenue	A\$m	0	0	0	0	235	611	753
Operating Costs	A\$m	0	0	0	0	(123)	(226)	(265)
Operational EBITDA	A\$m	0	0	0	0	112	384	488
Exploration Expense/Write-offs	A\$m	0	0	0	0	0	0	0
Corporate & Other Costs	A\$m	(13)	(16)	(16)	(17)	(17)	(18)	(18)
EBITDA	A\$m	(13)	(16)	(16)	(17)	95	367	469
D&A	A\$m	(1)	(1)	(1)	(1)	(18)	(43)	(51)
EBIT	A\$m	(14)	(17)	(17)	(17)	77	324	419
Net Interest	A\$m	0	2	(2)	(23)	(38)	(37)	(26)
Profit Before Tax	A\$m	(13)	(15)	(19)	(40)	39	287	393
Tax Expense	A\$m	0	0	0	0	(15)	(86)	(118)
Minorities	A\$m	0	0	0	0	0	0	0
Adjusted NPAT	A\$m	(13)	(15)	(19)	(40)	24	201	275
Significant Items (post tax)	A\$m	0	0	0	0	0	0	0
Reported NPAT	A\$m	(13)	(15)	(19)	(40)	24	201	275
CASHFLOW		FY17e	FY18e	FY19e	FY20e	FY21e	FY22e	FY23e
Net Profit	A\$m	(13)	(15)	(19)	(40)	24	201	275
Interest/Tax/D&A	A\$m	1	1	1	1	32	80	59
Working Capital/other	A\$m	5	0	0	0	(28)	(27)	(2)
Net Operating Cashflow	A\$m	(7)	(14)	(19)	(40)	28	255	332
Capex	A\$m	(16)	(222)	(419)	(429)	(43)	(23)	(18)
Investments	A\$m	(1)	0	0	0	0	0	0
Sale of PPE and Other	A\$m	0	0	0	0	0	0	0
Free cash flow	A\$m	(24)	(236)	(438)	(469)	(15)	232	314
Dividends Paid	A\$m	0	0	0	0	0	0	0
Debt	A\$m	(0)	0	270	468	62	(133)	(267)
Equity Issuance	A\$m	97	343	7	2	0	0	0
Other	A\$m	0	0	0	0	0	0	0
Net Financing Cashflow	A\$m	97	343	277	470	62	(133)	(267)
Net change in cash	A\$m	73	108	(161)	2	47	99	47
BALANCE SHEET		FY17e	FY18e	FY19e	FY20e	FY21e	FY22e	FY23e
Cash	A\$m	81	188	27	29	76	174	221
PP&E & Mine Development	A\$m	14	235	653	1,082	1,107	1,087	1,054
Exploration	A\$m	6	6	6	6	6	6	6
Total Assets	A\$m	121	480	768	1,228	1,383	1,660	1,708
Debt	A\$m	3	3	273	741	803	669	403
Total Liabilities	A\$m	10	40	340	838	969	1,046	819
Total Net Assets / Equity	A\$m	111	440	427	389	414	614	889
Net Debt / (Cash)	A\$m	(78)	(186)	245	712	727	495	181
Gearing (net debt/(nd + equity))	%	(236%)	(73%)	36%	65%	64%	45%	17%
Gearing (net debt/equity)	%	(70%)	(42%)	57%	183%	176%	81%	20%
ATTRIBUTABLE MINE OUTPUT		FY17e	FY18e	FY19e	FY20e	FY21e	FY22e	FY23e
Syerston Nickel & Cobalt								
Nickel	(t)	0	0	0	0	6,016	15,529	18,800
Cobalt	(t)	0	0	0	0	1,042	2,689	3,255
Scandium Oxide	(t)	0	0	0	0	23	46	52
C1 Cash costs								
Syerston Nickel & Cobalt	(US\$/lb)	nm	nm	nm	nm	1.60	-0.28	-0.19
Syerston Scandium	(US\$/kg)	nm	nm	nm	nm	580	539	507
AISC								
Syerston Nickel & Cobalt	(US\$/lb)	nm	nm	nm	nm	2.62	0.77	0.88
Syerston Scandium	(US\$/kg)	nm	nm	nm	nm	658	618	587
SYERSTON NICKEL & COBALT								
		FY17e	FY18e	FY19e	FY20e	FY21e	FY22e	FY23e
Nickel (kt)		0	0	0	0	6,016	15,529	18,800
Cobalt (kt)		0	0	0	0	1,042	2,689	3,255
AISC (US\$/lb)		nm	nm	nm	nm	2.62	0.77	0.88
AISC + sulphate premium (US\$/lb)		nm	nm	nm	nm	2.62	0.77	0.88
SYERSTON SCANDIUM								
		FY17e	FY18e	FY19e	FY20e	FY21e	FY22e	FY23e
Scandium oxide (t)		0	0	0	0	23	46	52
AISC (US\$/kg)		nm	nm	nm	nm	580	539	507
NICKEL/COBALT RESERVES AND RESOURCES								
Reserves								
Syerston		Mt	Ni (%)	Ni (kt)	Co (%)	Co (kt)		
Proved		54.9	0.71%	390.0	0.10%	55.0		
Probable		41.3	0.58%	240.0	0.10%	41.0		
Total Reserves		96.2	0.65%	630.0	0.10%	96.0		
Resources								
Syerston		Mt	Ni (%)	Ni (kt)	Co (%)	Co (kt)		
Measured		52.0	0.73%	380.0	0.11%	57.0		
Indicated		49.0	0.57%	280.0	0.10%	49.0		
Inferred		8.0	0.63%	50.0	0.10%	8.0		
Total Resources		109.0	0.65%	710.0	0.10%	114.0		
SCANDIUM RESERVES AND RESOURCES								
Syerston		Mt	Sc (ppm)	Sc (%)	(Sc t)	(Sc2O3)		
Reserves		1.2	582	0.06%	699	1,069		
Resources - High Grade		1.5	664	0.07%	996	1,524		
Resources - Low Grade		28.1	421	0.04%	11,819	18,083		
EQUITY DCF VALUATION								
			Spot prices			Macquarie forecasts		
Projects		A\$m	A\$ps	A\$m	A\$ps			
Syerston Nickel & Cobalt		934	0.77	981	0.81			
Syerston Scandium		302	0.25	41	0.03			
Unpaid capital & Equity Raising		350	0.29	350	0.29			
Resources		25	0.02	24	0.02			
Corporate		(112)	(0.09)	(112)	(0.09)			
Cash		93	0.08	93	0.08			
Debt		(3)	(0.00)	(3)	(0.00)			
Net Equity Value (@ 10% real WACC, 12.6% Nominal)		1,589	1.32	1,373	1.14			
Price Target								1.10

Source: CLQ, Macquarie Research, June 2017

Fig 13 AJM summary financials

Altura Mining								
ASX: AJM	Price: (A\$ps)	0.14		Year end:	Jun	Rating: Neutral	Up/dn	TSR
	Mkt cap: (A\$m)	171		Diluted shares (m)	1,222	Target: 0.16	14%	14%
ASSUMPTIONS		FY14	FY15	FY16e	FY17e	FY18e	FY19e	
Exchange Rate	A\$/US\$	0.92	0.84	0.73	0.76	0.74	0.74	
Lithium Carbonate Equivalent	US\$/t	5020	4919	6099	10517	8531	7803	
Spodumene (6% CIF)	US\$/t	230	223	351	825	626	571	
RATIO ANALYSIS		FY14	FY15	FY16e	FY17e	FY18e	FY19e	
Diluted share capital	m	454.3	837.7	1,222.5	1,541.2	2,421.2	2,421.2	
EPS (diluted and pre sig. items)	A¢	-0.7	-3.6	-3.2	-0.5	-0.2	1.3	
P/E	x	-19.1x	-3.9x	-4.4x	-30.2x	-64.9x	10.5x	
CFPS	A¢	(0.3)	(0.5)	(0.6)	(0.6)	(0.5)	1.6	
P/CF	x	-54.2x	-30.8x	-24.8x	-22.7x	-27.5x	8.7x	
DPS	A¢	0.0	0.0	0.0	0.0	0.0	0.0	
Dividend yield	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Franking Level	%	0%	0%	0%	0%	0%	0%	
Book value per share	x	0.11	0.03	0.02	0.03	0.06	0.07	
P/Book value	x	1.2x	4.5x	7.9x	4.1x	2.3x	1.9x	
R.O.E. (pre sig items)	%	-6%	-23%	-62%	-12%	-4%	18%	
R.O.A. (pre sig items)	%	-3%	-13%	-30%	-9%	-2%	21%	
Interest Cover	x	45.7x	143.5x	854.6x	-16.0x	-1.1x	8.5x	
EBITDA per share	A\$ps	0.00	-0.01	-0.01	0.00	0.00	0.02	
EV/EBITDA	x	-95.2x	-37.0x	-13.7x	-23.5x	-60.7x	3.3x	
ATTRIBUTABLE MINE OUTPUT		FY14	FY15	FY16e	FY17e	FY18e	FY19e	
Spodumene (kt)								
Pilgangoora	kt	-	-	-	-	-	14	182
Total	kt	-	-	-	-	-	14	182
Sales								
Spodumene	kt	-	-	-	-	-	14	182
Total	kt	-	-	-	-	-	14	182
Total LCE production	kt	-	-	-	-	-	1.7	22.7
FOB cash costs	(A\$/wmt)	-	-	-	-	-	511	424
AISC	(A\$/wmt)	-	-	-	-	-	10,763	456
FOB cash costs LCE	(US\$/t LCE)	-	-	-	-	-	5,035	4,960
AISC LCE	(US\$/t LCE)	-	-	-	-	-	5,212	5,113
OPERATIONAL OUTLOOK								
EARNINGS		FY14	FY15	FY16e	FY17e	FY18e	FY19e	
Sales Revenue	A\$m	7	5	1	1	12	141	
Other Revenue	A\$m	0	0	0	0	0	0	
Total Revenue	A\$m	7	5	1	1	12	141	
Operating Costs	A\$m	(6)	(5)	(7)	(1)	(8)	(77)	
Operational EBITDA	A\$m	2	0	(6)	0	5	64	
Exploration Expense/Write-offs	A\$m	0	0	0	0	0	0	
Corporate & Other Costs	A\$m	(4)	(5)	(7)	(7)	(8)	(8)	
EBITDA	A\$m	(2)	(5)	(12)	(7)	(4)	55	
D&A	A\$m	(1)	(1)	(1)	(0)	(0)	(3)	
EBIT	A\$m	(3)	(6)	(13)	(7)	(4)	52	
Net Interest	A\$m	0	0	0	(0)	(4)	(6)	
Profit Before Tax	A\$m	(3)	(6)	(13)	(8)	(7)	46	
Tax Expense	A\$m	(1)	(0)	(1)	1	2	(14)	
Minorities	A\$m	0	0	0	0	0	0	
Adjusted NPAT	A\$m	(3)	(6)	(13)	(6)	(5)	32	
Significant Items (post tax)	A\$m	(4)	(13)	1	1	0	0	
Reported NPAT	A\$m	(7)	(18)	(12)	(6)	(5)	32	
CASHFLOW		FY14	FY15	FY16e	FY17e	FY18e	FY19e	
Net Profit	A\$m	(7)	(31)	(32)	(6)	(5)	32	
Interest/Tax/D&A	A\$m	(0)	(0)	(4)	(3)	(4)	15	
Working Capital/other	A\$m	6	27	29	(1)	(3)	(8)	
Net Operating Cashflow	A\$m	(1)	(4)	(7)	(9)	(12)	39	
Capex	A\$m	(0)	0	(0)	(27)	(143)	(7)	
Investments	A\$m	5	0	0	0	0	0	
Sale of PPE and Other	A\$m	(1)	(1)	1	0	0	0	
Free cash flow	A\$m	2	(5)	(6)	(36)	(156)	32	
Dividends Paid	A\$m	0	0	0	0	0	0	
Debt	A\$m	(0)	(0)	0	0	46	(4)	
Equity Issuance	A\$m	0	4	26	42	104	0	
Other	A\$m	0	0	0	0	0	0	
Net Financing Cashflow	A\$m	(0)	4	26	42	150	(4)	
Net change in cash	A\$m	2	(1)	20	6	(6)	28	
BALANCE SHEET		FY14	FY15	FY16e	FY17e	FY18e	FY19e	
Cash	A\$m	3	2	22	28	22	50	
PP&E & Mine Development	A\$m	32	1	1	36	179	182	
Exploration	A\$m	14	15	14	1	3	5	
Total Assets	A\$m	89	46	43	77	216	250	
Debt	A\$m	32	17	18	18	64	59	
Total Liabilities	A\$m	37	21	21	25	70	72	
Total Net Assets / Equity	A\$m	52	26	22	52	146	178	
Net Debt / (Cash)	A\$m	28	15	(4)	(10)	41	9	
Gearing (net debt/(nd + equity))	%	35%	37%	(21%)	(25%)	22%	5%	
Gearing (net debt/equity)	%	55%	59%	(17%)	(20%)	28%	5%	
Total asset/debt	(x)	2.8	2.7	2.3	4.4	nm	nm	
RESERVES AND RESOURCES (ATTRIBUTABLE)								
Reserves								
Pilgangoora	Mt	Li2O (%)	Li2O (kt)	Ta2O5 (ppm)	Ta2O5 (kt)	Ta2O5 (Mlbs)		
Proved	0.0	0.0%	0.0	0	0.0	0.0		
Probable	30.1	1.04%	313.0	0	0.0	0.0		
Total	30.1	1.04%	313.0	0.0	0.0	0.0		
Resources								
Pilgangoora Lithium	Mt	Li2O (%)	Li2O (kt)					
Measured	0.0	0.0%	0					
Indicated	40.3	1.00%	403					
Inferred	2.3	0.90%	21					
Total	42.6	0.99%	424					
EQUITY DCF VALUATION								
Projects		A\$m	A\$ps					
Pilgangoora		272	0.18					
Undeveloped Resources		0	0.00					
Other Projects & Investments		0	0.00					
Corporate		(43)	(0.03)					
Unpaid capital		0	0.00					
Net cash (debt)		10	0.01					
Net Equity Value @ 10% WACC		239	0.16					
Price Target			(1x NPV)	0.16				

Source: AJM, Macquarie Research, June 2017

Fig 14 NMT summary financials

Neometals Limited								
ASX: NMT	Price: (A\$ps)	0.27		Year end:	Jun	Rating: Outperform	Up/dn	TSR
	Mkt cap: (A\$m)	153		Diluted shares (m)	566	Target: 0.37	37%	37%

ASSUMPTIONS		FY16	FY17e	FY18e	FY19e	FY20e	FY21e
Exchange Rate	A\$/US\$	0.73	0.76	0.74	0.74	0.74	0.75
Lithium Carbonate Equivalent	US\$/t	6125	10466	8300	7400	7750	8000
Spodumene (6% CIF)	US\$/t	329	609	531	490	513	530

RATIO ANALYSIS		FY16	FY17e	FY18e	FY19e	FY20e	FY21e
Diluted share capital	m	566.4	566.4	566.4	566.4	566.4	566.4
EPS (diluted and pre sig. items)	A¢	-0.7	0.7	3.6	3.6	3.9	4.1
P/E	x	-39.4x	39.9x	7.5x	7.5x	7.0x	6.6x
CFPS	A¢	(1.0)	0.2	5.1	5.3	5.8	6.2
P/CF	x	-27.4x	157.3x	5.3x	5.1x	4.7x	4.4x
DPS	A¢	2.0	0.0	0.0	0.0	0.0	0.0
Dividend yield	%	7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Franking Level	%	0%	0%	0%	0%	0%	0%
Book value per share	x	0.16	0.16	0.20	0.23	0.20	0.24
P/Book value	x	1.7x	1.7x	1.4x	1.2x	1.3x	1.1x
R.O.E. (pre sig items)	%	-4%	4%	18%	15%	19%	17%
R.O.A. (pre sig items)	%	-5%	5%	22%	17%	15%	13%
Interest Cover	x	12.5x	-2.7x	-12.6x	-8.7x	-7.0x	-5.8x
EBITDA per share	A\$ps	-0.01	0.01	0.05	0.05	0.05	0.05
EV/EBITDA	x	-15.8x	19.9x	2.2x	1.2x	0.1x	-1.0x

EARNINGS		FY16	FY17e	FY18e	FY19e	FY20e	FY21e
Sales Revenue	A\$m	0	15	53	55	58	59
Other Revenue	A\$m	0	0	0	0	0	0
Total Revenue	A\$m	0	15	53	55	58	59
Operating Costs	A\$m	0	(5)	(21)	(23)	(23)	(23)
Operational EBITDA	A\$m	0	10	33	32	34	35
Exploration Expense/Write-offs	A\$m	0	0	0	0	(1)	(1)
Corporate & Other Costs	A\$m	(5)	(5)	(4)	(4)	(4)	(4)
EBITDA	A\$m	(5)	5	28	28	29	30
D&A	A\$m	0	(0)	(1)	(2)	(2)	(2)
EBIT	A\$m	(5)	4	27	26	27	28
Net Interest	A\$m	0	2	2	3	4	5
Profit Before Tax	A\$m	(5)	6	29	29	31	33
Tax Expense	A\$m	1	(2)	(9)	(9)	(9)	(10)
Minorities	A\$m	0	0	0	0	0	0
Adjusted NPAT	A\$m	(4)	4	20	20	22	23
Significant Items (post tax)	A\$m	88	9	0	0	0	0
Reported NPAT	A\$m	85	13	20	20	22	23

CASHFLOW		FY16	FY17e	FY18e	FY19e	FY20e	FY21e
Net Profit	A\$m	85	13	20	20	22	23
Interest/Tax/D&A	A\$m	(2)	2	9	9	11	12
Working Capital/Other	A\$m	(89)	(14)	(1)	0	(0)	0
Net Operating Cashflow	A\$m	(6)	1	29	30	33	35
Capex	A\$m	(0)	(0)	(1)	(1)	(1)	(1)
Investments	A\$m	89	0	0	0	0	0
Sale of PPE and Other	A\$m	(1)	(2)	0	0	0	0
Free cash flow	A\$m	83	(1)	28	29	32	34
Dividends Paid	A\$m	(11)	(11)	0	0	0	0
Debt	A\$m	1	0	0	0	0	0
Equity Issuance	A\$m	(0)	(0)	0	0	0	0
Other	A\$m	0	0	0	0	0	0
Net Financing Cashflow	A\$m	(10)	(11)	0	0	0	0
Net change in cash	A\$m	73	(12)	28	29	32	34

BALANCE SHEET		FY16	FY17e	FY18e	FY19e	FY20e	FY21e
Cash	A\$m	73	62	90	119	150	184
PP&E & Mine Development	A\$m	0	0	0	0	0	0
Exploration	A\$m	12	12	13	14	14	14
Total Assets	A\$m	96	96	125	155	188	221
Debt	A\$m	0	0	0	0	0	0
Total Liabilities	A\$m	6	4	13	22	73	83
Total Net Assets / Equity	A\$m	90	92	112	133	115	138
Net Debt / (Cash)	A\$m	(73)	(62)	(90)	(119)	(150)	(184)
Gearing (net debt/(nd + equity))	%	(446%)	(206%)	(399%)	nm	421%	398%
Gearing (net debt/equity)	%	(82%)	(67%)	(80%)	(89%)	(131%)	(134%)
Total asset/debt	(x)	nm	nm	nm	nm	nm	nm

ATTRIBUTABLE MINE OUTPUT		FY16	FY17e	FY18e	FY19e	FY20e	FY21e
Spodumene (kt)							
Mt Marion	kt	-	16	51	56	56	56
Total	kt	-	16	51	56	56	56
Tantalite (k lb)							
Mt Marion	k lb	-	0	0	0	0	0
Total	k lb	-	0	0	0	0	0
Sales							
Spodumene	kt	-	97	372	403	403	403
Tantalite	kt	-	0	0	0	0	0
Total	kt	-	97	372	403	403	403
Total LCE produced	kt	-	2.0	6.4	6.9	6.9	6.9
FOB cash costs	(A\$/wmt)	-	467	406	416	422	426
AISC	(A\$/wmt)	-	689	421	431	436	438
FOB Costs (LCE)	(US\$/t)	-	5411	3876	3574	3667	3756
All in Cash Costs (LCE)	(US\$/t)	-	6755	3965	3661	3745	3826

OPERATIONAL OUTLOOK	

RESERVES AND RESOURCES (100%)				
Reserves				
	Mt	LiO2 (%)	LiO2 (kt)	
Proved	0.0	0.0%	0.0	
Probable	0.0	0.00%	0.0	
Total	0.0	0.00%	0.0	
Resources				
	Mt	LiO2 (%)	LiO2 (kt)	Fe2O3 (%)
Mt Marion Lithium				
Measured	0.0	0.0%	0	0.0%
Indicated	28.9	1.35%	390	1.1%
Inferred	48.9	1.38%	675	1.1%
Total	77.8	1.37%	1065	1.09%
Barrambie TiO2				
	Mt	TiO2 (%)	TiO2 (Mt)	V2O5 (%)
Measured	0.0	0.0%	0.0	0.00%
Indicated	34.7	22.3%	7.7	0.64%
Inferred	12.5	22.0%	2.7	0.58%
Total	47.2	22.2%	10.5	0.62%

EQUITY DCF VALUATION	
Projects	A\$m A\$ps
Mt Marion	134 0.24
Undeveloped Resources	16 0.03
Other Projects & Investments	20 0.04
Corporate	(18) (0.03)
Unpaid capital	0 0.00
Net cash (debt)	57 0.10
Net Equity Value (@ 8% WACC)	210 0.37
Price Target	(1x NPV) 0.37

Source: NMT, Macquarie Research, June 2017

Important disclosures:

Recommendation definitions

Macquarie - Australia/New Zealand

Outperform – return >3% in excess of benchmark return
Neutral – return within 3% of benchmark return
Underperform – return >3% below benchmark return

Benchmark return is determined by long term nominal GDP growth plus 12 month forward market dividend yield

Macquarie – Asia/Europe

Outperform – expected return >+10%
Neutral – expected return from -10% to +10%
Underperform – expected return <-10%

Macquarie – South Africa

Outperform – expected return >+10%
Neutral – expected return from -10% to +10%
Underperform – expected return <-10%

Macquarie - Canada

Outperform – return >5% in excess of benchmark return
Neutral – return within 5% of benchmark return
Underperform – return >5% below benchmark return

Macquarie - USA

Outperform (Buy) – return >5% in excess of Russell 3000 index return
Neutral (Hold) – return within 5% of Russell 3000 index return
Underperform (Sell) – return >5% below Russell 3000 index return

Volatility index definition*

This is calculated from the volatility of historical price movements.

Very high-highest risk – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

High – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

Medium – stock should be expected to move up or down at least 30–40% in a year.

Low-medium – stock should be expected to move up or down at least 25–30% in a year.

Low – stock should be expected to move up or down at least 15–25% in a year.

* Applicable to Asia/Australian/NZ/Canada stocks only

Recommendations – 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

Financial definitions

All "Adjusted" data items have had the following adjustments made:

Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense
Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

EPS = adjusted net profit / epowa*

ROA = adjusted ebit / average total assets

ROA Banks/Insurance = adjusted net profit / average total assets

ROE = adjusted net profit / average shareholders funds

Gross cashflow = adjusted net profit + depreciation

*equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

Recommendation proportions – For quarter ending 31 March 2017

	AU/NZ	Asia	RSA	USA	CA	EUR	
Outperform	47.26%	55.50%	38.46%	45.47%	59.09%	48.21%	(for global coverage by Macquarie, 8.20% of stocks followed are investment banking clients)
Neutral	38.01%	29.31%	42.86%	48.77%	37.88%	36.79%	(for global coverage by Macquarie, 8.25% of stocks followed are investment banking clients)
Underperform	14.73%	15.19%	18.68%	5.76%	3.03%	15.00%	(for global coverage by Macquarie, 8.00% of stocks followed are investment banking clients)

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Research

Head of Equity Research

Peter Redhead (Global)	(852) 3922 4836
Paul Checchin (Australia & NZ)	(612) 8232 4197

Retail / Consumer / Food & Bev

Andrew McLennan	(612) 8237 2829
-----------------	-----------------

Energy

Andrew Hodge	(612) 8237 0321
--------------	-----------------

ESG

Phineas Glover	(612) 8232 7394
----------------	-----------------

Financials

Banks & Diversified Financials

Victor German	(612) 8232 6089
Brendan Carrig	(612) 8237 6043
Anita Stanley	(612) 8232 9869

Insurance

Andrew Buncombe	(612) 8232 0629
-----------------	-----------------

Industrials

Capital Goods

John Purtell	(612) 8232 8633
Pelen Ji	(612) 8237 3523

Infrastructure

Ian Myles	(612) 8232 4157
-----------	-----------------

Transportation

Sam Dobson	(612) 8232 9986
------------	-----------------

Chemicals, D&C, Packaging, Builders, Steel

John Purtell	(612) 8232 8633
Pelen Ji	(612) 8237 3523
Peter Steyn	(612) 8232 5144

Resources

Hayden Bairstow	(618) 9224 0838
Ben Crowley	(618) 9224 0839
Andrew Hodge	(612) 8237 0321

Real Estate

Paul Checchin	(612) 8232 4197
Rob Freeman	(612) 8237 1152

Telcos / Media

Andrew Levy	(612) 8232 5165
-------------	-----------------

Gaming

Pete Vanns	(612) 8237 4220
------------	-----------------

Utilities

Ian Myles	(612) 8232 4157
-----------	-----------------

Commodities & Precious Metals

Colin Hamilton (Global)	(44 20) 3037 4061
Jim Lennon (London)	(44 20) 3037 4271

New Zealand

Stephen Hudson	(649) 363 1414
Warren Doak	(649) 363 1416
Daniel Frost	(649) 363 1474
Nick Mar	(649) 363 1476
Andrew Levy (Telecommunications)	(612) 8232 5165

Emerging Leaders – Industrials

Tim Lawson	(612) 8237 7332
Jodie Bannan	(612) 8232 2999
Jennifer Kruk	(612) 8232 6422
Deana Mitchell	(612) 8232 4576

Quantitative

Gurvinder Brar (Global)	(44 20) 3037 4036
John Conomos (Australia)	(612) 8232 5157
Jeremy Lamplough	(612) 8232 1060

Data Services

Sheridan Duffy	(612) 8232 9786
----------------	-----------------

Economics and Strategy

Jason Todd	(612) 8237 3134
James McIntyre (Australia)	(612) 8232 8930

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Contact	macresearch@macquarie.com for access requests.

Email addresses

FirstName.Surname@macquarie.com
eg. peter.redhead@macquarie.com

Sales

Equities

Dan Ritchie (Australia)	(612) 8232 3124
Dave Robertson (New Zealand)	(649) 363 1498

Sales

Kristen Edmond (Desk Head – Sydney)	(612) 8232 3111
Gavin Maher (Australia)	(612) 8232 4151
Nick Rehak (Australia)	(612) 8232 4053
Julia Thomas (Melbourne)	(613) 9635 9323
Anura Logan (Melbourne)	(613) 9635 8177
Mike Johnson (Desk Head – Hong Kong & International Sales)	(612) 8232 4717
Adam Millhouse (Hong Kong)	(852) 3922 2055
Dan Pittorino (Desk Head - London)	(44 20) 3037 4831
Andrew Haigh (London)	(44 20) 3037 4843
Leighton Patrick (Desk Head - New York)	(1 212) 231 2552
Michael McNair (New York)	(1 212) 231 2571
Dominic Smith (Singapore)	(65) 6601 0212

Sales Trading

Tim Shaw (Head of Sales Trading)	(612) 8232 4386
Sam Molina (Sydney)	(612) 8232 5935
Francis Sarks (Sydney)	(612) 8232 4458
Jarred Rubin (Sydney)	(612) 8232 2029
Ben McIntyre (Sydney)	(612) 8237 2833
Tarinee De Silva (Sydney)	(612) 8232 3151
Andrew Donald (Melbourne)	(613) 9635 8270
Natalie Rachele (Melbourne)	(613) 9635 8595
Jon Holland (Auckland)	(649) 363 1471
Mike Keen (London)	(44 20) 3037 4905

Electronic Execution

Valerie Kingsmill	(612) 8237 2230
Darren Miller	(612) 8232 8261
James Giarratano	(612) 8237 0878

Portfolio Trading

Garth Leslie	(612) 8232 9982
Kathryn Koutouzis	(612) 8237 5456

Block Trading

Tim Shaw (Desk Head – Sydney).	(612) 8232 4386
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Specialist Sales

Phil Zammit (Emerging Leaders)	(612) 8232 3122
Owen Johnston (Emerging Leaders)	(612) 8232 3328
Kurt Dalton (Property)	(612) 8232 5943
Stuart Murray (Derivatives)	(612) 8232 5090

Alternative Strategies

Greg Mann (Equity Finance)	(612) 8232 1820
Shannon Donohoe (Stock Borrow & Loan)	(612) 8232 6997

Syndication

Paul Staines	(612) 8232 7781
Angus Firth	(612) 8232 4039
Tiffany Ward	(612) 8232 5151

Corporate Access

Julie Loring	(612) 8232 7543
Eliza Davidson	(612) 8237 5064

Transition Management & Portfolio Solutions

Mick Larkin	(612) 8232 0639
David Goodman	(612) 8232 5245
Scott Macaulay	(612) 8232 4782
Elliot Graham	(612) 8237 4704