

## GALAXY RESOURCES LTD (GXY)

### Model update

Galaxy Resources recently announced an equity placement for A\$61m. The Company had A\$33m of debt, and after the placement we estimate net cash of ~\$37m. The capex requirement for Sal De Vida is US\$376m, and we estimate that James Bay will require >US\$120m. We estimate that GXY will generate ~A\$65m EBITDA in CY17 (more in CY18 when production ramps up), and hence more capital is clearly required if development is to begin this year, unless GXY sells assets.

### What is our James Bay and Sal de Vida valuation?

We value Mt Cattlin at A\$720m (~35cps). This is based on production of ~250kt of spodumene from CY18 and a ~14 year remaining mine life.

Our Sal de Vida valuation is A\$620m (~30cps), based on assumptions that are more conservative than the recent DFS and using a 12% discount rate. In particular, our LC price assumption is US\$10,400/t, versus the DFS assumptions of ~US\$14,000/t.

Our James Bay valuation is A\$130m (~7cps). This project is still early stage, in our view. There is still substantial study work to be completed (DFS due later this year), and the current resource (22.2Mt @ 1.28% Li<sub>2</sub>O) is relatively modest versus other spodumene developers.

### Maintain Buy

Our base case (assuming value for all three assets) is 64cps. Our spot price valuation (using US\$850/t for 5.5% Li<sub>2</sub>O) is 85cps. Lithium assets trade at full valuations versus other commodities for projects at similar stages of development, in our view. Hence, although there is upside to our valuation, we consider it to be higher risk because we have not risked the development projects as heavily as we would if the commodity was not lithium.

Fig. 1: GXY catalysts

<b>SAL DE VIDA</b> Offtake and project financing	<ul style="list-style-type: none"> <li>Development team confirmed, discussions with offtakers and strategic partners</li> <li>Site works commencing, including startup of demo plant program</li> <li>Continuing project financing evaluation and discussions</li> </ul>
<b>MT CATTLIN</b> Production & ramp up	<ul style="list-style-type: none"> <li>Focus on production ramp up and processing optimisation to meet 2017 production guidance of 160kt of lithium concentrate</li> <li>Lithium offtake for 2017 contracts successfully negotiated, strong cash flow and margin expected</li> </ul>
<b>JAMES BAY</b> Project development	<ul style="list-style-type: none"> <li>Exploration and development program, including comprehensive diamond drill program to upgrade existing resource to reserves</li> <li>Revised DFS expected to commence shortly, drawing on Mt Cattlin experience for study acceleration</li> </ul>
<b>MACRO</b> Robust lithium demand	<ul style="list-style-type: none"> <li>Continued strong growth in demand for lithium, led by increase in NEV sales and adoption rates in China, as well as robust growth in other markets</li> <li>Lagged response from supply side of both lithium compounds and concentrate feedstock, increased pricing levels being sustained</li> </ul>
<b>CORPORATE</b> Integration of General Mining	<ul style="list-style-type: none"> <li>General Mining takeover now complete and operations now fully integrated under Galaxy management, consolidates 100% ownership of all projects globally</li> <li>Recent addition to S&amp;P/ASX 200 index</li> </ul>

Source: GXY

Share Price	\$0.540
Valuation	\$0.64
Price Target (12 month)	\$0.70

#### Brief Business Description:

Commissioning the Mt Cattlin spodumene mine. Developing the large lithium brine operation Sal de Vida.

#### Hartleys Brief Investment Conclusion

One of the few Companies that is in production of lithium ore and has offtake agreements for product. Growth potential from James Bay project and Sal De Vida.

#### Chairman & MD

Martin Rowley (Exec. Chairman)

Anthony Tse (MD)

#### Major Shareholders

#### Company Address

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Ardross, WA, 6153

Issued Capital 1970.5m

- fully diluted 2007.9m

Market Cap A\$1064.1m

- fully diluted A\$1084.3m

Cash (31 Mar 17e) A\$70.0m

Debt (31 Mar 17e) A\$35.7m

Prelim. (A\$m)	CY17e	CY18e	CY19e
Prod (Li Spod. eq)	146.6	239.3	269.0
Op Cash Flw	105.4	141.0	163.0
Norm NPAT	57.9	134.2	150.4



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Galaxy Resources GXY		Share Price \$0.540				17 February 2017 Buy						
<b>Key Market Information</b>												
Share Price		\$0.540										
Market Capitalisation - ordinary		A\$1084m										
Net Debt (cash)		-\$34m										
Market Capitalisation - fully diluted		A\$1084m										
Issued Capital		1970.5m										
Options		37.3										
Issued Capital (diluted for options)		2007.9m										
12month price target		\$0.70										
<b>P&amp;L</b>												
	Unit	31 Dec 17	31 Dec 18	31 Dec 19	31 Dec 20							
Net Revenue	A\$m	148.9	240.7	268.7	222.1							
Total Costs	A\$m	-85.7	-100.9	-103.1	-101.1							
EBITDA	A\$m	63.1	139.8	165.5	121.1							
- margin		42%	58%	62%	55%							
Depreciation/Amort	A\$m	-2.5	-4.1	-13.9	-38.4							
EBIT	A\$m	60.6	135.7	151.6	82.6							
Net Interest	A\$m	-2.8	-1.6	-1.2	-6.5							
Pre-Tax Profit	A\$m	57.9	134.2	150.4	76.1							
Tax Expense	A\$m	0.0	0.0	0.0	0.0							
Normalised NPAT	A\$m	57.9	134.2	150.4	76.1							
Abnormal Items	A\$m	0.0	0.0	0.0	0.0							
Reported Profit	A\$m	57.9	134.2	150.4	76.1							
Minority	A\$m	0.0	0.0	0.0	0.0							
Profit Attrib	A\$m	57.9	134.2	150.4	76.1							
<b>Balance Sheet</b>												
	Unit	31 Dec 17	31 Dec 18	31 Dec 19	31 Dec 20							
Cash	A\$m	189.1	304.3	307.0	171.8							
Other Current Assets	A\$m	18.4	29.7	33.1	27.4							
Total Current Assets	A\$m	207.4	334.0	340.2	199.2							
Property, Plant & Equip.	A\$m	46.0	63.3	225.2	516.0							
Exploration	A\$m	4.1	8.5	12.9	17.3							
Investments/other	A\$m	0.0	0.0	0.0	0.0							
Tot Non-Curr. Assets	A\$m	50.1	71.8	238.1	533.3							
Total Assets	A\$m	257.5	405.8	578.2	732.4							
Short Term Borrowings	A\$m	0.2	0.2	0.2	0.2							
Other	A\$m	79.8	94.0	96.0	94.1							
Total Curr. Liabilities	A\$m	80.1	94.2	96.3	94.3							
Long Term Borrowings	A\$m	81.0	81.0	101.0	181.0							
Other	A\$m	-	-	-	-							
Total Non-Curr. Liabil.	A\$m	81.0	81.0	101.0	181.0							
Total Liabilities	A\$m	161.1	175.2	197.3	275.3							
Net Assets	A\$m	96.4	230.6	381.0	457.1							
Net Debt (net cash)	A\$m	-107.8	-223.0	-205.8	9.5							
<b>Cashflow</b>												
	Unit	31 Dec 17	31 Dec 18	31 Dec 19	31 Dec 20							
Operating Cashflow	A\$m	108.2	142.6	164.1	124.9							
Income Tax Paid	A\$m	0.0	0.0	0.0	0.0							
Interest & Other	A\$m	-2.8	-1.6	-1.2	-6.5							
Operating Activities	A\$m	105.4	141.0	163.0	118.4							
Property, Plant & Equip.	A\$m	-19.6	-21.4	-175.8	-329.2							
Exploration and Devel.	A\$m	-2.6	-4.4	-4.4	-4.4							
Other	A\$m	0.0	0.0	0.0	0.0							
Investment Activities	A\$m	-22.2	-25.8	-180.2	-333.6							
Borrowings	A\$m	50.0	0.0	20.0	80.0							
Equity or "tbc capital"	A\$m	70.1	0.0	0.0	0.0							
Dividends Paid	A\$m	0.0	0.0	0.0	0.0							
Financing Activities	A\$m	120.1	0.0	20.0	80.0							
Net Cashflow	A\$m	203.3	115.2	2.7	-135.3							
<b>Shares (GXY terms)</b>												
	Unit	31 Dec 17	31 Dec 18	31 Dec 19	31 Dec 20							
Ordinary Shares - End	m	1986.4	2032.2	2032.2	2047.2							
Ordinary Shares - W'ted	m	1911.2	2009.3	2032.2	2039.7							
Diluted Shares - W'ted	m	1978.2	2047.2	2047.2	2047.2							
<b>Ratio Analysis (GXY)</b>												
	Unit	31 Dec 17	31 Dec 18	31 Dec 19	31 Dec 20							
Cashflow Per Share	A\$ cpt	5.5	7.0	8.0	5.8							
Cashflow Multiple	x	9.8	7.7	6.7	9.3							
Earnings Per Share	A\$ cpt	3.0	6.7	7.4	3.7							
Price to Earnings Ratio	x	17.8	8.1	7.3	14.5							
Dividends Per Share	AUD	-	-	-	-							
Dividend Yield	%	0.0%	0.0%	0.0%	0.0%							
Net Debt / Net Debt + Equity %		946%	-2961%	-117%	2%							
Interest Cover	X	22.0	86.7	127.8	12.7							
<b>Directors</b>												
Martin Rowley (Exec. Chairman)						<b>Company Information</b>						
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Michael Fotios (Non-exec)						Ardross, WA, 6153						
George Zheng (Non-exec)						Ph +61 8 9215 1700						
						www.galaxylithium.com						
<b>Top Shareholders</b>												
<b>Reserves &amp; Resources</b>												
		Mt	Li %	TaxO <sub>2</sub>								
Mt Cattlin	M+I	12.1	1.09%	166								
Mt Cattlin	Inf	4.3	1.07%	132								
Mt Cattlin	Total	16.4	1.1%	149								
Mt Cattlin	Reserve	10.0	1.0%	149								
James Bay	M+I	11.8	1.30%									
James Bay	Inf	10.5	1.20%									
James Bay	Total	22.2	1.3%									
James Bay	Reserve	-										
Global Spod.	Total	38.6	1.18%									
Global Spod.	Reserve	9.974	1.04%	149								
<b>Sal de Vida</b>												
		Resource	Cub. m.	mg/l	LC Mt	KCI Mt						
Sal de Vida	Resource		1.81	753	7.2	28.8						
Sal de Vida	Reserve				1.4	4.2						
<b>Mt Cattlin Production Summary</b>												
	Unit	Dec 16	Dec 17	Dec 18	Dec 19	Dec 20	Dec 21					
Processed Mill Throughput	Mt	0.03	1.36	1.55	1.55	1.55	1.55					
Mined grade Li	%		1.2%	1.2%	1.2%	1.2%	1.2%					
Produced Spodumene - Technical	kt	0.0	0.0	0.0	0.0	0.0	0.0					
Produced Spodumene - Battery	kt	2	134	223	253	253	253					
Produced Tantalite	klb pa	4	231	314	314	314	314					
Produced Spodumene - Battery Eq	kt	3	147	239	269	273	275					
LCE equiv	Kt	0	20	32	36	37	37					
Mine Life	yr	15	14	13	12	11	10					
Assumed Mining Inventory	Mt	22.3	21.3	19.8	18.2	16.7	15.1					
Assumed Mining Inventory - Li grade	%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%					
Assumed Mining Inventory - Tant grade	%	149	149	149	149	149	149					
<b>Costs</b>												
	Unit	Dec 16	Dec 17	Dec 18	Dec 19	Dec 20	Dec 21					
Cost per milled tonne	\$A/t	54.8	55.0	55.4	55.4	55.4	55.4					
EBITDA / tonne milled ore	\$A/t	46.3	90.2	106.8	78.1	65.6	65.6					
Total cost per milled tonne	\$A/t	62.9	65.1	66.5	65.2	64.7	64.7					
Total Cash Costs	\$A/t Spod. Batt. eq	585	422	383	370	365	365					
- US\$	\$US/t Spod. Batt. eq	434	318	292	284	283	283					
C1: Operating Cash Cost = (a)	\$A/t Spod. Batt. eq	510	356	319	315	313	313					
(a) + Royalty = (b)	\$A/t Spod. Batt. eq	556	403	366	353	347	347					
C2: (a) + depreciation & amortisation = (c)	\$A/t Spod. Batt. eq	527	373	371	371	371	371					
(a) + actual cash for development = (d)	\$A/t Spod. Batt. eq	661	464	989	1,538	396	396					
AISC: (c) + Royalty	\$A/t Spod. Batt. eq	574	420	418	493	555	555					
(d) + Royalty	\$A/t Spod. Batt. eq	708	511	1,036	1,575	430	430					
<b>Price Assumptions</b>												
	Unit	Dec 16	Dec 17	Dec 18	Dec 19	Dec 20	Dec 21					
AUDUSD	US\$/A\$	0.75	0.74	0.76	0.76	0.77	0.78					
LC	US\$/t	10,941	12,931	12,672	12,672	11,439	10,941					
Spodumene - Battery	US\$/t	600	830	800	800	658	600					
Tantalum	US\$/lb	60	60	60	60	60	60					
<b>Hedging</b>												
Spodumene	Unit	Dec 16	Dec 17	Dec 18	Dec 19	Dec 20	Dec 21					
Spodumene	Yes											
<b>Sensitivity Analysis</b>												
		Valuation					FY21 NPAT					
Base Case		0.64					23.8					
Spot Prices		0.85 (34.1%)					78.2 (228.0%)					
Spot USD/AUD 0.77, Chemical Spod \$850/t, LC \$10,000/t, Tant. \$60/lb.												
AUDUSD +/-10%		0.53 / 0.77 (-16.8% / 20.5%)					14.1 / 35.8 (-40.9% / 50.0%)					
Spodumene - Technical +/-10%		0.64 / 0.64 (0.0% / 0.0%)					23.8 / 23.8 (0.0% / 0.0%)					
Spodumene - Chemical +/-10%		0.72 / 0.55 (13.4% / -13.4%)					37.4 / 10.3 (56.8% / -56.8%)					
Tantalite +/-10%		0.64 / 0.63 (0.8% / -0.8%)					25.1 / 22.6 (5.2% / -5.2%)					
Production +/-10%		0.78 / 0.49 (23.2% / -23.2%)					38.3 / 9.4 (60.4% / -60.4%)					
Operating Costs +/-10%		0.58 / 0.70 (-9.4% / 9.4%)					17.4 / 30.3 (-27.0% / 27.0%)					
<b>Unpaid Capital</b>												
Year Expires		No. (m)	\$m	Avg price	% ord							
31-Dec-18		45.8	5.3	0.11	2%							
31-Dec-19		0.0	0.0	0.00	0%							
31-Dec-20		15.0	5.2	0.34	1%							
31-Dec-21		0.0	0.0	0.00	0%							
31-Dec-22		0.0	0.0	0.00	0%							
31-Dec-22		0.0	0.0	0.00	0%							
TOTAL		60.8	10.4	0.17	3%							
<b>Valuation post merger</b>												
		\$m	\$/GXY									
100% Mt Cattlin (pre-tax NAV at disc. rate of 10%)		718	0.35									
Sal de vida		619	0.30									
Other Assets/Exploration		144	0.07									
Corporate Overheads		-45	-0.02									
Net Cash (Debt)		34	0.02									
Tax (NPV future liability)		-182	-0.09									
Options & Other Equity		5	0.00									
Total		1293	0.64									
Analyst: Trent Barnett												
+61 8 9268 3052												
*tbc capital* could be equity or debt. Our valuation is risk-adjusted for how this may be obtained.												
Sources: IRESS, Company Information, Hartleys Research												
16 Feb 17												

**Fig. 2: Key Assumptions and Risks for valuation**

Assumption	Risk of not realising assumption	Downside risk to valuation if assumption is incorrect	Comment
~15 year mine life	Low	Meaningful	This appears reasonable based on current resources
Ramp-up to 1.6mtpa in CY16	Upside/downside	Meaningful	This seems reasonable given infrastructure in place, and potentially ramp-up could be faster than our assumptions
Recoveries take time to reach 70%, and capital is required to achieve 85%	Upside/downside	Meaningful	Hopefully our recovery estimates are too low, and the plant can be optimised quickly to achieve 70%
Spodumene prices in line with our estimates	Upside/downside	Meaningful	We assume prices are yet to peak
Sal De Vida is developed	High	High	Sal De Vida appears highly economic, but will take time for first cash flows
James Bay is developed	High	Low	Given the grade of James Bay, and expected capex, our NPV is reasonably immaterial to valuation
No new financing	Low	Meaningful	We assume the project is fully funded.
Exploration value	Moderate	Meaningful	We assume modest exploration value.
<i>Conclusion</i>			
<i>Selling prices of spodumene and lithium carbonate and the development of Sal de Vida are significant risks to valuation.</i>			

Source: Hartleys

## PRICE TARGET

We have changed our price target to 70cps (from 66ps previously).

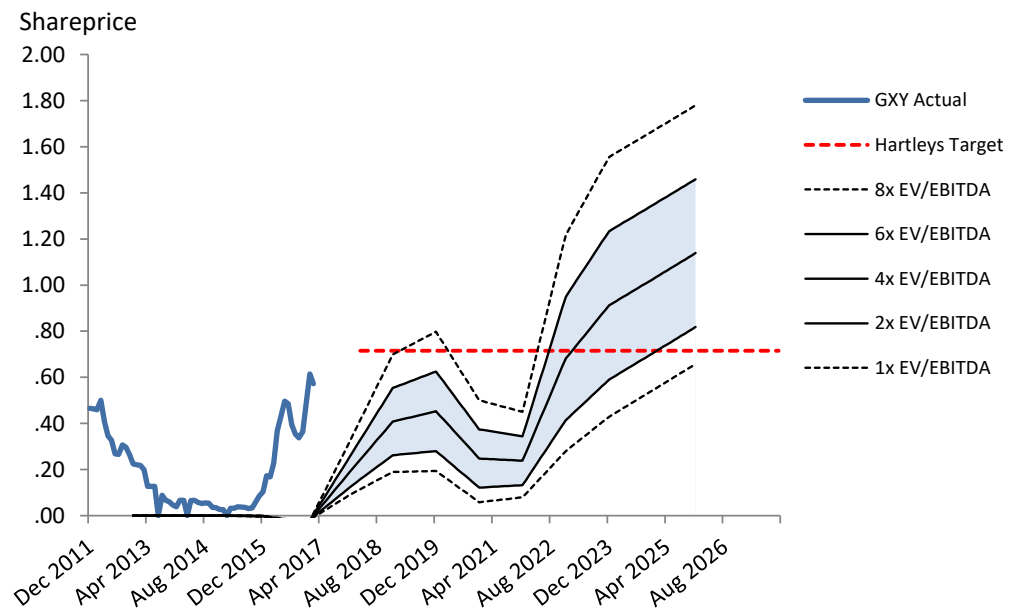
Price Target Methodology	Weighting	Spot	12 mth out
NPV base case	65%	\$0.64	\$0.69
NPV base case Mt Cattlin only	5%	\$0.28	\$0.31
NPV at spot commodity and fx prices	25%	\$0.85	\$0.93
Net cash	5%	\$0.00	\$0.00
<b>Risk weighted composite</b>		<b>\$0.64</b>	
<b>12 Months Price Target</b>		<b>\$0.70</b>	
Shareprice - Last - GXY		\$0.540	
<b>12 mth total return (% to 12mth target + dividend)</b>		<b>29%</b>	

Source: Hartleys Estimate

## RISKS

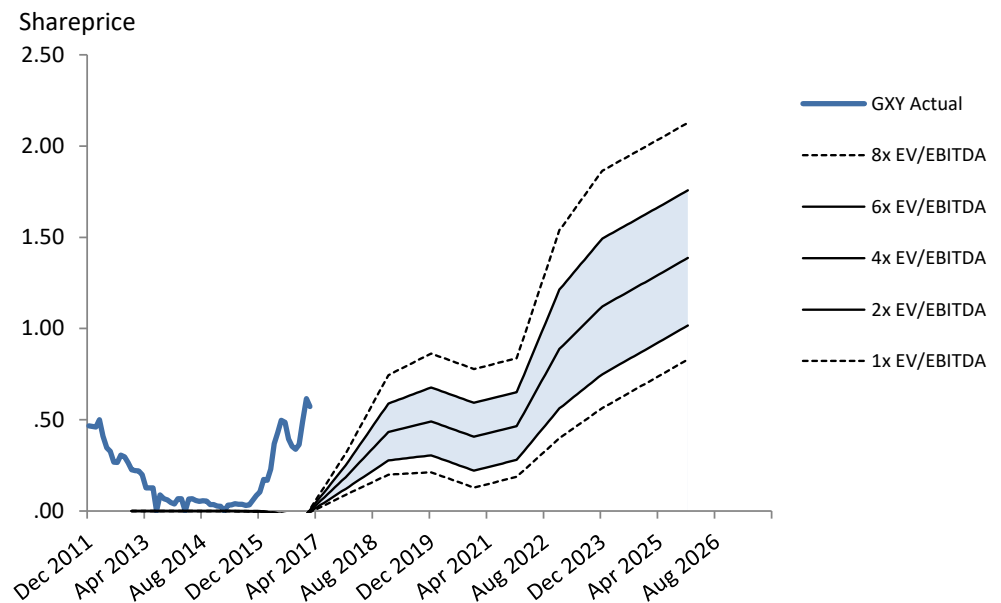
The largest risk for GXY are the selling prices of spodumene and lithium carbonate. Other risks are similar to most producers: mine planning, mill performance, force-majeure, counter party risks, mine life extensions, expansions.

**Fig. 3: Using Hartleys base case commodity forecasts**



Source: Hartleys Estimates, IRESS

**Fig. 4: Using spot commodity prices**



Source: Hartleys Estimates

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## Hartleys Recommendation Categories

Buy	Share price appreciation anticipated.
Accumulate	Share price appreciation anticipated but the risk/reward is not as attractive as a "Buy". Alternatively, for the share price to rise it may be contingent on the outcome of an uncertain or distant event. Analyst will often indicate a price level at which it may become a "Buy".
Neutral	Take no action. Upside & downside risk/reward is evenly balanced.
Reduce / Take profits	It is anticipated to be unlikely that there will be gains over the investment time horizon but there is a possibility of some price weakness over that period.
Sell	Significant price depreciation anticipated.
No Rating	No recommendation.
Speculative Buy	Share price could be volatile. While it is anticipated that, on a risk/reward basis, an investment is attractive, there is at least one identifiable risk that has a meaningful possibility of occurring, which, if it did occur, could lead to significant share price reduction. Consequently, the investment is considered high risk.

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