

IRONBARK ZINC LTD

Is this the year it happens?

Ironbark Zinc Limited is developing the very large Citronen zinc project in Greenland. The project has a total resource (M+I+Inf) of 132Mt @ 4.0% Zn and 0.4% Pb and a higher grade resource (M&I) of 29.9Mt @ 6.6% Zn and 0.5% Pb. Due to the scale of the project (large production and long mine life), the upside leverage to zinc prices is very significant. We estimate every US\$0.01/lb increase in zinc prices adds 0.7-1.5cps to our valuation.

Citronen could begin construction next year, first zinc 2018?

Project development is at an advanced stage with BFS/DFS released in early 2013 (and subsequently reviewed by NFC). We assume a ~14 year mine life and a 3.3Mtpa mine operation (2.2Mtpa processing) beginning in early CY18 (previously we assumed late CY17). We assume payable zinc equivalent of >200Ktpa for the first two years before declining to ~160Ktpa with a separate lead concentrate. We assume total cash costs of ~US\$74/t mined ore (~\$0.78/lb zinc eq in early years). We assume ~US\$500m of capex spent over two years (includes first fills, fuel etc). Using our zinc price profile (which is similar to consensus) our NPV₁₂ is ~\$120m (~19cps after assumed dilution). At spot prices, our valuation is 6cps.

The Company is engaged with China Non-Ferrous Corp (NFC) for potential financing. The MOU encompasses a 70% debt funding proposal brokered through Chinese banks and provides NFC with a right to buy a 19.9% direct interest at the project level. However, our valuation assumes a traditional financing agreement (ie no project divestment to NFC), and hence we assume significant equity dilution. This is an area of upside risk in our model (other areas of upside are reductions in capex, higher zinc prices).

Very large upside leverage to zinc prices

The Company's internal pre-tax estimated NPV₈ of US\$609m is based on life of mine zinc prices of ~US\$1.37/lb (in-line with industry estimates, but at the upper end of sell-side estimates). At US\$1.37/lb Zn, we conservatively (assumed substantial dilution) value IBG at 43cps. For another way of thinking about the leverage, if we value IBG as a series of in-the-money AUD zinc calls (50% volatility) then we derive a 48cps valuation.

Zinc price outlook remains positive, recent moves encouraging

Zinc prices have historically been very volatile but are trading below the mid-point of the ten year range (~US\$0.45/lb to US\$2.10/lb). Over coming years several large mines will be depleted. Levels of zinc LME inventories have been trending down. In CY15, the run-rate has been 2.8kt per day, and if it were to continue, LME reported inventory will be zero by the end of December.

Upcoming news flow...

- June Qtr: Social impact statement approval for public consultation.
- December Qtr 2015: Granting of mining licence possible;
- March Qtr 2016: Financing negotiations could be completed;
- June Qtr 2016: Early site works could begin.

Retain Speculative Buy recommendation.

Rising zinc prices and reducing supply suggest momentum to fund Citronen will increase. We maintain our Speculative Buy recommendation.

13 Apr 2015

Share Price	\$0.094
Valuation	\$0.17
Price Target (12 month)	\$0.28

Brief Business Description:

Very large zinc development project in Greenland

Hartleys Brief Investment Conclusion

Deposit is large and implies long mine life. Marginally economic on consensus estimated zinc prices, very economic at industry (the upper end of sell-side consensus) forecasted prices.

Chairman & MD

Peter Bennetto (Non Executive Chairman)

Jonathan Downes (Managing Director)

Major Shareholders

Nyrstar Int	22.1%
Glencore	9.5%
L1 Capital	7.6%

Company Address

Level 1, 350 Hay St
Subiaco, WA, 6008

Issued Capital	442.2m
- fully diluted	463.2m

Market Cap	A\$41.6m
- fully diluted	A\$43.5m

Cash (31 Dec 14a)	A\$3.2m
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Debt (31 Dec 14a)	A\$0.0m
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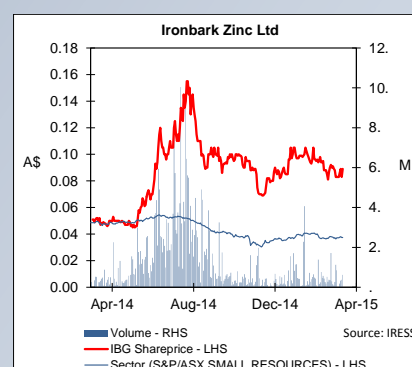
EV	A\$38.4m
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EV/Resource Zn	A\$0.0033/lb
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EV/Reserve Zn	-
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Prelim. (A\$m)	FY16e	FY17e	FY18e
Prod (kt Zn eq)	0.0	0.0	84.1
Op Cash Flw	-15.8	-30.4	47.5
Norm NPAT	-23.7	-50.6	41.9
CF/Share (cps)	-1.8	-2.3	1.9
EPS (cps)	-2.4	-3.0	2.4
P/E	-5.2	-4.1	5.0

	Zn	Pb
Resources (Billion lb)	11.7	1.3
Reserves (Billion lb)	0.0	0.0



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Hartleys has completed a capital raising in the past 12 months for Ironbark Zinc Limited ("Ironbark"), for which it has earned fees. Hartleys has provided corporate advice within the past 12 months and continues to provide corporate advice to Ironbark, for which it has earned fees and continues to earn fees. Analyst has a beneficial interest in IBG. See back page for details.

Ironbark Zinc Ltd						Share Price		13 April 2015									
IBG						\$0.094		Speculative Buy									
Key Market Information																	
Share Price						\$0.094											
Market Capitalisation - ordinary						A\$44m											
Net Debt (cash)						-\$3m											
Market Capitalisation - fully diluted						A\$44m											
EV						A\$40m											
Issued Capital						442.2m											
Options						21.0											
Issued Capital (diluted for options)						463.2m											
Issued Capital (diluted inc. options and new capital)						2217.2m											
12month price target						\$0.28											
P&L	Unit	30 Jun 16	30 Jun 17	30 Jun 18	30 Jun 19												
Net Revenue	A\$m	0.0	0.0	282.4	650.6												
Total Costs	A\$m	-2.2	-2.4	-171.2	-361.5												
EBITDA	A\$m	-2.2	-2.4	111.2	289.1												
- margin		-	-	39%	44%												
Depreciation/Amort	A\$m	-7.9	-20.2	-40.0	-49.7												
EBIT	A\$m	-10.1	-22.6	71.2	239.4												
Net Interest	A\$m	-13.6	-28.0	-29.3	-29.5												
Pre-Tax Profit	A\$m	-23.7	-50.6	41.9	209.9												
Tax Expense	A\$m	0.0	0.0	0.0	-68.8												
Normalised NPAT	A\$m	-23.7	-50.6	41.9	141.1												
Abnormal Items	A\$m	0.0	0.0	0.0	0.0												
Reported Profit	A\$m	-23.7	-50.6	41.9	141.1												
Minority	A\$m	0.0	0.0	0.0	0.0												
Profit Attrib	A\$m	-23.7	-50.6	41.9	141.1												
Balance Sheet	Unit	30 Jun 16	30 Jun 17	30 Jun 18	30 Jun 19												
Cash	A\$m	649.3	284.6	67.7	213.2												
Other Current Assets	A\$m	0.2	0.2	35.0	80.4												
Total Current Assets	A\$m	649.5	284.8	102.7	293.6												
Property, Plant & Equip.	A\$m	44.1	357.7	581.7	532.1												
Exploration	A\$m	95.6	96.0	96.4	96.8												
Investments/other	A\$m	1.2	1.2	1.2	1.2												
Tot Non-Curr. Assets	A\$m	140.9	454.9	679.3	630.1												
Total Assets	A\$m	790.3	739.7	782.0	923.7												
Short Term Borrowings	A\$m	-	-	-	-												
Other	A\$m	0.1	0.1	0.5	1.0												
Total Curr. Liabilities	A\$m	0.1	0.1	0.5	1.0												
Long Term Borrowings	A\$m	502.5	502.5	502.5	502.5												
Other	A\$m	-	-	-	-												
Total Non-Curr. Liabil.	A\$m	502.5	502.5	502.5	502.5												
Total Liabilities	A\$m	502.6	502.6	503.0	503.5												
Net Assets	A\$m	287.8	237.1	279.0	420.1												
Net Debt	A\$m	-146.8	217.8	434.8	289.3												
Cashflow	Unit	30 Jun 16	30 Jun 17	30 Jun 18	30 Jun 19												
Operating Cashflow	A\$m	-2.2	-2.4	76.8	244.2												
Income Tax Paid	A\$m	0.0	0.0	0.0	-68.8												
Interest & Other	A\$m	-13.6	-28.0	-29.3	-29.5												
Operating Activities	A\$m	-15.8	-30.4	47.5	145.9												
Property, Plant & Equip.	A\$m	-52.9	-333.9	-264.0	0.0												
Exploration and Devel.	A\$m	-0.4	-0.4	-0.4	-0.4												
Other	A\$m	0.0	0.0	0.0	0.0												
Investment Activities	A\$m	-53.3	-334.3	-264.4	-0.4												
Borrowings	A\$m	502.5	0.0	0.0	0.0												
Equity or "tbc capital"	A\$m	215.4	0.0	0.0	0.0												
Dividends Paid	A\$m	0.0	0.0	0.0	0.0												
Financing Activities	A\$m	717.9	0.0	0.0	0.0												
Net Cashflow	A\$m	648.7	-364.7	-216.9	145.5												
Shares	Unit	30 Jun 16	30 Jun 17	30 Jun 18	30 Jun 19												
Ordinary Shares - End	m	2195.6	2196.6	2216.6	2216.6												
Ordinary Shares - W'ted	m	1318.6	2196.1	2206.6	2216.6												
Diluted Shares - W'ted	m	1339.6	2216.6	2216.6	2216.6												
Ratio Analysis	Unit	30 Jun 16	30 Jun 17	30 Jun 18	30 Jun 19												
Cashflow Per Share	A\$ cps	-1.2	-1.4	2.2	6.6												
Cashflow Multiple	x	-7.8	-6.8	4.4	1.4												
Earnings Per Share	A\$ cps	-1.8	-2.3	1.9	6.4												
Price to Earnings Ratio	x	-5.2	-4.1	5.0	1.5												
Dividends Per Share	AUD	-	-	-	-												
Dividend Yield	%	0.0%	0.0%	0.0%	0.0%												
Net Debt / Net Debt + Equity %		-104%	48%	61%	41%												
Interest Cover	X	na	na	2.4	8.1												
Return on Equity	%	na	na	15%	34%												
Directors								Company Information									
Peter Bennetto (Non Executive Chairman)								Level 1, 350 Hay St									
Jonathan Downes (Managing Director)								Subiaco, WA, 6008									
Adrian Byass (Executive Technical Director)								Ph +61 8 6461 6350									
Gregory Campbell (Executive Engineering Director)								Fax +61 8 6210 1872									
David Kelly (Non Exec, Glencore representative)																	
Chris James (Non Exec, Nyrstar representative)								www.ironbarkgold.com.au									
Gary Comb (Non Exec.)																	
Top Shareholders								Ordinary									
								m sh.		%							
Nyrstar Int								97.7		22.1%							
Glencore								42.0		9.5%							
L1 Capital								33.7		7.6%							
Reserves & Resources								Mt		Zn %		Pb %					
Citronen - High Grade								M+I		5% cut		22.6		6.7%			
Citronen - High Grade								Inf		5% cut		7.3		6.2%			
Citronen - High Grade								Total		5% cut		29.9		6.6%			
Citronen - High Grade								Reserve		5% cut		none		0.5%			
Citronen - Global								M+I		2% cut		94.3		4.1%			
Citronen - Global								Inf		2% cut		37.7		3.8%			
Citronen - Global								Total		2% cut		132.0		4.0%			
Citronen - Global								Reserve		2% cut		none		0.4%			
Production Summary								Unit		Jun 16		Jun 17		Jun 18		Jun 19	
Unbeneficiated Mill Throughput								Mt		0.00		0.00		1.64		3.28	
Processed Mill Throughput								Mt		0.00		0.00		1.10		2.20	
Mined grade Zn								%		0.0%		0.0%		6.4%		7.4%	
Produced Zn								kt		0.0		0.0		93.9		219.1	
Payable Zn								kt		0.0		0.0		79.8		186.3	
Payable Zn Equiv								kt		0.0		0.0		84.1		194.9	
M&I Resource Mid Grade Conversion								%		89.3%		89.3%		90.6%		89.9%	
Mine Life								yr		13.75		13.75		13.75		12.75	
Assumed Mining Inventory								Mt		46.0		46.0		45.1		41.9	
Assumed Mining Inventory - Zn grade								%		5.2%		5.2%		5.2%		5.0%	
Assumed Mining Inventory - Pb grade								%		0.5%		0.5%		0.5%		0.5%	
Capex								-		52.9		-		333.9		-	
Costs								Unit		Jun 16		Jun 17		Jun 18		Jun 19	
Cost per milled tonne								\$A/t		-		-		94.7		100.0	
EBITDA / tonne milled ore								\$A/t		nm		nm		67.7		88.0	
Total cost per milled tonne														104.3		110.1	
Total Cash Costs								\$A/lb Zn eq						0.92		0.84	
C1: Operating Cash Cost = (a)								\$A/lb Zn eq		nm		nm		0.84		0.76	
(a) + Royalty = (b)								\$A/lb Zn eq		nm		nm		0.91		0.84	
C2: (a) + depreciation & amortisation = (c)								\$A/lb Zn eq		-		-		1.05		0.88	
(a) + actual cash for development = (d)								\$A/lb Zn eq		-		-		2.26		0.77	
C3: (c) + Royalty								\$A/lb Zn eq		-		-		1.13		0.95	
(d) + Royalty								\$A/lb Zn eq		-		-		2.34		0.84	
																0.84	
Price Assumptions								Unit		Jun 16		Jun 17		Jun 18		Jun 19	
AUDUSD								US\$/A\$		0.76		0.76		0.78		0.79	
Zinc								US\$/lb		1.08		1.13		1.20		1.20	
Lead								US\$/lb		0.97		1.02		1.06		1.07	
Hedging								Unit		Jun 16		Jun 17		Jun 18		Jun 19	
none																	
Sensitivity Analysis								Valuation				FY19 NPAT					
Base Case								0.17				141.1					
Spot Prices								0.06 (-64.4%)				104.8 (-25.7%)					
Spot USD/AUD 0.76, Zinc \$1.00/lb, Lead \$0.91/lb.																	
AUDUSD +/-10%								0.16 / 0.18 (-4.8% / 5.3%)				130.0 / 154.7 (-7.9% / 9.6%)					
Zinc +/-10%								0.27 / -0.02 (60.3% / -10.5%)				164.9 / 117.3 (16.9% / -16.9%)					
Lead +/-10%								0.17 / 0.16 (4.1% / -4.3%)				142.2 / 140.0 (0.8% / -0.8%)					
Production +/-10%								0.28 / -0.01 (65.0% / -107.5%)				166.9 / 115.3 (18.3% / -18.3%)					
Operating Costs +/-10%								-0.06 / 0.26 (-135.7% / 52.3%)				126.4 / 155.9 (-10.5% / 10.5%)					
Unpaid Capital (excluding convertible notes which are assumed to be never used)																	
Year Expires								No. (m)		\$m		Avg price		% ord			
30-Jun-15								0.0		0.0		0.00		0%			
30-Jun-16								0.0		0.0		0.00		0%			
30-Jun-17								1.0		0.1		0.10		0%			
30-Jun-18								20.0		3.5		0.17		5%			
30-Jun-19								0.0		0.0		0.00		0%			
30-Jun-20								0.0		0.0		0.00		0%			
TOTAL								21.0		3.6		0.17		5%			
Valuation								\$m		\$/shr							
100% Citronen (pre-tax NAV at disc. rate of 12%)								419		0.19							
Other Assets/Exploration								30		0.01							
Forwards								0		0.00							
Corporate Overheads								-13		-0.01							
Net Cash (Debt)								3		0.00							
Convertible notes (assumed converted to equity)								0		0.00							
Tax (NPV future liability)								-69		-0.03							
Options & Other Equity								2		0.00							
Total								372		0.17							
Analyst: Trent Barnett						Last Updated: 13/04/2015											
+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																	

BUSINESS OVERVIEW

IBG is a zinc focussed developer/explorer. The main asset is the world class Citronen project in Greenland.

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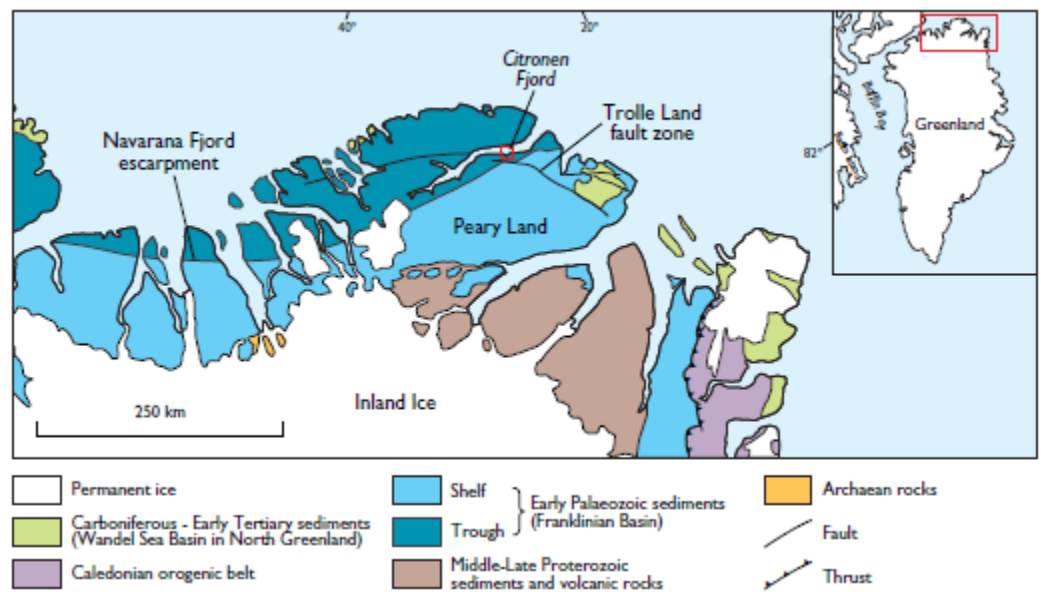
CITRONEN ZINC, GREENLAND

The Citronen Project (Citronen) is located adjacent to the Citronen Fjord in the National Park of North and East Greenland. It is approximately 2,000 km north-northeast from Greenland's capital, Nuuk and 940 km from Qaanaaq – the nearest Greenlandic settlement.

Fig. 1: Project location



Source: IBG

Fig. 2: Project location

Source: <http://www.geus.dk/publications/review-greenland-96/gsb176p44-49.pdf>

Platinova A/S discovered the large zinc and lead mineralisation at Citronen Fjord in 1993. Platinova worked on the project for five years with intensive drilling (32,839m between 1993 and 1997) and environmental studies were conducted. The project was mothballed in the late 1990's due to depressed base metal prices.

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IBG purchased the Citronen zinc project in March 2007 when the project had a resource of 17mt @ 7.8% Zinc and 0.9% lead. The purchase price was \$6M cash and 8M shares in Ironbark, plus 16M options in Ironbark with an exercise price of \$0.30 and maturity date of 1 February 2010 (since expired unexercised). Separately a 2.5% Net Smelter Royalty (NSR) is payable to Platinova.

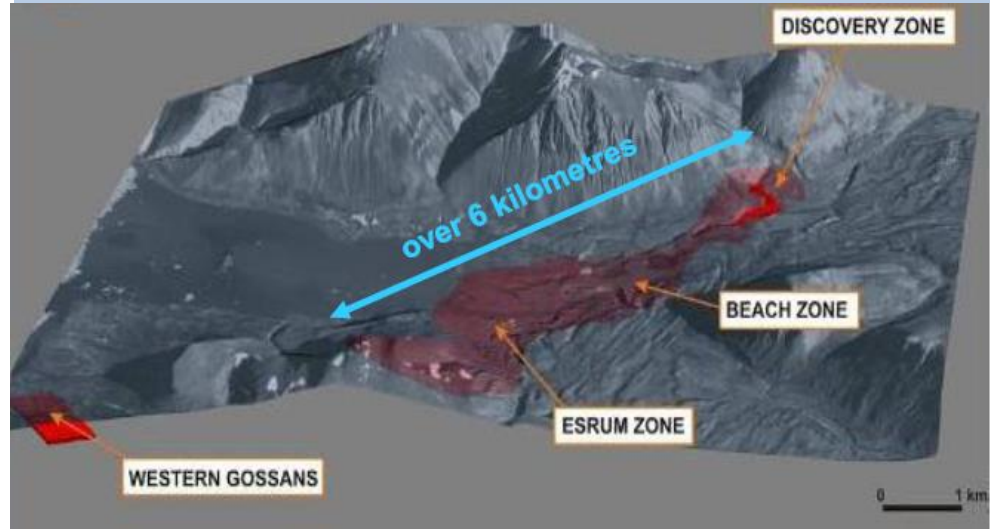
The Citronen deposit is hosted in the Ordovician Franklinian Basin that extends across northern Greenland and into north-eastern Canada and is described as Sedimentary-Exhalative (SEDEX) type deposit.

The deposit consists of five major sulphide mounds, forming three orebodies - the Discovery (open pit), Beach (underground) and Esrum (underground). The mineralisation at Citronen starts from surface, is flat lying and is currently open in all directions.

IBG completed a PFS in early 2009 and is currently undertaking a feasibility study.

The current development plan envisages the process plant being constructed on three barges and towed to site where they will be positioned and joined together on the eastern margin of the Citronen Fjord.

Fig. 3: Citronen Deposit looking East (sulphide horizons in red)

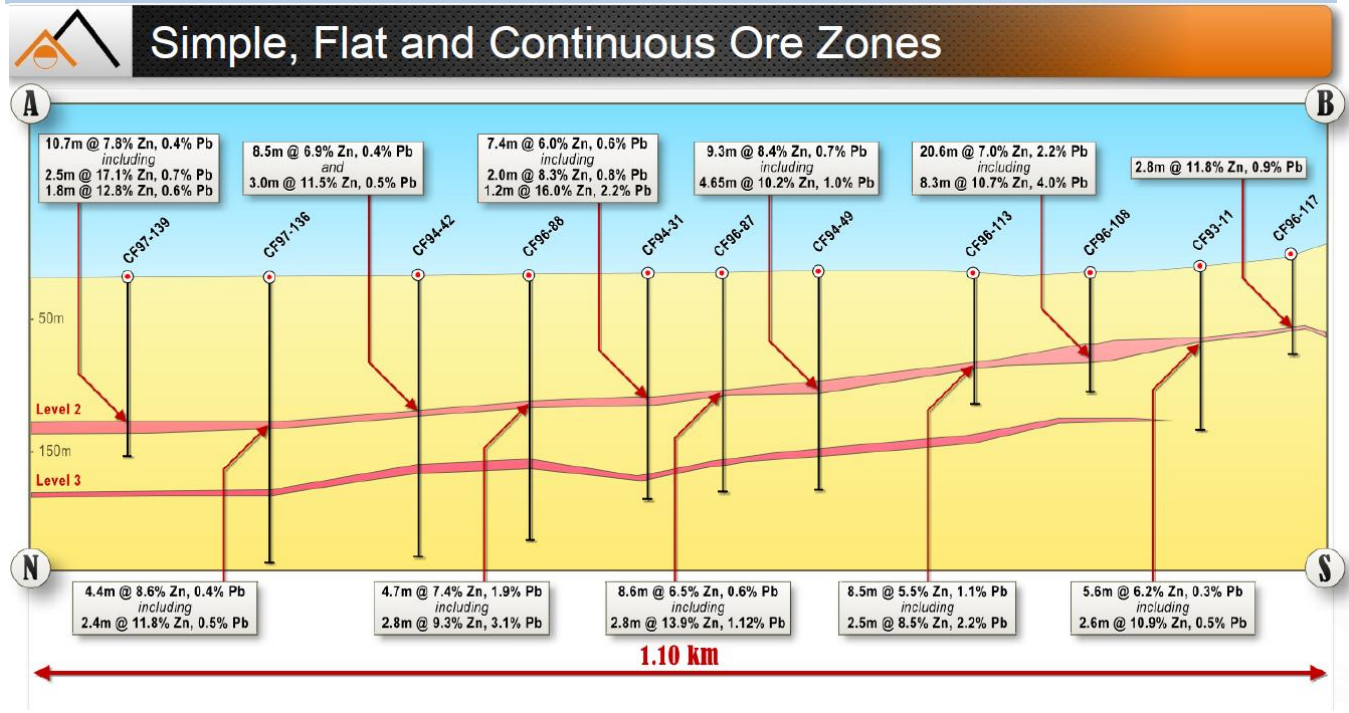


Source: IBG

IBG completed a PFS for Citronen in early 2009 and recently released a DFS for the project (April 2013). The current development plan envisages the process plant being constructed on three barges and towed to site where they will be positioned and joined together on the eastern margin of the Citronen Fjord. The site infrastructure and mine development will be constructed concurrently. The mine plan is to mine underground first (3.3mtpa beneficiated to be processed at 1.8mtpa), and the low grade open pits will be mined near the end of planned mine's life.

The fjord is only free of ice for three months of the year and so it is anticipated the Company will stockpile concentrate through winter months. The DFS assumes a 45 day per year shipping window from mid-July to early September. The company expects to receive payments for concentrate at the time of production discounted by time value to delivery.

Fig. 1: Citronen Deposit looking East (sulphide horizons in red)



Source: IBG

Fig. 2: Latest Citronen Resource

Citronen - High Grade 5% cutoff	M+I	22.6	6.7%	0.5%
Citronen - High Grade 5% cutoff	Inf	7.3	6.2%	0.5%
Citronen - High Grade 5% cutoff	Total	29.9	6.6%	0.5%
Citronen - High Grade 5% cutoff	Reserve	none		
Citronen - Mid Grade 3.5% cutoff	M+I	51.5	5.3%	0.5%
Citronen - Mid Grade 3.5% cutoff	Inf	19.3	4.9%	0.4%
Citronen - Mid Grade 3.5% cutoff	Total	70.8	5.2%	0.5%
Citronen - Mid Grade 3.5% cutoff	Reserve	none		
Citronen - Global 2.0% cutoff	M+I	94.3	4.1%	0.4%
Citronen - Global 2.0% cutoff	Inf	37.7	3.8%	0.4%
Citronen - Global 2.0% cutoff	Total	132.0	4.0%	0.4%
Citronen - Global	Reserve	none		

Source: IBG 2014

The global resource is
132Mt @ 4.5% Zn +
Pb.

MAJOR SHAREHOLDERS

There are three substantial shareholders. Two are industry participants, Nystar (22.1%), Glencore (9.5%) and the other is an investment fund called "L1 Capital" (7.6%).

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Glencore became an IBG shareholder in July 2007 with 12.5m shares via a primary placement at \$0.50. It increased the stake to ~42m shares at \$0.71 in March 2008. Glencore was also granted an off-take for 35% of the product. In late 2011 IBG issued a convertible note to IBG for \$50m convertible at \$0.42 and \$0.50/shr. The convertible note was never drawn down and we assume it will not be drawn.

Nyrstar came onto the register in September 2009 also via a primary placement for 52.8m shares at \$0.125. Nyrstar was also granted a life of mine off-take agreement for 35% of the production from the Citronen deposit and a non-dilutive pre-emptive right that would allow Nyrstar to participate on a pro-rata basis in any future capital raisings in order to maintain its relative shareholding. Six months later (March 2010), Nyrstar took a second primary placement of ~42.3m shares at \$0.35.

Fig. 3: Shareholders

Top Shareholders	Ordinary		Dil. For notes	
	m sh.	%	m sh.	%
Nyrstar Int	97.7	22.1%	97.7	17.6%
Glencore	42.0	9.5%	153.4	27.7%
L1 Capital	33.7	7.6%	33.7	6.1%

Source: IBG

OPTIONS, CONVERTIBLES AND UNPAID CAPITAL

Options

There are 21m options at various strikes and maturities (out-of-the-money).

Fig. 4: Options

Expiry	Exercise Price	number of shares	Unpaid capital
31-Dec-17	\$0.30	5,000,000	1.50
18-Dec-16	\$0.10	1,000,000	0.10
20-Nov-17	\$0.13	15,000,000	2.0
Total	\$0.17	21,000,000	3.6

Source: IBG

In October 2011, IBG entered into an agreement with Glencore for US\$50m of convertible note funding, which was never drawn

Glencore convertible note

In October 2011, IBG entered into an agreement with Glencore for US\$50m of convertible note funding in exchange for off-take at the Citronen project (up to 55% and best endeavours for 100%) plus 100% off-take of all future IBG projects (if off-take is not available on future projects than a 1% revenue royalty instead).

The US\$50m facility is in two tranches:

- Tranche 1: US\$30m may be converted into IBG shares at the election of either Glencore or Ironbark at A\$0.42 per share; and triggers Glencore's right to increase from 35% to 55% of off-take of Citronen.
- Tranche 2: US\$20m may be converted into Ironbark shares at the election of Glencore at A\$0.50 per share;

Interest will accrue at an annualised rate of 5% + LIBOR (London Interbank Offered Rate, currently approximately ~0.85% for a 1 year term). Rights of conversion and redemption commence 18 months after date of issue, and the term of any notes is 4 years following the date of issue.

We assume the notes are never used, particularly as the drawdown triggers an increase in Glencore's off-take from Citronen. We believe that last remaining unallocated off-take (30%) would be better use to negotiate the large Citronen financing package. Consequently, we believe it is highly unlikely that the convertible notes are drawn, at least in their current form.

Nyrstar is a substantial shareholder with 98m shares. It has a non-dilute option which means that it has the option to top up any equity raising by IBG with additional funds at the same terms as such an equity raising may be offered such that Nyrstar does not have its percentage of the ordinary shares outstanding reduced.

Nyrstar non-dilute

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NFC MOU (Memorandum of Understanding)

"China Non Ferrous Industry's Foreign Engineering and Construction Co. Ltd" (NFC) is listed on the Shenzhen Stock Exchange and is based in Beijing. It is primarily an engineering design and construction company but also operates a wide array of mines and processing plants around the world including zinc mines and a zinc smelter.

In September 2011 IBG signed an MOU with NFC which establishes a framework for formal agreements for NFC to engineer, design, procure, supply, construct, test and commission the Citronen project on a full turnkey basis and for NFC to facilitate funding of development costs from major banks in China. Citronen's Feasibility Study with all the supporting studies was been presented (July 2013) to NFC for the purposes of preparing the EPC and financing work, and both Companies subsequently signed a new MOU in April 2014.

The MOU encompasses a 70% debt funding proposal brokered through Chinese banks and provides NFC with a right to buy a 19.9% direct interest in the Citronen Project at the time of decision to mine. The purchase price would be decided by an "independent valuation".

OFF TAKE

For Citronen, Glencore has a current off-take agreement for 35% which will increase to 55% if the convertible note is drawn (we don't believe it will be). Nyrstar has a life of mine off-take agreement for 35% of the production from the Citronen deposit. This leaves 10%-30% unallocated.

The NFC MOU allows for "NFC entering into an offtake agreement for the concentrate products of the Project or a portion thereof".

If Glencore convertible note facility is drawn down, Glencore has first right of refusal effectively for 100% offtake of all other IBG base metal projects (current and future) where available and a 1% revenue royalty if offtake is not available.

ZINC PRICES

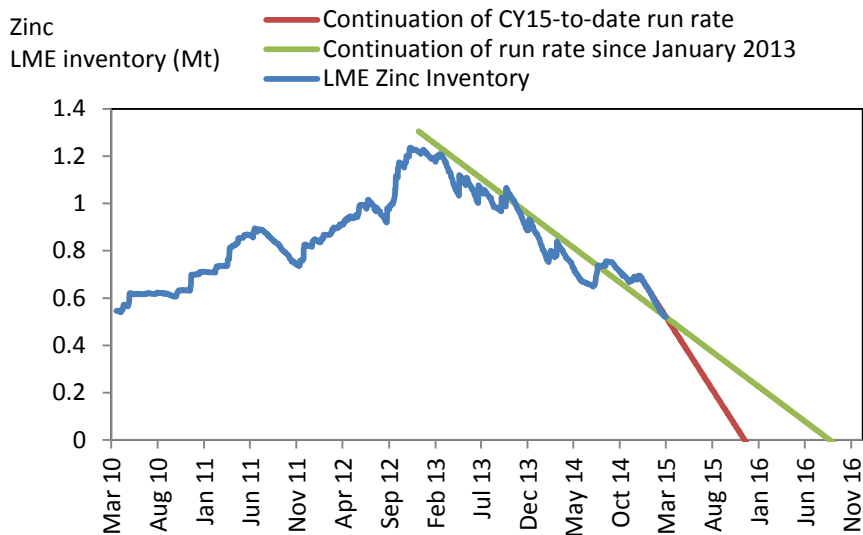
Zinc LME inventories are trending down, and that is ahead of the planned closure of the Century mine later this year.

If the daily inventory draw-down-rate since January 2013 continues (-1.3kt per day), the LME reported inventory will be zero around September 2016 (green line).

In CY15, the run-rate has been faster (-2.8kt per day), and if it continues, LME reported inventory will be zero by end December (red line).

For a simple snapshot on CY14 zinc supply/demand see this....
http://www.ilzsg.org/generic/pages/list.aspx?table=document&ff_aa_document_type=R&from=1.

Fig. 5: LME Inventories



Source: Bloomberg, Hartleys

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VALUATION

The DFS mine plan is for underground ore to be mined first (11 years), and then progress to the lower grade open pits in years 11-14. The operation is expected to have a mining rate of 3.3mtpa (2.2mtpa processing). Operating costs are low at ~US\$52/t ore, although the remote and isolated location means that shipping and logistics costs are meaningful, adding an extra ~\$10/t ore. There are additional smelter fees of ~12-25c/lb, with the fee linked to the prevailing zinc price (adds 13c/lb or \$12/t ore in our model). Consequently total cash costs are expected to be reasonably high. We assume costs of US\$0.80/lb Zn net of credits (CFR, including royalties and our assumed smelter fees) – see Fig 6 below. Based on the recent feasibility study, capex is expected to be US\$484m.

We assume a 46Mtpa mining inventory at 5.2% zinc and 0.5% lead. We assume a ~15 year mine life and ~90% conversion of the mid-grade resource. The resource remains open to further mineralisation but is unproven at this time.

We assume a 3.3mtpa mine operation beginning in late CY16. We assume payable zinc equivalent of >200k tonnes (~400kt concentrate) for the first two years before declining to ~120-160ktpa.

We assume costs of ~\$73/t mined ore which equates to <\$0.80/lb zinc in early years rising to \$0.91/lb in later years.

We assume ~A\$650m of capex spent over two years, funded ~70% debt and ~30% new equity at current prices. Conservatively, we don't assume NFC exercises its right to purchase 19.9% of the project. We assume the debt is funded at 6% (it could be lower). We use a 12% discount rate.

We assume the convertible notes (\$50m) are never drawn.

Fig. 6: Hartleys Cost Assumptions

	Underground only			Open Pit					
	Total	US\$/t ore	US\$/t Zn eq	Total	US\$/t ore	US\$/t Zn eq	Total	US\$/t ore	US\$/t Zn eq
Mine life	11			3			14		
Ore	36.1			9.9			46.0		
grade Zn	5.8%			3.1%			5.2%		
grade Pb	0.5%			0.6%			0.5%		
Payable Zn Mlb	3,522			500			4,022		
Payable Pb Mlb	198			60			258		
Payable Zn eq Mlb*	3,702			555			4,257		
Mining	975	27.0	0.26	69	7.0	0.12	1,044	22.7	0.25
Processing	508	14.1	0.14	165	16.8	0.30	673	14.6	0.16
Overheads (inc corporate)	340	9.4	0.09	99	10.1	0.18	440	9.6	0.10
Logistics	361	10.0	0.10	99	10.0	0.18	460	10.0	0.11
Royalties	176	4.9	0.05	20	2.0	0.04	196	4.3	0.05
Smelter fees	513	14.2	0.14	52	5.3	0.09	565	12.3	0.13
Operating Costs	1,824	50.5	0.49	333	33.8	0.60	2,157	46.9	0.51
+ logistics	2,185	60.5	0.59	432	43.8	0.78	2,617	56.9	0.61
+ royalties	2,361	65.4	0.64	452	45.9	0.81	2,813	61.2	0.66
+ smelting	2,874	79.6	0.78	504	51.2	0.91	3,378	73.5	0.79
TOTAL CASH COSTS	2,874	79.6	0.78	504	51.2	0.91	3,378	73.5	0.79

* assume Zn / Pb price ratio of 110%

Source: Hartleys

DILUTION AND LEVERAGE

The DFS The table below shows our base case valuation (assuming large dilution) and two more optimistic scenarios. Our "Lower Bull Case" valuation assumes the project is funded 100% equity, but at prices closer to the full project value. Our "Maximum Bull Case" valuation assumes the project is funded entirely with debt (or funded with internal cash flow from a larger company).

Fig. 7: IBG leverage to long term zinc prices

Zinc Price per lb		Base Case (aggressive dilution)		Lower Bull Case (100% equity funded)		Maximum Bull Case (100% debt funded)	
AUD*	USD	IBG Val. (A\$/shr)	New Shares (m)	IBG Val. (A\$/shr)	New Shares (m)	IBG Val. (A\$/shr)	New Shares (m)
0.79	0.60		n/a		n/a		0
0.92	0.70		n/a		n/a		0
1.05	0.80		n/a		n/a		0
1.19	0.90		n/a		n/a		0
1.32	1.00	\$ 0.04	4775	\$ 0.02	24102	\$ 0.26	0
1.45	1.10	\$ 0.16	1510	\$ 0.23	2336	\$ 0.54	0
1.58	1.20	\$ 0.22	1348	\$ 0.45	1251	\$ 0.82	0
1.71	1.30	\$ 0.28	1288	\$ 0.69	855	\$ 1.10	0
1.85	1.40	\$ 0.33	1257	\$ 0.93	650	\$ 1.37	0
1.98	1.50	\$ 0.39	1239	\$ 1.19	524	\$ 1.65	0
2.11	1.60	\$ 0.44	1226	\$ 1.44	439	\$ 1.93	0
2.24	1.70	\$ 0.50	1217	\$ 1.70	378	\$ 2.21	0
2.37	1.80	\$ 0.55	1210	\$ 1.96	332	\$ 2.49	0
2.50	1.90	\$ 0.60	1204	\$ 2.23	296	\$ 2.77	0
2.64	2.00	\$ 0.66	1200	\$ 2.49	267	\$ 3.03	0

Source: Hartleys. Valuations based on a 12% discount rate.

PRICE TARGET

Our price target is a blended valuation based on a scenario of different of commodity price assumptions and capital raising prices.

Fig. 8: Price Target Methodology

Price Target Methodology	Weighting	Spot	12 mth out
NPV base case, assuming significant equity dilution	13%	\$0.17	\$0.18
NPV at spot commodity and fx prices	30%	\$0.06	\$0.06
NPV using spot fx, but zinc prices a US\$1.37/lb	5%	\$0.43	\$0.48
NPV upper end consensus profile	5%	\$0.35	\$0.39
AUD zinc price calls (1.9Mt over 12yrs, avg strike @A\$1.07/lb)	17%	\$0.48	\$0.48
Net cash	25%	\$0.01	\$0.01
NPV using spot fx, but zinc prices at US\$1.60/lb, <u>no equity dilution</u>	5%	\$1.93	\$2.16
Risk weighted composite		\$0.26	
12 Months Price Target		\$0.28	
Shareprice - Last		\$0.094	
12 mth total return (% to 12mth target + dividend)		196%	

Source: Hartleys

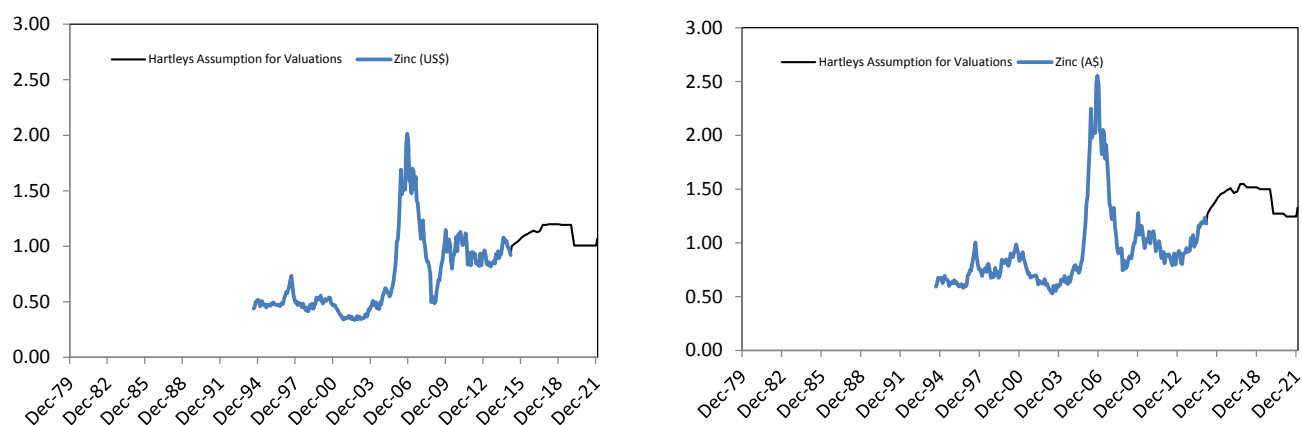
CONCLUSION

We view IBG as a high risk investment and speculation on rising zinc prices or a takeover. Using our base case zinc prices our valuation (NPV₁₂) is 17cps (after assumed dilution). There is further substantial upside if one uses credible, but higher than sell-side consensus, zinc price assumptions (ie if one uses the prices expected by many industry sources rather than those expected by equity markets). We have a 28cps twelve month price target, based on better zinc prices.

Fig. 9: Companies with high exposure to zinc prices are very volatile, but have an ability to “rocket” from the bottom of a zinc cycle



Source: Hartleys, IRESS

Fig. 10: Zinc Price assumptions

Source: Hartleys, Bloomberg

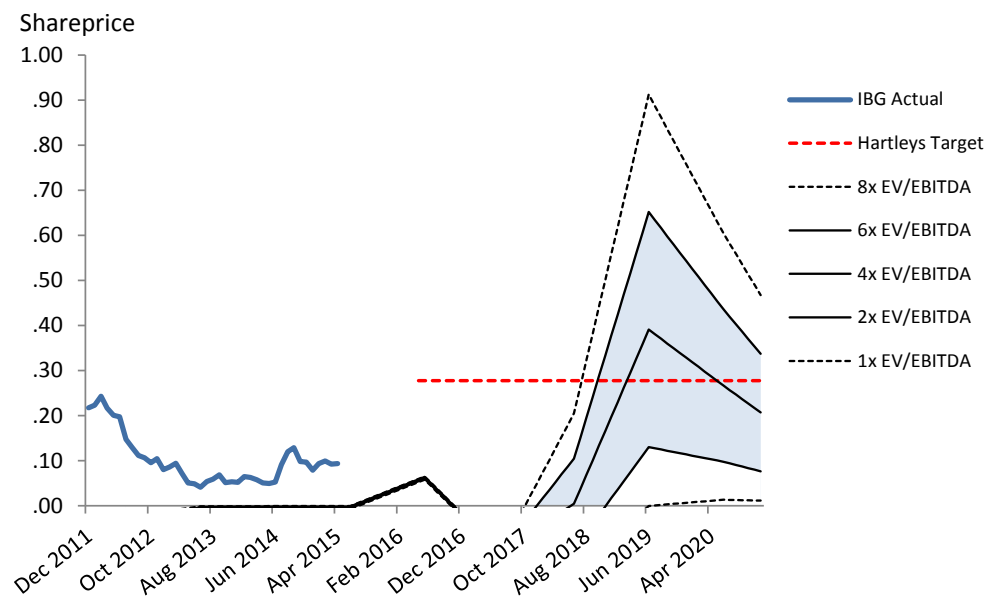
Fig. 11: Key assumptions and risks for valuation

Assumption	Risk of not realising assumption	Downside risk to valuation if assumption is incorrect	Comment
Fourteen year mine life	Low	Upside	The current high grade resource implies a mine life of >15years.
Zinc price rises	Moderate	Upside	Our zinc price assumptions imply prices rise over coming years.
Large proportion of capex is funded with debt	Moderate to high	Not meaningful	The long mine life should support debt funding
Conservatively, we don't assume NFC exercises its right to purchase 19.9% of the project.	Moderate	Upside	We assume the project equity is financed by IBG shareholders, and they do not receive an equity injection from any "farm-out"
Limited value for exploration and other projects	Moderate	Upside	The other assets may have exploration success
Conclusion <i>IBG still has funding risk, which reduces as zinc prices increase (in our view). Consequently, we view IBG as leveraged to rising zinc prices.</i>			

Source: Hartleys

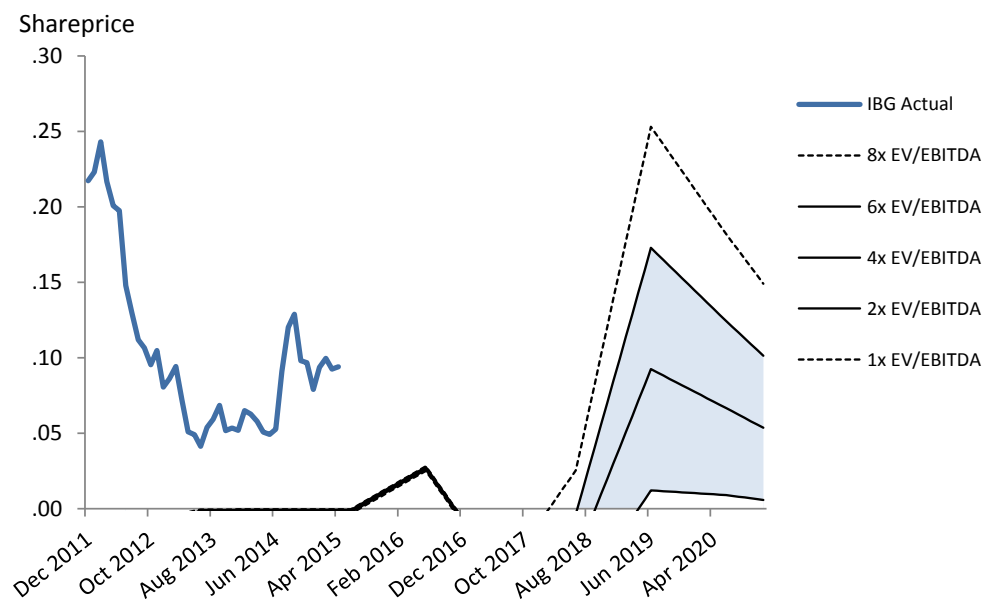
EV/EBITDA BANDS

Fig. 12: Using *Hartleys base case commodity forecasts*



Source: Hartleys Estimates, IRESS

Fig. 13: Using *spot commodity prices*



Source: Hartleys Estimates, IRESS

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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	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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