

HIGHLY LEVERAGED ZINC PROJECT LIKELY TO BE FUNDED IN THE NEAR TERM

Investment Highlights

- **We are initiating coverage of Ironbark Zinc Limited (IBG) with a Speculative Buy rating and \$0.35/sh price target.** IBG is focussed on developing its fully permitted Citronen Fjord Zinc project (100%) (Citronen) located in northern Greenland. The project is a globally significant zinc project with a contemplated 14-year mine life and peak production rate of c.200,000tpa of zinc metal. In addition, the deposit has outstanding exploration upside. Based on our price forecasts, we estimate the project generates >US\$150mpa in free-cash generation with a payback period of c.2.5 years. We believe that the current supportive zinc pricing environment should allow the project to be financed and move towards construction potentially in 2018. IBG has a supportive shareholder base with Nyrstar and Glencore on the register. In addition, IBG has the support of China Non-Ferrous (NFC) who are looking to potentially fund the project.
- **Significant Zinc Project with Strong Upside:** We see the Citronen Project as having the potential to significantly exceed the contemplated 14-year mine life. Citronen is a SEDEX style deposit and these tend to be very large whilst maintaining excellent grades. IBG has published an exploration target of 302-347Mt at 4.4-5% Zn over the 11km of strike of known mineralisation which suggests a potential mine life of over 100 years is possible. This significantly exceeds the last published Mineral Resource of 70.8Mt at 5.7% Zn+Pb.
- **Funding the Key for Development:** We believe the current supportive zinc pricing environment will likely allow Citronen to be funded. IBG recently signed a MoU with China Non-Ferrous for an engineering procurement and construction (EPC) lump sum, fixed price construction and commissioning contract with associated 70% debt and 20% direct project investment. In addition, IBG is examining alternative non-Chinese proposals for project funding.
- **Supportive Shareholders:** IBG has a supportive shareholder base with Nyrstar and Glencore owning 19% and 9% of the stock respectively. Treatment charges especially out of China are rapidly reducing as there is increased demand for good quality zinc concentrates (such as Citronen) to blend with lower quality ores.
- **Valuation:** We have determined a valuation of \$0.35/sh. Our valuation is based on the recent updated feasibility assuming the project is funded 70% debt and 30% equity via a highly dilutive capital raising.

Year End June 30	2018F	2019F	2020F	2021F	2022F
Reported NPAT (\$m)	(2.0)	(14.4)	(42.5)	122.6	292.0
Recurrent NPAT (\$m)	(2.0)	(14.4)	(42.5)	122.6	292.0
Recurrent EPS (cents)	(0.1)	(0.7)	(2.1)	6.1	10.5
EPS Growth (%)	na	na	na	na	131.9
PER (x)	(117.8)	(16.6)	(5.6)	2.1	0.7
EBITDA (\$m)	(2.9)	(5.3)	(5.4)	200.3	283.0
EV/EBITDA (x)	7.2	(43.8)	(126.5)	3.6	0.8
Capex (\$m)	0.0	182.0	307.9	224.5	20.1
Free Cashflow	(2.0)	(196.4)	(350.5)	(68.6)	243.1
FCFPS (cents)	(0.1)	(12.6)	(22.5)	(4.5)	12.0
PFCF (x)	(70.9)	(0.7)	(0.4)	(2.1)	0.6
DPS (cents)	0.0	0.0	0.0	0.0	0.0
Yield (%)	0.0	0.0	0.0	0.0	0.0
Franking (%)	25.0	0.0	0.0	0.0	0.0

24 November 2017

12mth Rating	SPECULATIVE BUY	
Price	A\$	0.070
Target Price	A\$	0.35
12mth Total Return	%	393.0

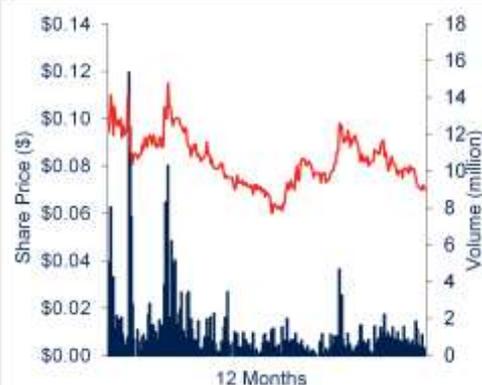
RIC: IBG.AX		BBG: IBG AU	
Shares o/s	m		539.4
Free Float	%		88.5
Market Cap.	A\$m		37.8
Net Debt (Cash)	A\$m		-1.5
Net Debt/Equity	%		na
3mth Av. D. T'over	A\$m		0.06
52wk High/Low	A\$		0.12/0.06
2yr adj. beta			1.37

Valuation:

Methodology		DCF
Value per share	A\$	0.35

Analyst:	Simon Tonkin
Phone:	(+61 8) 9225 2816
Email:	stonkin@psl.com.au

12 Month Share Price Performance



Performance %	1mth	3mth	12mth
Absolute	-10.0	-20.0	-23.4
Rel. S&P/ASX 300	-12.2	-24.6	-32.2

SUMMARY

We are initiating coverage of Ironbark Zinc Limited (IBG) with a Speculative Buy rating and price target of \$0.35/sh. The Company has exposure to zinc through its fully permitted Citronen Fjord Zinc Project (Citronen) in Northern Greenland. IBG recently released an updated feasibility which demonstrated a robust 14-year project with an NPV (8%; pre-tax) of over US\$1bn and IRR of 36%. Based on our price forecasts, we estimate the project generates >US\$150mpa in free-cash generation with a payback period of c.2.5 years. In addition, we see significant exploration upside with the deposit given that Citronen is a Sedimentary exhalative deposit (SEDEX). These style of deposits can be very large to giant in size (eg. Century, Mt Isa and Broken Hill). The Company has established an exploration target which could potentially add a further 100 years of mine life based on the current throughput rates.

In the near to medium term the Company is looking to fund the projects upfront capital price tag of US\$514m. A positive outcome here could allow for project construction to commence in 2018. In January 2017, the Company signed a MoU with China Non-Ferrous (NFC) whereby it would take a 20% interest in the project which would essentially provide the equity component for IBG and NFC would provide debt funding to IBG for the other 70%. This appears to be an attractive option with NFC currently reviewing the updated feasibility. However, given the positive zinc price there will likely be alternative proposals for the Company to consider.

Importantly, IBG has a supportive shareholder base with Nyrstar and Glencore holding 19% and 9% respectively. IBG has signed offtake arrangements to supply 35% of its concentrate to Nyrstar and 35% to Glencore respectively.

We believe that the current supportive zinc pricing environment should allow the project to be financed and move towards construction potentially in 2018.

VALUATION

We have determined a Net Asset Value (NAV) of \$0.35/sh for IBG (Figure 1). We have based our Citronen valuation of \$427m or \$0.21/sh in accordance with the updated feasibility results released in September 2017 using our pricing estimates. The feasibility presented a 14-year mine life plan utilising a throughput rate of 3.3Mtpa with a peak production rate of 200,000tpa of zinc metal (average 150,000tpa LOM). The upfront capital cost is US\$514m and operating costs are estimated at US\$0.66/lb (payable; after by-product credits). The project will use proven dense media separation (DMS) and flotation techniques to produce separate zinc and lead concentrates. We do note the potential for this to be a much larger project given the significant exploration upside. In a supportive resources market the large blue-chip miners would likely be willing to pay a premium for a cycle proof project with a significantly long mine life such as Citronen.

We have assumed funding using a highly dilutive 30% equity raise (c. US\$154m; based on a 10% discount to the current share price) and 70% debt (US\$360m) based on an interest rate of 8%.

On taxation, we have used a tax rate of 30% which is consistent with that used in Australia. IBG has reported accumulated tax losses of c\$71m of which we assume \$50m is usable.

Figure 1: Patersons IBG Valuation

Valuation	US\$m	A\$m	A\$/sh
Citronen (post-tax)	320	427	0.21
Other Projects	10	13	0.01
Exploration	20	27	0.01
Forward Sales	0	0	0.00
Equity Investment	0	0	0.00
Corporate	(19)	(25)	(0.01)
Unpaid Capital	154	205	0.10
Tax Losses	38	50	0.02
Debt	0	0	0.00
Cash	1	2	0.00
NAV @ 8% Discount Rate	524	699	0.35
Price Target	524	699	0.35

Source: Patersons Securities Limited

The deposit is relatively flat lying and will be mostly exploited from underground using the room and pillar mining method with a small low-strip open-pit operation at the end of the mine life. The mine will operate all year around with a 3-month shipping window given the project is above the 80-degree north latitude and has the potential to encounter thick ice during the winter months. Importantly, IBG is expected to be paid by the smelters a significant portion (c.90%) of the zinc concentrate produced at the end of each month. The project has an on-site airstrip which can supply the project all-year-round.

SENSITIVITIES

Based on our analysis the project is most sensitive to zinc price/grade (30% for a 10% delta), operating costs (14%), upfront capital (8%), Minable Tonnes (1%) and Lead price (1%). We have conducted a spot analysis of our IBG valuation based on various US\$ zinc pricing (Figure 2). At current spot pricing (highlighted in yellow), we calculate a valuation of \$0.63/sh with an average EBITDA(US\$m) of \$247mpa and payback of 1.9 years.

Figure 2: Sensitivity Table US\$ zinc price vs Our Valuation

Zinc Price (US\$/lb)	IBG Valuation (\$A/sh)	Average EBITDA (US\$ mpa)	Approx Payback (years)
\$0.90	\$0.09	\$86	8.5
\$1.00	\$0.18	\$113	5.9
\$1.10	\$0.27	\$140	4.5
\$1.20	\$0.36	\$167	3.5
\$1.30	\$0.45	\$193	2.8
\$1.40	\$0.54	\$220	2.3
\$1.50	\$0.63	\$247	1.9
\$1.60	\$0.72	\$274	1.8
\$1.70	\$0.80	\$301	1.8
\$1.80	\$0.89	\$327	1.7
\$1.90	\$0.98	\$354	1.6
\$2.00	\$1.07	\$381	1.5

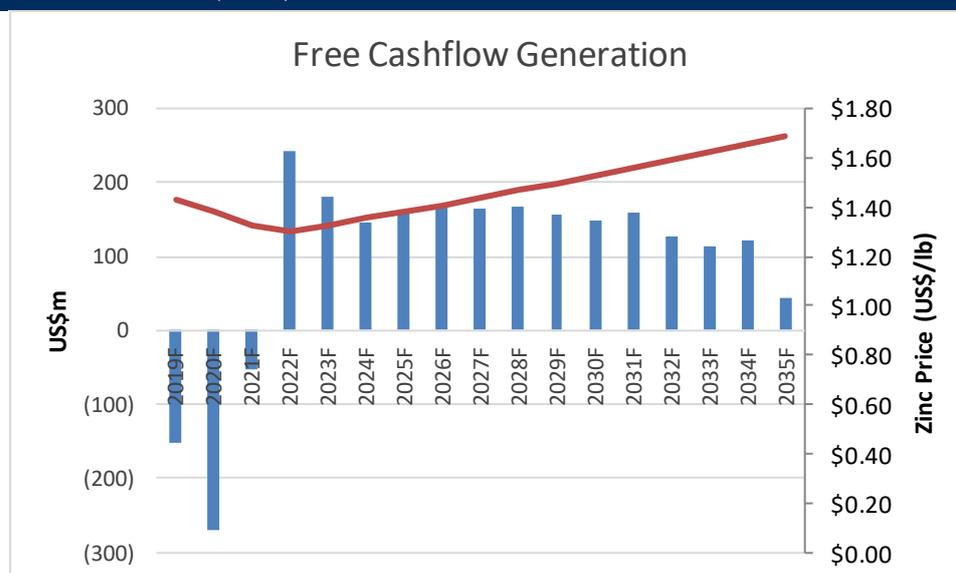
*yellow = approx spot zinc price

Source: Patersons Securities Limited

Strong Cashflow (based on our pricing)

In Figure 3, we outline the strong project free-cash flow. The project generates significant free-cashflow of >US\$150mpa over 10 years. Our zinc price forecasts are on the secondary axis.

Figure 3: Annual Free-Cashflow (US\$m) Based on Patersons Zinc Price Forecasts



Source: Patersons Securities Limited

ASSETS

Greenland Projects

Citronen Fjord Zinc Project

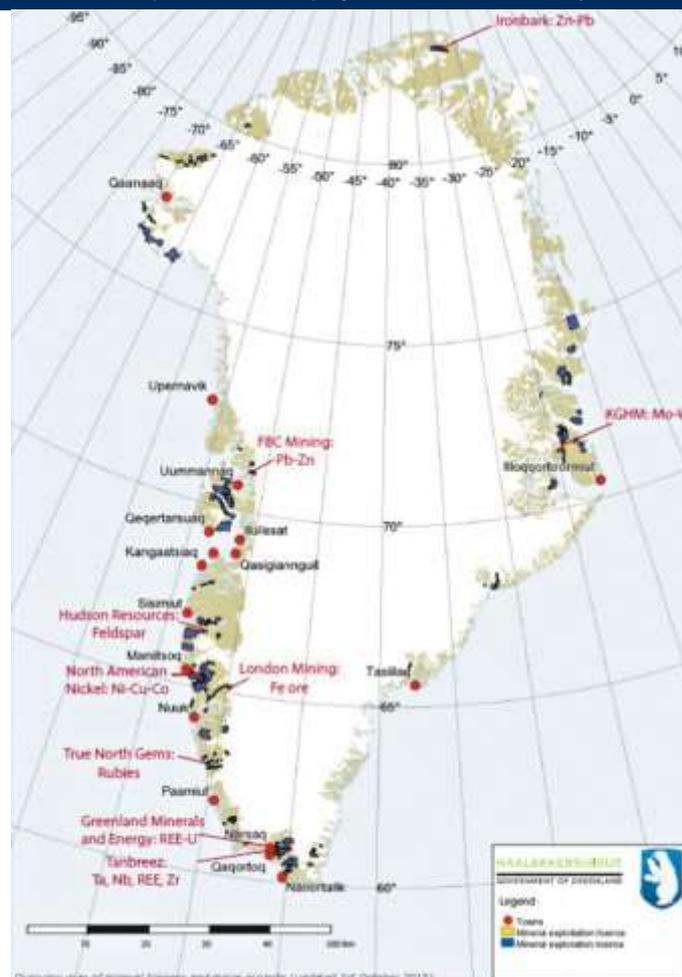
The Citronen Project is located in the Northern Region of Greenland on the coast of the Greenland Sea (Figure 4). The property covers an area of approximately 36 km² and contains three main deposits, referred to as Esrum, Discovery and Beach Zones. The Citronen deposit is considered to be of a Sedex style zinc deposit starting at the surface, shallow, flat lying and adjacent to a deep-water fjord. The lead zinc ore mineralisation of sphalerite and galena is mainly found in a primary zone within the Palaeozoic Franklandian Basin rock types found in northern Greenland.

The Citronen deposit was discovered by Platinova in 1993. Platinova conducted extensive geological mapping, geophysics and drilling programmes during the summers of 1993 to 1997 with over 33,000m of diamond drilling for 143 holes completed and four main prospects were identified (Discovery, Beach, Esrum and the Western Gossans).

IBG acquired the Citronen Project in early 2007 and during summer completed an intensive sampling program of previously un-assayed Platinova drill core.

IBG has since actively explored the Project from 2008 and has completed 166 holes for 32,240m, bringing the total drilling completed at Citronen to 313 holes for 67,069m. This has resulted in a significant resource upgrade in terms of tonnes and confidence.

Figure 4: Mineral Projects in Greenland (IBG's Citronen project located in the north)



Source: Government of Greenland

Mineral Resource Estimate

IBG released an updated Mineral Resource estimate on 25 November 2014. We note that 72% of the overall Mineral Resource is in the Measured and Indicated category. The Mineral Resource is based on 315 holes totalling 67,083m of diamond drilling.

Figure 5: Citronen Mineral Resource Estimation (JORC 2012 – Released 25 November 2014)

70.8 million tonnes at 5.7% Zn + Pb

Category	Mt	Zn%	Pb%	Zn+Pb%
Measured	25.0	5.0	0.5	5.5
Indicated	26.5	5.5	0.5	6.0
Inferred	19.3	4.9	0.4	5.3

Using Ordinary Kriging interpolation and reported at a 3.5% Zn cut-off

Including a higher grade resource of:

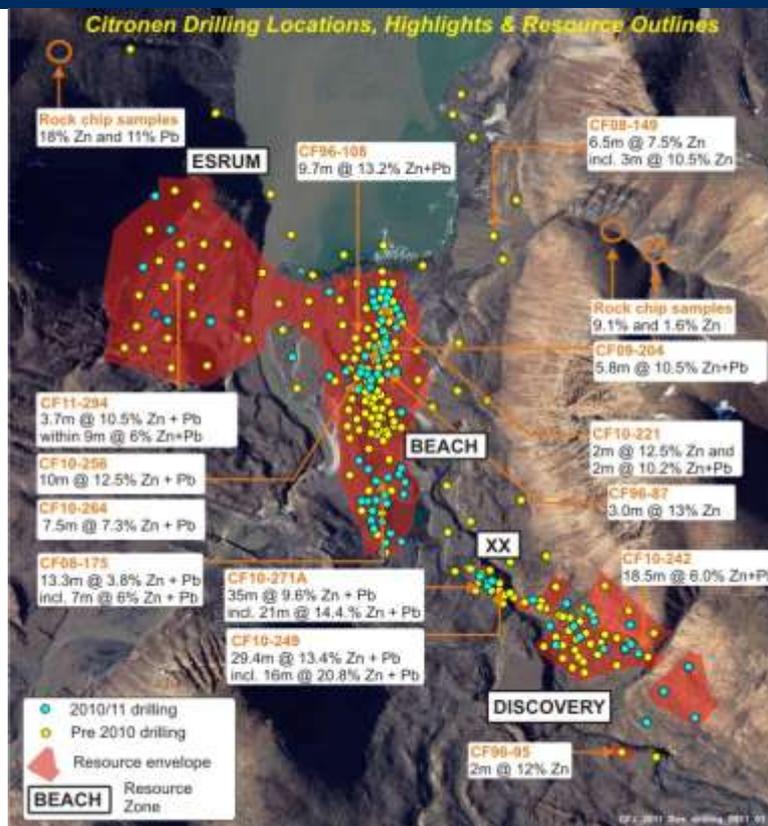
29.9 million tonnes at 7.1% Zn + Pb

Category	Mt	Zn%	Pb%	Zn+Pb%
Measured	8.9	6.6	0.6	7.2
Indicated	13.7	6.8	0.5	7.3
Inferred	7.3	6.2	0.5	6.6

Using Ordinary Kriging interpolation and reported at a 5.0% Zn cut-off

Source: Ironbark Zinc Limited

Figure 6: Citronen Project drill holes and resource outline



Source: Ironbark Zinc Limited

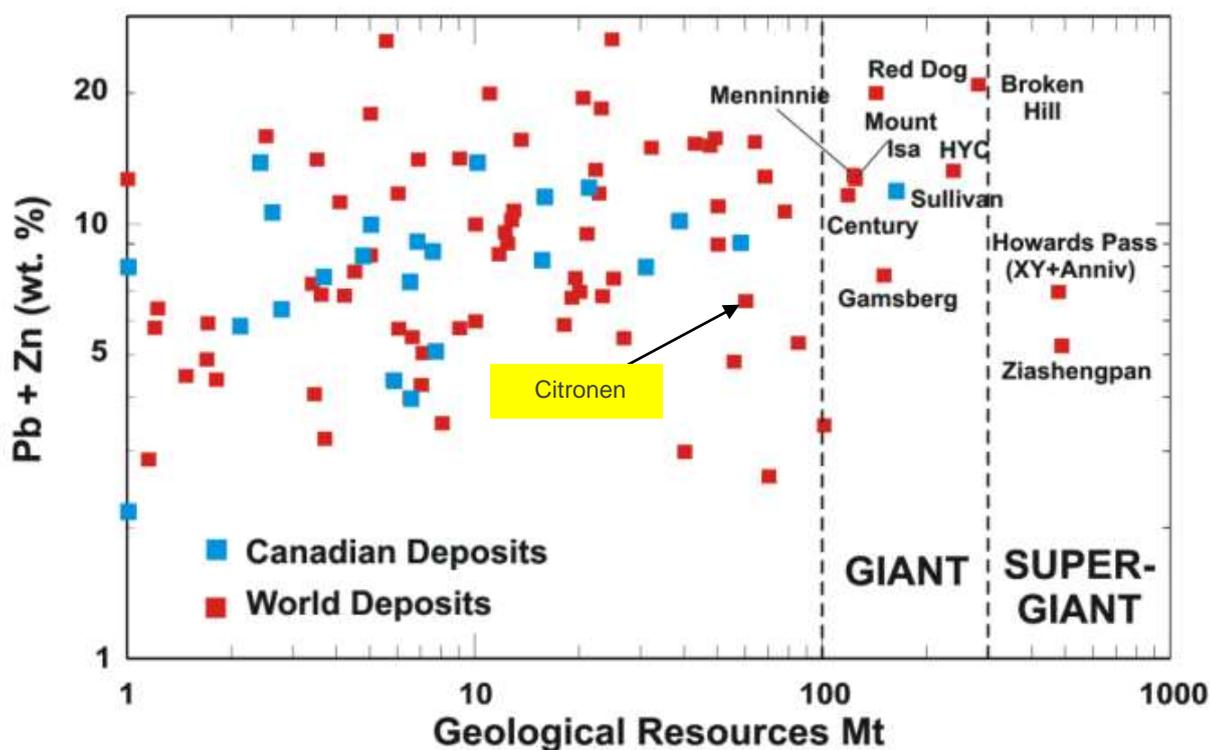
Citronen: A Sedex Style Deposit (These tend to be large to Giant)

The Citronen Deposit is interpreted as belonging to the SEDEX class Zn-Pb-Ag deposits (Figure 7) forming syn-depositionally with sedimentation. The geology of northern Greenland is contemporaneous to that of parts of the Canadian arctic islands and Alaska, which also host several large base metal deposits of SEDEX and Mississippi Valley Type (MVT).

SEDEX deposits are formed in submarine environments by the precipitation of sulphides from metal bearing fluids introduced onto the seafloor through underlying fractures which act as metal-bearing fluid conduits. Large amounts of sulphur are precipitated principally as pyrite and focused around vent areas or ‘mounds’ on the sea floor. Base metal (Zn + Pb) bearing sulphides at Citronen are predominantly located within laminate horizons surrounding these larger sulphide accumulations.

The formation of these SEDEX deposits are similar to that of the VMS deposits. Both are 1) deposited on the seafloor at the same time as the host rocks 2) Massive Sulphide Lenses 3) Often form in clusters or stacked lenses and the metal is transported as chloride complexes in brines. Sedex deposits are usually formed in fault bounded sedimentary basins on continental crust, not oceanic. Host rocks are usually shales and 100% from host sediments/basement and not intrusive. There are insignificant in copper and gold and mainly zinc, lead and silver.

Figure 7: Global SedEx Deposits



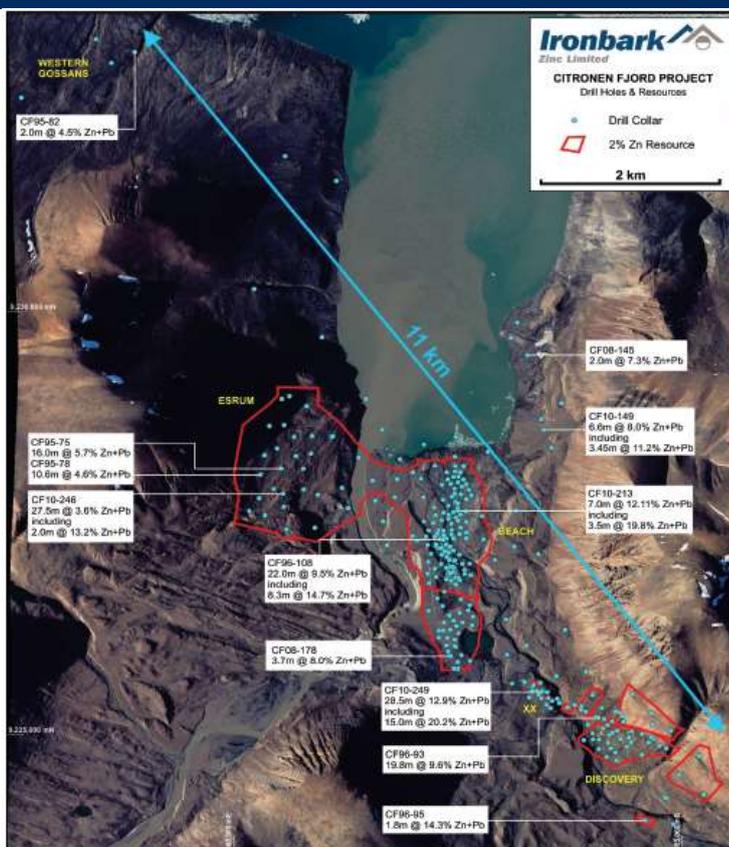
Source: <https://www.911metallurgist.com/blog/wp-content/uploads/2015/10/sedex-are-larger-than-vms.png>

Exploration Upside

A total of 315 diamond drill holes totalling 67,083m have been completed at the project since exploration began in 1993. The strike length of the mineralised holes of economic grade is 11 km and the strike length of the area containing the current resource is over 6.5km (Figure 8). 91% of effectively drilled holes (holes completed to target depth) at the project have intersected sulphide mineralisation with 73% of the holes intersecting economic mineralisation of more than 2.0m at 3.5% Zinc. The project is open in almost every direction and many economic intercepts are outside the current resource wireframe.

In 2010, IBG published an exploration target of 302-347Mt at 4.4-5% Zn. This demonstrates that the project has the potential to enter the Giant or Super-Giant area in Figure 5. Based on the current throughput rate this would mean that the project could have another 100 years of mine life. Such a long-term project would likely attract the attention of the large diversified miners seeking large low cost long life projects.

Figure 8: Citronen Project drill holes and resource outline highlighting the strike length of known mineralisation and high grade drill intercepts including outside or at the edge of the current resource.



Source: Ironbark Zinc Limited

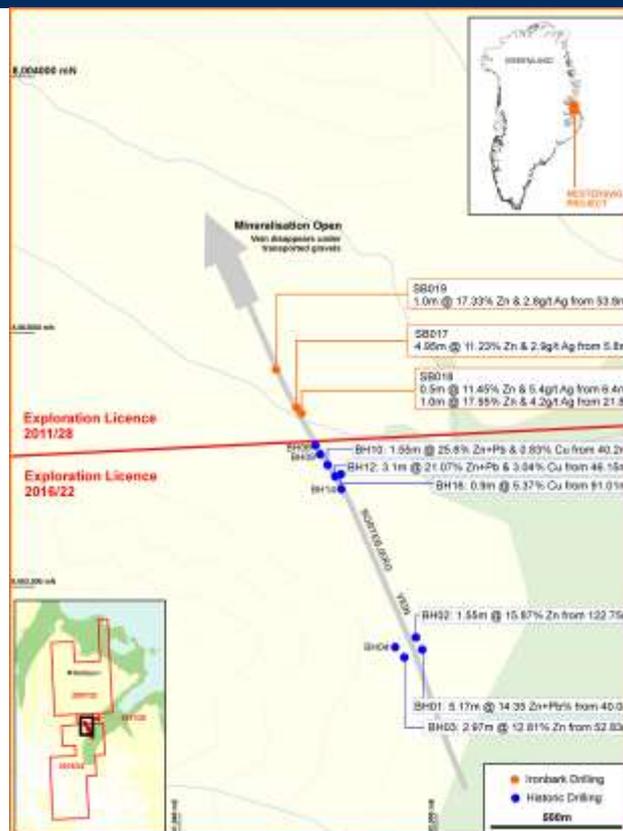
Mestersvig

The Mestersvig Base Metal Project in eastern Greenland comprises three 100% Ironbark owned exploration licences which contain the historic high-grade Blyklippen Zinc-Lead Mine and the outcropping Sortebjerg Zinc-Lead Prospect.

Blyklippen Mine

The Blyklippen base metal mine operated between 1956 and 1962 and produced 544,600t of high-grade ore in excess of 20% zinc + lead for a recovered grade of 9.9% zinc and 9.3% lead. Previous explorers identified additional mineralised structures near the main mine and the project area is considered prospective. In its 2011 exploration programme, Ironbark drilled under the historic mine to test for deep extensions. Three diamond holes were drilled and all intersected a mineralised structure at depth (Figure 9).

Figure 9: Mestersvig project – Plan View Drilling



Source: Ironbark Zinc Limited

Sortebjerg Prospect

The Sortebjerg prospect is located 8km south of the Blyklippen mine on the same north-trending fault zone. During the 1950's a 16-hole drilling program was conducted in the area that returned significant zinc and lead grades. During the 2011 exploration season, Ironbark drilled three diamond holes to the north of the historic drilling area that returned significant intercepts including;

SB017: 4.95m at 11.2% Zn and 3.0 g/t Ag from 5.8m

SB018: 0.5m at 11.45% Zn and 5.4g/t Ag from 6.4m

1.0m at 17.95% Zn and 4.2g/t Ag from 21.8m

SB019: 1.0m at 17.33% Zn and 2.8g/t Ag from 53.8m

Washington Land Project

The Washington Land Project in North West Greenland contains the Cass Fjord base and precious metals prospect which was discovered in 1999 during helicopter reconnaissance. Zinc, lead and barium mineralisation was found at surface along a lineament. A single diamond hole was drilled vertically into one of the mineralised areas shortly after discovery and returned 1.2m at 8.4% Zn and 98 g/t Ag from 2m depth.

No follow up work was performed until Ironbark drilled the prospect in August 2011. Eleven widely spaced holes over a 2.7km strike length were drilled and all were mineralised with intercepts at depth.

In 2011, Ironbark announced the assay results from its drilling programme at Washington Land. Significant widths of high-grade, primary zinc-lead-silver-barite mineralisation were drilled around and along strike from the single discovery drill hole completed by Rio Tinto PLC ("Rio Tinto") in 1999 at the Cass Fjord Prospect.

All holes drilled over a 2.7km strike were mineralised with follow up drilling planned for 2012. The results validate the Washington Land project as having the potential to host a large scale base metal resource.

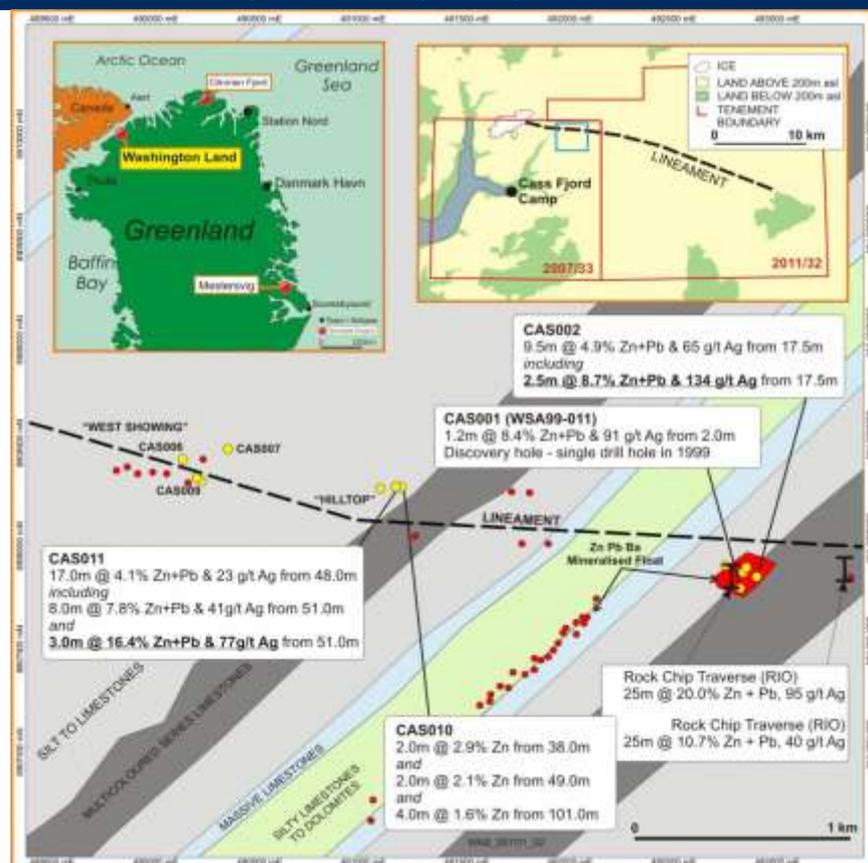
Significant intercepts included:

CAS011 – 3m at 16.4% Zn + Pb, 77 g/t Ag within 17m at 4.1% Zn + Pb, 23 g/t Ag from 48m,

CAS002 – 2.5m at 8.7% Zn + Pb, 134 g/t Ag within 9.5m at 4.9% Zn + Pb, 65 g/t Ag from 17.5m,

This prospect was identified during brief helicopter reconnaissance in 1999 by Rio Tinto and only one drill hole was completed before pre-planned demobilisation of the regional exploration programme 80km away. No follow-up work occurred until Ironbark's drilling programme in 2011.

Figure 10: Mineralisation and drill intercepts at the Cass Fjord Prospect



Source: Ironbark Zinc Limited

AUSTRALIAN ASSETS

IBG's mineral assets in Australia comprises of two base and precious metal projects in New South Wales (NSW). The Captains Flat Project contains the historic Lake George Mine and together with the adjoining Peakview project, which contains several base and precious metal prospects, covers a strike length of over 80km of prospective geology. IBG also owns the Fiery Creek Prospect in NSW which consists of the historic Fiery Creek and Macanally gold and copper working from the early 1900's that extend for over 7km.

RISKS

Below we have identified a number of risks which may impact IBG. These are by no means a completed list of risk and there may be others beyond those identified:

Financing: The Citronen Project will require large scale financing to be successfully completed and there is no certainty that this can be achieved. However, at current zinc prices the project appears to generate significant returns that should support financing.

Geographical Location & Access: The mine site is located at latitude 83 degrees north and is 940 km from the nearest Greenlandic settlement. The project location comes with inherent weather and access difficulties. While year-round access to site may be obtained via aircraft, ocean access is possible only during the summer months; this is due to sea ice and requires the use of special ice class of vessels. This circumstance influences on the import to site of bulk supplies and the export of concentrate products.

Project Execution: The above mentioned geographical difficulties could result in delayed project completion due to the missing of weather windows required for shipping access. Such a delay would have a negative effect on our estimated financial indicators.

Commodity Price Risk: This Project is very sensitive to zinc price; based on our modelling a 10% move in zinc price results in a 30% move in our valuation. The various market forecasts for future zinc price are very favourable;

Currency Risk: The operation of the Citronen Project involves several currencies (including the Australian, US & Canadian Dollars, Danish Kroner, and Chinese Yuan) and is therefore also sensitive to the fluctuation in foreign rates. We have modelled the project in US dollars.

Mining Risks: We see a relatively low risk associated with the mining and extraction of ore at Citronen. The ore body's nature and orientation are well understood and the room and pillar mining method has been selected as the most appropriate for this style of deposit. The Company is confident this understanding will achieve the maximum possible head grade for the mine.

Metallurgy: IBG has completed extensive metallurgical testwork and has returned zinc recoveries over 90%. The Company is confident that the recoveries achieved during mining will reflect the testwork completed to date and the risk of poor recoveries is very low.

DIRECTORS AND MANAGEMENT

Peter Duncombe Bennetto GAICD, SA Fin

Non-Executive Chairman

Mr Bennetto has over 30 years' experience in banking and investment. He has had deep involvement in capital, currency and commodity markets with Societe Generale and Banque Indosuez. Mr Bennetto has held company director positions in exploration, mining and manufacturing companies listed on the ASX since 1990. Peter was also a founding director of Anaconda Nickel Ltd.

As at 30 June 2017 holds 2.6m IBG shares and 1m options.

Jonathan C. Downes B.Sc Geol, MAIG

Managing Director

Mr Downes has over 18 years' experience in the minerals industry and has worked in various geological and corporate capacities. He is experienced in nickel, gold and base metals and has also been intimately involved with numerous private and public capital raisings.

Mr Downes is on the board of several ASX-listed companies; he is a founding director of Hibernia Gold (now Moly Mines Limited) and Siberia Mining Corporation Limited (now merged with Monarch Resources Limited) and is a Non-Executive Director of Corazon Mining Limited.

As at 30 June 2017 holds 11.2m IBG shares and 6m options.

David Kelly BCom, CA

Non-Executive Director

Mr Kelly has over 9 years' experience in finance industry in Australia and the United Kingdom; he has held senior roles at Deloitte Touche Tomatsu, Chartered Accountants and Royal & SunAlliance Insurance Group plc. Mr Kelly is a qualified Chartered Accountant, and is currently working for IBG's substantial shareholder, Glencore International.

Gary Comb BE Mech, BSc, Dip Ed

Non-Executive Director

Mr Comb is an engineer with over 25 years' experience in the Australian mining industry, with a strong track record in successfully commissioning and operating base metal mines. Whilst he was Managing Director of Jabiru Metals Limited, he successfully took the Jaguar base metal project into production with the commissioning of the mine and processing plant taking place during the Global Financial Crises.

Mr Comb was previously the Chief Executive Officer of BGC Contracting Pty Ltd, the mining contracting arm of the West Australian construction group BGC Pty Ltd. He is currently also a director of Zenith Minerals Limited."

As at 30 June 2017 holds 2.2m IBG shares.

Kelly Strong BEng (Mining)

Non-Executive Director

Mr. Strong is the Vice President for mining operations at Nyrstar located in Tennessee. In his current role Mr. Strong is responsible for all of Nyrstar's zinc mining and milling operations in Canada and the United States, operating the mining of polymetallic zinc ore bodies, and associated products. Mr. Strong's appointment is ideally suited to support Ironbark's planned transition into mining.

Prior to joining Nyrstar, Mr. Strong spent 14 years with Vale in various senior management roles. These roles included working at their nickel operations in Indonesia and was also responsible for mining and smelting operations in various parts of Canada and the UK. In Mr. Strong's last role he was the Vice President of the Ontario and UK operations where his portfolio included mining, smelting and refining operations of nickel, copper, cobalt and precious metals. Mr. Strong holds a Bachelor degree in Mining Engineering from South Dakota Tech.

Rob Orr B Bus Acc, CA

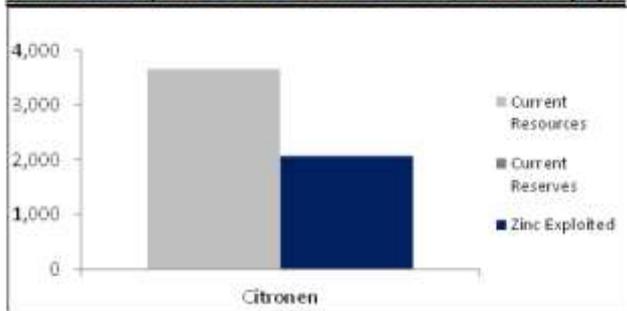
Chief Financial Officer

Mr Orr is a Chartered Accountant with a significant level of commercial experience in the roles of Chief Financial Officer and Company Secretary for a number of ASX listed companies. Mr Orr has over 20 years' experience in public practise and commerce and has worked extensively in the resource industry and is experienced in capital markets, project development, contract negotiation and mining operations.

Ironbark Zinc Limited		\$0.070	
Valuation	US\$m	A\$m	A\$/sh
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Other Projects	10	13	0.01
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Tax Losses	38	50	0.02
Debt	0	0	0.00
Cash	1	2	0.00
NAV @ 8% Discount Rate	524	699	0.35
Price Target	524	699	0.35
	(1x NAV)		

AUDUSD 0.75

Attrib. Zinc Exploited as a subset of reserves/resources (kt)



Production Summary



Reserves & Resources

Resources	(Mt)	(%)	(kt)	Attrib.
Citronen (as at June 2017)				
Measured				
Zinc	25.00	5.00	1,250	1,250
Lead	25.00	0.5	125	125
Indicated				
Zinc	26.50	5.50	1,458	1,458
Lead	26.50	0.5	133	133
Inferred				
Zinc	19.30	4.90	946	946
Lead	19.30	0.4	77	77
Total				
Zinc	70.80	5.16	3,653	3,653
Lead	70.80	0.5	335	335

Directors

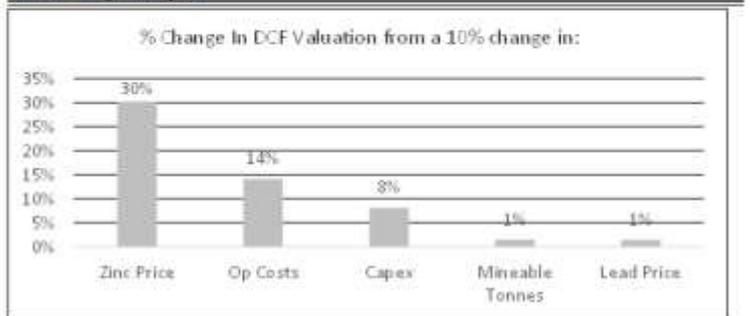
Name	Position
Peter Duncombe	Non-Executive Chairman
Jonathan C. Downes	Managing Director
David Kelly	Non Executive Director
Gary Comb	Non Executive Director
Kelly Strong	Non Executive Director
Rob Orr	CFO

Substantial Shareholders

	Shares (m)	%
Nyrstar NV	19.0	
Glencore	9.0	
Board and Management	5.0	

Commodity Assumptions	2018F	2019F	2020F	2021F	2022F
A\$/US\$	\$0.78	\$0.77	\$0.77	\$0.75	\$0.73
Copper (US\$/lb)	\$3.08	\$3.17	\$3.18	\$3.03	\$2.93
Lead (US\$/lb)	\$1.11	\$1.13	\$1.14	\$1.10	\$1.09
Zinc (US\$/lb)	\$1.44	\$1.43	\$1.38	\$1.32	\$1.30
Silver (US\$/oz)	\$17.16	\$17.60	\$18.00	\$18.32	\$18.72
Gold (US\$/oz)	\$1,283	\$1,307	\$1,335	\$1,359	\$1,389

Sensitivity Analysis



Production Summary	2018F	2019F	2020F	2021F	2022F
Citronen					
Zn Metal Contained (kt)	0.0	0.0	0.0	113.2	214.0
Zn Metal Production (kt) payable	0.0	0.0	0.0	96.2	181.9
Pb Metal Contained (kt)	0.0	0.0	0.0	5.4	10.8
Pb Metal Production (kt) payable	0.0	0.0	0.0	5.0	10.2

C1 Cash Cost (US\$/lb Zn)	\$0.00	\$0.00	\$0.00	\$0.39	\$0.45
Total Cash Cost (US\$/lb Zn)	\$0.00	\$0.00	\$0.00	\$0.51	\$0.59

Profit & Loss (US\$m)	2018F	2019F	2020F	2021F	2022F
Sales Revenue	0.0	0.0	0.0	248.8	478.7
Other Income	0.0	0.0	0.0	0.0	0.0
Operating Costs	0.0	0.0	0.0	(94.2)	(191.3)
Exploration Exp.	0.0	(2.1)	(2.1)	(2.1)	(2.2)
Corporate/Admin	(2.3)	(2.1)	(2.1)	(2.1)	(2.2)
EBITDA	(2.3)	(4.1)	(4.2)	150.2	283.0
Depn & Amort	0.0	0.0	0.0	(25.0)	(50.0)
EBIT	(2.3)	(4.1)	(4.2)	125.2	233.0
Net Interest	0.8	(7.0)	(28.5)	(33.3)	(19.8)
Operating Profit	(1.5)	(11.1)	(32.7)	91.9	213.2
Tax expense	(0.1)	0.0	0.0	0.0	0.0
Minorities	0.0	0.0	0.0	0.0	0.0
Abnormals	0.0	0.0	0.0	0.0	0.0
NPAT	(1.6)	(11.1)	(32.7)	91.9	213.2

Normalised NPAT

*Note: Reports in A\$; Modelled in US\$ as overseas project likely to change reporting

Cash Flow (US\$m)	2018F	2019F	2020F	2021F	2022F
Receipts from Customers	0.0	0.0	0.0	248.8	478.7
Payments to Suppliers	2.3	2.1	2.1	96.4	193.5
Net Interest	0.8	(7.0)	(28.5)	(33.3)	(19.8)
Payment for Exploration	0.0	2.1	2.1	2.1	2.2
Tax	0.1	0.0	0.0	0.0	0.0
-Working Capital Increase/(Decrease)	0.0	0.0	0.0	0.0	0.0
Operating Cashflow	(1.6)	(11.1)	(32.7)	116.9	263.2
- Capex (+asset sales)	0.0	140.1	237.1	168.4	20.1
- Other investing cashflow	0.0	0.0	0.0	0.0	0.0
Free Cashflow	(1.6)	(151.2)	(269.8)	(51.5)	243.1
- Dividends (ords & pref)	0.0	0.0	0.0	0.0	0.0
+ Equity raised	154.0	0.0	0.0	0.0	0.0
+ Debt drawdown (repaid)	0.0	468.0	0.0	(50.0)	(225.0)
Net Change in Cash	152.4	316.8	(269.8)	(101.5)	18.1
Cash at End Period	154.3	471.1	201.2	99.8	117.8
Net Cash/(Debt)	154.3	3.1	(266.8)	(318.2)	(75.2)

Balance Sheet (US\$m)	2018F	2019F	2020F	2021F	2022F
Cash/Bullion	154.3	471.1	201.2	99.8	117.8
Total Assets	188.5	645.4	612.6	623.5	679.5
Total Debt	0.0	468.0	468.0	368.0	193.0
Total Liabilities	0.3	468.3	468.3	387.3	230.1
Shareholders Funds	188.2	177.1	144.3	236.3	449.4

Ratios

Net Debt/Equity (%)	na	na	184.8	134.7	16.7
Interest Cover (x)	2.9	na	na	3.8	11.7
Return on Equity (%)	na	na	na	38.9	47.4

Recommendation History



Date	Type	Target Price	Share Price	Recommendation	Return
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