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15 May 2017 Company Announcements

Australian Securities Exchange Limited Level 40, Central Park, 152-158 St Georges Terrace PERTH WA 6000

#### **Ironbark Zinc Presentation**

Please find attached a revised presentation as released by Ironbark Zinc Limited (Ironbark) (ASX: IBG) on 11 May 2017.

As requested by the ASX the Company has amended disclosure in the presentation in relation to the Competent Persons Statement, referencing to past information and data, referencing to past announcements and the proximity of the exploration target disclaimer to the target.

ENDS

#### For further information please contact:

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# **BECOMING A MAJOR BASE METAL MINER**

# **ASX Listed Zinc Focused Developer**





### Disclaimer

#### FORWARD LOOKING STATEMENTS

The following information is not intended to guide any investment decisions in Ironbark Zinc Limited.

This material contains certain forecasts and forward-looking information, including possible or assumed future performance, costs, production levels or rates, reserves and resources, prices and valuations and industry growth and other trends. Such forecasts and information are not a guarantee of future performance and involve many risks and uncertainties, as well as other factors. Actual results and developments may differ materially from those implied or expressed by these statements and are dependent on a variety of factors. The Company believes that it has a reasonable basis for making the forward looking statements in the announcement, based on the information contained in this and previous ASX announcements.

The Citronen zinc project is considered to be at an early development stage and will require further regulatory approvals and securing of finance and there is no certainty that these will occur. Nothing in this material should be construed as either an offer to seek a solicitation or as an offer to buy or sell Ironbark securities. Consideration of the technical and financial factors requires skilled analysis and understanding of their context.

Ironbark is not aware of any new information or data that materially affects the information included in this ASX release in relation to the Exploration Target, and Ironbark confirms that, to the best of its knowledge, all material assumptions and technical parameters underpinning the Exploration Target estimates in this release continue to apply and have not materially changed

#### JORC CODE COMPLIANCE AND COMPETENT PERSON STATEMENT & DISCLOSURE

The information included in this report that relates to Exploration Targets, Results & Mineral Resources is based on information compiled by Ms. E Laursen (B. ESc Hons (Geol), MSEG, MAIG), an employee of Ironbark Zinc Limited. Ms. Laursen has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Targets, Results, Mineral Resources and Ore Reserves. Ms. Laursen consents to the inclusion in the report of the matters based on this information in the form and context in which it appears

#### **COMPETENT PERSONS DISCLOSURE**

Ms. E Laursen is an employee of Ironbark Zinc Limited and currently holds securities in the company.

# Corporate Snapshot

	Ironbark Zinc	Limited	(ASX: IBG)	
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Shares on Issue	539 million
Options on Issue <sup>1</sup>	19 million
Market Cap. (at 7.5 cents)	\$40 million
Debt	Nil

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96.0

Major Shareholders	
Nyrstar NV	19%
Glencore	9%
Board and Mgt	5%
Total Top 20, Board & Mgt	45%

### The case for zinc is compelling

### The world is running out of Zinc (the fourth most consumed metal by volume)

296.

- Major mine closures in recent years due to depletion
  - Century (500,000 tpa)
  - Brunswick (200,000 tpa)
  - Perseverance (128,000 tpa)
  - Lisheen (167,000 tpa)
- Yet at the same time demand is growing (forecast at 3% in 2017\*) to 13.8Mt zinc
- The falling supply against rising consumption is driving a price rise

\* Wood McKenzie



# **Developing the Citronen Zinc Project**

#### One of the largest Zinc Projects in the world

- 12.8 Billion pounds of zinc defined- Open ended resource
- Exploration Target 302-347Mt @ 4.4-5.0% zinc+lead (ASX announcement 28 January 2010)

The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration completed to date to estimate a Mineral Resource in accordance with the JORC 2012 Edition Guidelines. It is uncertain if further exploration will result in the delineation of a Mineral Resource.

- High grade zones from drill holes such as 16m @ 20.8% zinc

#### 100% ownership of Advanced Project

- Over \$50M expended to date on the Citronen Project
- Low sovereign risk and supportive Government

#### Bankable Feasibility Study completed, confirming world class scale

- Potential for long life base metal mining operations
- Simple process flow sheet with excellent recoveries

#### Mining Licence Recently Granted (Exploitation Permit - Dec 2016)

- Right to exploit zinc and lead resources for a 30 year period

#### Financing and Engineering works commenced with major Chinese Firm

- China Nonferrous (NFC) appointed to incorporate current Chinese equipment and construction costs
- Prepare study to comply with Chinese banking requirements
- Ensure criteria meets the laws, regulations, standards and codes of both Greenland and China
- Assist Ironbark in securing Chinese project debt for the development of Citronen under the pre-existing MOU with NFC\*\*
  - \*\*MOU with NFC for an EPC lump sum, fixed priced construction and commissioning contract with an associated 70% debt funding and 20% direct project investment





## **A Globally Significant Zinc Project**

### Citronen is one of the world's largest credible zinc projects

### Considerable exploration potential in addition to existing resource

Owners - Major Zinc	Mine/Deposits	Citronen Deposit looking East
Company	Mine/deposit	(sulphide horizons in red)
Glencore	Mt. Isa	DISCOVERY ZONE
Glencore	McArthur River	
Teck Resources	Red Dog	liometre
Hindustan Steel	Rampura Agucha	over 6 kilon
Govt. & Sichuan Hongda	Lanping	in the second second
Ironbark Zinc Limited	Citronen	BEACH ZONE
BHP Billiton/ Xstrata/ Teck/ Votorantim Metals Mitsubishi Corp/	Antamina	ESRUM ZONE
		WESTERN GOSSANS

396.5

## **Strategic Benefits of Citronen**

- Located adjacent to deep, protected water on the doorstep of Europe and North America
- Simple, shallow, flat and continuous ore zones
- Open-pit fresh sulphide potential with very low strip ratios to supplement higher grade underground mined mineralisation
- Simple, predominantly underground room and pillar mining operation. Proven DMS and flotation techniques to produce zinc and lead concentrates

296.

· Will operate the mine all year round, but with 3 months shipping window



# **JORC Resource (2012 Compliant)**

## +12.8 Billion pounds of zinc and growing Resource Grade - 30Mt @ 7.6% Zn + Pb (3.5% Zn cut-off)

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Resource 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	4.7	0.4	5.1
Total	70.8	5.1	0.5	5.7

### Within a Larger Resource - 132Mt @ 4.4% Zn + Pb (2.0% Zn cut-off)

And an exploration target of 302-347Mt @ 4.4-5.0% zinc+lead\*

Resource Category	Mt	Zn %	Pb %	Zn+Pb%
Measured	43.1	4.1	0.5	4.6
Indicated	51.2	4.1	0.4	4.6
Inferred	37.7	3.8	0.4	4.2
Total	132.0	4.0	0.4	4.5

• The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration completed to date to estimate a Mineral Resource in accordance with the JORC 2012 Edition Guidelines. It is uncertain if further exploration will result in the delineation of a Mineral Resource.

• For full details refer to ASX announcement 25 November 2014 - Citronen Project Resource Update - JORC 2012 compliant resource. Ironbark is not aware of any new information or data that materially affects the information included in this ASX release, and Ironbark confirms that, to the best of its knowledge, all material assumptions and technical parameters underpinning the resource estimates in this release continue to apply and have not materially changed.

Feasibility Summary\*

NPV*	US\$609 million (post tax US\$354 million) + US\$1B @ \$1.50/lb Zn and + US\$2B @ \$2.00/lb/ Zn
IRR	32% (post tax 22%)
Capital Cost	US\$429.3 million
Operating Cost <sup>1</sup>	(payable US\$)
- Site	48c / lb zinc
- Shipping Logistics	11c / lb zinc
- Smelter Fees	12c / lb zinc
All in Costs	71c / lb
Payback Period	18 months
Life of Mine Revenue	US\$5.65 billion

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96.0

96.0

\*Details and assumptions released to the ASX in announcement dated 29 April 2013

# Feasibility Summary\*

94:35

Resource	71Mt @ 5.7% zinc + lead (Zn + Pb)
First 5 Years Mining	Underground 16.5 Mt @ ~7.1% Zn + Pb, upgrading to mill feed grade ~11.4% Zn + Pb @ a mining rate of 3.3 Mtpa
Production Rate	3.3Mtpa ROM Ore
Life of Mine	14 years* (resource open ended)
Concentrate Grade	~55% Zn, ~50% Pb
- Contained Zn Metal	185,677 tpa (average for first 5 years)
- Contained Pb Metal	9,609 tpa (average for first 5 years)
Exceptional Exploration Upside	Mineralisation remains open in almost every direction, potentially adding many years to the life of mine
Leverage	Citronen offers low sovereign risk upside to rising zinc price and tightening market

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>96.0

### Advanced Towards Development – China Nonferrous (NFC) > 96.0

- Agreement (January 2017) with China Nonferrous Major step towards advancing Citronen project Financing and Construction
  - Incorporating current Chinese equipment and construction costs
  - Financing work commenced -Prepare Feasibility Study to comply with Chinese banking requirements
  - Ensure criteria meets the laws, regulations, standards and codes of both Greenland and China
  - Assist Ironbark in securing Chinese project debt for the development of Citronen under the pre-existing MOU with NFC
- NFC Major Chinese construction/engineering firm listed on the Shenzen Stock Exchange (50,000 employees)
- Ideal Partner from a development and funding perspective
- Globally operates many mines and processing plants including zinc mines and smelters
- NFC rated by US authoritative publication, the Engineering News Record as one of the world's top engineering firms
- Major fabrication facilities
- Experience constructing and operating zinc mines, process plants and smelters.



 Mining Licence Granted at Citronen - paving way to production

Summary

- Agreement with NFC Major step towards advancing Citronen Financing and Construction-Work in Progress
- Engineering, Procurement and Construction (EPC) contract (turnkey) for developing Citronen from China Nonferrous (NFC)
- NFC assisted funding pathway for Citronen
- Exploration at Ironbark's Greenland and Australian base metal exploration projects



### Ironbark Zinc – Key Messages









# **BECOMING A MAJOR BASE METAL MINER**

Major JORC compliant zinc resource -100% owned

First world jurisdiction – mining friendly

Rising zinc price

Major Industry Partners

Feasibility Study

**Granted Mining Licence** 

Credible Financing Pathway - Underway

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