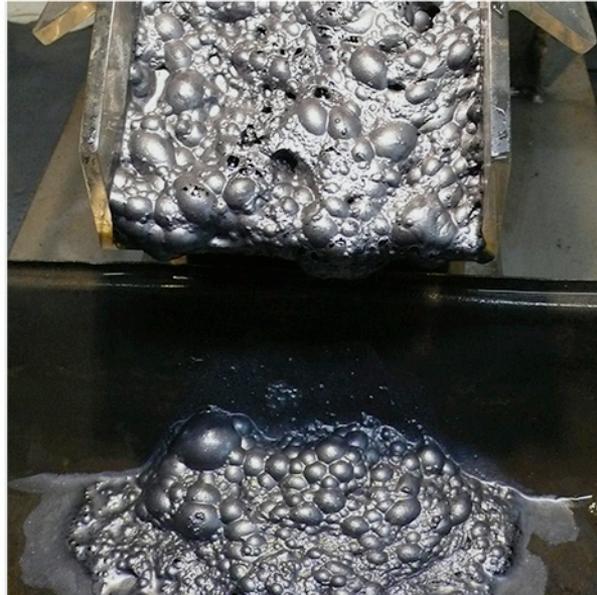




# GALENA

MINING LIMITED



## PRE-FEASIBILITY STUDY FOR ABRA BASE METALS PROJECT

*September 2018*

## PFS Cautionary Statement

70% of the material included in the current mining schedule for the Abra Base Metals Project (“**Abra**” or the “**Project**”) Pre-Feasibility Study (“**PFS**”) is included in Probable Ore Reserves. However, the remainder is currently included in Inferred Resources, with no reduction factor applied to the tonnes and grades of the Inferred Resources. Inferred Resources have a lower level of geological confidence and can’t be included in the calculation of Ore Reserves. All results of 2018 infill drilling have not been received and there is no guarantee that a Resource update will convert Inferred material into Indicated or return the same grade and tonnage distribution. This may affect mining studies and economic outcomes from this PFS. The Abra Ore Reserve will be reviewed in conjunction with the coming Resource update.

Process and engineering designs for Abra’s PFS were developed to support capital and operating estimates to an accuracy of  $\pm 20\%$  and  $\pm 15\%$  respectively. Key assumptions that the PFS was based on are outlined in the body of this presentation and in the Galena ASX announcement of 25 September 2018 (including Appendix 1 to that announcement).

## Competent Person’s Statement

The information in this report related to the Abra Ore Reserve estimate is based on work completed by Mr Simon Krebs, BEng (Mining, Member AUSIMM. Mr Krebs is an independent consultant to Galena through his company Mining Project and Development Services. Mr Krebs has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves. Mr Krebs consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

The information in this report related to the Mineral Resource estimate is based on work completed by Mr A Byass, B.Sc Hons (Geol), B.Econ, FSEG, MAIG a Director of Galena and Mr Don Maclean MSc (Geol), MAIG and RP Geo (Exploration and Mining), MSEG, a consultant to Galena. Mr Byass was responsible for the resource estimation, classification and reporting. Mr Maclean was responsible for data review, QAQC, and development of the geological model. Mr Byass and Mr Maclean have sufficient experience 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 Results, Exploration Targets, Mineral Resources and Ore Reserves. Mr Byass and Mr Maclean consent to the inclusion in the report of the matters based on this information in the form and context in which it appears.

The information in this report to which this statement is attached that relates to Exploration Results and drilling data is based upon information compiled by Mr E Turner B.App Sc, MAIG who is an employee of Galena. Mr Turner has sufficient experience 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 Results, Exploration Targets, Mineral Resources and Ore Reserves. Mr Turner consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

## Forward Looking Statements

The contents of this presentation reflect various technical and economic conditions at the time of writing. Given the nature of the resources industry, these conditions can change significantly over relatively short periods of time. Consequently, actual results may vary from those in this presentation.

Some statements in this presentation regarding estimates or future events are forward-looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward-looking statements include, but are not limited to, statements preceded by words such as “planned”, “expected”, “projected”, “estimated”, “may”, “Scheduled”, “intends”, “anticipates”, “believes”, “potential”, “predict”, “foresee”, “proposed”, “aim”, “target”, “opportunity”, “could”, “nominal”, “conceptual” and similar expressions.

Forward-looking statements, opinions and estimates included in this presentation are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward-looking statements are provided as a general guide only and should not be relied on as guarantee of future performance. Forward-looking statement may be affected by a range of variables that could cause actual results to differ from estimated results and may cause the Company’s actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward-looking statements. So there can be no assurance that actual outcomes will not materially differ from these forward-looking statements.

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World class, 100%-owned,  
high-grade, unmined, base  
metals deposit in Western  
Australia



Outstanding PFS  
A\$528M NPV<sub>8</sub> / 50% IRR  
14-year mine life  
A\$97M/year cash flow



Construction start 2019  
DFS mid-2019  
Initial production 2021  
On track



Infrastructure and port capacity  
confirmed



Granted mining licence  
No EPA approval required  
Indigenous land use  
agreement



Highest grade primary lead  
concentrate available globally  
Offtake 100% available

## PFS CONFIRMS OUTSTANDING ABRA ECONOMICS

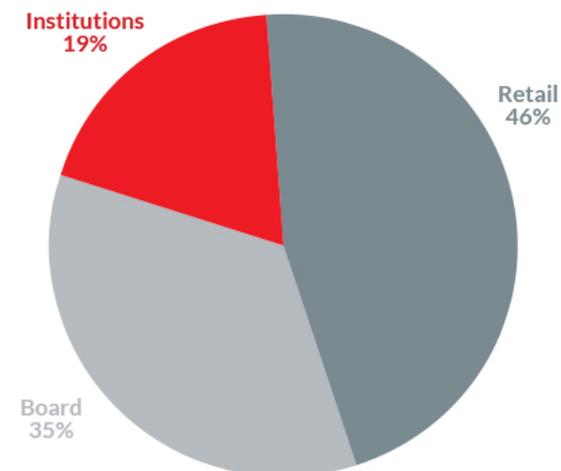
- 14-year mine life for Abra Project, producing a high-value, high-grade lead-silver concentrate containing 91ktpa of lead and 760kozpa of silver after ramp-up
- Extremely strong projected investment returns – **IRR of 50%**
- Compelling value based on discrepancy between market capitalisation and project value – Galena’s **current market capitalisation of ~A\$60M vs. PFS pre-tax NPV<sub>8</sub> of A\$528M**
- Pre-production capital investment of A\$154M with a payback period of approximately 24-months – average annual free cash flow after ramp-up of A\$97M
- High recoveries into highest grade commercially available primary lead concentrate globally – Product already in high demand, with 9 indications of interest received from potential customers
- Project within granted mining license, EPA approval not required, and covered by indigenous land use agreement
- Multiple upcoming catalysts and an aggressive timeline to commence construction in 2019
- A rare opportunity on the ASX to invest in such a robust and significant Australian base metal mine development opportunity

## Capital structure

Shares on issue (ASX: G1A)	336.5M
Options on issue <sup>1,2</sup>	34.8M
Share price	A\$0.18/share
Market Cap	~A\$60.6M
Cash balance (30 June 2018)	~A\$8.5M
Debt	Nil

1. Options issued to employees and management with 11.75m having an exercise price of \$0.06 and expiry date of 30 June 2020, and 18m having an exercise price of \$0.08 and expiry date of 30 June 2021. 5m having exercise price of \$0.30 2. In addition, 16.5m performance rights for CEO/MD subject to shareholder approval.

## Shareholder summary



## Board of directors and key management

A proven track record in financing, development and production of mineral assets

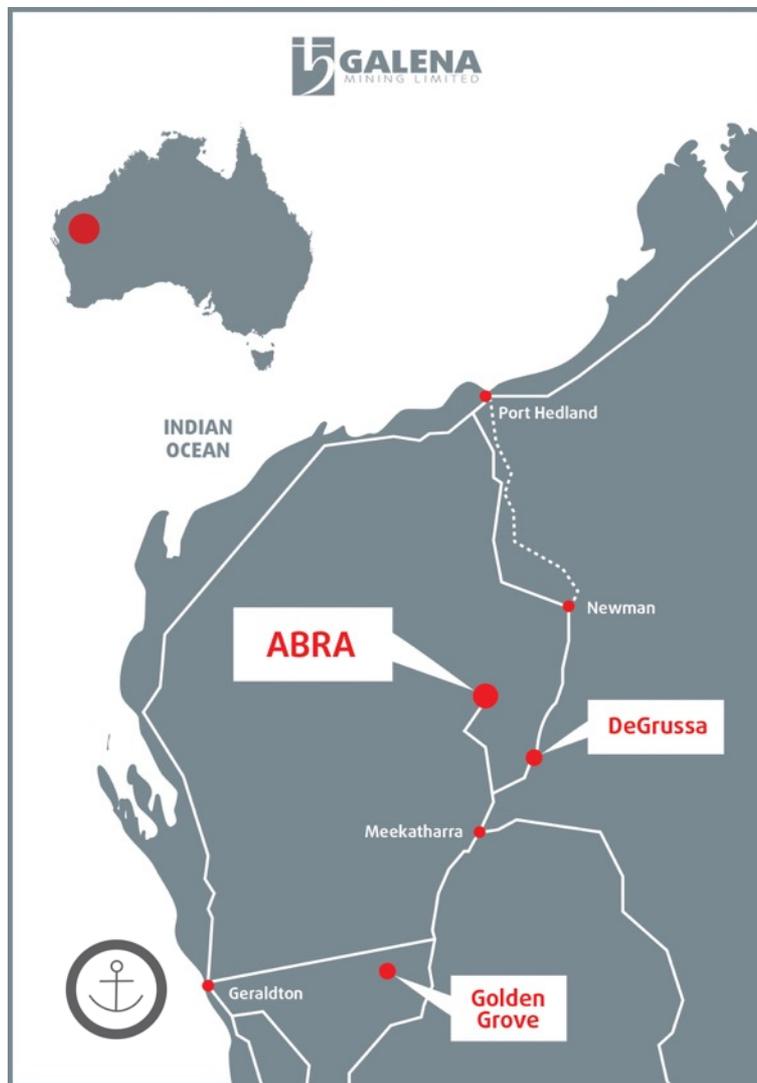
Adrian Byass	Non-Executive Chairman	Economist, geologist, experienced board member, mine development specialist
Alex Molyneux	CEO / Managing Director	Experienced metals and mining industry executive and financier
Troy Flannery	Chief Operating Officer	Mining engineer, underground development, base and precious metals
Ed Turner	GM, Exploration & Geology	Geologist, 30-years+ experience, base and precious metals, former exploration manager of Abra
Jonathan Downes	Non-Executive Director	Geologist, mining and mine development expertise
Olly Cairns	Non-Executive Director	Corporate finance, LSE & ASX capital markets, M&A, IR
Timothy Morrison	Non-Executive Director	Corporate finance, Capital markets, M&A, IPOs

# OUTSTANDING PFS RESULTS

PFS RESULTS	NPV <sub>8</sub> A\$528M	IRR 50%	Capex A\$154M
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PFS outcomes – Production metrics		PFS outcomes – Capital investment and project economics	
Mill throughput	1.2Mtpa	Pre-production capital	A\$154m
Initial mine life	14-years	Steady-state average cash flows (yrs 3-13)	A\$97m
Average LOM lead metal production	91ktpa	Project payback from commercial production	2-years
Average LOM silver metal production	760kozpa	Pre-tax NPV (8% discount rate)	A\$528M
Lead C1 direct cash cost	A\$0.66/lb / US\$0.48/lb	Pre-tax IRR	50%

- PFS assumptions include: lead price US\$0.95/lb; silver price US\$14.50/oz; and A\$1=US\$0.73
- Abra product will be a high-value, high-grade concentrate containing 75% lead and 220g/t silver – The highest grade primary lead concentrate available globally
- No material impediments in the areas of permitting, concentrate marketing, infrastructure and logistics, or native title
- PFS compares favourably to previously announced Scoping Study – 20% higher annual throughput, three years (27%) extra mine life and A\$134M (34%) increase in NPV



- Abra is located in the Gascoyne region of Western Australia approximately 110km from Sandfire Resources' DeGrussa copper mine
- Well serviced by infrastructure and located approximately halfway between Newman and Meekatharra
- Lead concentrate to be trucked via public highways to Port of Geraldton
- Port of Geraldton has all permits and infrastructure required to handle lead sulphide concentrates and is currently an active handler of third-party (Golden Grove) similar product
- Ample ship loading capacity available



Port of Geraldton – Primary export port

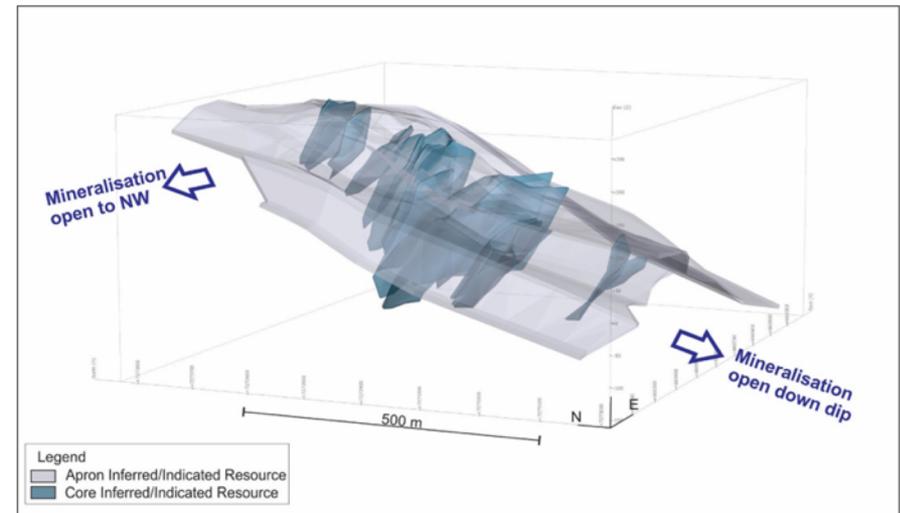
## JORC Mineral Resource estimate (PFS Updated Resource) at a 5% lead cut-off grade<sup>1</sup>

<u>Resource classification</u>	<u>Tonnes (Mt)</u>	<u>Lead grade (%)</u>	<u>Silver grade (g/t)</u>
Measured	-	-	-
Indicated	17.0	8.0	20
Inferred	19.7	6.6	15
<b>Total</b>	<b>36.7</b>	<b>7.3</b>	<b>18</b>

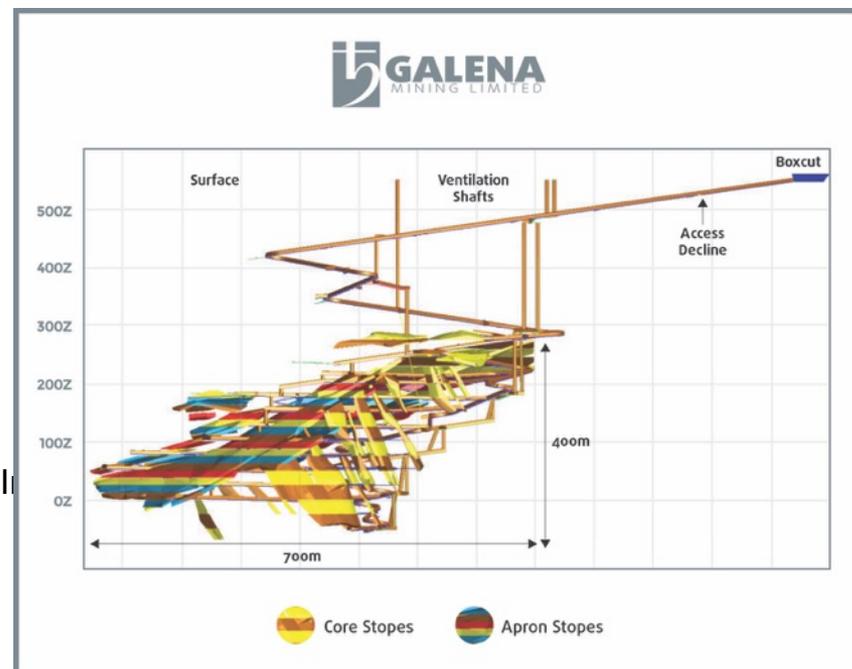
Notes: 1. For more detail please see Galena ASX announcement of 25 September 2018.

- 2018 infill and resource development program in progress will add 10,000m+ new drilling data for a Resource update later in the year
- Some holes that have already returned assays have established continuity of mineralisation up to 150m outside the existing Resource envelope
- Resource open at depth and in multiple directions
- Copper-gold mineralisation observed in the Core Zone beneath lead-silver Resource envelope

Image of existing Resource looking obliquely east



- Underground mining primarily using long-hole open stoping but with some areas mined as room and pillar
- Good geotechnical conditions allowing for relatively large stopes
- 85% recovery assumption with 5% dilution
- 70% of mining inventory assumed for PFS from within Ore Reserves



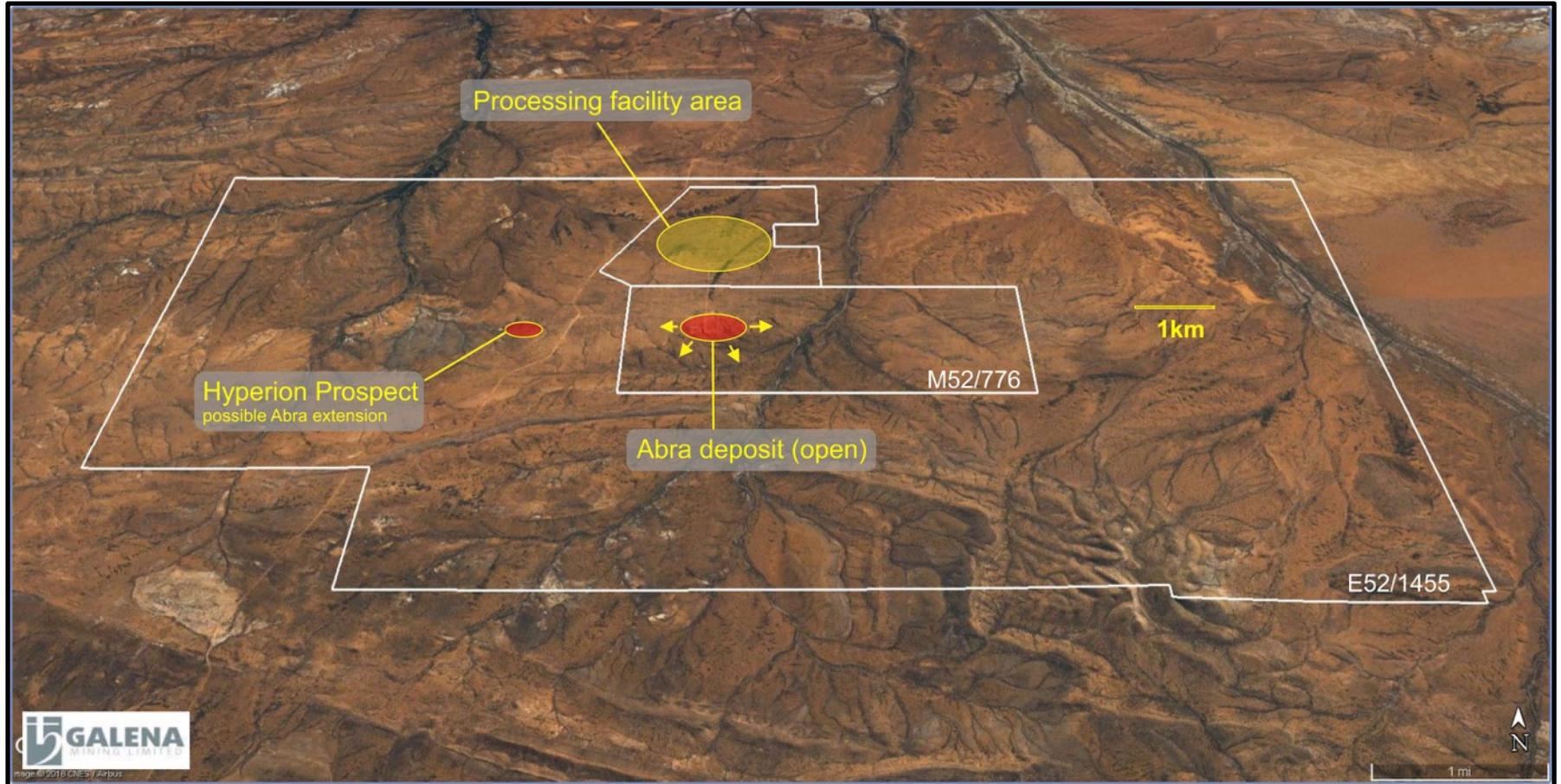
JORC Ore Reserve statement <sup>1</sup>			
<u>Reserve classification</u>	<u>Tonnes (Mt)</u>	<u>Lead grade (%)</u>	<u>Silver grade (g/t)</u>
Proved	-	-	-
Probable	10.5	8.1	20
<b>Total</b>	<b>36.7</b>	<b>7.3</b>	<b>18</b>

Notes: 1. Prepared by Mining and Project Development Services in conjunction with the PFS – For more detail please see Galena ASX announcement of 25 September 2018.

- 1.2Mtpa plant throughput
- Conventional crushing, grinding, flotation and filtration
- Metallurgical testing confirms high (96%) recoveries for both lead and silver into high-value, high-grade concentrate
- Concentrate product expected to be the highest grade primary lead concentrate available globally – 75% lead and 220g/t silver
- Abra's product in high demand, particularly in the context of the global lead market in current deficit and limited new supply growth
- Nine indications of interest for offtake received from potential customers in Europe, East Asia and China



# ABRA PROJECT SITE PLAN



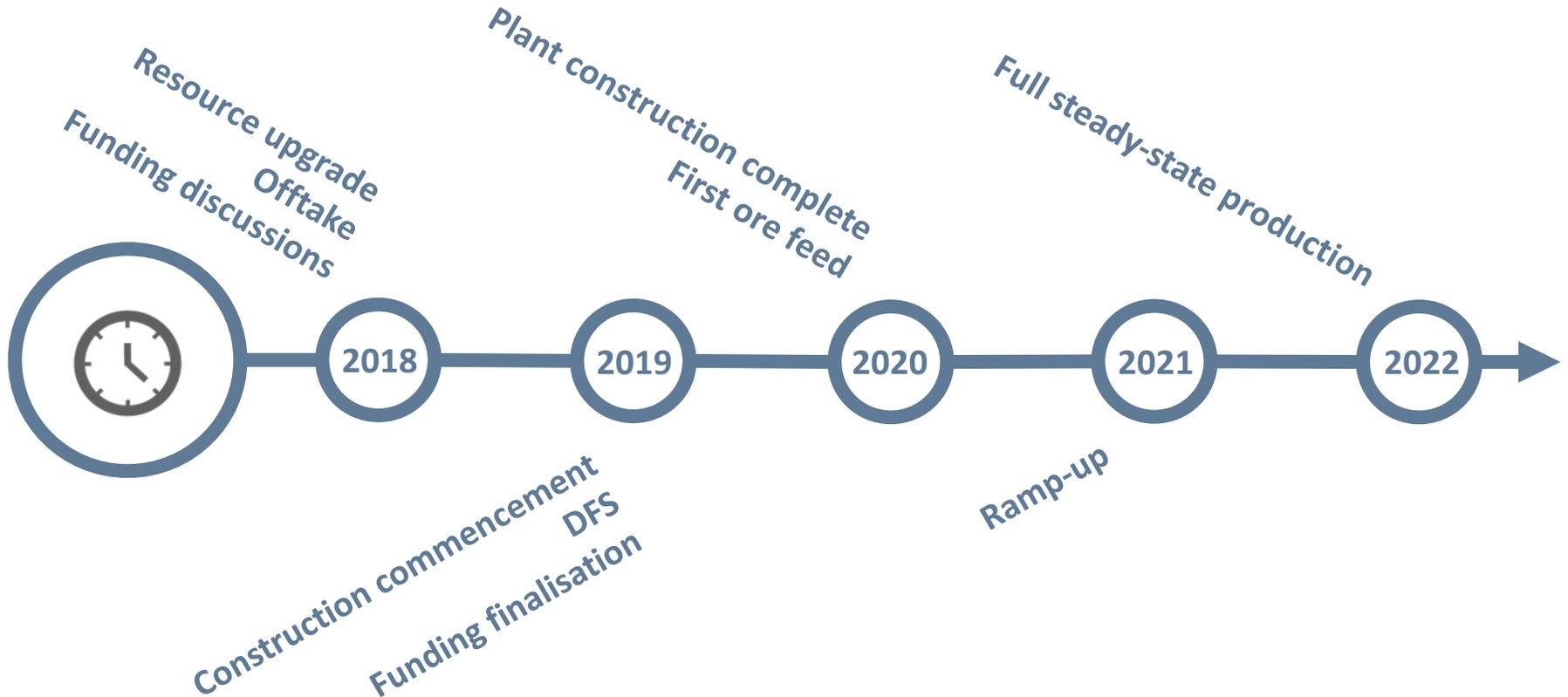


Abra pre-production capital expenditure	
	<u>A\$M</u>
Mine development (incl. box cut and access)	31.2
Processing plant (concentrator)	51.4
Surface infrastructure	28.8
Offsite road upgrades and miscellaneous	1.5
Tailings storage facilities	5.0
EPCM	13.8
Contingency	10.1
Owner's and indirect costs	12.3
<b>Total</b>	<b>154.0</b>

Abra LOM operating cost estimates	
	<u>US\$ C/lb</u>
Mining	23.4
Processing <sup>1</sup>	14.7
TCRCs and outbound logistics	15.4
By-product credit for net silver revenue	(5.6)
<b>Lead C1 direct cash cost of production<sup>2</sup></b>	<b>48.0</b>
<b>Royalties<sup>3</sup></b>	<b>7.2</b>

Notes: 1. Includes an allocation for site general and administration costs of A\$8/t of throughput, 2. Equates to A\$0.657/lb based on an exchange rate of A\$1=US\$0.73, 3. For lead, 5.0% Western Australian State royalty plus 3.27% in vendor and other royalties, and for silver, 2.5% Western Australian State royalty plus 3.27% in vendor and other royalties.

# CLEAR PATHWAY TO PRODUCTION



- **Completion of current drilling, resource and reserve update** – Preparation of an updated Mineral Resource estimate and Ore Reserve once the current 10,000m+ infill and resource development drilling program completes and all assays are returned
- **PFS review / optimisation** – PFS mine schedule will be reviewed for possible optimisation on completion of the resource and reserve update
- **Commencement of bankable / definitive feasibility study (DFS)**
- **Permitting approvals** – Abra already on granted mining licence and no requirement for EPA but Galena aims to lodge its final Mining Proposal in three to four months
- **Offtake** – Continued engagement with a select sub-set of the nine parties that already submitted expressions of interest for Abra's high-value, high-grade lead-silver concentrate with a view to concluding formal offtake arrangements
- **Advancing discussions with project financiers** – Preliminary discussions have commenced with traditional project financing banks and strategic counterparties
- **Construction decision and commencement of construction (by mid-2019)**
- **Completion DFS**

*“The PFS confirms Abra is one of the best base metals projects in the world in terms of high investment returns, low country risk and market significance. The overall value of the Project has also just got a whole lot bigger with the NPV rising by 34% to A\$528M and a number of years additional mine life.”*

*“The work done for the PFS also confirms we have a clear pathway to complete permitting and other pre-development works quickly. Abra is a very ‘executable’ project and it will be the absolute mission of Galena’s team to move it into construction in a timely manner.”*

***Managing Director, Alex Molyneux***



Alex Molyneux

|

Managing Director



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