



DE GREY  
MINING LTD

# INVESTOR PRESENTATION

**Bell Potter Unearthed Natural  
Resources Conference**  
February 2022



# FORWARD LOOKING STATEMENTS DISCLAIMER



These materials prepared by De Grey Mining Limited (or the “Company”) include forward looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as “may”, “will”, “expect”, “intend”, “plan”, “estimate”, “anticipate”, “continue”, and “guidance”, or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company’s actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licenses and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

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Although the Company attempts and has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be as anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or any relevant securities exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

All references to the scoping study and its outcomes in this presentation relate to ASX announcement *Mallina Gold Project Scoping Study* dated 5 October 2021. All references to the Mineral Resource Estimate in this presentation relate to ASX announcement *6.8Moz Hemi Maiden Mineral Resource drives MGP to 9.0Moz* dated 23 June 2021. Please refer to the two announcements for full details and supporting information including JORC and Competent Person information.

# ACKNOWLEDGMENT OF COUNTRY

At De Grey Mining, we acknowledge the Traditional Custodians of the land upon which we operate, the Kariyarra, Ngarluma, Nyamal and Mallina peoples. We recognise their unique cultural heritage, beliefs and connection to these lands, waters and communities.

We pay our respects to all members of these Indigenous communities, and to Elders past, present and emerging. We also recognise the importance of continued protection and preservation of cultural, spiritual and educational practices.

As we value treating all people with respect, we are committed to building successful and mutually beneficial relationships with the Traditional Custodians throughout our areas of operation.



# BOARD OF DIRECTORS



**Simon Lill**  
Non-Executive Chairman  
Corporate Management  
→ Joined October 2013



**Glenn Jardine**  
Managing Director  
Mining Engineer  
→ Joined May 2020



**Peter Hood AO**  
Non-Executive Director  
Chemical Engineer  
→ Joined November 2018



**Andy Beckwith**  
Executive Technical Director  
Geologist  
→ Joined October 2017



**Samantha Hogg**  
Non-Executive Director  
Finance / Governance  
→ Joined January 2022



**Eduard Eshuys**  
Non-Executive Director  
Geologist  
→ Joined July 2019



**Craig Nelmes**  
Company Secretary  
Accountant / Governance  
→ Joined October 2013



**Bruce Parncutt AO**  
Non-Executive Director  
Corporate Finance  
→ Joined July 2019

# EXPERIENCED MANAGEMENT TEAM



**Glenn Jardine**  
Managing Director



**Andy Beckwith**  
Executive Technical Director



**Peter Canterbury**  
Chief Financial Officer



**Phil Tornatora**  
Exploration



**Bronwyn Campbell**  
Community Relations



**Allan Kneeshaw**  
Business Development



**John Brockelsby**  
Risk and HSE



**Rod Smith**  
Studies Manager



**Courtney Morgan-Evans**  
People and Capability



**Noel O'Brien**  
Studies Consultant



A management team with experience spanning exploration, assessment, planning, construction and operation of large scale resources projects



# 2021 – A YEAR OF MAJOR ACHIEVEMENTS

- JAN** ● Discovery of large intrusion-hosted deposits at Diucon and Eagle
- MAR** ● Establishment of regional exploration team  
New shear-hosted discovery at the Gillies JV
- JUN** ● Maiden 6.8Moz Mineral Resource estimate for Hemi increases the Mallina Gold Project Mineral Resource to 9.0Moz
- SEP** ● Extensions of mineralisation at Diucon and Eagle
- OCT** ● Completion of Scoping Study for Hemi  
Placement to raise \$125 million before costs
- NOV** ● Submission of Mining Lease and Miscellaneous Licence application for Hemi

# FURTHER GROWTH AND DISCOVERY IN 2022

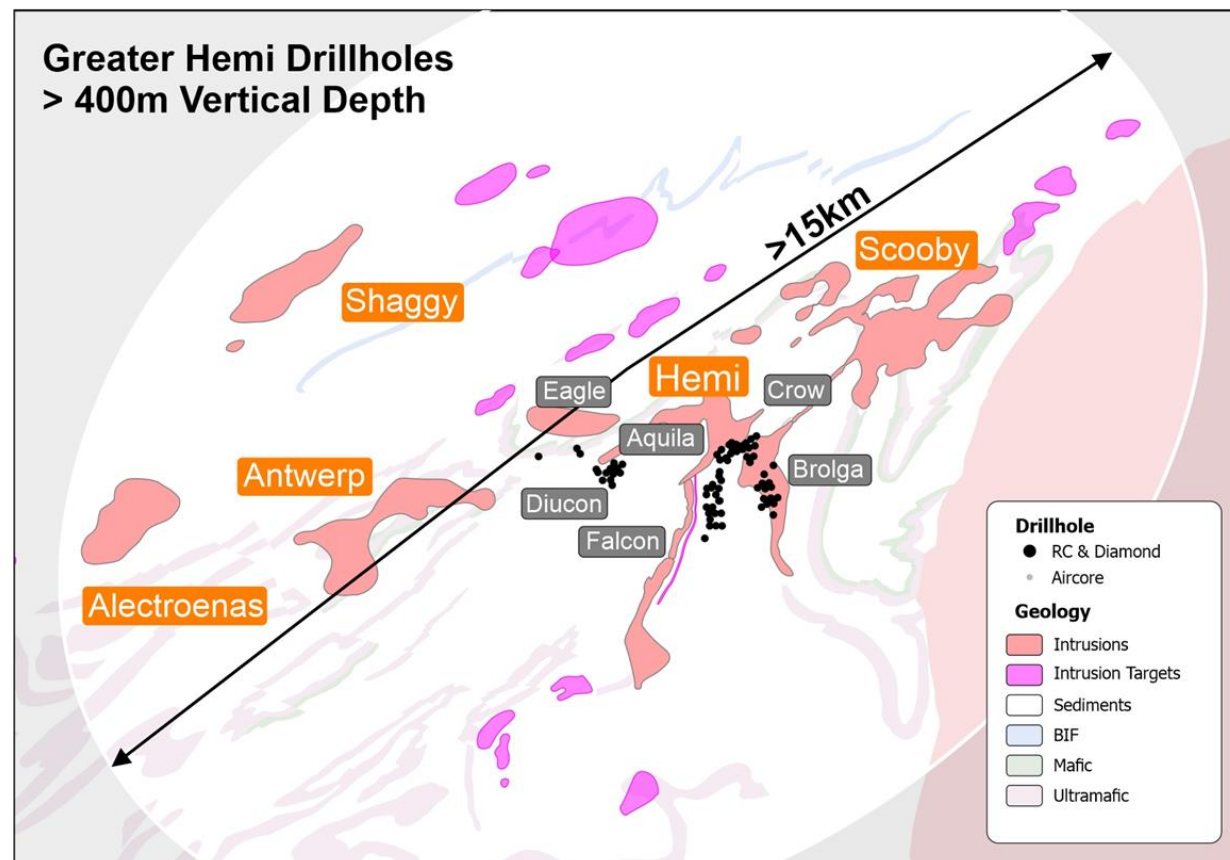
## PFS targeting an improvement to the Scoping Study outcomes

- Approximately 800koz of Mineral Resource (mostly JORC Inferred) contained within Scoping Study open pit mine designs was not included in the initial Scoping Study evaluation period of 10 years
  - Resource definition drilling aims to increase resource classification to JORC Indicated for incorporation into the Pre-Feasibility Study
- In addition, drilling at Diucon and Eagle since the maiden Hemi Mineral Resource has extended the mineralised footprint and depth below the Scoping Study open pit mine designs
  - Resource definition drilling on the expanded Diucon and Eagle aims to increase resource classification to JORC Indicated for incorporation into the PFS
- Resource definition and extensional drilling at Diucon, Eagle and other zones has intersected high grades
  - Fits with previous Hemi experience of increasing grade when JORC resource classification is upgraded from Inferred to Indicated
  - Positive impact on the mine plan targeting higher grade mineralisation
- Overall aim is to increase the production target, evaluation period and confidence level in the Hemi project in the PFS

# FURTHER GROWTH AND DISCOVERY IN 2022

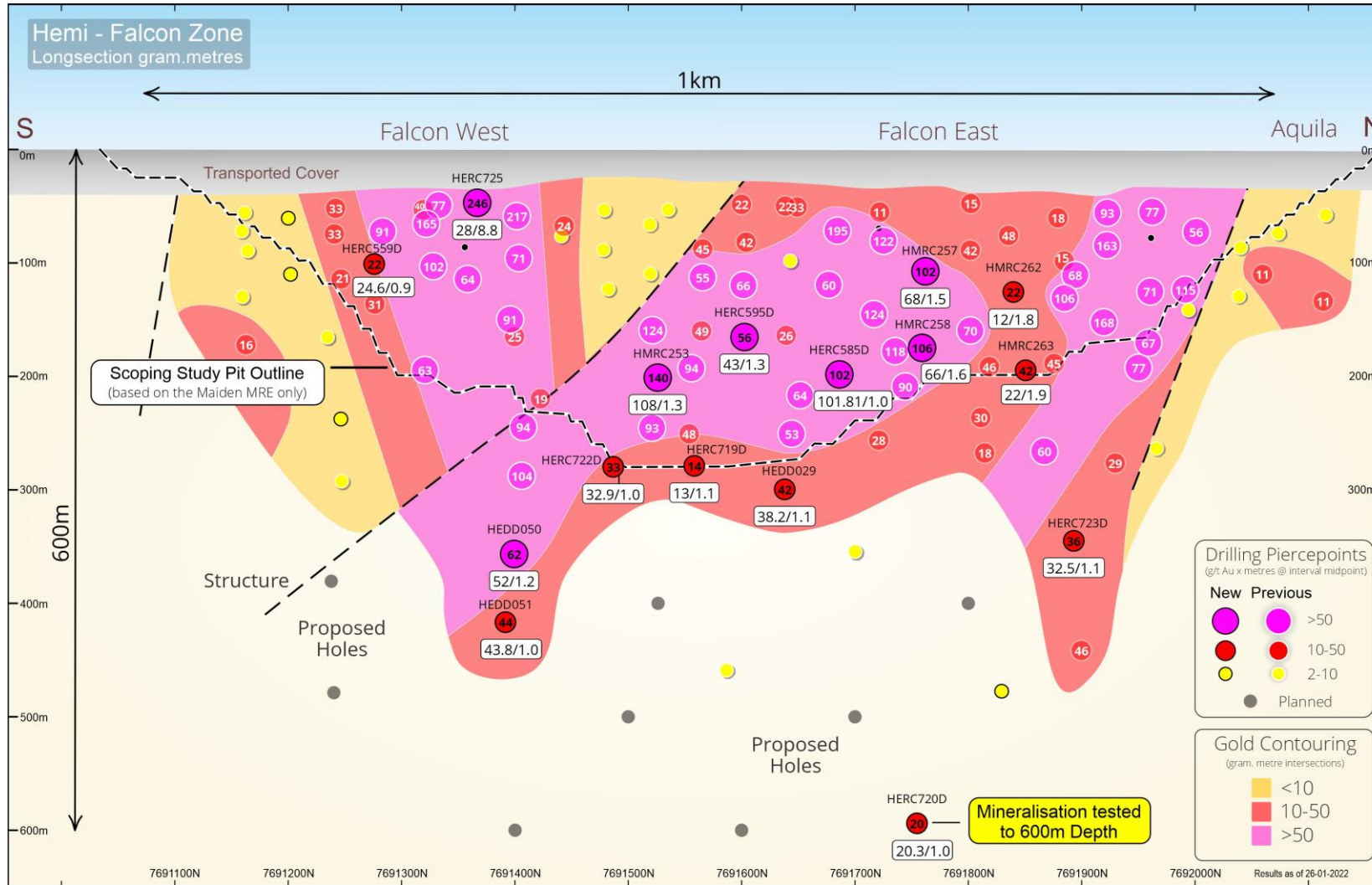
## Resource Extension/Discovery drilling at Hemi and Greater Hemi

- Drilling at Hemi will pivot further to discovery and new resource extension drilling after the March quarter 2022 on completion of current resource definition drilling
- Recent focus has been on near surface early open pit resource definition drilling to maximise the PFS production target and reserve
- Drilling remains open at depth and within the Greater Hemi area
- Two aircore and four RC rigs currently operating on near surface discovery opportunities in Greater Hemi

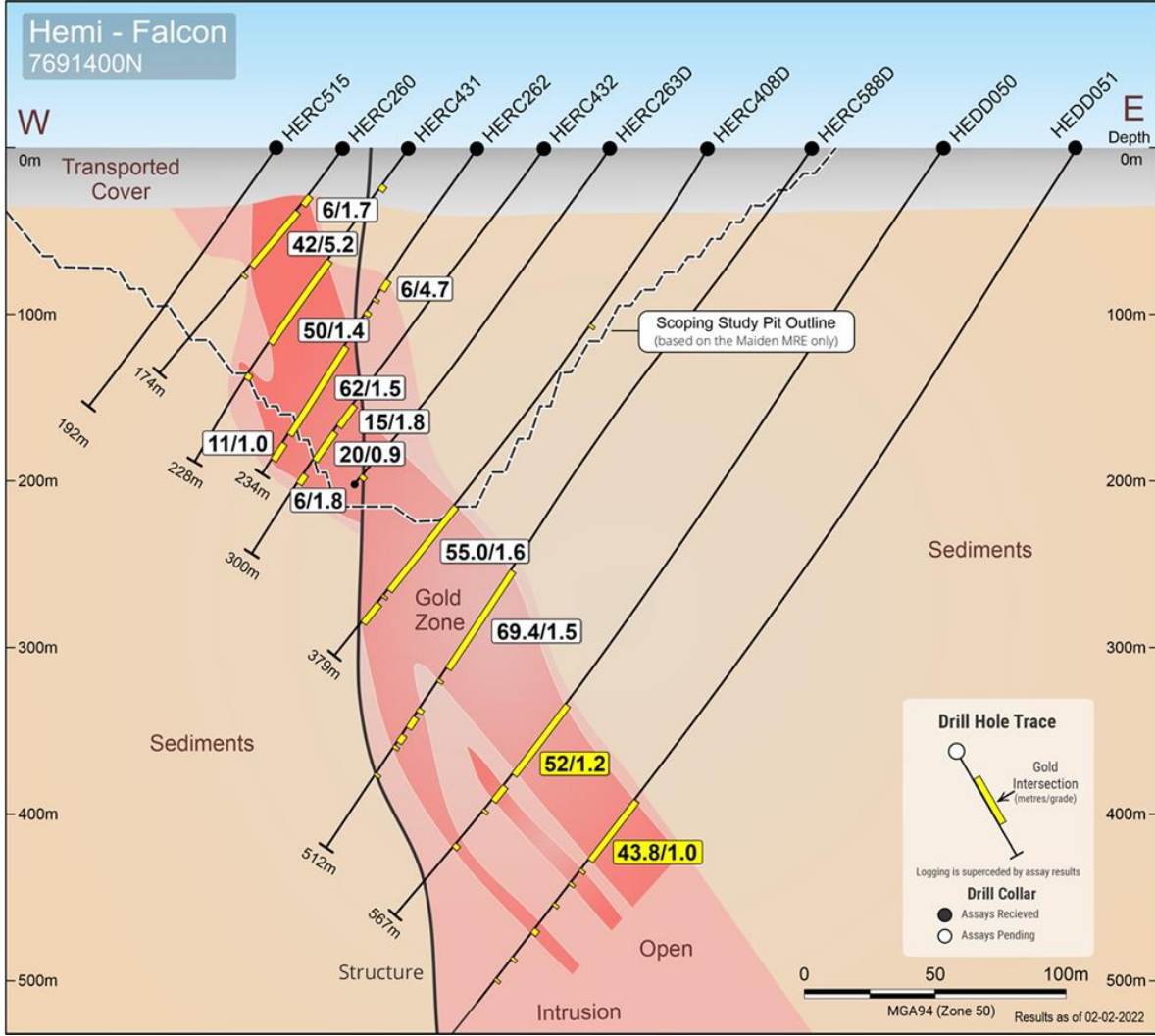




# TESTING BENEATH KNOWN DEPOSITS TO EXPAND THE PRODUCTION POTENTIAL

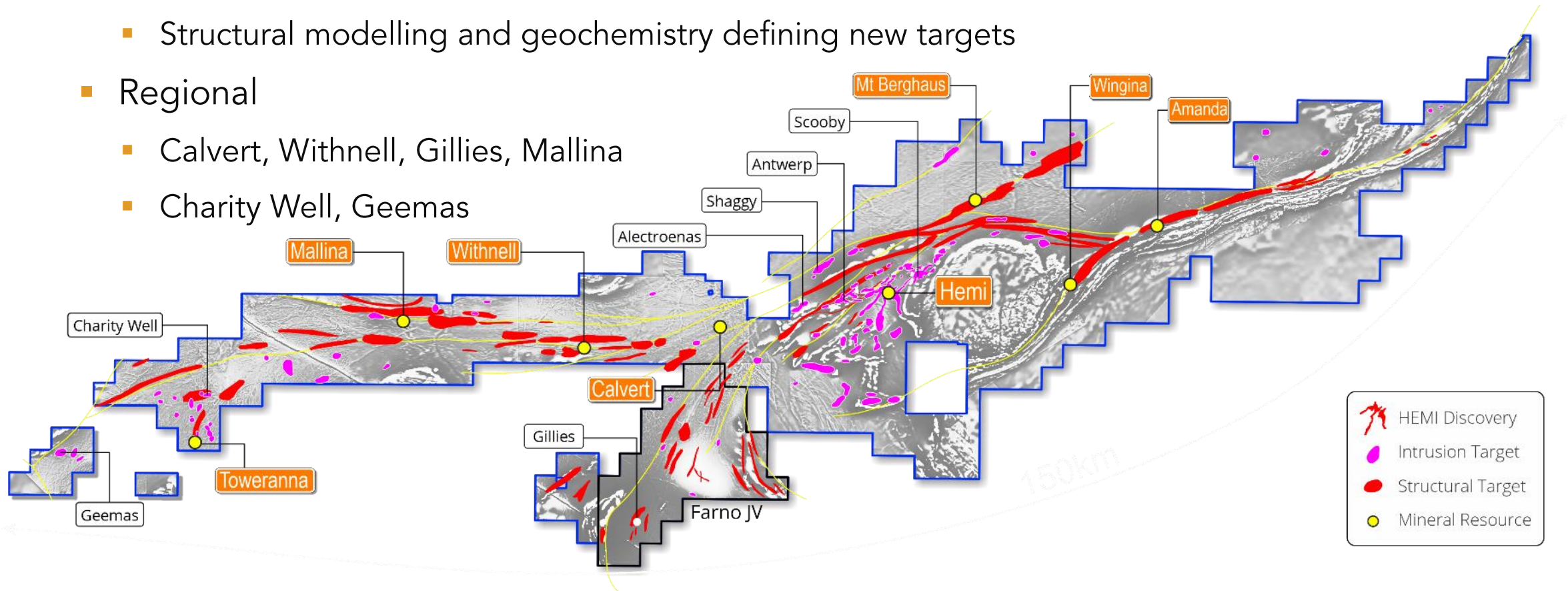


# TESTING BENEATH KNOWN DEPOSITS TO EXPAND THE PRODUCTION POTENTIAL



# TRANSFORMATIONAL REGIONAL POTENTIAL

- Two Aircore and two RC rigs currently drilling outside Greater Hemi deposit:
  - Greater Hemi Area
    - Antwerp, Scooby and southwest of Hemi
    - Structural modelling and geochemistry defining new targets
  - Regional
    - Calvert, Withnell, Gillies, Mallina
    - Charity Well, Geemas



# SCOPING STUDY HIGHLIGHTS



**A future top 5  
Australian Gold Mine**  
Based on production



**Total production**  
**4.3Moz** over  
**10 years**



**Undiscounted free cash flow**  
**\$3,946M: pre-tax**  
**\$2,857M: post-tax**



**Mining physicals**  
**111Mt @ 1.43g/t Au**  
processed at 93% recovery



**Annual production**  
**473koz: first 5 years**  
**427koz: 10 years**



**NPV<sub>5%</sub>**  
**\$2,764M: pre-tax**  
**\$1,976M: post-tax**



**Strip ratio (Hemi)**  
**4.8:1 waste:ore**



**AISC**  
**\$1,111/oz: first 5 years**  
**\$1,224/oz: 10 years**



**IRR**  
**60%: pre-tax**  
**49%: post-tax**



**Plant throughput**  
**10Mtpa**



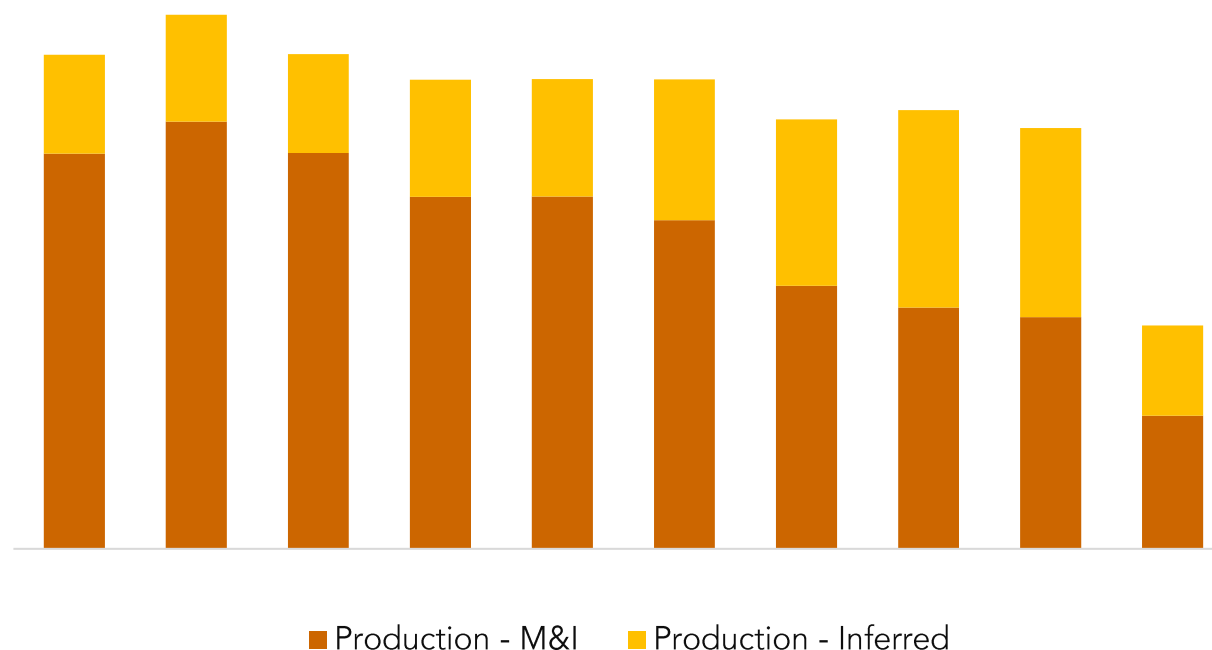
**Pre-production capital**  
**\$835M: cost of plant and**  
infrastructure including 25%  
contingency (\$167M) plus  
**\$58M pre-stripping cost**



**Unleveraged payback period**  
**1.5 years: pre-tax**  
**1.8 years: post-tax**

# ANNUAL PRODUCTION FORECAST

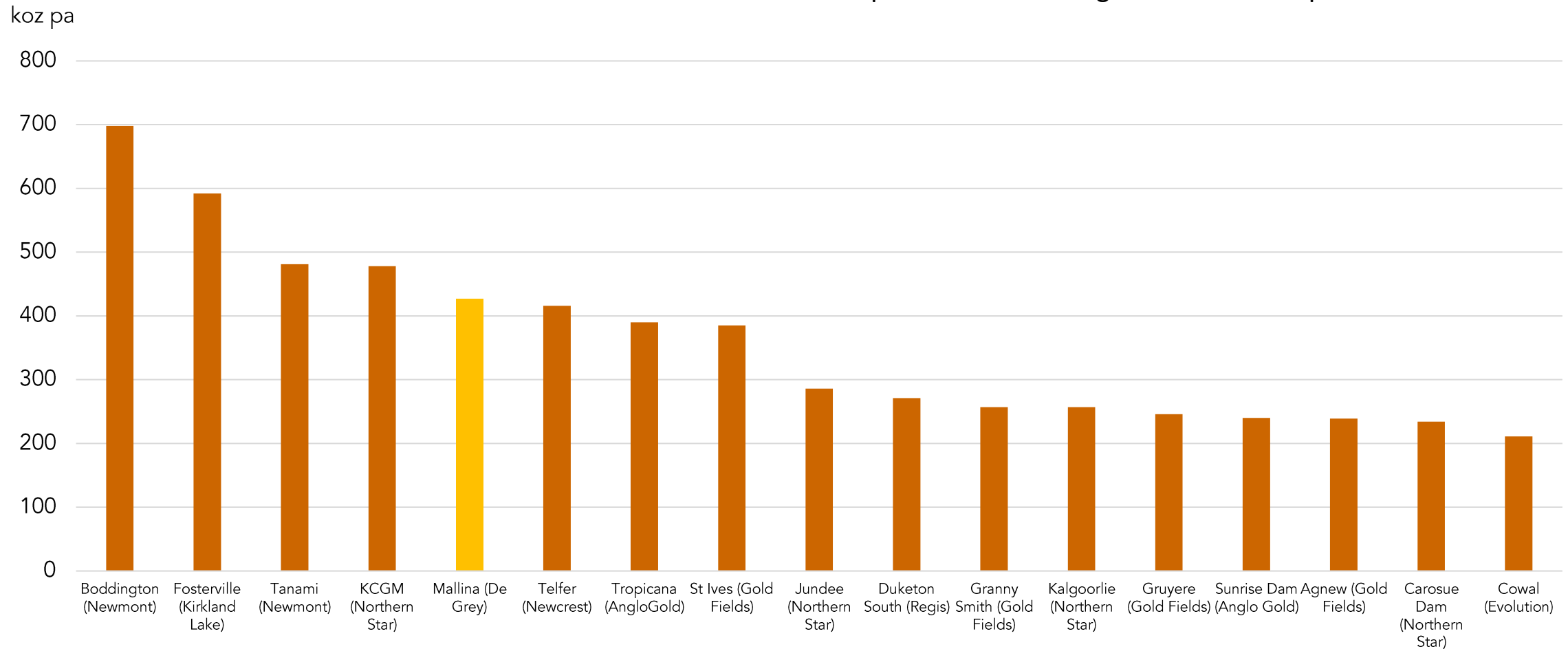
- Production based on June 2021 maiden Hemi MRE and existing Regional resources
- Resource extensions to Hemi and Regional deposits, increases to Indicated mineralisation and new discoveries expected to improve production profile and evaluation period
- Resource definition drilling at Diucon and Eagle has intersected high grade mineralisation associated with quartz veining
- Financial metrics expected to improve with physical metrics for the PFS



Throughput	Year (koz pa)										Average
Mtpa	1	2	3	4	5	6	7	8	9	10	koz pa
7.5	463	487	442	382	344	342	352	325	296	261	370
10.0	475	513	475	451	451	451	413	422	405	215	427
12.5	539	637	583	496	517	422	416	524	476	337	495

# A FUTURE TOP FIVE AUSTRALIAN GOLD MINE

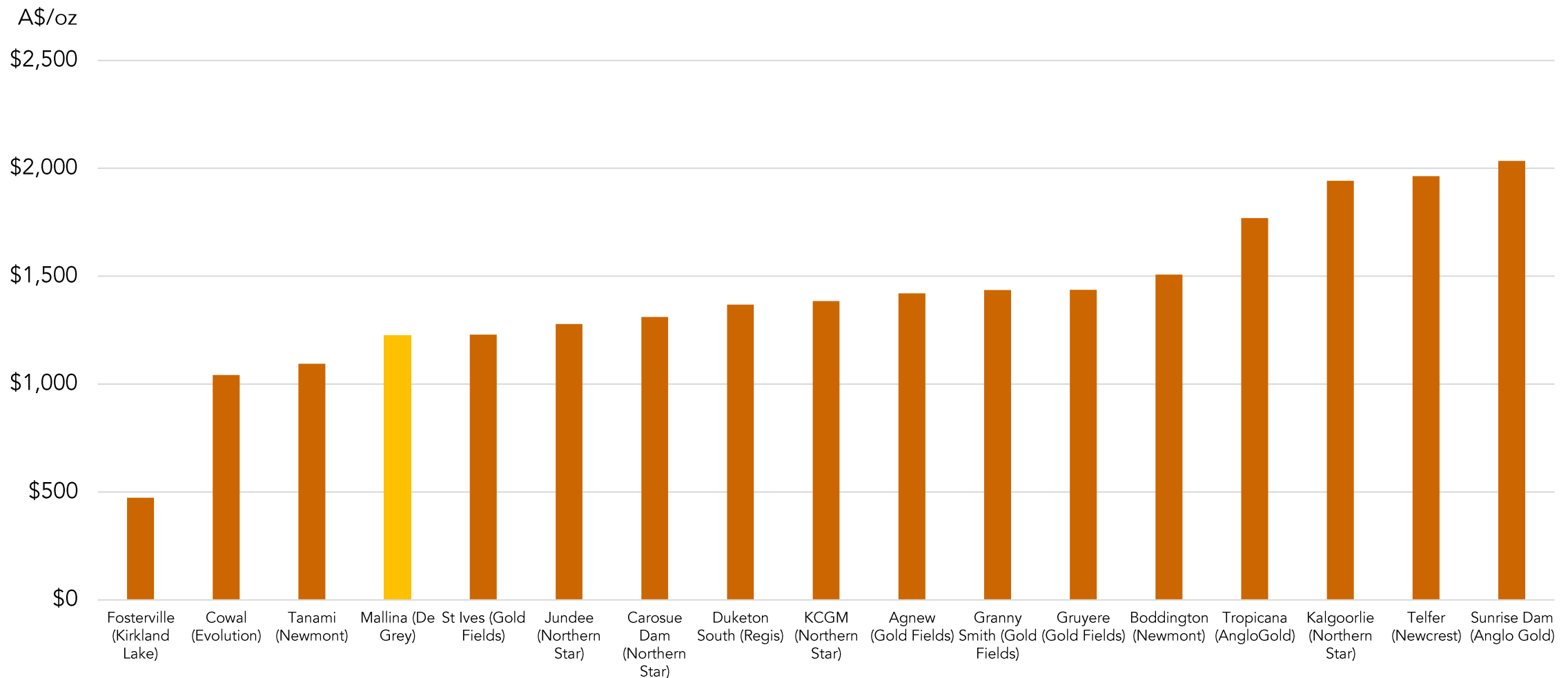
LOM Annual Production of Australian Gold Mines with production scale higher than 200koz pa



Comparable project data sourced from public company disclosures for the 12 months ended 30 June 2021. Developers that have released a PFS or FS with LOM average AISC were used for comparison purposes. Refer to ASX announcement *Mallina Gold Project Scoping Study* dated 5 October 2021.

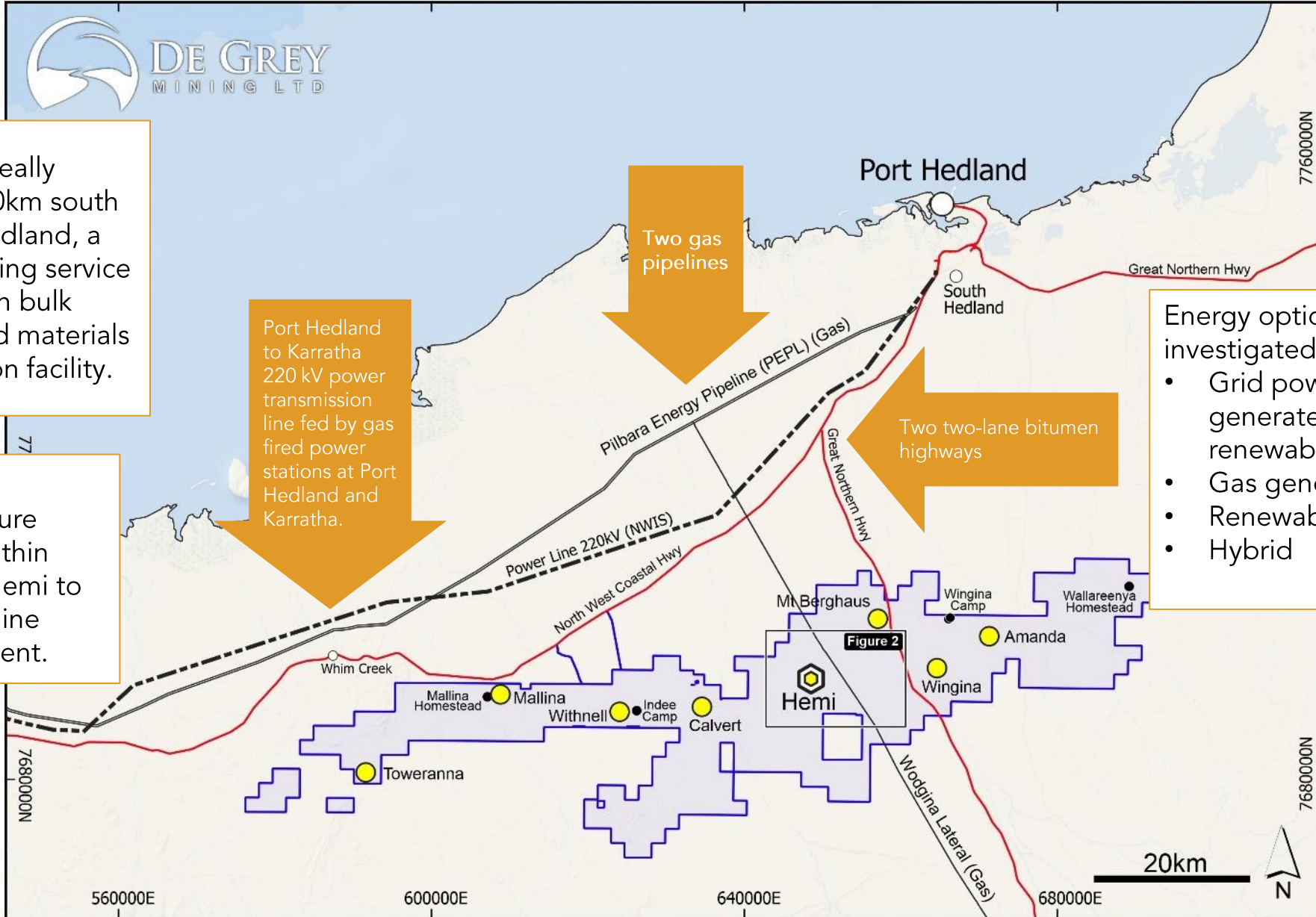
# ATTRACTIVE OPERATING COSTS AT SCALE

LOM AISC of Australian Gold Mines with production scale higher than 200koz pa



Comparable project data sourced from public company disclosures for the 12 months ended 30 June 2021. Developers that have released a PFS or FS with LOM average AISC were used for comparison purposes. Refer to ASX announcement *Mallina Gold Project Scoping Study* dated 5 October 2021.

# TIER 1 JURISDICTION & INFRASTRUCTURE



Hemi is ideally located 60km south of Port Hedland, a major mining service centre with bulk export and materials importation facility.

Existing infrastructure located within 20km of Hemi to support mine development.

Port Hedland to Karratha 220 kV power transmission line fed by gas fired power stations at Port Hedland and Karratha.

Two gas pipelines

Two two-lane bitumen highways

- Energy options being investigated in the PFS include:
- Grid power – currently gas generated with future renewable input planned
  - Gas generated – on site
  - Renewables – on site
  - Hybrid

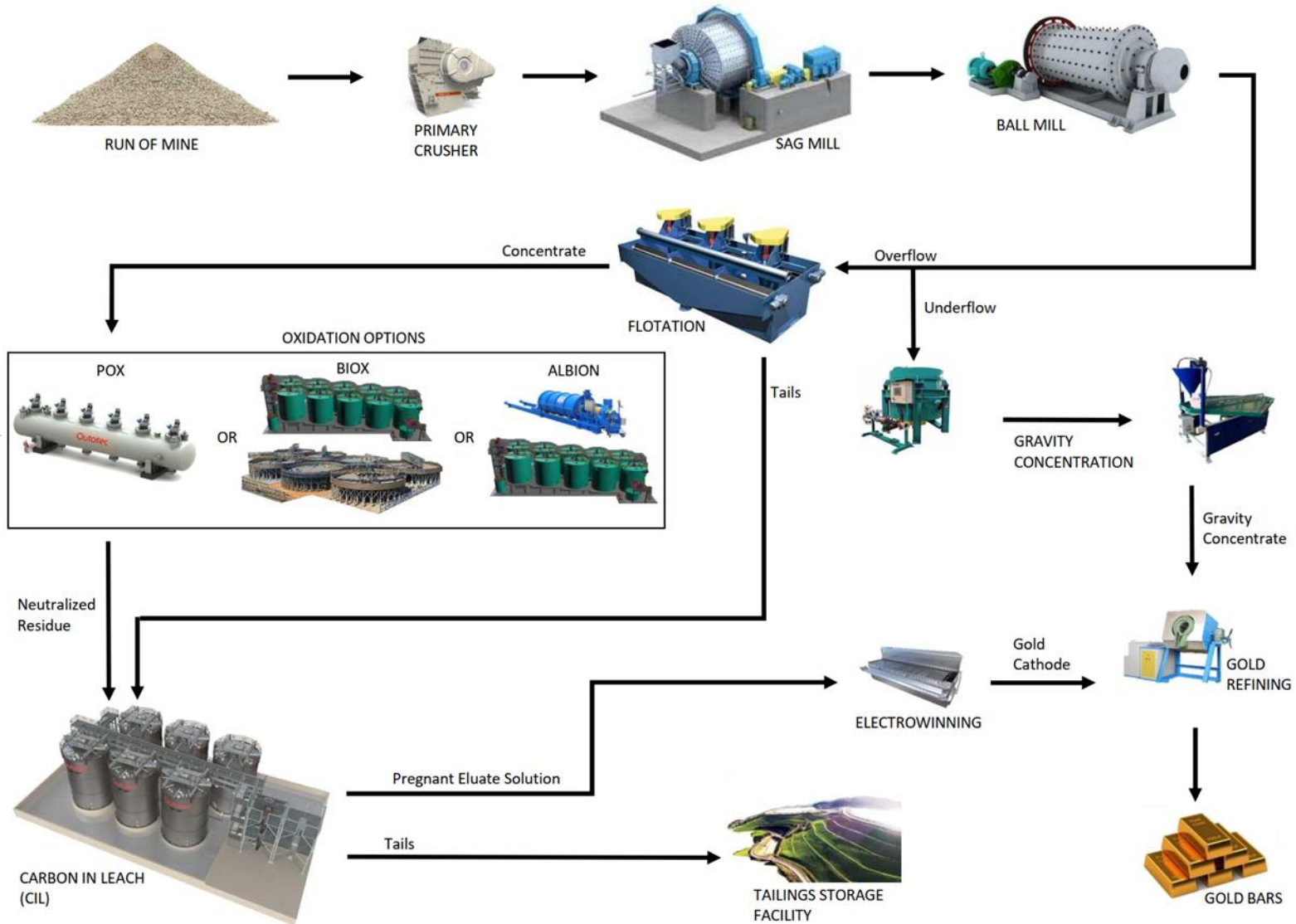


# HEMI METALLURGY

- Overall metallurgical recovery through detailed testwork is in the mid 90% range with overall tailings grade consistently less than 0.1g/t Au
- The final product on site is gold dore
- Hemi comprises oxide, transition and primary gold mineralisation:
  - Approximately 10% is gold bearing oxide mineralisation which is free milling
  - The balance is associated with gold bearing transition or primary sulphide mineralisation
- Hemi transition and primary mineralisation is classified as semi-refractory generally comprising:
  - 60% non-refractory or free milling mineralisation
  - 40% refractory mineralisation
- Gold bearing sulphides are readily recoverable into a low (~8% mass pull) flotation concentrate
- The gold bearing sulphide concentrate will be treated through a conventional oxidation process (e.g. POX, Albion, biological oxidation) with the oxidised residue treated through CIL
- Non-sulphide gold bearing flotation tailings go straight to CIL and contributes greater than 5% to the overall metallurgical recovery

# HEMI PROCESS FLOWSHEET

The preferred oxidation process route will be determined during the PFS



# HEMI PROCESSING ADVANTAGES

- The flotation circuit produces a sulphide concentrate to feed the oxidation circuit that is approximately 12 -13 times less than the plant front end crusher feed
- This significantly reduces the size and capital cost of the oxidation circuit (e.g. autoclaves) compared with a “whole of ore” operation
- The sulphur grade of the concentrate is sufficient for successful oxidation without heat addition
- Gold to sulphur ratio is >1:1 reducing oxygen requirements per unit of gold production
- The predominant gold bearing arsenopyrite oxidises more readily than pyrite and oxidises to a stable arsenate
- Flotation and oxidation testwork undertaken at ALS successfully demonstrated overall gold recoveries in the mid-90% range using POX, Albion or biological oxidation
- Engineering studies conducted for the Scoping Study demonstrated the technical and financial attractiveness of POX, Albion or biological oxidation
- Trade-off study underway with the prefeasibility study to select the optimal comminution circuit and oxidation process route
- Access to world class infrastructure for power, services and sufficient good quality groundwater

# HEMI METALLURGY TESTWORK UPDATE

- The Aquila, Brolga, Crow and Falcon deposits have now had batch testwork completed on representative samples in accordance with the process flowsheet
- The Diucon and Eagle deposits are currently having batch testwork completed
- A pilot plant run on a 5 tonne Brolga sample from the proposed starter pit is underway
  - Comminution and flotation testwork results have thus far aligned with batch testwork results
  - Sulphide oxidation testwork is in progress
- The pilot plant sample will enable testing for material flow, tailings design and geochemistry, with a second pilot plant run scheduled for April 2022 that will test additional Brolga samples along with Falcon, Diucon and Eagle samples

# PRINCIPLES INCORPORATED INTO STUDIES

- Adoption of the ICMM's Principles which align with the UN Sustainable Development goals for future studies and development phases
- Board has also resolved to adhere to the Task Force on Climate-Related Financial Disclosures (TCFD)
- PFS to incorporate practical outcomes in areas including the use of renewable energy, mining fleet options, future procurement decisions, environmental management and mine closure planning

## Community engagement

- Pursue continue improvement in social performance.
- Contribute to the social, economic and institutional development of host countries and communities.

## Working with Traditional Owners

- Consultation, collaboration approach. Cultural respect.
- Improve outcomes for Aboriginal children, families and communities.

## Acting ethically

- Apply ethical business practices.
- Implement sound systems of corporate governance and transparency.
- Help support sustainable operations.

## Caring for the environment

- Plan and design for closure.
- Implement water stewardship practises to achieve responsible water use.
- Design, construct, operate, monitor and decommission tailings disposal/storage facilities.
- Implement measures to improve energy efficiency and contribute to a low carbon future.

## Health and safety practices

- Protect the health and safety of our De Grey family by developing a fatality, injury and illness free performance and culture.
- Designing healthy and safe work whilst embracing innovation and technology.
- Truly understand the psychological health and wellness of our employees and impacts of work.
- A capable and competent workforce who can perform at the optimum level to achieve our objectives.

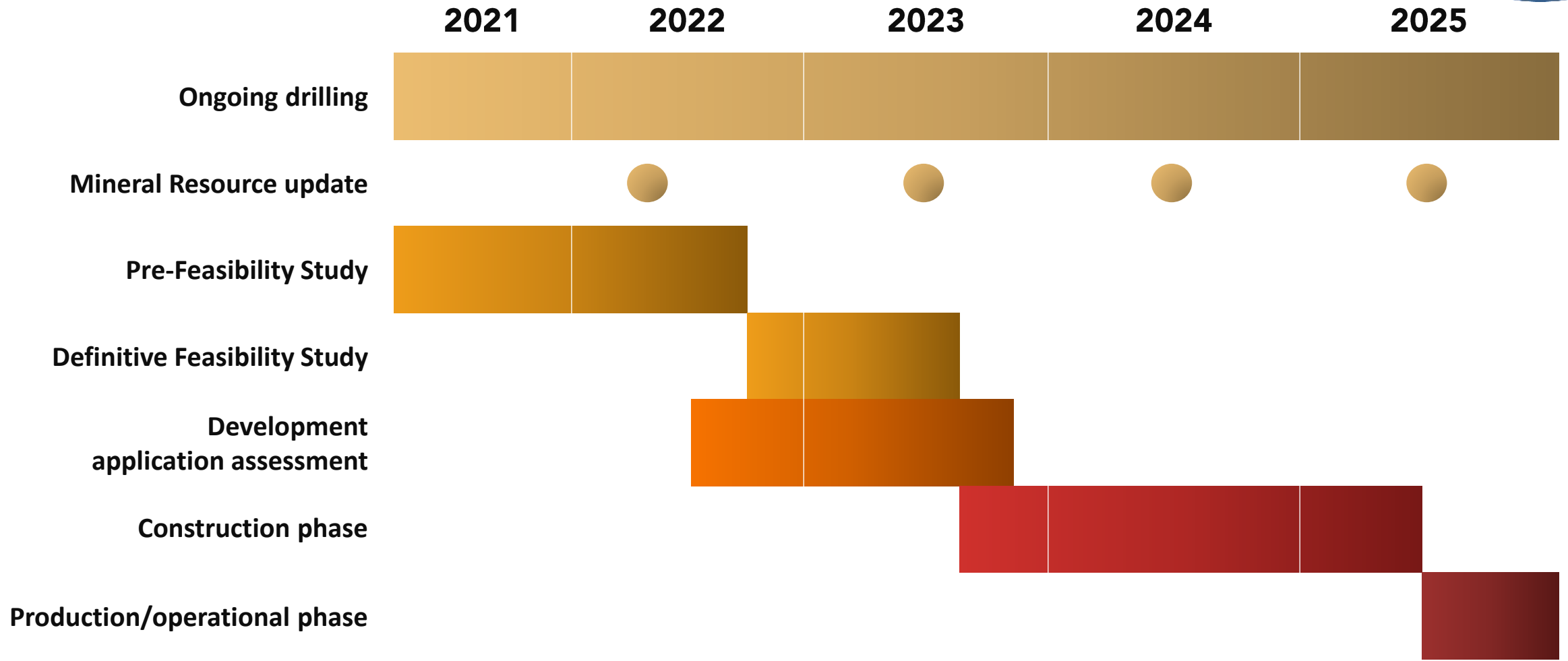


# ADOPTING SUSTAINABILITY FROM THE START

- Strong focus on health, safety and wellbeing
- Long-term partnership with Mission Australia
- Mandatory COVID-19 screening in place since March 2020 for all employees and contractors before travelling to site
- Recent introduction of rapid antigen tests to strengthen protocols and ability to identify and isolate any case on site should it arise
- Implementation of the “Containers for Change” initiative which aims to reduce plastic usage on site
- Ongoing heritage surveys with the Traditional Owners of the Kariyarra, Nyamal, Mallina and Ngarluma people – Hemi is within Kariyarra land
- Ongoing environmental surveys



# CONCEPTUAL PROJECT SCHEDULE



# GROWTH STRATEGY



Key management team in place and organisational growth aligned with activities



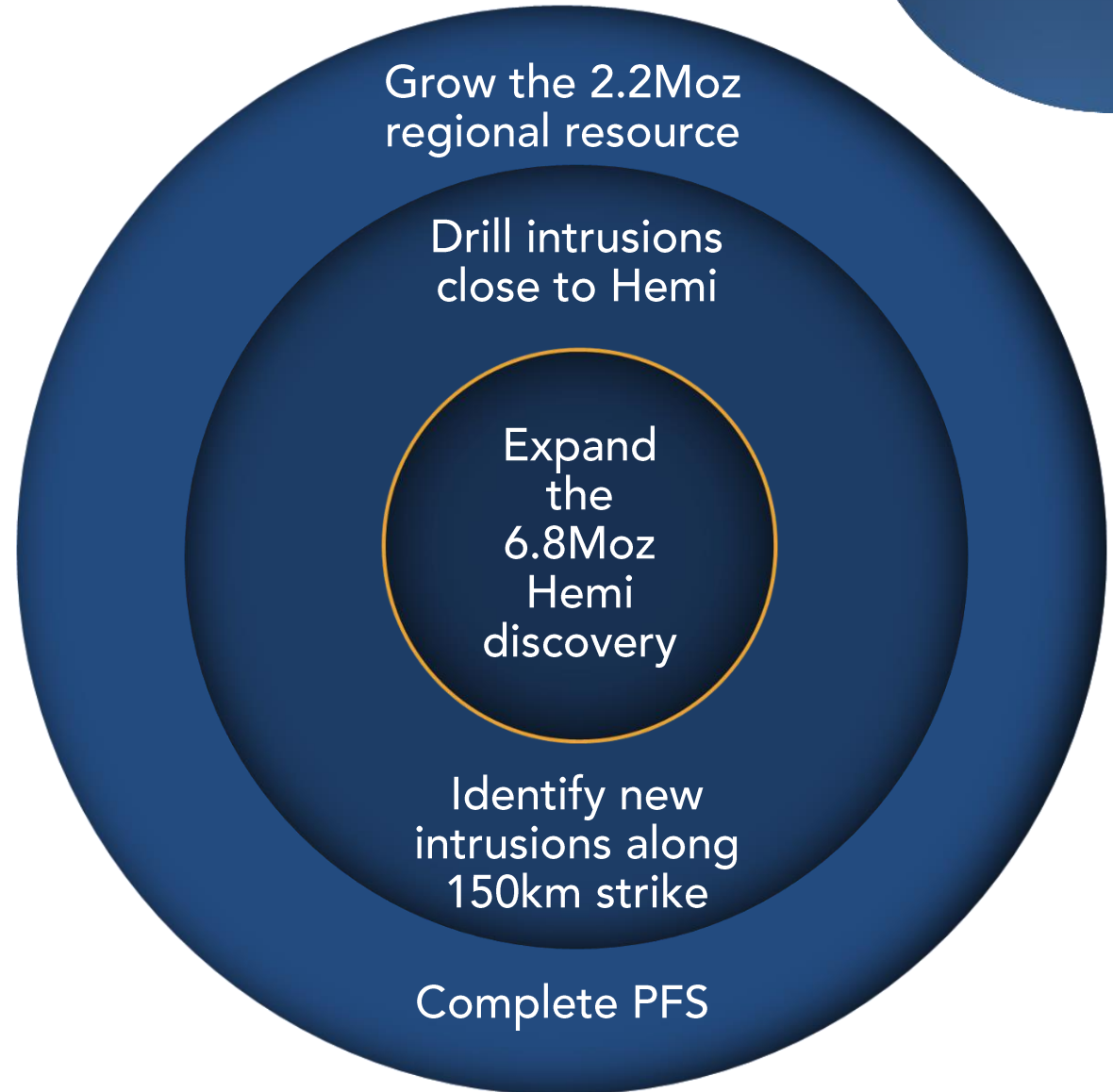
Delivering resource extensions at Hemi – depth and strike



Geological teams progressively testing targets across Greater Hemi and regionally



Studies team advancing the PFS to deliver improved outcomes from the Scoping Study





# CONTACT

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