

## **About AMEC**

## **Association of Mining and Exploration Companies**

The Association of Mining and Exploration Companies (AMEC) is a national peak industry body representing 580 mining and mineral exploration companies across Australia.

Our members are mineral explorers, emerging miners, producers, and a wide range of businesses working in and for the industry.

#### **Key advocacy objectives:**

- Increasing mineral exploration and project development
- Reducing the cost of doing business and streamlining approvals
- Building community support





# **State of Industry in 2024**

## **Mining and Mineral Exploration**

- Coming off a period of strong investment and record mineral exploration expenditure
- Mining projects and operations are facing significant inflationary pressures - pushing up costs of the order of 40 -50% (raw materials, capital infrastructure, labour etc)
  - There have been a number of operations put into care and maintenance (Nickel)
- Investment in mineral exploration has stagnated over last 12 months.
  - Capital raising has become very challenging
  - IPOs have dropped off a cliff
- Developing critical minerals projects / emerging industries is always challenging





# Mining & Exploration

## **Exploration**

- Mineral exploration precedes mining
- An Exploration Licence does <u>not</u> permit mining
- Only about 1 in 1,000 prospects become a working mine
- Early-stage activities to intense and costly activities

#### **Mineral Tenements**

- Licence, permit or lease that gives the rights to explore for or extract minerals from land
- Mineral tenement required for mining or exploration activity
- Crown (generally) owns minerals and grants these rights

#### **Tenements include:**

- Prospecting licence
- Exploration licence
- Mining lease





## The Mine Cycle

## The long journey from exploration to mining











#### Exploration 4-5 Years

Exploration is the process of collecting geographical information to identify mineral deposits and their economic viability. There are a range of activities that may be undertaken as part of an exploration program.

#### Discovery 1-2 Years

Even when there has been a discovery explorers will likely undertake further activities to build their confidence in the deposit. This may include collecting more drill data and resource modelling.

#### Feasibility 3-5 Years

Once explorers are confident with their discovery, they will need to conduct feasibility studies and apply for further permits to progress to mining. This stage usually involves conducting assessments of risk, safety, and environmental impacts, as well as further studies to assess the economic viability of the deposit.

## Development - 3 Years

The development stage of the mineral exploration cycle typically involves financing, engineering, further project permitting and construction. This is usually the most capital-intensive stage of the mine cycle, due to the costs of construction.

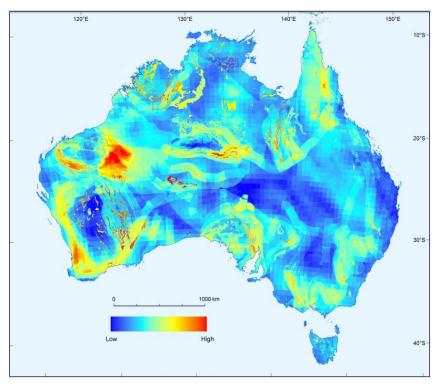
#### Mine

Mining occurs only after all the other stages of the cycle. The average mine life ranges from 5-15 years. It is estimated that only 1 in 135 discoveries will reach the stage of a producing mine, and even if there is a discovery it is an average of 13 years until mining will begin.



# **Exploring for the Future**

## **Commonwealth Government EFTF Program**



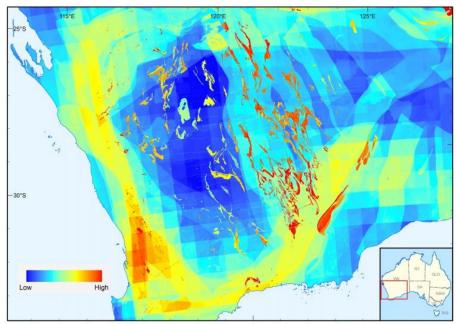
Map showing the potential of tholeiitic intrusion-hosted Ni-Cu-PGE sulfide deposits in Australia.

- In 2016, Australian Government made a 4 year \$100M investment to Geoscience Australia's Exploring for the Future (EFTF) Program
- Aim to drive investment into the resource and agricultural sectors by providing pre-competitive data about potential mineral, energy and groundwater resources
- Under EFTF, Geoscience Australia published nickel-copper-PGE prospectivity map in 2016
- Map identifies regions of intrusion-hosted Ni-Ci-PGE potential



# **Exploring for the Future**

### **Julimar Discovery**



Variations in modelled potential for tholeiitic intrusion-hosted Ni-Cu-PGE sulfide mineralization in the Yilgarn Craton in Western Australia.

- Following release of the Ni-Cu-PGE prospectivity map, showing significant mineralisation in the Wheatbelt, Chalice Mining focused exploration efforts in the Julimar area
- Chalice's exploration at the Julimar site led to the discovery of high-grade platinum group elementscopper-nickel deposit (the Gonnevile Discovery) in March 2020.
- Gonnevile discovery generated significant increased interest in the mineral potential across the Wheatbelt.



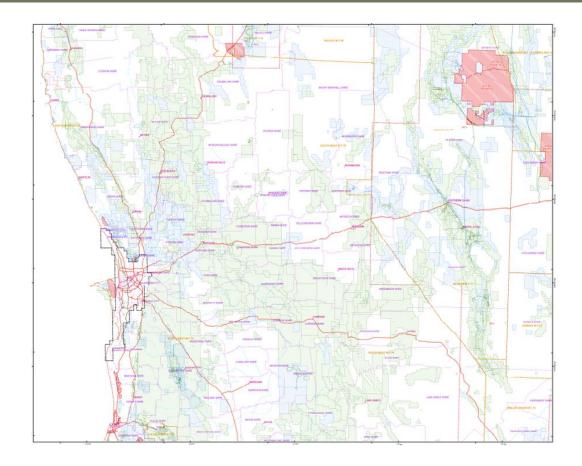
# **Chalice Mining – Julimar Project**

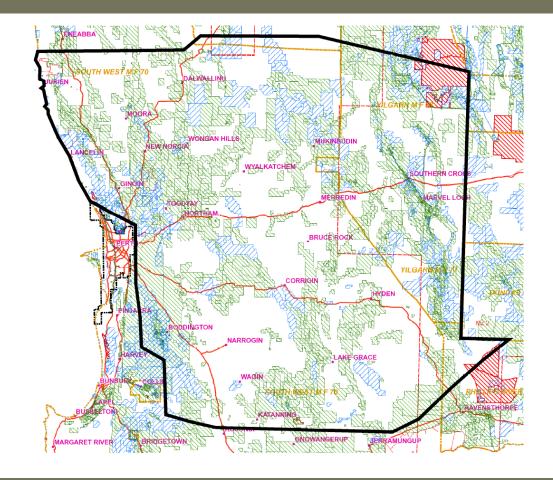
## Julimar Project - the Gonneville Discovery



- Chalice discovered the Gonneville deposit at the project in March 2020, intersecting shallow high-grade PGE-nickel -copper-cobalt-gold sulphide mineralisation.
- Gonneville is located on private farmland at the southern end of the interpreted >30km long Julimar Complex.
- Chalice has recently proposed their development to the Environmental Protection Authority (EPA) signifying substantial progress to the project.







# **State of Play in the Wheatbelt**

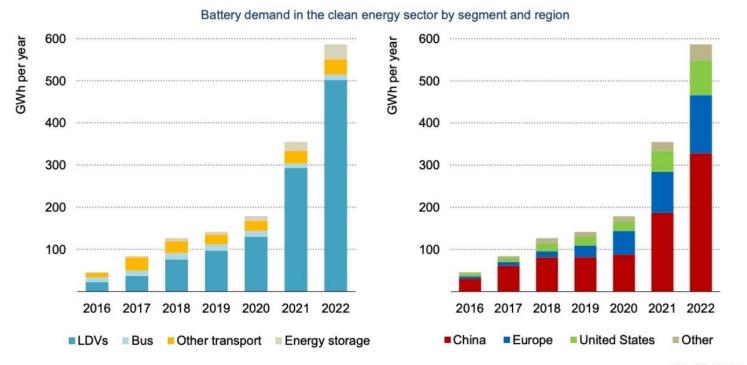
Slow progress - Mineral Exploration takes time.

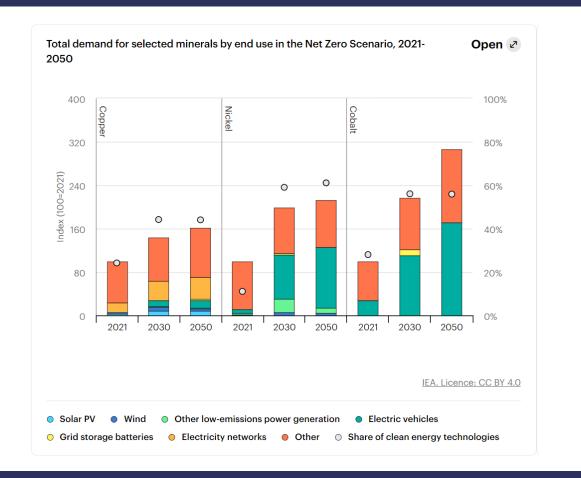
- Exploration efforts have been significantly slowed by a weak investment environment for mineral exploration
- Getting on ground: Land Access negotiations can take considerable time to work through
- Companies have only held tenure since around 2020.
  It's still early.
- Mineral exploration takes time.
- Still strong interest in the Wheatbelt
  When ground is dropped, its usually being picked up by another company.





# Global battery demand for clean energy applications increased by two-thirds in 2022, mainly for transport but with power sector storage growing fast







## **Exploration for the Future**

#### **Critical Minerals & Gold**

Currently, the mining industry contributes \$1.3B to the overall Gross Regional Product (GRP), the 2<sup>nd</sup> largest industry in the Wheatbelt region.

- Exploration efforts will continue.
- The Wheatbelt is still significantly under-explored.
- Still a strong belief that there are both significant critical mineral and gold resources to be discovered in the Wheatbelt.





# **Industry Challenges in the Wheatbelt**

#### **Major growth pressures occurring**

- Access to labour, competing with other industries in the same talent pool. All industries under pressure.
- Land access is a constant challenge for exploration companies. Wheatbelt is unique in Western Australia due to the large portions of Freehold land.
- Significant wage inflation is already taking place, in our industry and many others, as we compete for employees. (140,000 employees – Average Wage \$140K)
- Attracting people to the region or to work FIFO/DIDO.
  These people need somewhere to live putting further pressure of regions and towns.
- Maintaining community support for our industry.







# **Wheatbelt Working Group**

### **AMEC Members**

Andromeda Metals	_andromet.com.au	DevEx Resources	devexresources.com.au	OD6 Metals	od6metals.com.au
Ausgold	ausgoldlimited.com	Dundas Minerals	dundasminerals.com	Pursuit Minerals	pursuitminerals.com.au
AusQuest	ausquest.com.au	Emu NL	emunl.com.au	Sipa Resources	sipa.com.au
Australian Vanadium	australianvanadium.com.au	Enegex	enegex.com	Strategic Energy Resources	strategicenergy.com.au
Bulletin Resources	bulletinresources.com	Impact Minerals	impactminerals.com.au	Tambourah Metals	tambourahmetals.com.au
Burley Minerals	burleyminerals.com.au	Latin Resources	<u>latinresources.com.au</u>	Todd River Resources	trrltd.com.au
Caravel Minerals	caravelminerals.com.au	Medallion Metals	medallionmetals.com.au	Venture Minerals	ventureminerals.com.au
Caspin Resources	caspin.com.au	Meeka Metals	meekametals.com.au		
Chalice Mining	chalicemining.com	Moho Resources	mohoresources.com.au		<b>A</b>
Charger Metals	chargermetals.com.au	Nickel Search	nickelsearch.com	-	
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## **Working together**

## Next steps...

- Mineral exploration companies will be more prominent in the Wheatbelt than in the past.
- Our member companies value and rely on good working relationships with landowners, local governments and the surrounding local communities
- Today's mineral exploration projects have the potential in time to turn into mining projects creating new employment and economic opportunities in the region
- We want to ensure that our Members interact openly, honestly and fairly with landowners and their communities, and that our industry is welcome and wanted to continue to explore



