



# An emerging critical minerals province in Western Australia

Future Facing Commodities 2024

26 MARCH 2024

ASX:CHN



# Cautionary statements and competent person(s) disclosure



## Authorisation

This Presentation has been authorised for release by the Disclosure Committee.

## Disclaimer

This Presentation does not provide investment or financial product advice and does not include all available Information on Chalice Mining Limited ("Chalice" or "the Company") and should not be used in isolation as a guide to investing in the Company. This Presentation is not a prospectus, disclosure document or other offering document under Australian law or under any other law. It is provided for information purposes and is not an invitation nor offer of shares or recommendation for subscription, purchase or sale in any jurisdiction. This Presentation does not purport to contain all the information that a prospective investor may require in connection with any potential investment in the Company. Any potential investor should also refer to Chalice Mining Limited's Annual Reports, ASX releases, and take independent professional advice before considering investing in the Company. For further information about Chalice Mining Limited, visit our website at [chalicemining.com](http://chalicemining.com)

Whilst care has been exercised in preparing and presenting this Presentation, to the maximum extent permitted by law, the Company and its representatives:

- Make no representation, warranty or undertaking, express or implied, as to the adequacy, accuracy, completeness or reasonableness of this Presentation;
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## Cautionary statement

This Presentation includes information extracted from the Company's ASX announcement dated 29 August 2023, titled "Gonneville Nickel-Copper-PGE Project Scoping Study".

For the production targets and forecast financial information for the 15Mtpa Case scenario (modelled LOM - 19 years), Inferred Resources comprise 14% of the production schedule over the modelled Life of Mine (LOM). For the 30Mtpa Case scenario (modelled LOM - 18 years), Inferred Resources comprise 37% of the production schedule over the modelled Life of Mine (LOM). Significantly, in both the 15Mtpa Case and 30Mtpa Case scenarios, the Inferred Mineral Resources do not play a prominent role in the initial mine plan. Throughout the first 15 years of production, the Inferred Mineral Resources constitute less than ~20% in both production schedules. Accordingly, Chalice has concluded that it is satisfied that the financial viability of both development cases modelled in the Scoping Study is not dependent on the inclusion of Inferred Resources early in the production schedule given an estimated payback period (from commencement of production) of ~2 years for the 15Mtpa Case and the 30Mtpa Case.

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production targets themselves will be realised

## Forward-Looking Statement

This Presentation may contain forward-looking statements and forward information, (collectively, forward-looking statements). These forward-looking statements are made as of the date of this Annual Report and Chalice Mining Limited (the Company) does not intend, and does not assume any obligation, to update these forward-looking statements.

Forward-looking statements relate to future events or future performance and reflect Company management's expectations or beliefs regarding future events and include, but are not limited to: the impact of the discovery on the Gonneville Project's capital payback; the Company's planned strategy and corporate objectives; estimated timing of the Gonneville Project schedule; objectives of the strategic partnering process, the realisation of Mineral Resource Estimates; anticipated production; sustainability initiatives; climate change scenarios; the likelihood of further exploration success; the timing of planned exploration and study activities on the Company's projects; mineral processing strategy; access to sites for planned drilling activities; planned production and operating costs profiles; planned capital requirements; the success of future potential mining operations and the timing of the receipt of exploration results.

In certain cases, forward-looking statements can be identified by the use of words such as, "aim", "anticipate", "commence", "considered", "continue", "could", "estimate", "expected", "for", "forecast", "future", "intend", "indicates", "is", "likely", "may", "objectives", "optionality", "outlook", "open", "plan" or "planned", "potential", "strategy", "target", "will" or variations of such words and phrases or statements that certain actions, events or results may, could, would, might or will be taken, occur or be achieved or the negative of these terms or comparable terminology. By their very nature forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

Such factors may include, among others, risks related to actual results of current or planned exploration and development activities; whether geophysical and geochemical anomalies are related to economic mineralisation or some other feature; whether visually identified mineralisation is confirmed by laboratory assays; obtaining appropriate approvals to undertake exploration activities; metal grades being realised; metallurgical recovery rates being realised; results of planned metallurgical test work including results from other zones not tested yet; the outcomes of feasibility studies, scaling up to commercial operations; the speculative nature of mineral exploration and development; changes in project parameters as plans continue to be refined and feasibility studies are undertaken; changes in exploration programs and budgets based upon the results of exploration; successful completion of the strategic partnering process; changes in commodity prices and economic conditions; political and social risks, accidents, labour disputes and other risks of the mining industry; delays or difficulty in obtaining governmental approvals, necessary licences, permits or financing to undertake future mining development activities; changes to the regulatory framework within which Chalice operates or may in the future; movements in the share price of investments and the timing and proceeds realised on future disposals of investments as well as those factors detailed from time to time in the Company's interim and annual financial statements, all of which are filed and available for review on the ASX at [asx.com.au](http://asx.com.au).

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.



# Cautionary statements and competent person(s) disclosure (cont'd.)



## Reliance on Third Party Information

The views expressed in this Presentation contain information that has been derived from third party sources that have not been independently verified. No representation or warranty is made as to the accuracy, completeness or reliability of the information.

## Mineral Resources Reporting Requirements

As an Australian Company with securities quoted on the Australian Securities Exchange (ASX), Chalice is subject to Australian disclosure requirements and standards, including the requirements of the Corporations Act 2001 and the ASX. Investors should note that it is a requirement of the ASX listing rules that the reporting of mineral resources in Australia is in accordance with the JORC Code and that Chalice's mineral resource estimates comply with the JORC Code. The requirements of JORC Code differ in certain material respects from the disclosure requirements of other countries. The terms used in this announcement are as defined in the JORC Code. The definitions of these terms may differ from the definitions of such terms for purposes of the disclosure requirements in other countries.

## Competent Person(s) Statement

The information in this Presentation that relates to previously reported exploration results is extracted from the following ASX announcements:

- "High-grade nickel-copper-palladium sulphide intersected at Julimar Project in WA", 23 March 2020.
- "Extensive Ni-Cu Soil Anomalism at Julimar", 9 June 2021.
- "Gonneville Resource increases by approx. 50% to 3Mt NiEq", 28 March 2023.
- "Further early-stage exploration success north of Gonneville", 3 May 2023.
- "New wide high-grade zones in ~900m step-out drill hole", 31 July 2023.
- "Gonneville Nickel-Copper-PGE Project Scoping Study", 29 August 2023.
- "High-grade copper-PGE zones extended at Gonneville", 30 November 2023.

The information in this Presentation that relates to Mineral Resources has been extracted from the ASX announcement titled:

- "Gonneville Resource increases by approx. 50% to 3Mt NiEq", 28 March 2023.

The above announcements are available to view on the Company's website at [chalicemining.com](http://chalicemining.com)

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the original release continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the relevant original market announcements. Refer to the attached Appendix for further information on the Mineral Resource Estimate and metal equivalents.

## Production Targets and Forecast Financial Information

The production targets and forecast financial information disclosed in this Presentation is extracted from the Company's ASX announcement "Gonneville Nickel-Copper-PGE Project Scoping Study", dated 29 August 2023.

All material assumptions underpinning the production targets and forecast financial information derived from the production targets in the previous announcement continue to apply and have not materially changed.

# Why Chalice? We own one of the **largest critical minerals deposits in the western world** and are unlocking a new mineral province

## Strong financial position

- ~A\$112M in cash and no debt<sup>1</sup>
- No need to raise capital in the foreseeable future

## Unique tier-1 Gonneville Resource

- 100% ownership of the largest undeveloped palladium resource and one of the largest critical minerals discoveries in the western world
- 16Moz of Pd-Pt-Au (3E), 860kt Ni, 520kt Cu, 83kt Co contained<sup>2</sup>

## Compelling value and leverage

- Trading at extremely low EV/resource metrics – A\$12/oz PdEq<sup>3</sup>
- ~A\$180M spent to date on Gonneville drilling, testwork, studies and acquiring ~24km<sup>2</sup> of surrounding farmland – current EV ~A\$330M<sup>4</sup>
- Commodity prices at cyclical lows – high leverage to price recovery

## Highly competitive cost profile

- Predicted to become lowest cost PGE mine in the western world and 2<sup>nd</sup> quartile globally (after by-product credits)
- Shallow, simple open-pit mining and sulphide mineralogy

## Low risk project

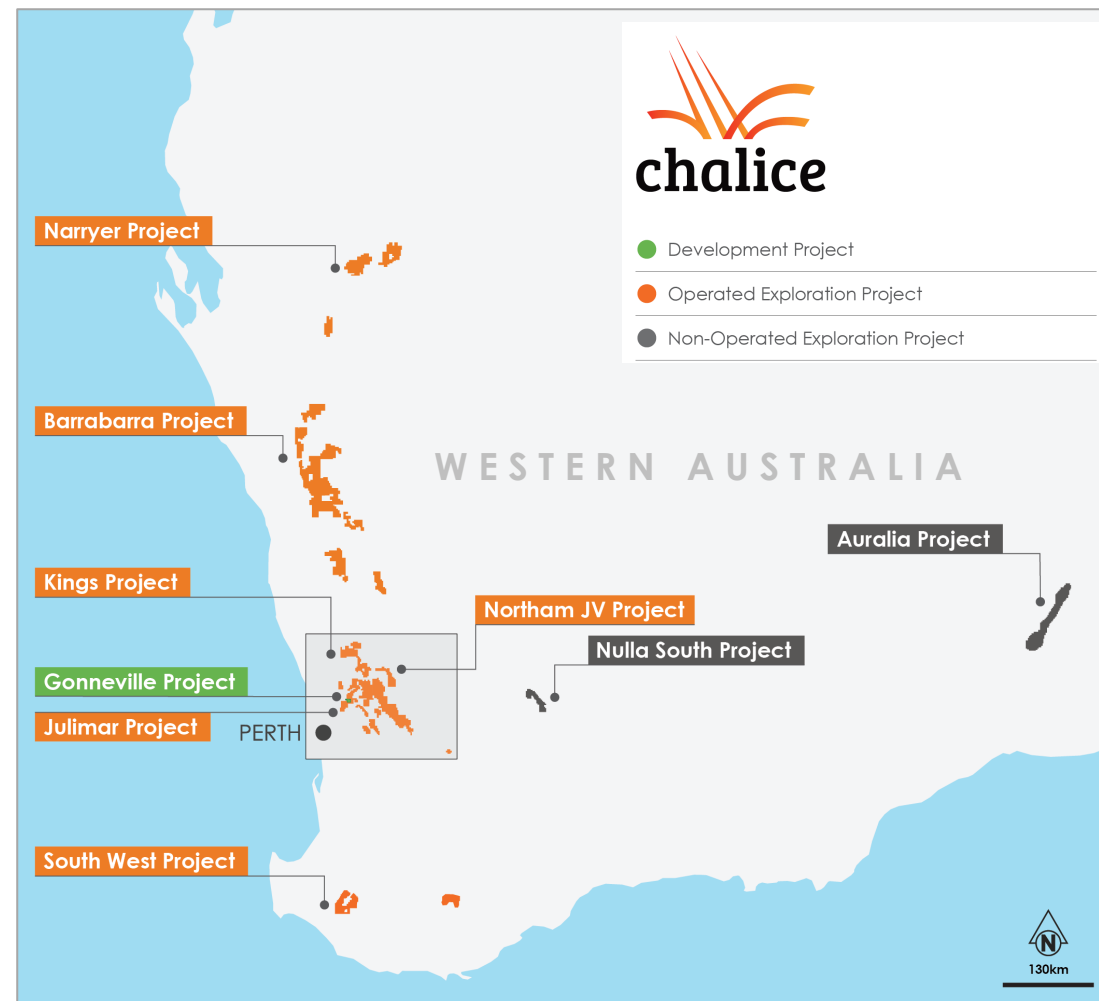
- Location ~70km from Perth, WA – excellent infrastructure and jurisdiction
- IRA<sup>5</sup> compliant metals
- Pre-Feasibility Study underway (targeting mid 2025 completion) – high-grade starter case, capital phasing and optimisations underway

## Exceptional exploration upside

- >9,600km<sup>2</sup> surrounding licence area being explored for first time
- Province hosts >40Moz Boddington gold mine, >2.5Mt Greenbushes lithium mine as well as >30Moz PdEq Gonneville deposit

## Team

- Board and management team with track record of discovery and large-scale project development
- Significant insider ownership and stable share register



1. As of 31 Dec 2023 2. 560Mt @ 0.88g/t Pd+Pt+Au (3E), 0.16% Ni, 0.09% Cu, 0.015% Co (Refer to the Mineral Resources Statement in Appendix).

3. PdEq (Palladium Equiv.) g/t = Pd(g/t)+0.67xPt(g/t)+1.17xAu(g/t)+3.11xNi(%) +2.57xCu(%) +9.33xCo(%). 4. As of 21 Mar 2024. 5. United States Inflation Reduction Act.

# Gonneville is positioned to become a **strategic asset** for Australia and the western world, given its rare palladium-nickel-cobalt content

Gonneville is the **first major PGE discovery in Australia** and one of the few recent large-scale magmatic Ni-Cu-PGE discoveries in the western world

**Pd, Pt, Ni and Co** are classified as **'critical minerals'** by most western governments; case is also growing for Cu

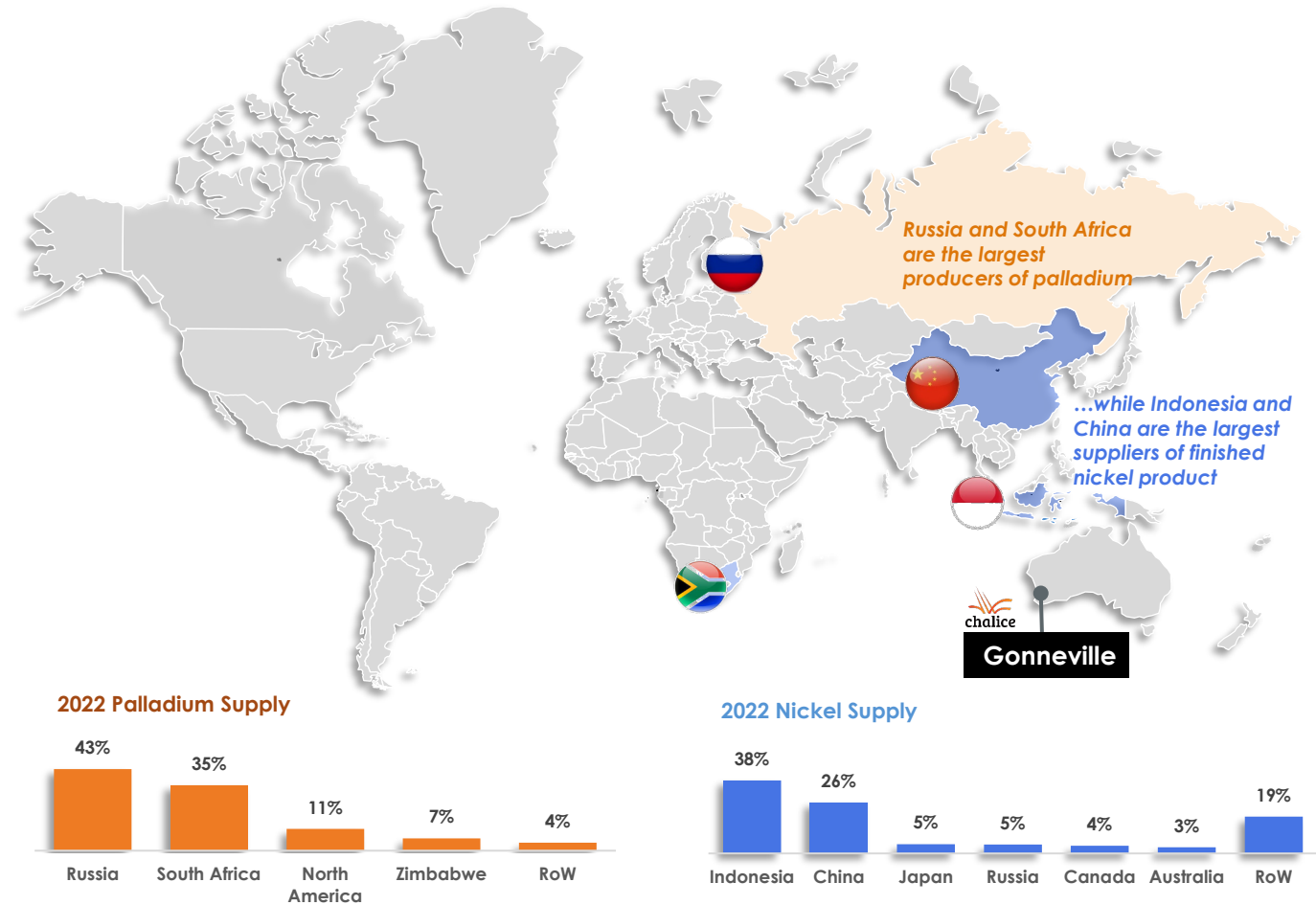
The western world is **extremely reliant on Russian Palladium supply** (~43% of global supply)

Gonneville is located in one of the **world's most stable and friendly mining jurisdictions** with a commitment to sustainable development

The Australian Government has committed A\$6 billion<sup>1</sup> to **accelerate strategically significant projects** and **strengthen** internal critical mineral **security and supply chains**

The **US Inflation Reduction Act (IRA)** includes a **US\$370 billion stimulus package** to accelerate critical minerals production in western countries

Global **Palladium** and **Nickel** Primary Supply Market Share (2022)<sup>2</sup>

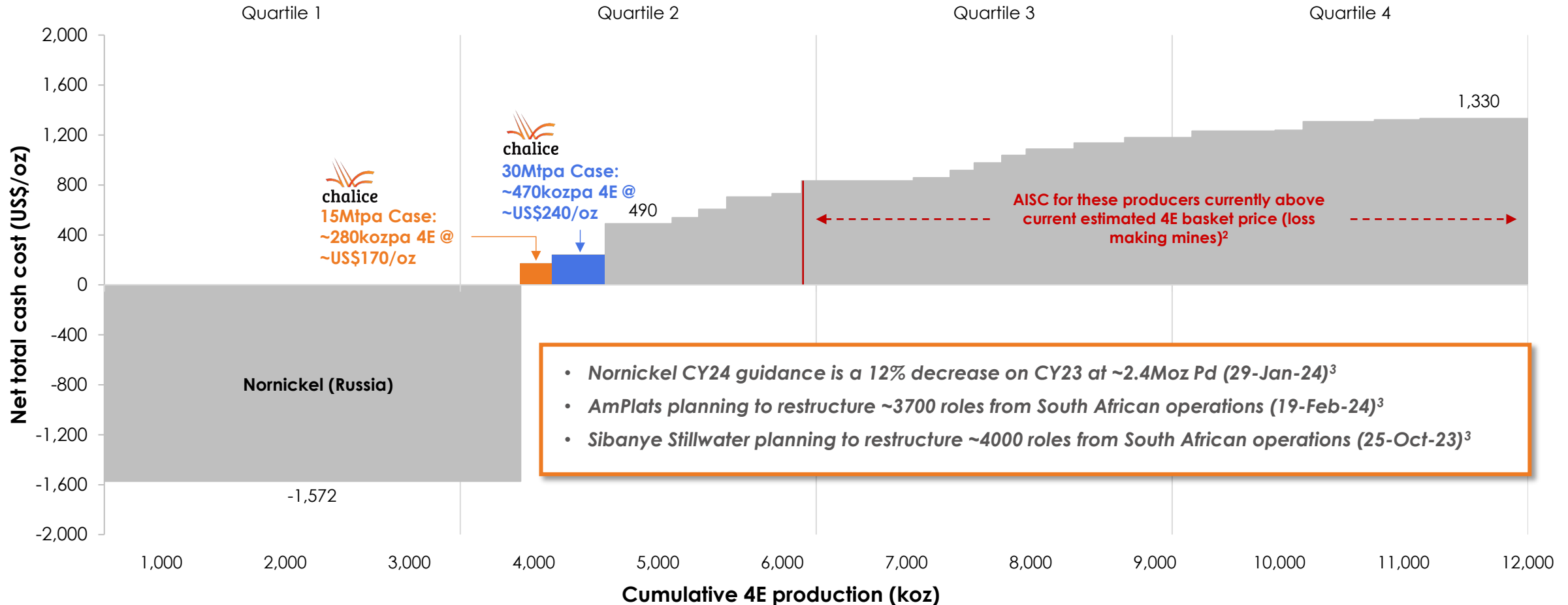


Source: 1. '2023-2030 Critical Minerals Strategy' Department of Industry, Science, Energy and Resources, Australian Government, June 2023, '\$2 billion critical minerals boost crucial to energy transition', Australian Government, October 2023. 2. AME as at 10 May 2023, Market research.

# Palladium spot price is at the ~50th percentile of the cost curve – Supply is decreasing whilst demand remains robust



**PGE Industry Cost Curve – Net total cash costs per 4E oz (after by-product credits), CY2022, US\$/oz<sup>1</sup>**



Source: 2022 SFA (Oxford) Ltd collated costs and revenues used for 4E cost curve data. Note: 1. 4E cost curve positioning assumes average 2022 by-product commodity prices of: Copper US\$10,105/t, Nickel US\$25,000/t, Iridium US\$4,400/oz, Ruthenium US\$550/oz, Chrome 42% CIF US\$300/t. AME forecast Cobalt price of US\$46,407/t has been assumed given not disclosed in SFA data. Above cash costs will differ to that presented elsewhere given the difference in commodity prices assumed for by-products calculation. 2. Estimated weighted average 4E basket price calculated using spot prices as at 14 February 2024. 3. Refer to the respective press release for the date shown.

# Why palladium? Hybrid electric vehicles – the ‘best of both worlds’ solution will **drive strong demand for palladium and battery metals**

- Key driver of Pd demand is **sales of plug-in hybrid electric (PHEV) and ICE vehicles**
- Consumers are favouring PHEVs over BEVs due to their **lower cost, longer range and the lack of charging infrastructure**
- Major car manufacturers, such as **Toyota, Ford and Hyundai**, are scaling up PHEV production to meet growing demand

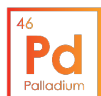


TOYOTA

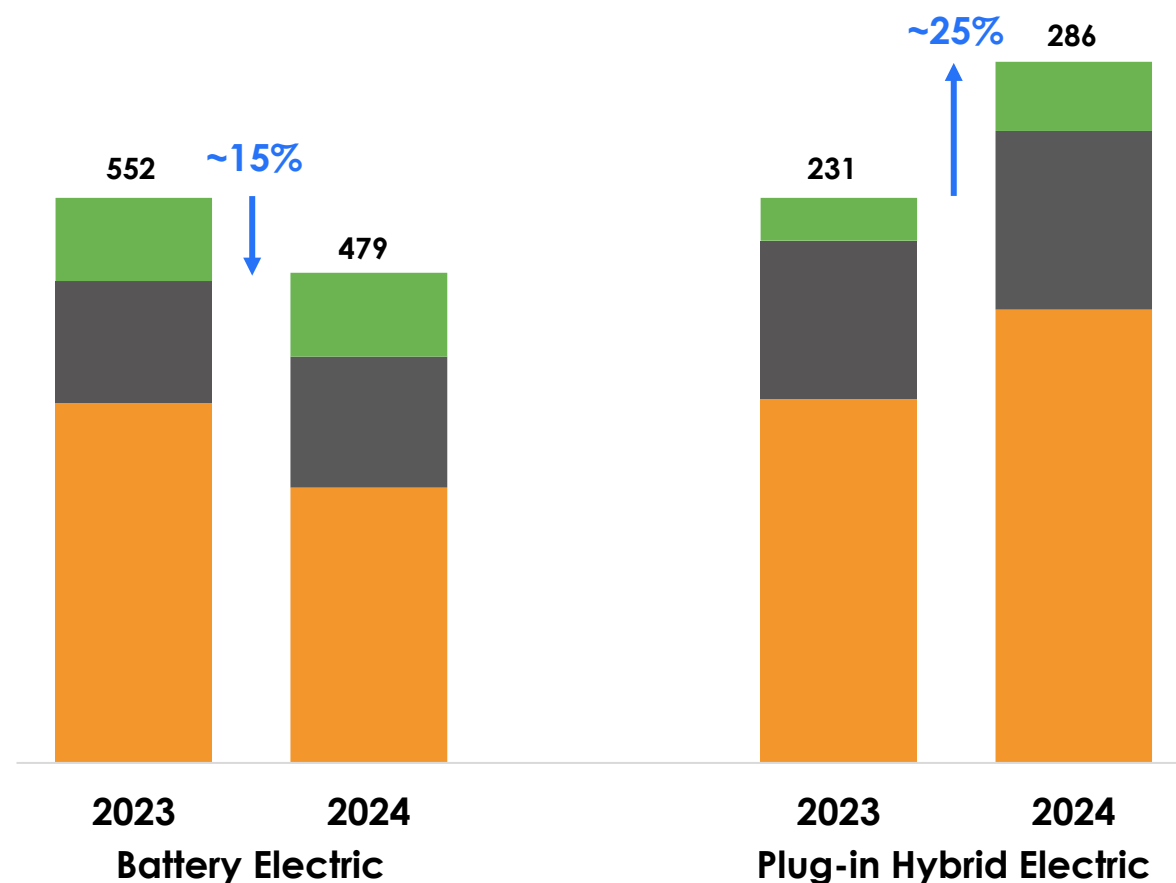


HYUNDAI

- PHEVs typically have a **palladium based catalytic converter and a nickel-cobalt chemistry battery (NCA or NCM)**



**Electric vehicle sales year-on-year  
Feb 2023 - Feb 2024 ('000s)**



# Why now? Palladium prices are at cyclical lows, vehicle sales are strong and **Chalice has a high degree of leverage to price recovery**



## China-US-EU total ICE+hybrid vehicle sales (000's, monthly)<sup>1</sup> vs Pd price performance (rebased)<sup>2</sup>



## Drivers for PGE price recovery

1. **Slowing electric vehicle uptake**
2. **Growing ICE and hybrid electric vehicle sales**
3. **Spot price at 50<sup>th</sup> percentile of the cost curve**

## Upcoming project catalysts

1. **Gonneville high-grade sulphide Resource update**
2. **Updated scoping study with higher-grade, staged open-pit / underground starter cases**
3. **Strategic partnering process for Gonneville<sup>3</sup>**

Source: 1. JPMorgan. 2. FactSet market data as at 19 Jan 2024. 3. A formal partnering process is underway. Discussions with potential partners are preliminary in nature. There is no assurance that the strategic partnering process will result in a transaction.





# Gonneville Project

Project update and priorities



# Gonneville Ni-Cu-PGE Project Overview

A new long-life, low-cost, low-carbon *critical minerals* project in Western Australia

## A globally significant magmatic sulphide Resource ~70km from Perth:

- 560Mt @ ~0.54% NiEq or 1.7g/t PdEq for ~16Moz of Pd-Pt-Au (3E), 860kt Ni, 520kt Cu, 83kt Co<sup>1</sup> contained – deposit remains open at depth
- Strategic and rare, large-scale critical minerals project in a western jurisdiction – strong potential for a western and green premium (IRA-compliant products)

## Scoping Study (Aug 2023) completed on bulk open-pit development options:

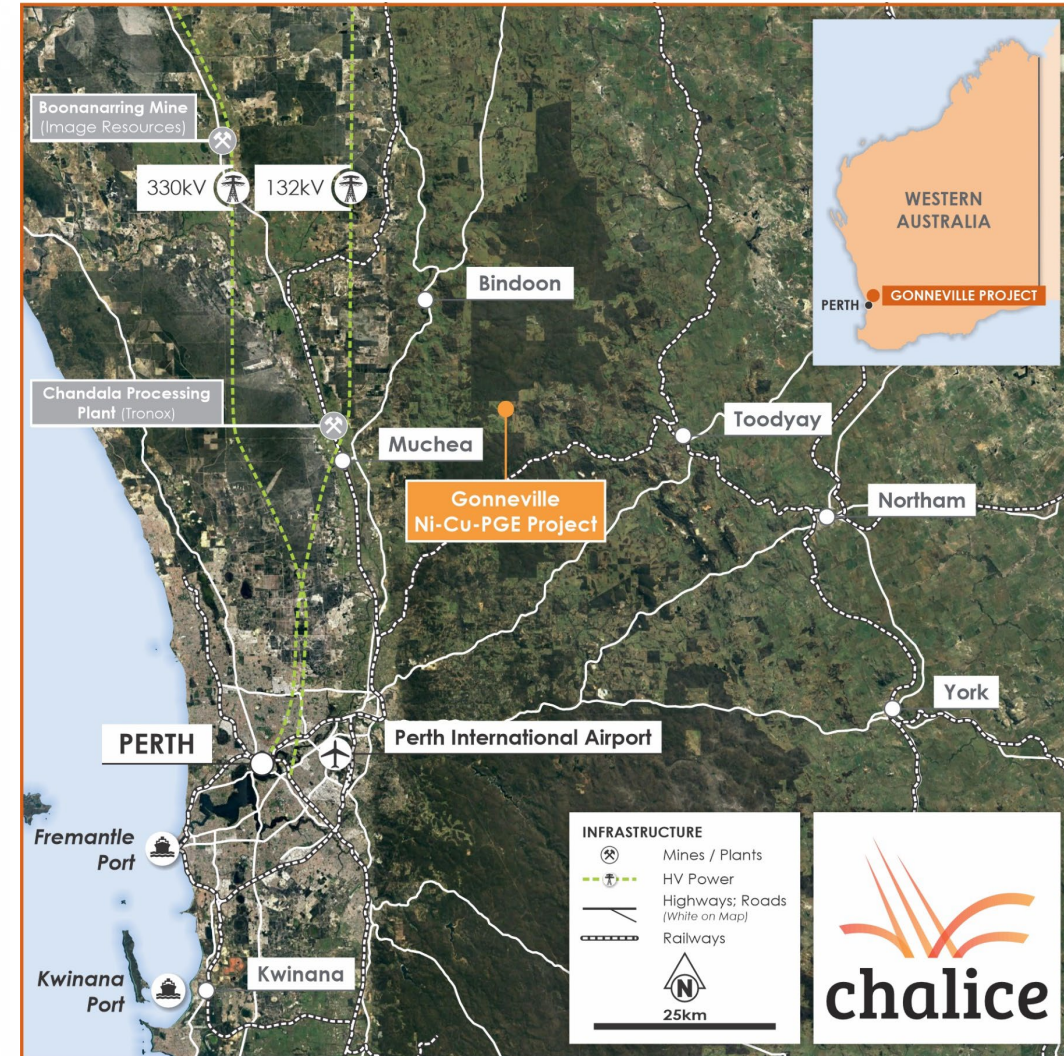
- Predicted to be lowest cost PGE producer in the western world – ~US\$160-230/oz 3E cash costs (after Ni-Cu-Co by-product credits) – 2<sup>nd</sup> quartile on the PGE industry cost curve
- Investigating high-grade, staged open-pit / underground starter cases in the initial phase of the Pre-Feasibility Study (in progress)
- World class sustainability metrics – low carbon intensity products, an ~A\$18 billion contribution to WA economy and substantial regional benefits
- Regulatory approvals process to commence in Q1 2024 – FID targeted for late 2026

## Strong upside potential on study metrics currently being investigated:

- No underground mining options modelled as yet – high-grade sulphide mineralisation extends well beyond the limit of Scoping Study pit designs
- Resource, optimal flowsheet and pathways to market continuing to be defined

## Strategic partnering process ongoing:

- Positive progress made and active discussions ongoing<sup>2</sup>



1. For tonnes and grades by confidence category and metal equivalent assumptions, refer to the Mineral Resources Statement in Appendix.  
2. Discussions with potential partners are preliminary in nature, there is no assurance that the strategic partnering process will result in a transaction.

# Gonneville high-grade starter cases, regional exploration drilling and the ongoing strategic partnering process represent **potential catalysts**



## Milestones achieved to date



**Gonneville discovery** and birth of the new West Yilgarn Ni-Cu-PGE Province



Mar-2020



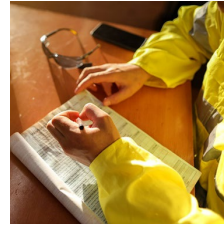
**Significant expansion** of tenure (>8,000km<sup>2</sup>) and exploration activities



**Maiden Mineral Resource Estimate at Gonneville**



Nov-2021



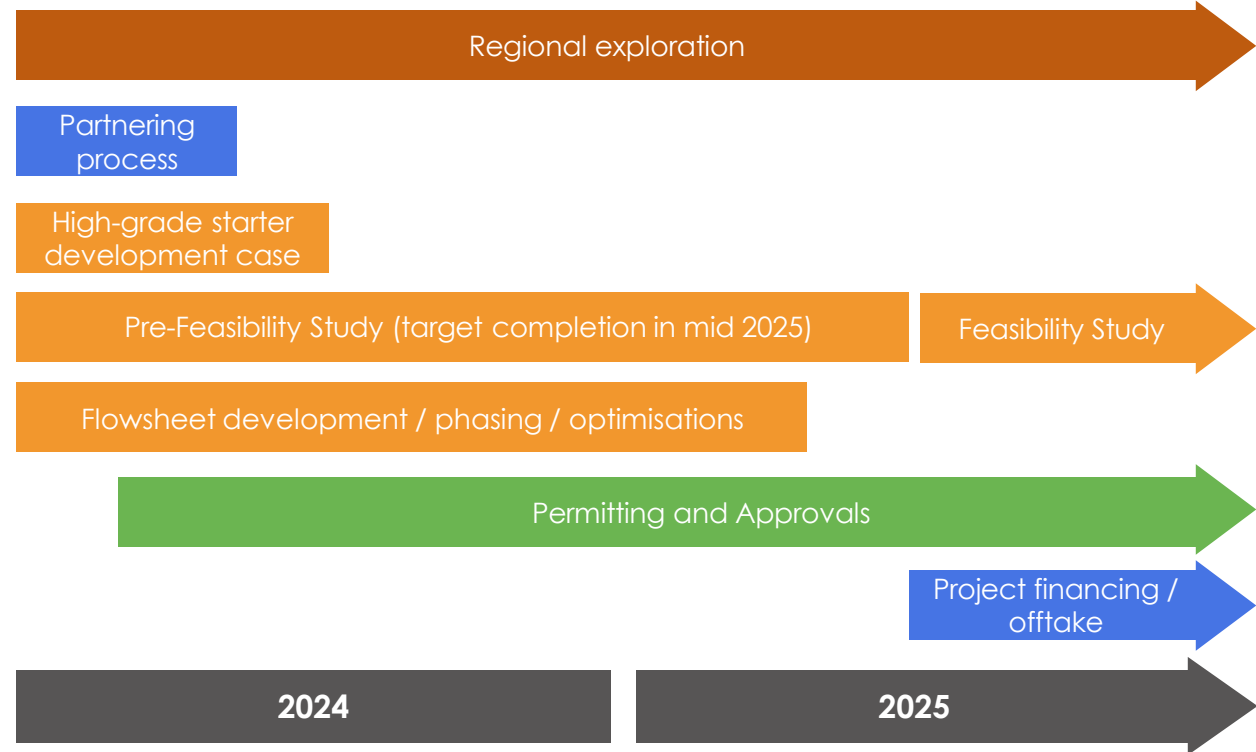
**Completion of Gonneville Scoping Study**



Aug-2023



## Forward Plan<sup>1</sup>



*Chalice is fully funded to progress key development and exploration activities that will ultimately drive long-term value for shareholders, despite current market volatility*

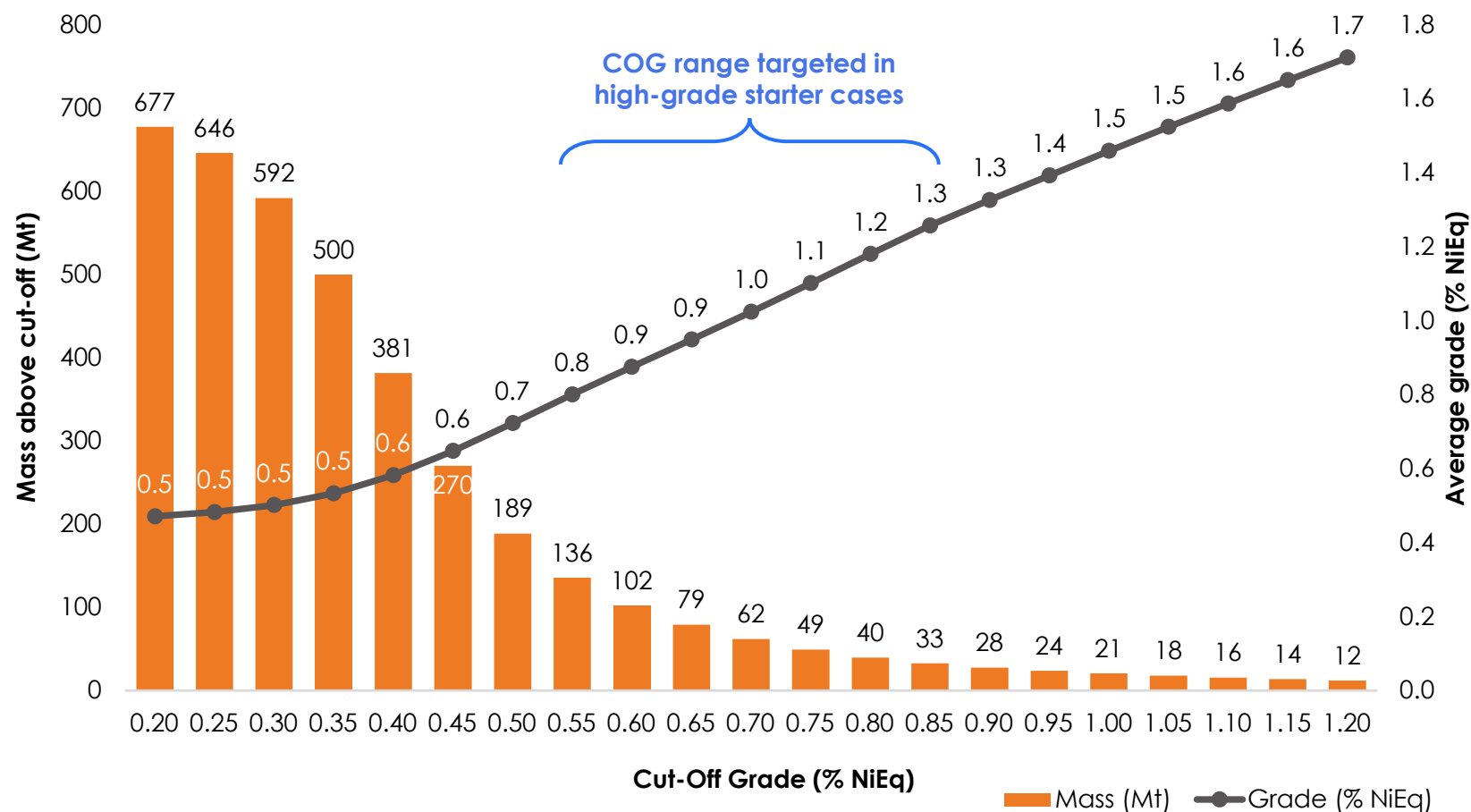
1. Project study, approvals and development timeline is indicative. There is no assurance that the strategic partnering process will result in a transaction

# The **rare, tier-1 scale** Gonneville Resource has **high-grade optionality** and **compelling growth potential**

## Mineral Resource Estimate<sup>1</sup>:

- **560Mt @ 0.88g/t 3E (Pd+Pt+Au), 0.16% Ni, 0.09% Cu, 0.015% Co (~0.54% NiEq or ~1.7g/t PdEq)**
- **16Moz 3E, 860kt Ni, 520kt Cu and 83kt Co (~3.0Mt NiEq or ~30Moz PdEq)** contained
- Resource located on **Chalice-owned farmland**
- Resource is defined to depth of ~800m, remains **open at depth**
- Resource modelled assuming a bulk open-pit mining approach – **remodelling now underway to refine selective approaches at higher cut-off grades**

**Gonneville Nickel Equivalent Grade-Tonnage Curve in-pit (on NiEq cut-off grade basis)**



1. For tonnes and grade by confidence category and metal equivalent assumptions, refer to the Mineral Resource Statement in Appendix



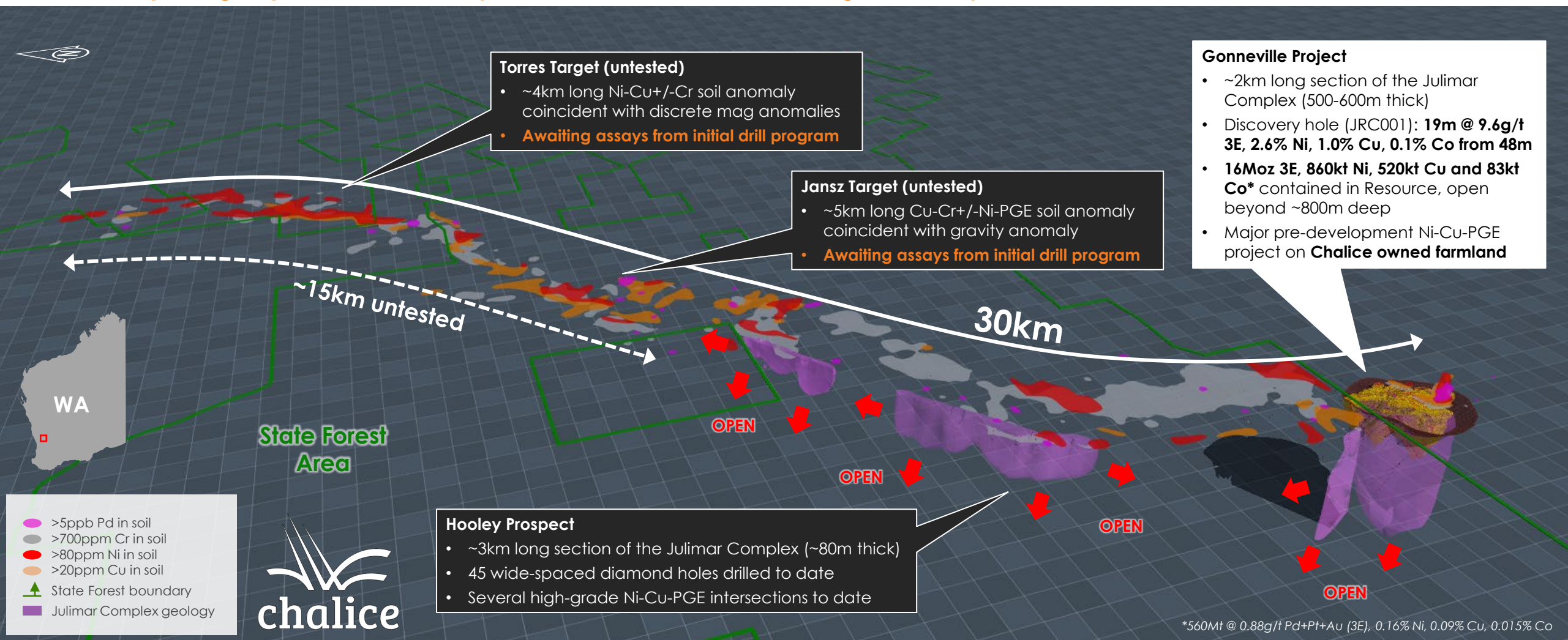


# Regional Exploration



# Gonneville Resource occupies just ~2km of the >30km long intrusive belt – regional drilling continuing

## 3D view (looking ESE) of the Julimar Complex, Gonneville Resource and soil geochemistry



# Chalice has defined **40+ Ni-Cu-PGE and Cu-Au-Ag targets** in the West Yilgarn Province – near-term focus on copper and precious metal targets



~1,200km long western margin of the Yilgarn craton is highly prospective for orthomagmatic Ni-Cu+/-PGE, Intrusion-related / orogenic gold-copper and lithium-caesium-tantalum pegmatite deposits but **is almost entirely unexplored**

- Development Project
- Operated Exploration Project

**Barrabarra Project**

**Barrabarra Nickel-Copper-PGE Exploration Project, WA (100% owned + Koojan earn-in to 80%)**

- 69,000 line-km high resolution airborne magnetic survey complete
- 6,900 line-km airborne gravity gradiometry survey complete
- RC drilling 8 priority greenfield targets completed (all assays pending)

**Kings Project**

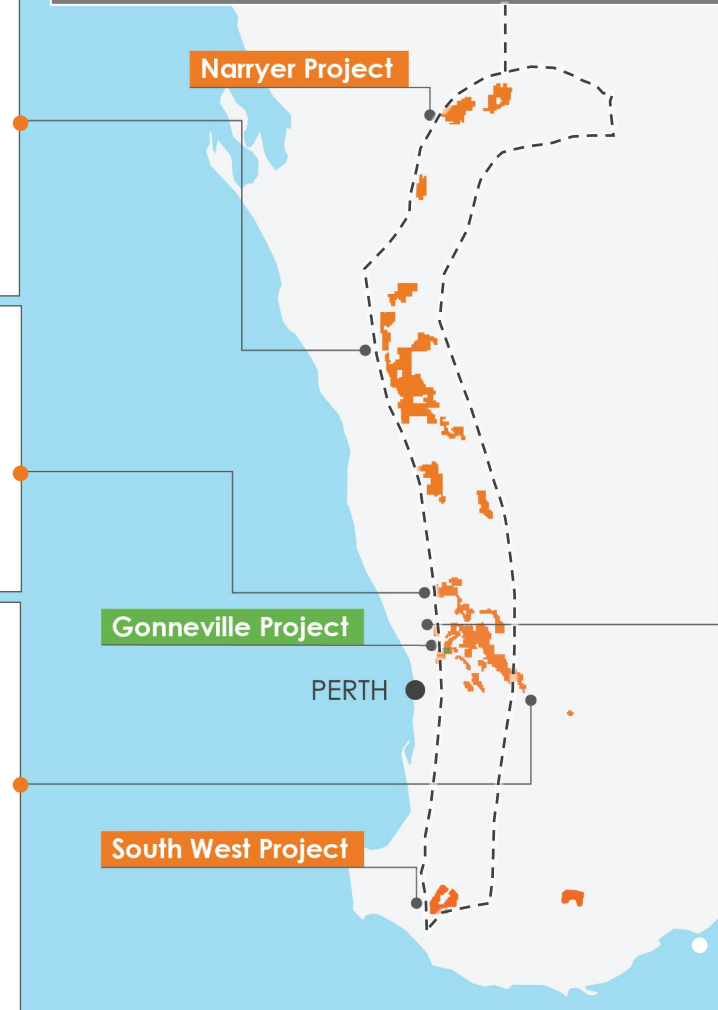
**Kings Nickel-Copper-PGE Exploration Project, WA (100% owned + Bolgart earn-in to 75%)**

- 7 new early-stage targets identified with AEM/MLM and geochemistry
- AC drilling priority greenfield targets in Q1 2024

**Northam JV Project**

**Northam Nickel-Copper-PGE Exploration Joint Venture Project (Earn-in to 70%)**

- Recent earn-in over ~1,600km<sup>2</sup> licence holding contiguous with Chalice's existing tenure
- 34,000 line-km high resolution airborne magnetic survey completed
- 28 early-stage Ni-Cu-PGE target areas identified
- MLM underway on 9 areas to define drill-ready targets



## WESTERN AUSTRALIA

**Julimar Project**

**Julimar Ni-Cu-PGE Exploration Project (100% owned)**

- Several high-grade zones intersected over ~10km strike length to date, confirming the Julimar Complex hosts a large-scale mineral system with potential for multiple discrete Ni-Cu-PGE deposits
- Reconnaissance diamond and broad spaced AC completed (all assays pending)





Chalice owns 100% of a new long-life, low-cost, low-carbon critical minerals project in WA



Chalice's team has a track record of discovery and value creation



There is significant exploration upside across the exciting new West Yilgarn Ni-Cu-PGE Province

## Key value drivers and upcoming catalysts

1. **PGE price recovery driven by slowing BEV uptake and strong ICE/hybrid sales**
2. **Strategic partnering process for Gonneville** – positive progress made and active discussions ongoing
3. **Gonneville high-grade sulphide resource update** to suit selective open-pit / underground mining methods – **April 2024**
4. Investigating **high-grade, staged open-pit / underground starter cases** in the initial phase of the Pre-Feasibility Study (targeting Q2 2024)
5. **High-priority greenfield exploration in new mineral province underway**





# Appendix





# Chalice is a **globally recognised explorer** with a highly regarded Board and management team



## Our Achievements

- World class Gonneville Ni-Cu-PGE discovery recognised with PDAC **Thayer Lindsley Award** (2023) and AMEC **Prospector of the Year Award** (2022)
- RIU **Craig Oliver Award** (2021), MNN **Explorer of the Year** (2021) and D&D **Emerging Company of the Year** (2021)
- Member of the **Dow Jones Sustainability Index Australia** (2023)

## Corporate snapshot – ASX:CHN

Market Capitalisation<sup>1</sup>  
~**A\$440M**

Cash balance<sup>2</sup>  
~**A\$112M**

Shares on issue  
~**389M**

Avg liquidity  
**>4M/day**

### Share Register<sup>3</sup>

Tim Goyder (Founder)	11%
Goldman Sachs	7%
Directors & Mgmt	2%
Other institutional	35%

*Stable top 10 with long term focus*

### Research coverage

 **BELL POTTER**

 **UBS**

 **MACQUARIE**

J.P.Morgan

 **morgans**

 **Barrenjoey**<sup>o</sup>

 **Jefferies**

 **ARGONAUT**

## Board of Directors

<b>Derek La Ferla</b>	Non-Executive Chair
<b>Alex Dorsch</b>	Managing Director & Chief Executive Officer
<b>Morgan Ball</b>	Non-Executive Director
<b>Garret Dixon</b>	Non-Executive Director
<b>Stephen McIntosh</b>	Non-Executive Director
<b>Linda Kenyon</b>	Non-Executive Director
<b>Jo Gaines</b>	Non-Executive Director

## Management

<b>Richard Hacker</b>	General Manager – Strategy & Commercial
<b>Dr Kevin Frost</b>	General Manager – Exploration
<b>Dr Soolim Carney</b>	General Manager – Environment & Community
<b>Mike Nelson</b>	General Manager – Project Development
<b>Chris MacKinnon</b>	Chief Financial Officer
<b>Ben Goldbloom</b>	General Manager – Corporate Development

1. As of 21 March 2024; 2. As of 31 Dec 2023; 3. As of 4 March 2023. Substantial shareholder information is as disclosed in the last substantial shareholder notice provided to the Company.  
Note: Arctis Global disclosed a long equity derivative position of 46,728,282 shares on 10 Nov 2022.

# Our **approach to sustainability**: Deliver sustained shared value through responsible sustainability practices



## Our Sustainability Vision and Pillars

Member of  
**Dow Jones Sustainability Indices**  
 Powered by the S&P Global CSA

### Strong Environmental Stewardship



### Manage Climate Change Risk



### Create Value for Stakeholders



### Healthy and Safe Workforce



The Gonneville Project is located on 100%-owned Chalice farmland

**Gonneville Biodiversity Strategy** to ensure a science-based no net loss of species or habitat diversity as a result of our operations

Comprehensive baseline **environmental surveys** across 6,000ha; covering flora, fauna, dieback

Successfully implemented **industry leading low-impact exploration drilling techniques** in vegetated areas – no mechanised clearing

Progressing **Taskforce on Climate-related Financial Disclosures (TCFD)** Roadmap and implementation plan

Development of a **Climate Change Policy** in FY2023

**Responsibly discovering and developing** new mineral deposits that provide the key metals which are **critical to decarbonisation**

Chalice and providers have contributed ~**A\$8.2 million** to communities surrounding Gonneville (FY21-23)

**Established Chalice Mining Community Fund** – agreement with Shire of Toodyay to deliver significant long-term benefits to the local community

**Local Voices Community Survey**, a series of independent surveys to understand the priorities of the community

Active engagement with Whadjuk and Yued Traditional Owners – worked with **>70 Traditional Owners** since 2021

**Zero** lost time injuries, fatalities or high potential safety events

**Gender diversity well above industry standards** – women make up **45%** of our overall workforce (FY2023)

BSS Employee Assistance Program to support **wellbeing** and **mental health** of our employees

# Chalice's team has a track record of discovery and large-scale project development



## Board of Directors



### **Derek La Ferla, Non-Exec Chair**

- Highly regarded ASX200 chair and company director with 30+ years experience as a corporate lawyer
- Former Chair of Poseidon Nickel and Sandfire Resources



### **Alex Dorsch, Managing Director and Chief Executive Officer**

- Diverse experience in consulting, engineering and corporate advisory in the energy and resources sectors
- Previously a Specialist consultant with McKinsey & Company



### **Morgan Ball, Non-Exec Director**

- Chartered Accountant with 25+ years experience in the resources, logistics and finance industries
- CFO of Genesis Minerals and formerly CFO of Northern Star Resources and Saracen Mineral Holdings



### **Garret Dixon, Non-Exec Director**

- 30+ years experience in resources and mining contracting sectors
- Formerly Executive VP Alcoa & President Bauxite



### **Stephen McIntosh, Non-Exec Director**

- Highly regarded mining executive with 30+ years experience in exploration, major project studies and execution
- Formerly Group Executive and Head of Exploration & Development Projects at Rio Tinto



### **Linda Kenyon, Non-Exec Director**

- Corporate lawyer and senior executive with 30+ years experience
- Formerly Company Secretary and member of Executive Leadership Team at Wesfarmers



### **Jo Gaines, Non-Exec Director**

- Extensive experience in intergovernmental negotiations and stakeholder engagement
- Chair of the Government Employees Superannuation Board (GESB) and a Director of Development WA and Technology Metals Australia Limited

## Management



### **Richard Hacker, GM Strategy and Commercial**

- Chartered Accountant with 20+ years experience in resource company financing, corporate and commercial management
- Previously Company CFO since 2006



### **Dr Kevin Frost, GM Exploration**

- Co-recipient of PDAC 2023 Thayer Lindsley Award and AMEC's 2022 Prospector of the Year Award for the Gonneville discovery, and previously in 2009 for the discovery of the Spotted Quoll nickel sulphide deposit in WA (Western Areas)



### **Dr Soolim Carney, GM Environment and Community**

- Environment, health and safety, indigenous affairs, govt relations and community specialist with 20+ years experience
- Former Regional Environment Manager for Alcoa Australia



### **Mike Nelson, GM Project Development**

- 30+ years experience in operational and technical leadership roles
- Instrumental in leading several mega-projects for mining internationals including Barrick Gold and Teck Resources



### **Chris MacKinnon, CFO**

- Qualified accountant and lawyer with 15+ years experience of professional and corporate experience in the energy and resources industry

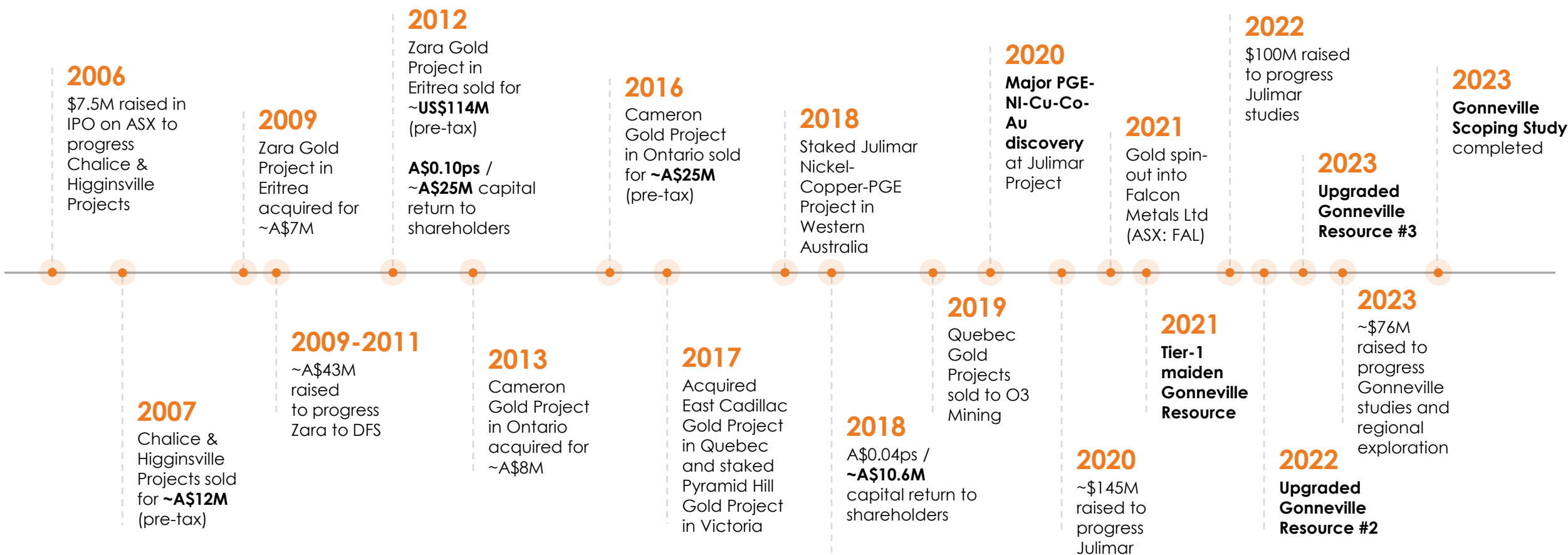


### **Ben Goldbloom, GM Corporate Development**

- Investor relations, commercial and business development specialist with 15+ years experience in commercial and technical roles in the resources industry



# Since our 2006 IPO, we have acquired quality assets, advanced projects quickly and generated exceptional returns



# Unlocking the full value of **Gonneville** through upside opportunities in mining, processing and commercial areas is underway



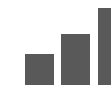
[Orange] = Near term priorities

Assessed upside potential



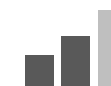
## Mining

- **Early high-grade underground mining in parallel to open-pit phase and block/sub-level caving options**
- **Selectivity, equipment sizing, cut-off grade, dilution, pit phasing, stockpiling and blending mining optimisations**
- Real-time mining/cut-off strategies to adapt to prevailing macro environment
- Ore-sorting and other beneficiation techniques to be investigated (as yet unmodelled)
- Automation and electrification of mining and haulage



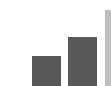
## Processing

- **Geo-met domaining of the deposit**
- **Bulk flotation testwork and trade-off studies (vs sequential Cu/Ni flotation)**
- Grind size, staged grinding, Leaching and flotation processing / recovery optimisations
- Further downstream processing as resource base grows and operation matures
- Phasing of flowsheet configuration (concentrates to midstream to downstream) to de-risk execution and ramp-up
- New processing and tailings storage technologies
- Advanced analytics and machine learning / artificial intelligence in process optimisation



## Commercial

- **Strategic partnering to bring technical, financial and/or marketing capabilities**
- **Government grants, debt, tax incentives or targeted project support (including infrastructure, permitting etc)**
- Higher long-term prices due to scarcity, lack of new discoveries or geo-political events (lower cut-off grades)
- Potential for *green/western premiums* on products
- Recovery and payability of additional metals (i.e. Rh, Ir, Os, Ag, Te)
- Strategic power purchase agreement or improvements in SWIS grid
- Local offtake to potential new downstream processing hub





# Gonneville Mineral Resource Estimate (JORC Code 2012), 28 March 2023



Domain	Cut-off Grade	Category	Mass							Grade										Contained Metal				
			(Mt)	Pd (g/t)	Pt (g/t)	Au (g/t)	Ni (%)	Cu (%)	Co (%)	NiEq (%)	PdEq (g/t)	Pd (Moz)	Pt (Moz)	Au (Moz)	Ni (kt)	Cu (kt)	Co (kt)	NiEq (kt)	PdEq (Moz)					
Oxide	0.9g/t Pd	Measured	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		Indicated	7.3	1.9	-	0.06	-	-	-	-	2.0	0.45	-	0.01	-	-	-	-	-	0.47				
		Inferred	0.2	1.9	-	0.07	-	-	-	-	2.0	0.01	-	0.00	-	-	-	-	-	0.02				
		<b>Subtotal</b>	<b>7.5</b>	<b>1.9</b>	<b>-</b>	<b>0.06</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.0</b>	<b>0.47</b>	<b>-</b>	<b>0.01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.49</b>				
Sulphide (Transitional)	0.35% NiEq	Measured	0.38	0.82	0.17	0.03	0.19	0.17	0.020	0.70	2.2	0.01	-	-	0.72	0.63	0.07	2.7	0.03					
		Indicated	14	0.66	0.15	0.03	0.16	0.10	0.018	0.54	1.7	0.30	0.07	0.01	22	14	2.5	77	0.77					
		Inferred	0.27	0.60	0.16	0.03	0.15	0.12	0.015	0.54	1.7	0.01	-	-	0.42	0.32	0.04	1.5	0.01					
		<b>Subtotal</b>	<b>15</b>	<b>0.66</b>	<b>0.15</b>	<b>0.03</b>	<b>0.16</b>	<b>0.10</b>	<b>0.018</b>	<b>0.55</b>	<b>1.7</b>	<b>0.31</b>	<b>0.07</b>	<b>0.01</b>	<b>23</b>	<b>15</b>	<b>2.6</b>	<b>81</b>	<b>0.81</b>					
Sulphide (Fresh)	0.35% NiEq	Measured	2.3	1.1	0.26	0.03	0.24	0.18	0.019	0.87	2.7	0.08	0.02	-	5.4	4.2	0.43	20	0.20					
		Indicated	280	0.67	0.15	0.03	0.16	0.09	0.015	0.53	1.7	6.0	1.3	0.23	440	260	43	1500	15					
		Inferred	200	0.67	0.15	0.03	0.15	0.09	0.015	0.53	1.6	4.4	0.96	0.16	310	180	29	1100	11					
		<b>Subtotal</b>	<b>480</b>	<b>0.67</b>	<b>0.15</b>	<b>0.03</b>	<b>0.16</b>	<b>0.09</b>	<b>0.015</b>	<b>0.53</b>	<b>1.7</b>	<b>10</b>	<b>2.3</b>	<b>0.39</b>	<b>750</b>	<b>440</b>	<b>72</b>	<b>2600</b>	<b>26</b>					
Underground	0.40% NiEq	Measured	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		Indicated	1.7	0.75	0.21	0.06	0.14	0.08	0.013	0.55	1.7	0.04	0.01	-	2.4	1.4	0.23	9.5	0.10					
		Inferred	52	0.78	0.17	0.03	0.16	0.11	0.015	0.59	1.8	1.3	0.28	0.05	83	56	7.7	310	3.1					
		<b>Subtotal</b>	<b>54</b>	<b>0.78</b>	<b>0.17</b>	<b>0.03</b>	<b>0.16</b>	<b>0.11</b>	<b>0.015</b>	<b>0.59</b>	<b>1.8</b>	<b>1.3</b>	<b>0.29</b>	<b>0.06</b>	<b>86</b>	<b>57</b>	<b>7.9</b>	<b>320</b>	<b>3.2</b>					
All		Measured	2.7	1.1	0.24	0.03	0.23	0.18	0.019	0.85	2.6	0.09	0.02	-	6.2	4.9	0.51	23	0.23					
		Indicated	300	0.70	0.15	0.03	0.16	0.09	0.015	0.54	1.7	6.8	1.4	0.26	460	280	45	1600	16					
		Inferred	250	0.70	0.15	0.03	0.15	0.09	0.015	0.54	1.7	5.7	1.2	0.22	390	230	37	1400	14					
		<b>Total</b>	<b>560</b>	<b>0.70</b>	<b>0.15</b>	<b>0.03</b>	<b>0.16</b>	<b>0.09</b>	<b>0.015</b>	<b>0.54</b>	<b>1.7</b>	<b>13</b>	<b>2.7</b>	<b>0.48</b>	<b>860</b>	<b>520</b>	<b>83</b>	<b>3000</b>	<b>30</b>					

Note some numerical differences may occur due to rounding to 2 significant figures.

PdEq oxide (Palladium Equivalent g/t) = Pd (g/t) + 1.27x Au (g/t)

NiEq sulphide (Nickel Equivalent %) = Ni (%) + 0.32x Pd(g/t) + 0.21x Pt(g/t) + 0.38x Au(g/t) + 0.83x Cu(%) + 3.00x Co(%)

PdEq sulphide (Palladium Equivalent g/t) = Pd (g/t) + 0.67x Pt(g/t) + 1.17 x Au(g/t) + 3.11x Ni(%) + 2.57x Cu(%) + 9.33x Co(%)

Underground resources are outside the pit above a 0.40% NiEq cut off grade based on sub-level caving mining method

Includes drill holes drilled up to and including 11 December 2022.

# Higher-grade sulphide component of Gonneville Resource (in pit and underground), 28 March 2023



Domain	Cut-off Grade	Category	Mass	Grade							Contained Metal								
				Pd (g/t)	Pt (g/t)	Au (g/t)	Ni (%)	Cu (%)	Co (%)	NiEq (%)	PdEq (g/t)	Pd (Moz)	Pt (Moz)	Au (Moz)	Ni (kt)	Cu (kt)	Co (kt)	NiEq (kt)	PdEq (Moz)
High-grade Sulphide (Transitional)	0.6% NiEq	Measured	0.17	1.2	0.24	0.05	0.24	0.25	0.023	0.97	3.0	0.01	-	-	0.41	0.43	0.04	1.7	0.02
		Indicated	3.4	1.1	0.21	0.04	0.20	0.16	0.020	0.79	2.5	0.12	0.02	-	6.6	5.3	0.69	27	0.27
		Inferred	0.07	0.84	0.18	0.03	0.22	0.26	0.019	0.81	2.5	-	-	-	0.16	0.18	0.01	0.57	0.01
		<b>Subtotal</b>	<b>3.6</b>	<b>1.1</b>	<b>0.21</b>	<b>0.04</b>	<b>0.20</b>	<b>0.16</b>	<b>0.021</b>	<b>0.80</b>	<b>2.5</b>	<b>0.12</b>	<b>0.02</b>	<b>-</b>	<b>7.2</b>	<b>5.9</b>	<b>0.74</b>	<b>29</b>	<b>0.29</b>
High-grade Sulphide (Fresh)	0.6% NiEq	Measured	0.88	2.2	0.47	0.05	0.39	0.35	0.027	1.6	4.9	0.06	0.01	-	3.4	3.1	0.24	14	0.14
		Indicated	58	1.2	0.26	0.06	0.20	0.18	0.018	0.87	2.7	2.3	0.48	0.11	120	100	10	500	5.1
		Inferred	40	1.3	0.26	0.06	0.19	0.18	0.017	0.87	2.7	1.6	0.33	0.08	75	73	6.6	340	3.5
		<b>Subtotal</b>	<b>98</b>	<b>1.2</b>	<b>0.26</b>	<b>0.06</b>	<b>0.20</b>	<b>0.18</b>	<b>0.017</b>	<b>0.88</b>	<b>2.7</b>	<b>3.9</b>	<b>0.82</b>	<b>0.19</b>	<b>200</b>	<b>180</b>	<b>17</b>	<b>860</b>	<b>8.7</b>
Underground	>0.6% NiEq	Measured	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Indicated	0.4	1.2	0.36	0.12	0.14	0.11	0.014	0.78	2.5	0.02	-	-	0.61	0.46	0.06	3.3	0.03
		Inferred	13	1.4	0.27	0.06	0.20	0.20	0.017	0.93	2.9	0.58	0.12	0.03	26	26	2.2	120	1.2
		<b>Subtotal</b>	<b>14</b>	<b>1.4</b>	<b>0.28</b>	<b>0.06</b>	<b>0.20</b>	<b>0.19</b>	<b>0.017</b>	<b>0.93</b>	<b>2.9</b>	<b>0.60</b>	<b>0.12</b>	<b>0.03</b>	<b>27</b>	<b>26</b>	<b>2.3</b>	<b>130</b>	<b>1.3</b>
All		Measured	1.1	2.0	0.43	0.05	0.37	0.33	0.026	1.5	4.6	0.07	0.01	-	3.8	3.5	0.28	15	0.15
		Indicated	62	1.2	0.25	0.06	0.20	0.18	0.018	0.87	2.7	2.4	0.50	0.11	130	110	11	530	5.4
		Inferred	53	1.3	0.26	0.06	0.19	0.19	0.017	0.89	2.8	2.2	0.45	0.11	100	99	8.8	470	4.7
		<b>Total</b>	<b>120</b>	<b>1.3</b>	<b>0.26</b>	<b>0.06</b>	<b>0.20</b>	<b>0.18</b>	<b>0.017</b>	<b>0.88</b>	<b>2.7</b>	<b>4.7</b>	<b>0.97</b>	<b>0.22</b>	<b>230</b>	<b>210</b>	<b>20</b>	<b>1000</b>	<b>10</b>

Note some numerical differences may occur due to rounding to 2 significant figures.

This higher-grade component is contained within the reported global Mineral Resource.

PdEq oxide (Palladium Equivalent g/t) = Pd (g/t) + 1.27x Au (g/t)

NiEq sulphide (Nickel Equivalent %) = Ni (%) + 0.32x Pd(g/t) + 0.21x Pt(g/t) + 0.38x Au(g/t) + 0.83x Cu(%) + 3.00x Co(%)

PdEq sulphide (Palladium Equivalent g/t) = Pd (g/t) + 0.67x Pt(g/t) + 1.17 x Au(g/t) + 3.11x Ni(%) + 2.57x Cu(%) + 9.33x Co(%)

Underground resources are outside the pit above a 0.40% NiEq cut off grade based on sub-level caving mining method

Includes drill holes drilled up to and including 11 December 2022.



# Metal equivalent assumptions of Gonneville Resource, 28 March 2023



Based on metallurgical testwork completed to date for the sulphide domain, it is the Company's opinion that all the quoted elements included in metal equivalent calculations (palladium, platinum, gold, nickel, copper and cobalt) have a reasonable potential of being recovered and sold.

Only limited samples have been collected from the transitional zone due to its relatively small volume. Therefore, the metallurgical recovery of all metals in this domain are unknown. However, given the relatively small proportion of the transition zone in the Mineral Resource, the impact on the metal equivalent calculation is not considered to be material.

Metal equivalents for the transitional and sulphide domains are calculated according to the formula below:

- $NiEq\% = Ni\% + 0.32x Pd(g/t) + 0.21x Pt(g/t) + 0.38x Au(g/t) + 0.83x Cu(\%) + 3.00x Co(\%)$ ;
- $PdEq(g/t) = Pd(g/t) + 0.67x Pt(g/t) + 1.17x Au(g/t) + 3.11x Ni(\%) + 2.57x Cu(\%) + 9.33x Co(\%)$

Metal recoveries used in the metal equivalent calculations are based on rounded average Resource grades for the sulphide domain (>0.35% NiEq cut-off):

- Pd – 60%, Pt – 60%, Au – 70%, Ni – 45%, Cu – 85%, Co – 45%.

Metal prices used are consistent with those used in the Whittle pit optimisation (based on long term consensus analyst estimates):

- US\$1,800/oz Pd, US\$1,200/oz Pt, US\$1,800/oz Au, US\$24,000/t Ni, US\$10,500/t Cu and US\$72,000/t Co.

Initial metallurgical testwork indicates that only palladium and gold are likely to be recovered in the oxide domain, therefore no NiEq grade has been quoted for the oxide. The PdEq grade for the oxide has been calculated using the formula:

$PdEq\ oxide\ (g/t) = Pd\ (g/t) + 1.27 \times Au\ (g/t)$ .

- Metal recoveries based on limited metallurgical test work completed to date:
  - Pd – 75%, Au – 90%.
- Metal prices used are consistent with those used in the pit optimisation:
  - US\$1,800/oz Pd, US\$1,800/oz Au

For additional information on the assumptions used in the calculation of metal equivalents, refer to the ASX announcement titled "Gonneville Resource increases by approx. 50% to 3Mt NiEq", dated 28 March 2023.



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