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ASX Announcement

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27 February 2023

BMO Global Metals, Mining & Critical Minerals Conference Presentation

Live webcast available | Wednesday 1 March 2023

Chalice Mining Limited ("Chalice" or "the Company", ASX: CHN | OTCQB: CGMLF) wishes to advise that Managing Director and CEO, Alex Dorsch will be presenting to the BMO Global Metals, Mining & Critical Minerals Conference held in Miami, Florida on **Wednesday, 1 March 2023 9:45am US Eastern Time (GMT-05:00)**.

A copy of the presentation is attached, and is also available on the Company website at:

https://chalicemining.com/presentations

The presentation will also be livestreamed during the presentation time and for on-demand viewing within 24 hours after the presentation is complete. Register via the following link:

BMO - Livestream Registration

Livestream registration is free, and it is recommended that you log on at least 10 minutes prior to the commencement of the Chalice presentation.

Authorised for release by the Disclosure Committee.

For further information, please visit www.chalicemining.com, or contact:

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The Julimar Ni-Cu-PGE Project – the right metals at the right time in Western Australia

BMO Global Metals, Mining & Critical Minerals Conference

27 February 2023

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Forward looking statements and competent person(s) disclosure

This presentation does not provide investment or financial product advice and does not include all available Information on Chalice Mining Limited 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/OTCQB 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

Forward-Looking Statement

This presentation may contain forward-looking statements and forward information, including forward looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 (collectively, forward-looking statements). These forward-looking statements are made as of the date of this announcement 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 Julimar Project's capital payback; the Company's strategy and objectives; the realisation of mineral resource estimates; 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; and 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, "commitment" or "committed", "considered", "could", "estimate", "expected", "for", "further", "future", "goal", "indicates", "is", "likely", "may", "needs", "open", "optionality", "plan" or "planned", "points", "possible", "potential", "promising", "strategy", "upside", "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 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, scaling up to commercial operations; changes in project parameters as plans continue to be refined; changes in exploration programs and budgets based upon the results of exploration, changes in commodity prices; 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, the impact of the COVID 19 pandemic 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 and OTC Markets at otcmarkets.com. 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.

Authorisation

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

Disclaimer

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- Accept no responsibility or liability as to the adequacy, accuracy, completeness or reasonableness of this Presentation; and
- Accept no responsibility for any errors or omissions from this Presentation.

Reliance on Third Party Information

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Mineral Resources Reporting Requirements

As an Australian company with securities listed 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 exploration results and mineral resources in Australia is in accordance with the JORC Code and that Chalice's exploration results and mineral resource estimates comply with the JORC Code. The requirements of JORC Code differ in certain material respects from the disclosure requirements of United States securities laws and other reporting regimes. There is no assurance that the Company's mineral resource estimates and related disclosures prepared under the JORC Code would be the same as those prepared under United States securities law other reporting regimes. The terms used in this announcement are as defined in the JORC Code. The definitions of these terms differ from the definitions of such terms for purposes of the disclosure requirements in the United States and other reporting regimes

Competent Persons Statement

The Information in this presentation that relates to exploration results for the Julimar Project is extracted from the following ASX announcements:

- "High-grade nickel-copper-palladium sulphide intersected at Julimar Project in WA", 23 March 2020
- "New Mineralised Zone Intersected at Dampier Target", 7 July 2022
- "Seismic identifies potential 1.6km extension of Gonneville", 6 September 2022
- "Major northern extension of Gonneville Intrusion confirmed", 19 October 2022
- "Outstanding wide high-grade intersections north of Gonneville", 23 November 2022
- "Promising new sulphide mineralisation at the Hooley Prospect", 8 December 2022
- "Julimar flowsheet development and scoping update", 13 December 2022

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

- "Updated Gonneville Mineral Resource", 8 July 2022.

The above announcements are available to view on the Company's website at 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 Appendices for further information on the Mineral Resource Estimate and metal equivalents.

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A globally recognised name in exploration – a team with a track record of **finding mines and rewarding shareholders**

High-performance, results driven culture (mine finding + commercial DNA)

Our purpose – to find the metals needed to decarbonise the world (the *green metals*)

Our aspiration – to create a world class, multi-district green metals province

Chalice is a **leading ASX200 green metals explorer** with a track record of creating shareholder value

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Our Achievements

- **~4,000% total return to shareholders** since Julimar discovery in March 2020
- World class Julimar Ni-Cu-PGE discovery recognised with PDAC **Thayer Lindsley Award** (2023) and AMEC **Prospector of the Year Award** (2022)
- Chalice recognised as RIU **Craig Oliver Award** (2021) MNN **Explorer of the Year** (2021) and D&D **Emerging Company of the Year** (2021)

Board of Directors

Derek La Ferla
Chairman

Alex Dorsch
Managing Director and Chief Executive Officer

Morgan Ball
Non-Executive Director

Garret Dixon
Non-Executive Director

Stephen McIntosh
Non-Executive Director

Linda Kenyon
Non-Executive Director

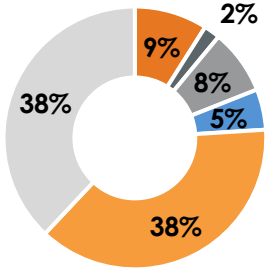
Jo Gaines
Non-Executive Director

Corporate snapshot - ASX: CHN

Market Capitalisation[1]
~A$2.3Bn

Cash balance[2]
A$97.6m

Shares on issue
376m



Top Shareholders[3]

- Tim Goyder (Founder)
- Directors & Mgmt.
- Goldman Sachs
- BlackRock
- Other Institutions
- Retail & HNWI

Research coverage

BELL POTTER
J.P.Morgan
MACQUARIE
Jefferies

[1] As of 17 Feb 2023; [2] As of 31 Dec 2022; [3] As of 31 Jan 2023 or for shareholdings over 5%, as disclosed in the last substantial shareholding notice given to the Company. Note: Arctis Global disclosed a long equity derivative position of 46,728,282 shares on 10 Nov 2022

Chalice is actively growing its organisational capability

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Board of Directors

Derek La Ferla, Chairman
- Highly regarded ASX200 chair and company director with 30+ years experience as a corporate lawyer
- Chair of Poseidon Nickel and formerly Chair of 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
- 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

Management

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

Dr Kevin Frost, GM Discovery & Growth
- Co-recipient of PDAC 2023 Thayer Lindsley Award and AMEC's 2022 Prospector of the Year Award for the Julimar discovery, and previously in 2009 for the discovery of the Spotted Quoll nickel sulphide deposit in WA (Western Areas)

Bruce Kendall, GM Exploration
- Co-recipient of AMEC's Prospector of the Year Award in 2012 for the discovery of the world-class Tropicana gold deposit in WA (AngloGold Ashanti)

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, Business Development and Legal Manager
- 15 years experience as a corporate lawyer and finance advisor in the resources industry

Jamie Armes, Company Secretary
- Chartered Accountant with 20+ years experience within the accounting profession and administration of public listed companies in the mining and exploration industry

Julimar – a major new polymetallic critical minerals project in Western Australia

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A remarkable new greenfield discovery in 2020, now a tier-1 scale Resource:

350Mt @ ~0.58% NiEq or ~1.8g/t PdEq[1] (~70% Indicated / ~30% Inferred):

11Moz 3E[2] | **560kt Ni** | **360kt Cu** | **54kt Co** contained

equivalent to **~2.0Mt NiEq** or **~20Moz PdEq** contained

Including a higher-grade (>0.6% NiEq OP + UG) sulphide component, with upside:

82Mt @ ~1.0% NiEq or ~2.9g/t PdEq, extending from 30m to 700m+ (open)

Resource update expected in late Q1 2023

A **strategic, large-scale** Resource with rare mix of critical minerals in sulphide mineralogy

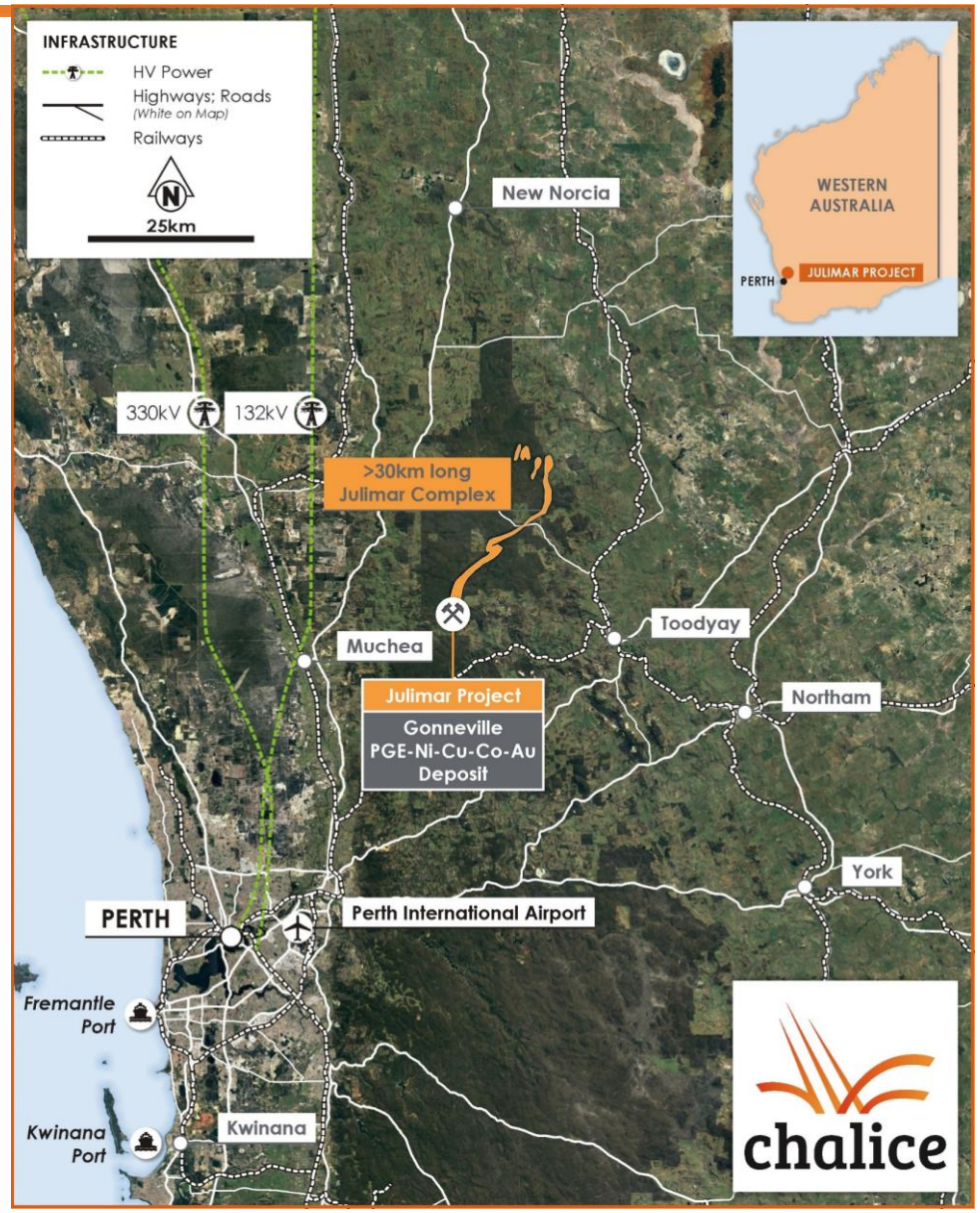
Green metals at Julimar are **essential for decarbonisation** technologies like batteries, electric vehicles and hydrogen

100% owned by Chalice, and located in WA, one of the **world's most attractive mining jurisdictions**

Strategy to explore and develop in parallel; **strategic minority JV partnerships** under consideration

Direct access to **major highway, rail, power, port infrastructure** as well as a **large local workforce**

Compelling exploration upside, Resource occupies just ~2km of newly recognised >30km long Julimar Complex



[1] Refer to full Mineral Resource Statement in Appendix
[2] 3E = Palladium (Pd) + Platinum (Pt) + Gold (Au)

Julimar is capturing attention as a **strategic asset** for Australia and the western world, given its rare palladium-nickel-cobalt content

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

Pd, Pt, Ni and Co are classified as **'critical minerals'** by most western governments

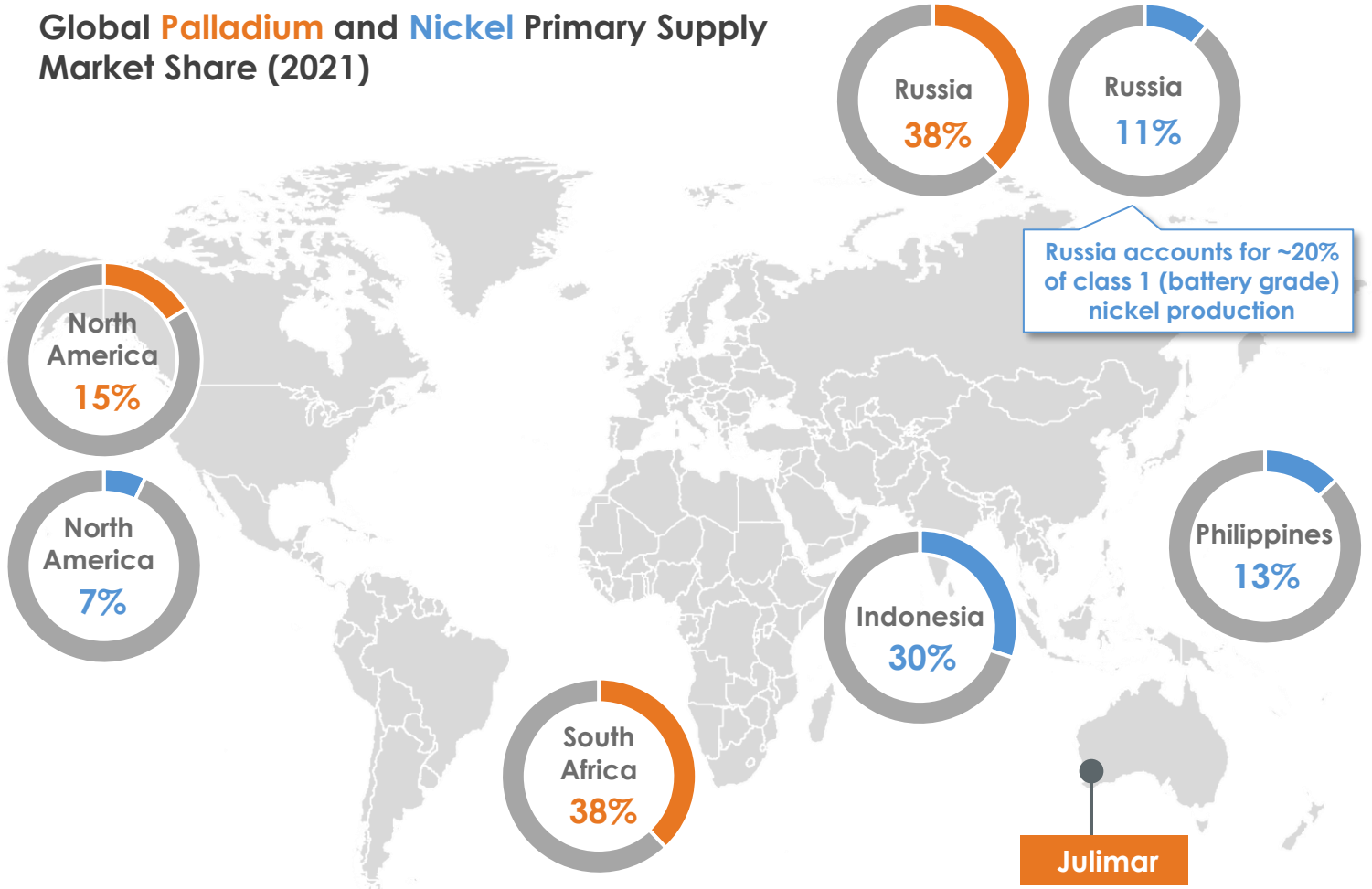
The western world is **extremely reliant** on **Russian Palladium supply** (~40% of global supply)

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

The Australian Government has committed >$1 billion to **accelerate strategically significant projects** and **strengthen** internal critical mineral **security and supply chains**[1]

Strategic partner interest[2] in **Julimar's large nickel sulphide endowment** has increased significantly, triggered by the US Inflation Reduction Act (IRA)

Global Palladium and Nickel Primary Supply Market Share (2021)



Source: 'Provision of PGM market intelligence and long-term metal price forecasts' SFA Oxford, March 2021
'Distribution of mine production of nickel worldwide in 2020*, by country', Statista, February 2022
(1) '2022 Critical Minerals Strategy' Department of Industry, Science, Energy and Resources, Australian Government, March 2022. (2) Discussions with potential partners are preliminary in nature.

The need to decarbonise the global economy will underpin long-term demand for the **green metals** at Julimar

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Importance of metals →

	Hydrogen	Electric Vehicles	Hybrid Vehicles	Energy Storage	Semi-conductors	Wind & Solar PV
Nickel and Cobalt • Key industrial and electrification metals with unique chemical properties • ~3Mt p.a. Ni market, supply dominated by carbon intensive, high environmental impact laterite sources, significant deficit forecast • ~0.2Mt p.a. Co market, supply dominated by Democratic Republic of Congo with humanitarian challenges						
Copper • Key industrial and electrification metal with high conductivity • ~26Mt p.a. market, with severe lack of recent large-scale discoveries resulting in a significant deficit forecast						
Platinum and Palladium • Extremely rare (precious) metals with highly versatile catalytic properties, used in emissions reduction technologies such as catalytic converters and in hydrogen electrolysers and fuel cells • ~11Moz p.a. Pd market in prolonged deficit, supply dominated by Russia • ~7Moz p.a. Pt market, supply dominated by South Africa						

Source: IEA "The Role of Critical World Energy Outlook Special Report Minerals in Clean Energy Transitions" March 2022; S&P Global, CBS Reports, Jan 2023; SFA Oxford, 'Provision of PGM market intelligence and long-term metal price forecasts', SFA Oxford, Mar 2021; Johnson Matthey, 'PGM market report', May 2021

The growing battery industry needs new, large scale and sustainable sources of battery-grade nickel – **a unique opportunity for Julimar**

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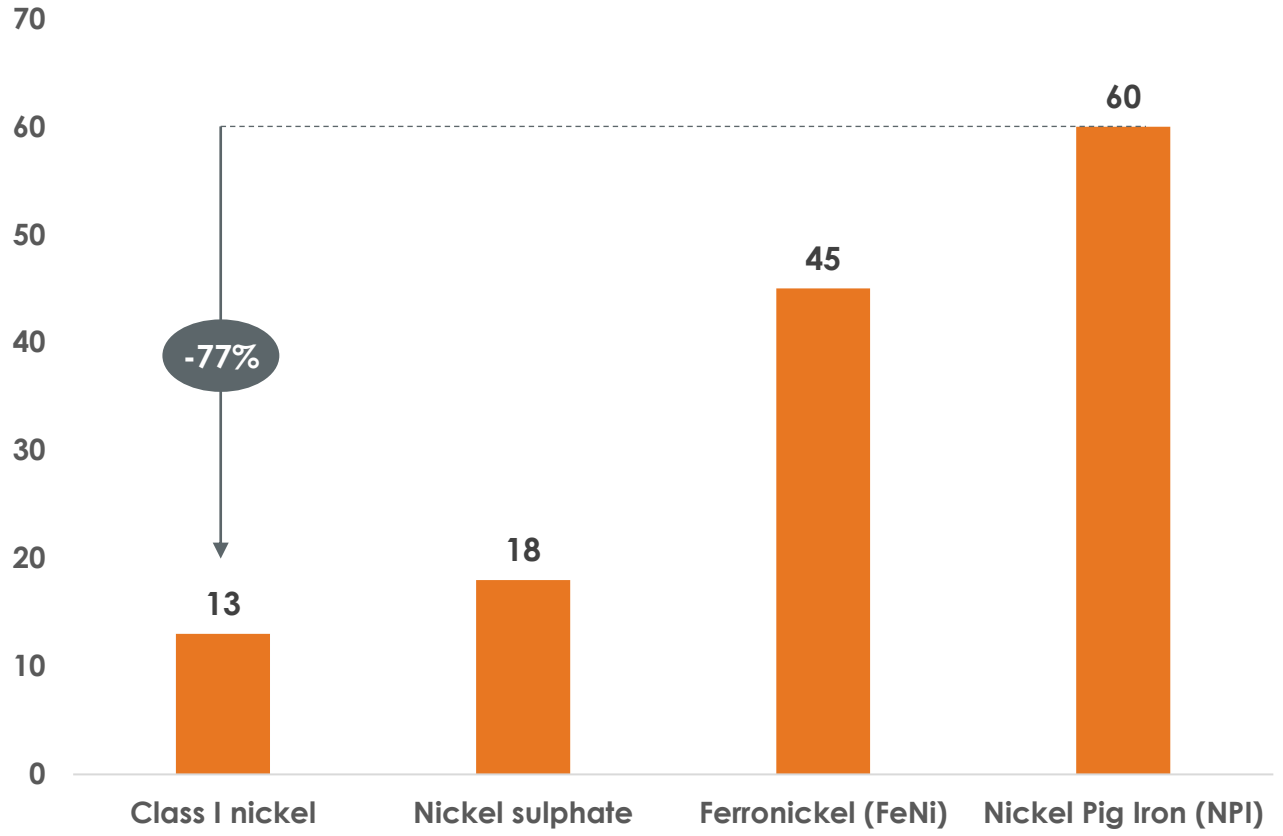
Battery-grade nickel consumers forecast to become heavily reliant on supply sources that **do not meet sustainability standards**, i.e. NPI

With **560kt of contained nickel** defined to date, Julimar has the potential to become a globally significant source of class 1 nickel, which has a much lower carbon footprint than other sources

Julimar's proximity to WA's **world class power grid and infrastructure** make it uniquely positioned to deliver low carbon intensity metals

Class 1 nickel sources are likely to **demand a premium**, driven by the need to comply with emissions targets and to satisfy increasing sensitivity to sustainability standards

Estimated average carbon intensity of nickel sources ($kgCO_2$ eq. per kg Ni)



Source: Nickel Institute, Goldman Sachs Global Investment Research via 'Nickel's class divide', April 2022.

Platinum and Palladium are essential in every stage of the hydrogen value chain, a critical solution to **achieving net-zero carbon emissions**

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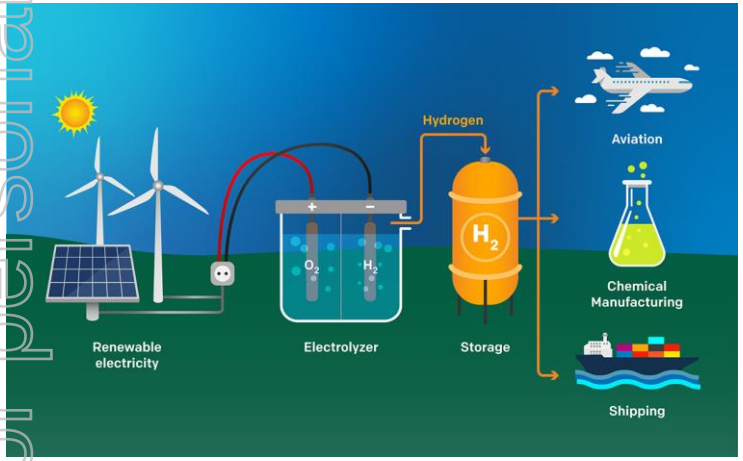
Production

Green hydrogen produced by electrolysis of water using renewable energy (wind, solar, hydro)



PGEs are essential catalysts in the Proton Exchange Membrane (PEM) Electrolyser

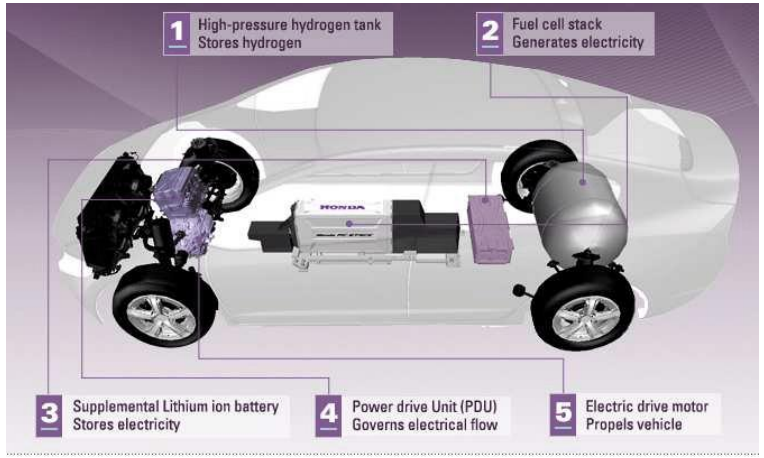
Transport and Storage

Long-term storage and transport of green hydrogen likely to be achieved using liquified ammonia (NH_3) as carrier

Pd is an essential catalyst in hydrogen-ammonia conversion and purification

Utilisation

Green hydrogen ideal for use in green steel and Fuel Cell Electric Vehicles (FCEVs), likely to be the dominant technology for heavy transport such as trucks, trains and ships



PGEs are essential catalysts in most hydrogen fuel cell designs

Source: 'Hydrogen for Net-Zero' Hydrogen Council & McKinsey & Company, November 2021
'Provision of PGM market intelligence and long-term metal price forecasts' SFA Oxford, March 2021
'Australian and Global Hydrogen Demand Growth Scenario Analysis' Deloitte & COAG Energy Council, November 2019

The rapidly growing and increasingly adopted hydrogen economy has the potential to **underpin long term PGE demand**

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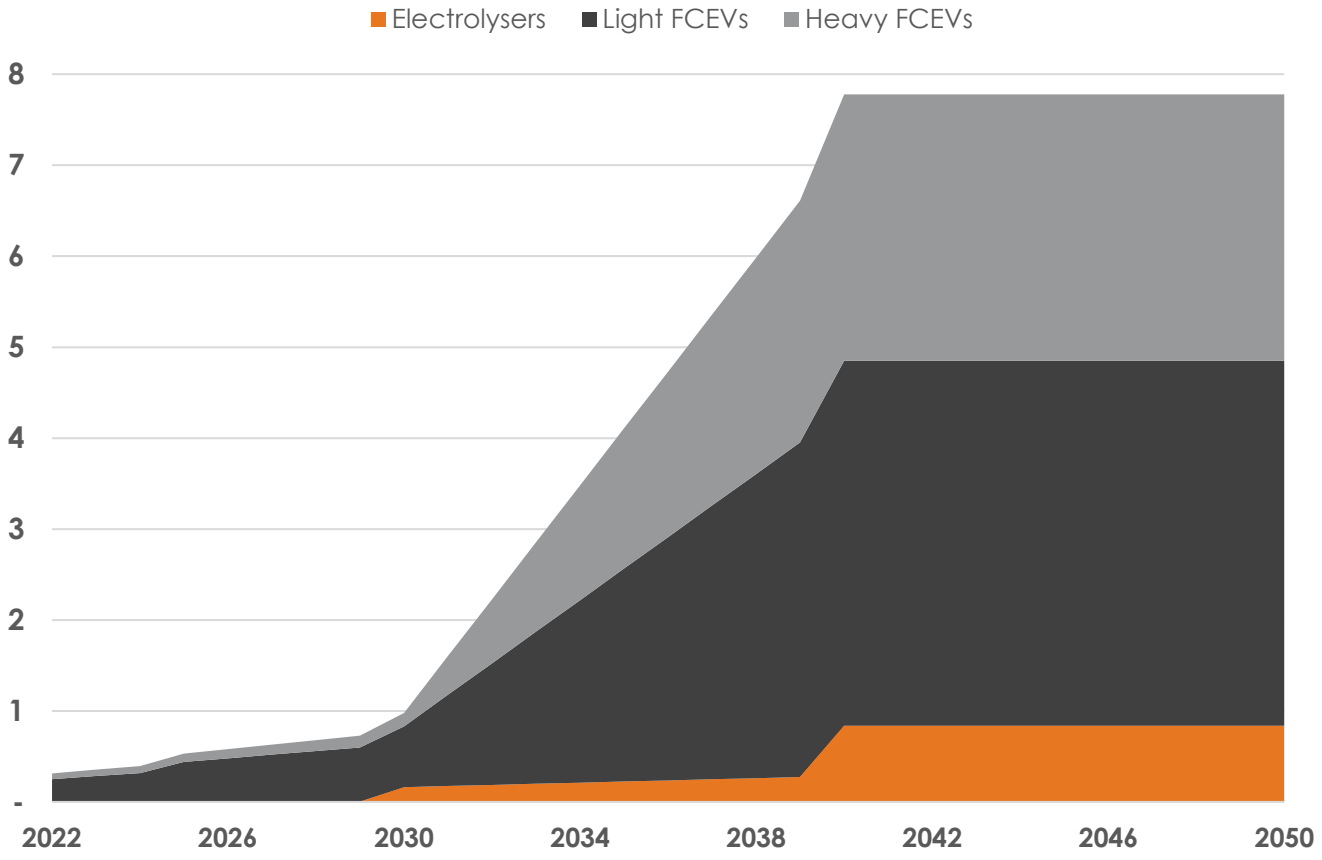
Current **primary supply of Pt and Pd is ~16Moz p.a.** Pd is in prolonged deficit while Pt in surplus

Our view is that with **conservative hydrogen adoption**, demand for Pt and Pd from hydrogen could be as high as ~**8Moz p.a.**(1)

A modest hydrogen adoption scenario includes **~10% share** of light vehicle market, **~40% share** of heavy vehicle market, and **50-70GW** of electrolyser capacity by 2040

Projections do not include PGE usage from hydrogen applications in **shipping, aviation, industrial or steel manufacturing**

Estimated Annual Pt and Pd Demand from Hydrogen (Moz)



(1) Cautionary statement: The forward-looking statements have been estimated by Chalice using assumptions that have been informed by third party research. These statements are based on an assessment of economic and operating conditions and on various assumptions regarding future events and actions that, as at the date of this presentation, are considered reasonable by Chalice. Refer to "Long Term PGE Demand Forecast" slide in Appendix for additional information regarding the underlying assumptions and calculation methodology, and Slide 2 for a statement regarding the risks involved in forward-looking statements of this nature. Without limiting these risks, such forward-looking statements are predictive in character, may be affected by incorrect assumptions or by known or unknown risks and uncertainties, and may differ materially in due course. Investors are therefore cautioned against attributing undue certainty to forward-looking statements, including those outlined above.

The **tier-1 scale, near-surface Resource** has high-grade optionality and compelling growth potential

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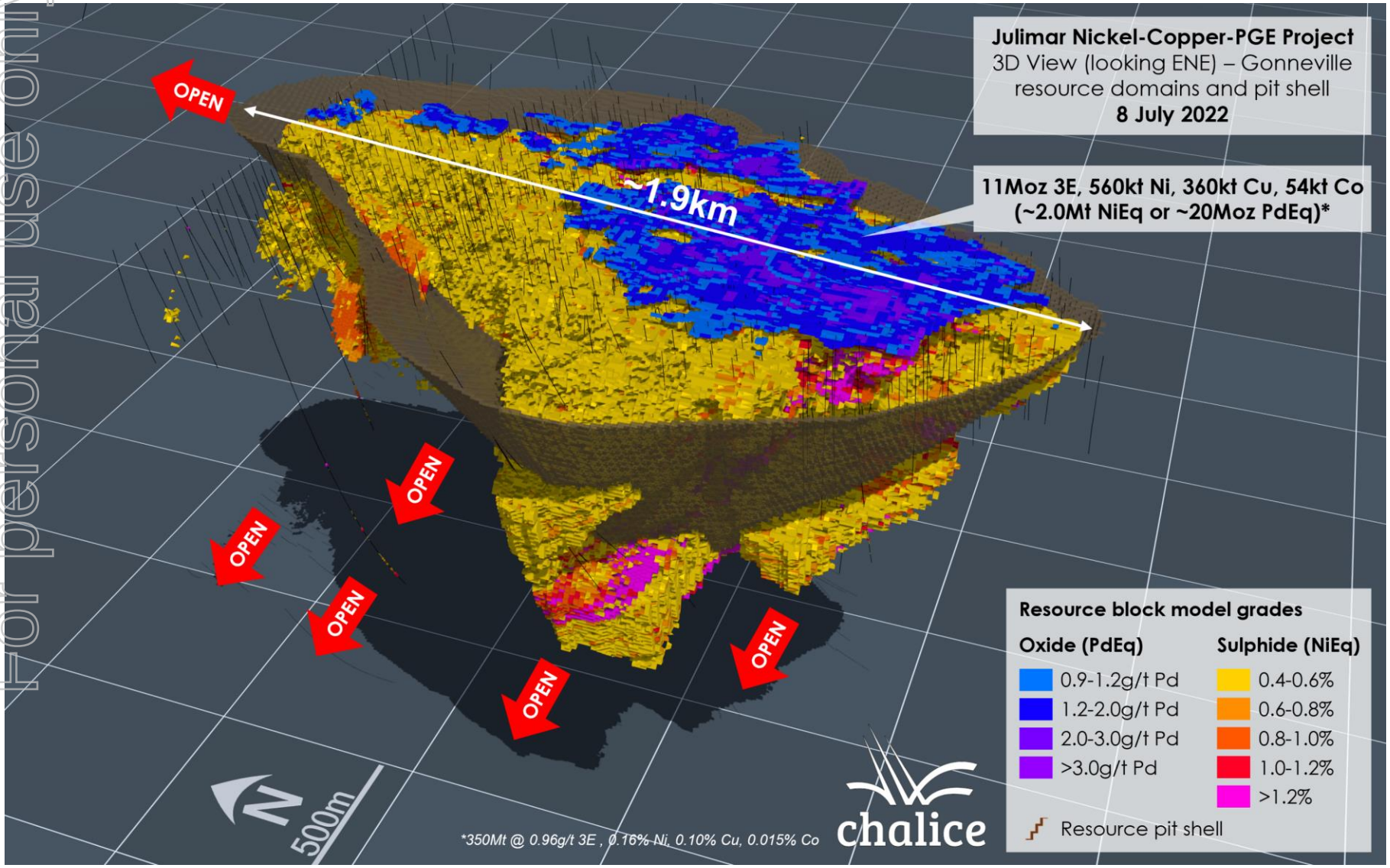
3D view (looking ENE) of Gonneville Resource domains and pit shell



Current Indicated and Inferred Mineral Resource Estimate[1]:

- **350Mt** @ 0.96g/t Pd+Pt+Au (3E), 0.16% Ni, 0.10% Cu, 0.015% Co (~**0.58% NiEq** or ~**1.8g/t PdEq**)
- **11Moz 3E**, **560kt Ni**, **360kt Cu** and **54kt Co** contained
- Equivalent to ~**2.0Mt NiEq** or ~**20Moz PdEq** contained
- Resource is defined to depth of ~700m, **open to the north and at depth**
- Located entirely on **Chalice-owned farmland**

Resource update in progress, expected to be completed in late Q1 2023

1 Refer to full Mineral Resource Statement in Appendix

Julimar has the **fourth largest** undeveloped nickel sulphide resource in Australia and has significant PGE-Cu-Co credits

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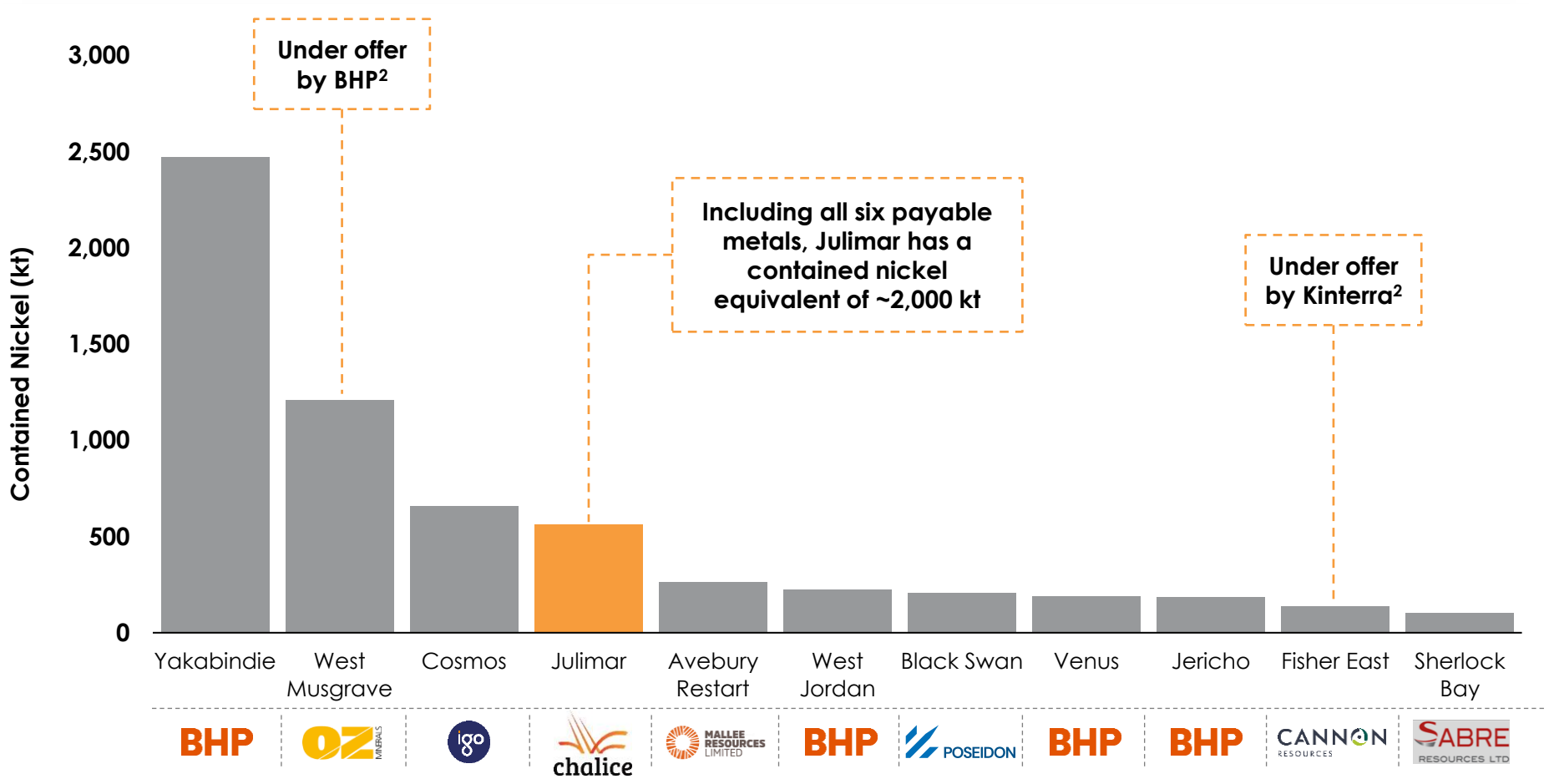
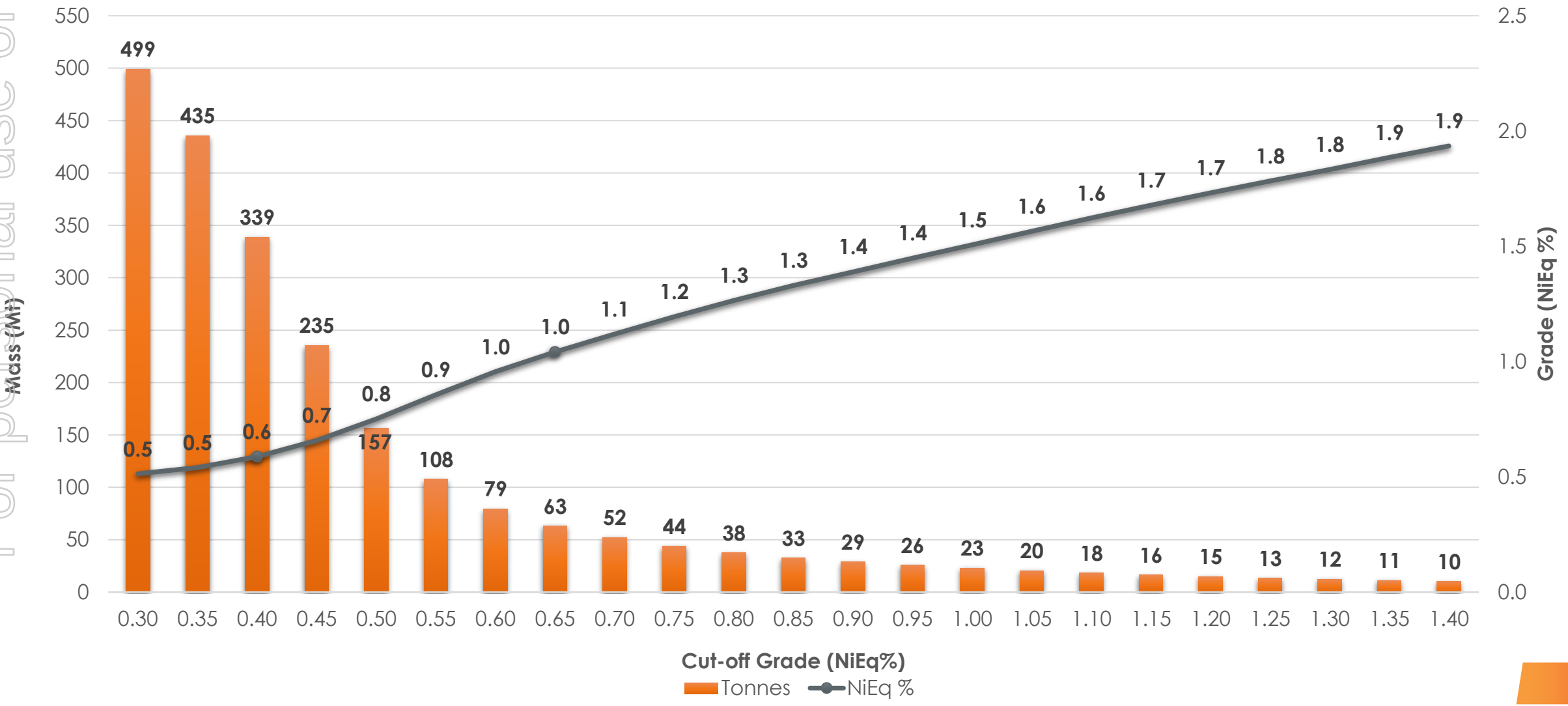
Australian primary nickel sulphide resources in exploration or development [1]



Source: Company filings.
1: Based on total reported JORC Resource (Measured, Indicated, and Inferred). Includes all exploration and development projects with a contained Ni resource of over 99kt. Please refer to Appendix [Australian Primary Nickel Sulphide Resources slide] for peer comparison information; [Gonneville Mineral Resource Estimate slide] and [Metal equivalent assumptions slide] for the assumptions used for the calculation of metal equivalents.
2: As at time of release

Flat grade-tonnage curve highlights the significant higher-grade component – providing the project with **development optionality**

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



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The processing flowsheet is under development, targeting production of a **Cu-PGE-Au concentrate** and a **battery-grade Ni-Co MHP**

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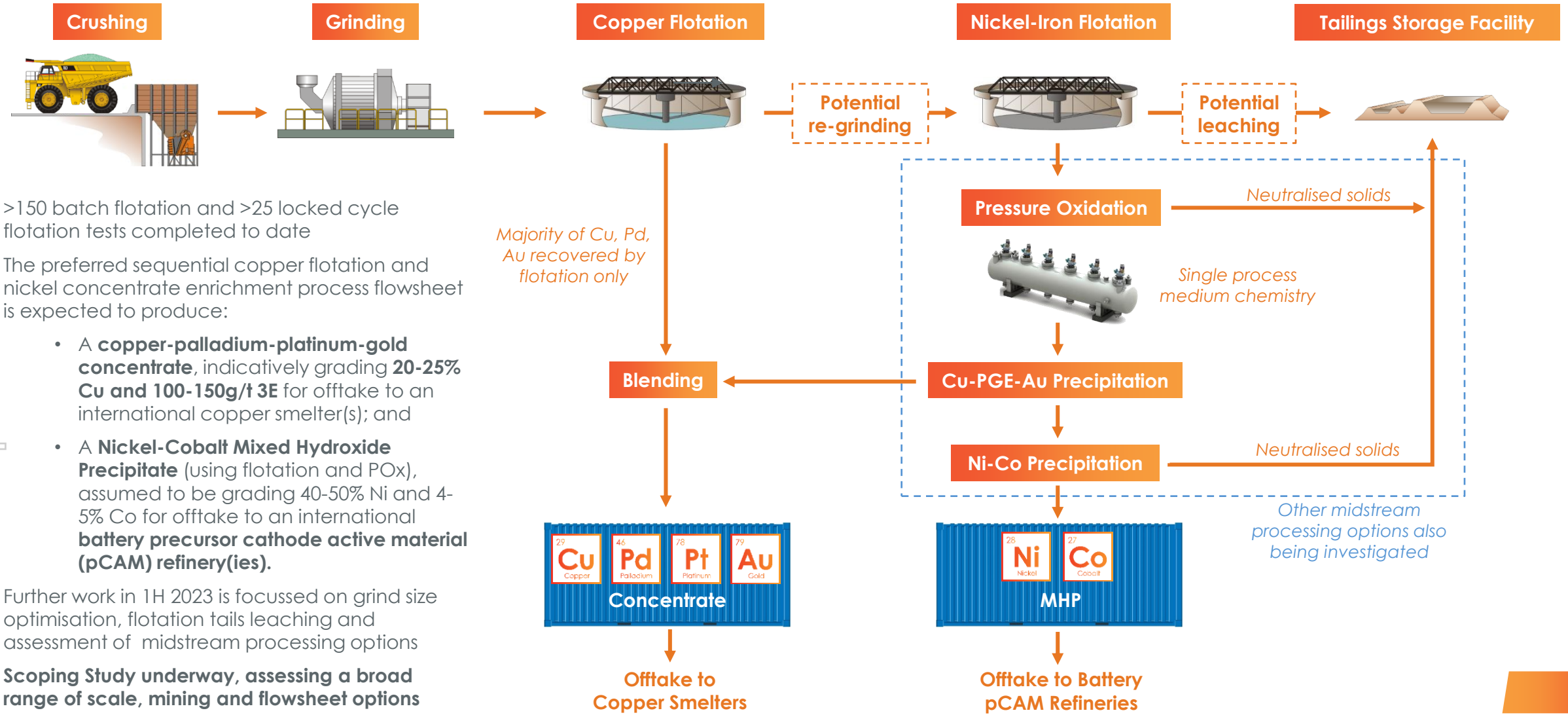
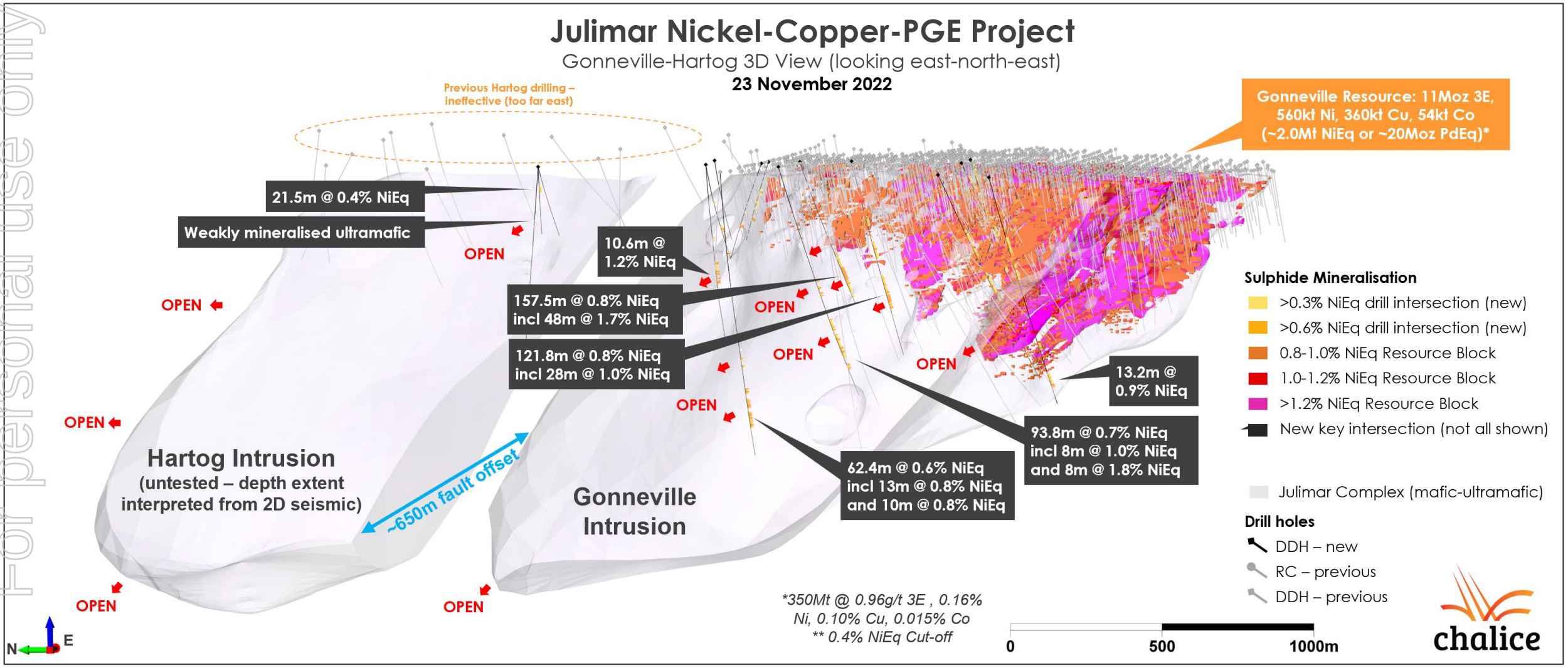
Julimar Processing Flowsheet (simplified)



- >150 batch flotation and >25 locked cycle flotation tests completed to date
- The preferred sequential copper flotation and nickel concentrate enrichment process flowsheet is expected to produce:
  - A **copper-palladium-platinum-gold concentrate**, indicatively grading **20-25% Cu and 100-150g/t 3E** for offtake to an international copper smelter(s); and
  - A **Nickel-Cobalt Mixed Hydroxide Precipitate** (using flotation and POx), assumed to be grading 40-50% Ni and 4-5% Co for offtake to an international **battery precursor cathode active material (pCAM) refinery(ies).**
- Further work in 1H 2023 is focussed on grind size optimisation, flotation tails leaching and assessment of midstream processing options
- **Scoping Study underway, assessing a broad range of scale, mining and flowsheet options**

The growth potential at Gonneville was highlighted by recent **outstanding wide, high-grade intersections** at the northern end of the deposit



The initial results at Hartog from restricted drill sites have confirmed **Gonneville-like sulphide mineralisation** in this fault-offset extension of the Julimar Complex – further wide-spaced step-out drilling is underway

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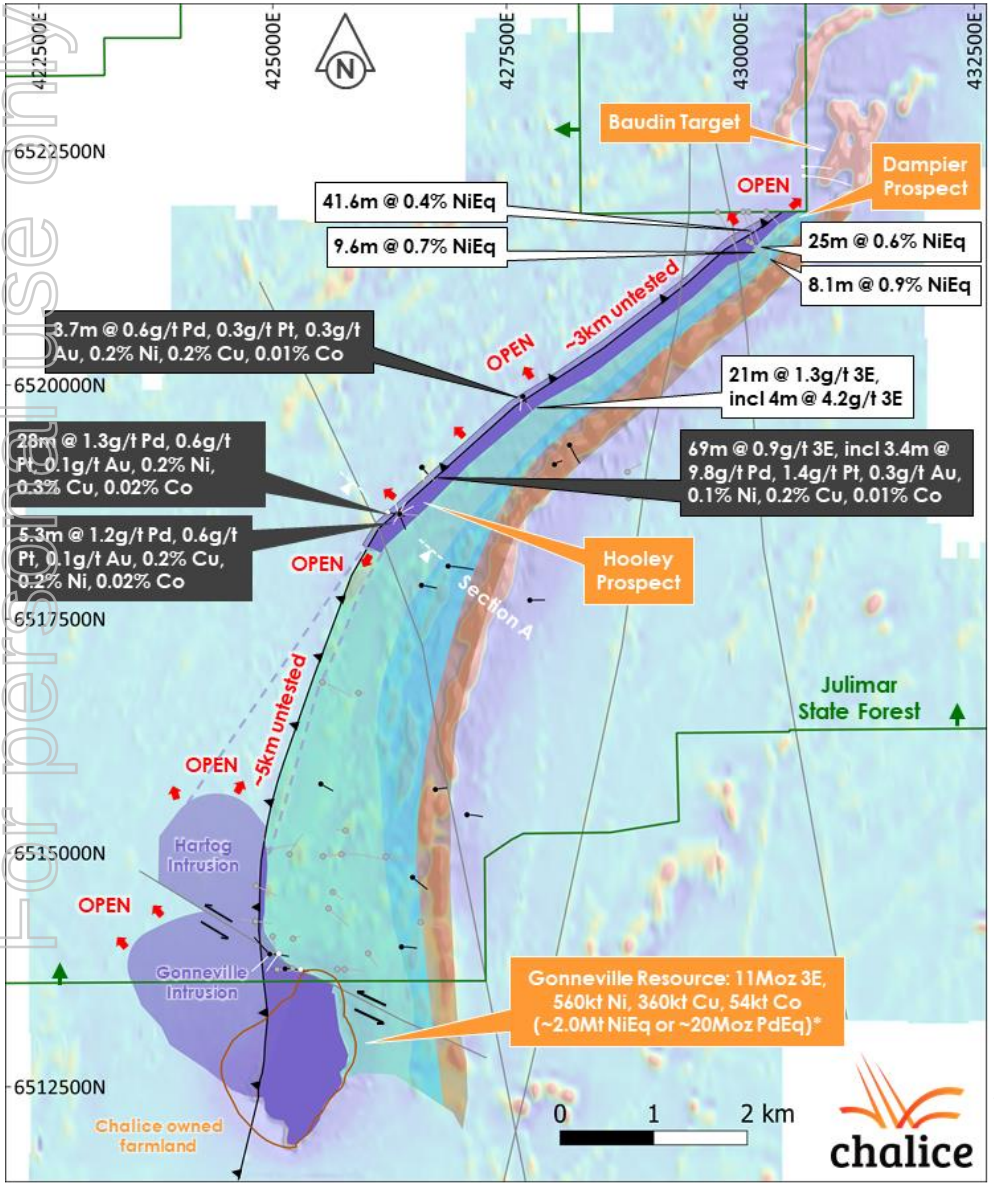
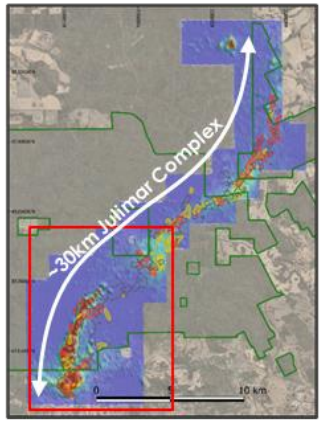
Gonneville-like ultramafic geology + magmatic sulphides have been intersected over a **strike length of ~10km** across the Julimar Complex





State Forest boundary
DDH – New
DDH – Previous
DDH – Assays pending
Gonneville Resource pit crest
New intersection (excl. Gville)
Previous intersection

Geology Interpretation

Julimar Complex (at surface)
Julimar Complex (at depth)
Greenstone Sequence
Other Mafic-Ultramafic
Banded Iron Formation
Granite
Hanging Wall Structure
Other Structures

**350Mt @ 0.96g/t 3E , 0.16% Ni, 0.10% Cu, 0.015% Co*

Julimar Nickel-Copper-PGE Project
South Julimar Complex Plan View – Drill holes, geology, over magnetics (TMI-RTP)
8 December 2022

- Drilling **6-10km** further north of Gonneville has intersected a Gonneville-type ultramafic horizon over **~5.5km of strike length**
- All these holes have intersected highly encouraging evidence of **magmatic sulphides** → Julimar is a very extensive mineral system, potentially **capable of delivering multiple discoveries**
- 2D seismic and drilling to date supports interpretation of Julimar having a rare chonolith-like geometry, similar to other major mineral systems like **Norilsk-Talnakh** (Russia) and **Jinchuan** (China)

- Drilling along the Complex continues with **5 rigs**
- Access discussions underway for next phase of exploration along Hartog-Baudin trend
- **Targeted exploration** will continue in parallel to development studies for a potential mine at Gonneville on Chalice-owned farmland

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The Resource occupies just ~2km of the **>30km long Julimar Complex** – the upside to the north has the potential to transform the project

3D view (looking NW) of the Julimar Complex, Gonneville Deposit, targets, soil geochemistry over regional magnetics

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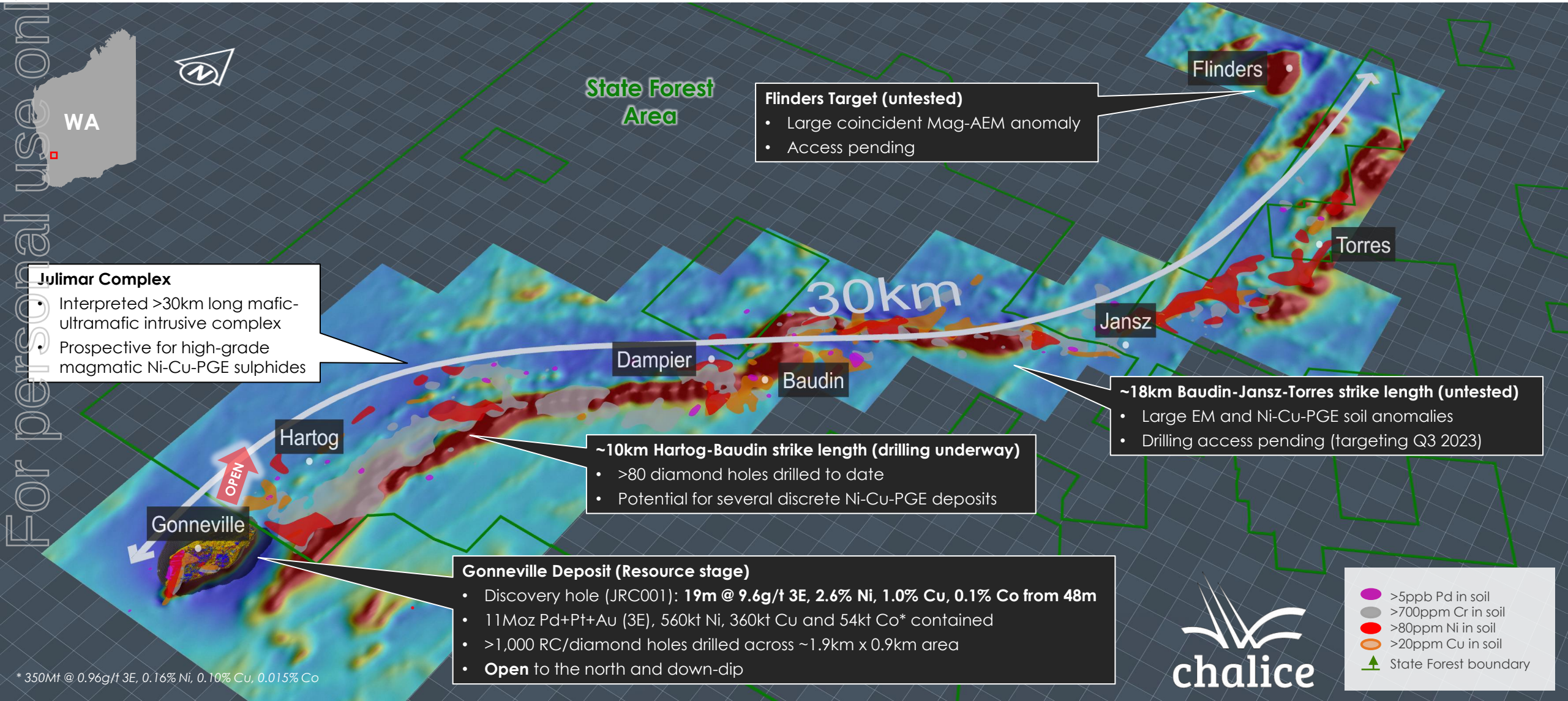

* 350Mt @ 0.96g/t 3E, 0.16% Ni, 0.10% Cu, 0.015% Co

Initial drilling along the Julimar Complex and the Scoping Study for a potential mine at Gonneville represent **significant upcoming milestones**

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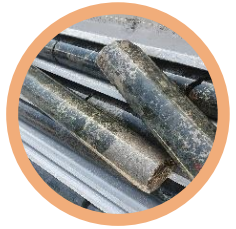
Chalice continues its **dual strategy at Julimar** – to advance development studies and regulatory approvals for a potential mine at Gonneville, in parallel with ongoing exploration activities across the full >30km long Julimar Complex strike length…

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

Significant expansion of tenure (~8,000km^2) and exploration activities



Maiden Mineral Resource Estimate at Gonneville

Drilling commences at greenfield targets along **>30km Julimar Complex**

Updated Mineral Resource at Gonneville – ~2.0Mt NiEq or ~20Moz PdEq

Resource Update at Gonneville – incorporate new extensional and infill drilling

Completion of Scoping Study First step to defining the development options for Gonneville

Gonneville Mine Proposal – commence major regulatory approvals processes

Mar-2020 | **Nov-2021** | **Jan-2022** | **Jul-2022** | **Q1 2023** | **2023+**

… Province scale exploration is ramping up across the new West Yilgarn Ni-Cu-PGE Province and Chalice is **exploring strategic partnering options for Julimar**

[1] Refer to full Mineral Resource Statement in Appendix. Timeline is indicative and subject to exploration and study outcomes

Chalice is committed to **strong environmental stewardship** and has established **trust based relationships** with local communities and Traditional Owners

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We have adopted a **Biodiversity goal** for the Julimar Project – to ensure science-based **no net loss of species or habitat diversity** as a result of our operations

Delivering the Biodiversity Strategy A detailed implementation plan is under development targeting:

Connectivity Establish ecological corridors

Restoration to address habitat fragmentation

Regeneration Improve carbon sequestration

Leading practice low-impact exploration

- Strictly governed by a Conservation Management Plan, according to industry best practice
- Track mounted rigs with a small footprint and no mechanised clearing of vegetation
- Flora, fauna and cultural heritage monitoring is conducted prior to each mobilisation to site

Science-based environmental management

- Comprehensive baseline environmental surveys across 6,000ha; covering flora, fauna, and dieback
- Baseline water studies underway; Chalice recognises water is a shared resource

A mine at Julimar could deliver significant **jobs, skills and economic diversification** to the Wheatbelt region of WA

Creating lasting social and economic benefits

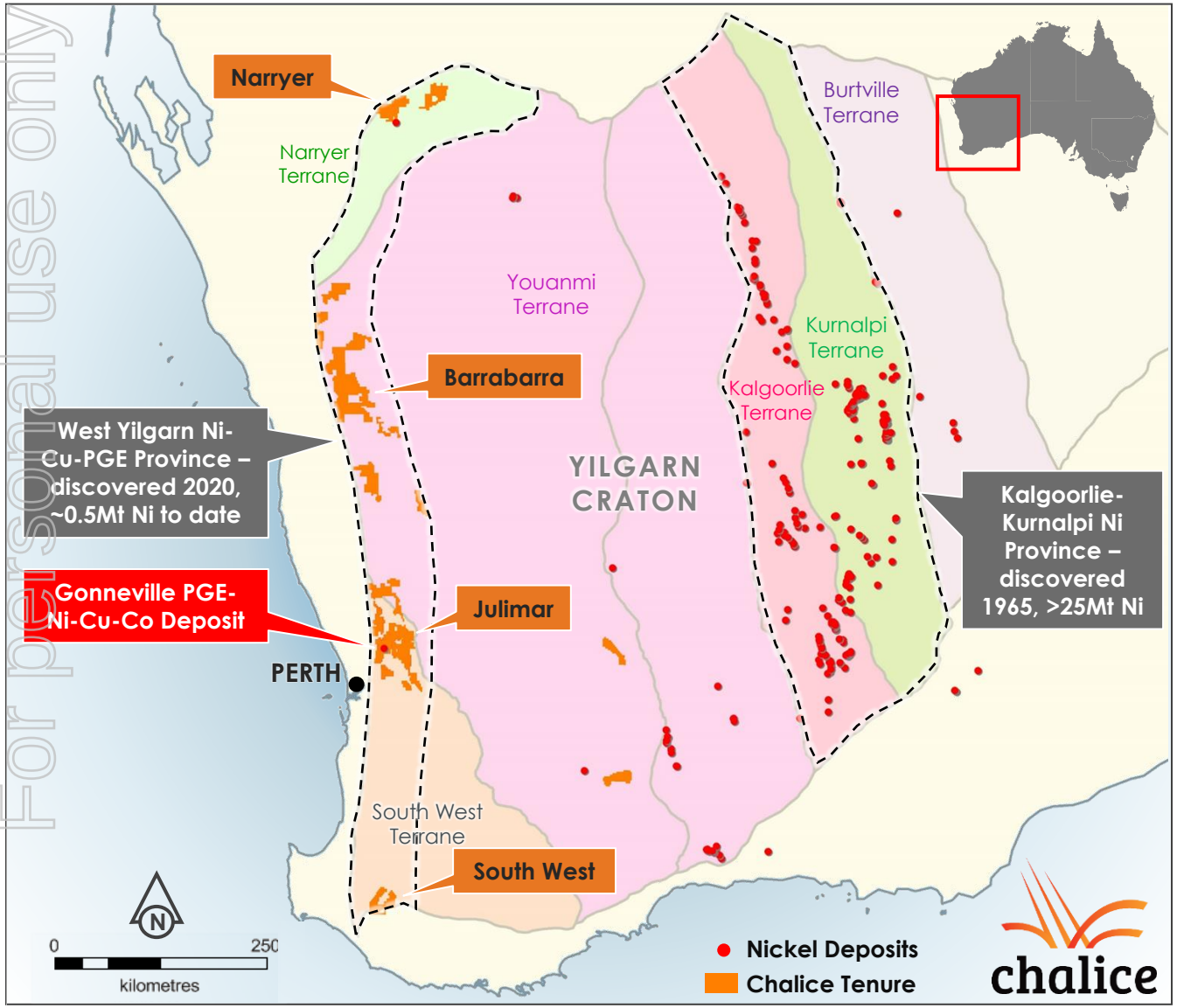
- ~$1.2M local procurement and investment by Chalice, plus ~$1.5M spend by direct contractors in the local shires surrounding the Julimar Project in FY22
- Chalice has engaged early, actively and transparently to build respectful and collaborative relationships with stakeholders

Building **strong, collaborative relationships** with Whadjuk and Yued Traditional Owners

Actively engaging to protect cultural heritage values

- Whadjuk and Yued have started a program of cultural heritage surveys and monitoring for the Julimar Project
- In 2022 over **60 Traditional Owners** participated in this work

The Julimar discovery has kick-started the new West Yilgarn Ni-Cu-PGE Province, which could deliver **more major critical mineral discoveries**



- Many of the **'giant' ortho-magmatic nickel-copper-PGE sulphide** deposits such as Norilsk, Jinchuan, Thompson and Voisey's Bay are located proximal to the margin of cratons
- In WA, the Archaean age eastern Yilgarn craton hosts several world-class nickel sulphide deposits with over **25Mt of Ni** discovered since 1965
- ~1,200km long western margin of the Yilgarn presents a **similar geological setting, but is almost entirely unexplored**
- Chalice made the first major ortho-magmatic Ni-Cu-PGE discovery in the region (Julimar), subsequently staking **>8,000km^2**
- Chalice has **'first mover' advantage** in this exciting new province – strong potential to deliver more major Ni-Cu-PGE discoveries

- **Hundreds of potential host intrusions** already identified in our area – **AI assisted screening and prioritisation underway**
- Rapid, low-cost exploration approach being used – EM, soil/auger sampling and shallow reconnaissance drilling
- Potential for **highly variable** mineralisation styles (Ni:Cu:PGE metal ratios) across the province
- **The prize is significant – i.e. Julimar discovery zone massive sulphides grading c. 3.2% Ni, 1.2% Cu, 10g/t 3E**

Source: S&P Global

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The fate of decarbonisation rests on the explorers who must find the green metals – **the big discoveries are very rare**

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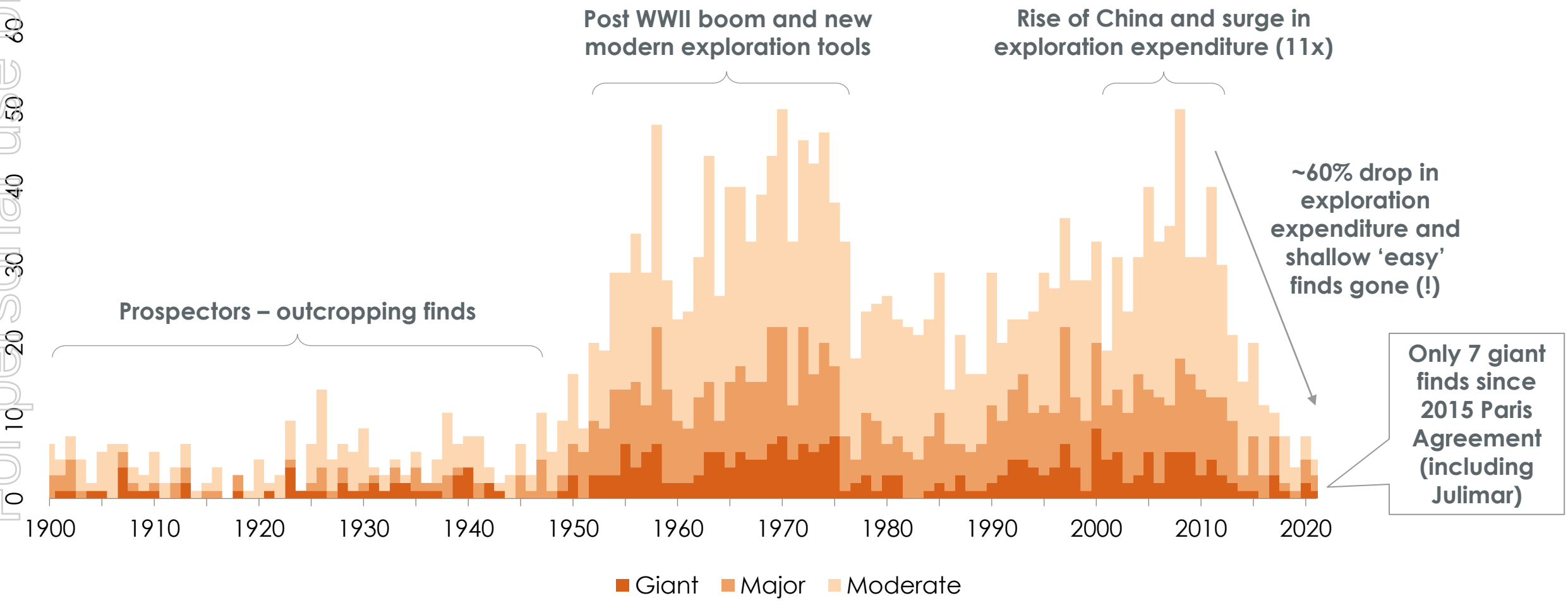
Number of base metal (Ni, Cu, Zn, Pb) discoveries in the World by size – 1900-2021



Source: MinEx Consulting © February 2023

Note: "Moderate" >10kt Ni, >100kt Cu, >300kt Zn+Pb; "Major" >100kt Ni, >1Mt Cu, >3Mt Zn+Pb; "Giant" >1Mt Ni, >5Mt Cu, >12Mt Zn+Pb.
Excludes unreported discoveries in recent years

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Highlights

World class, tier-1 scale 'green metals' project in Western Australia – unique exposure to critical metals required for decarbonisation

A team with a **track record of discovery and shareholder value creation**

Significant exploration upside at Julimar and in the exciting new West Yilgarn Ni-Cu-PGE Province

Appendix

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

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2006
$7.5M raised in IPO on ASX to progress Chalice & Higginsville Projects

2007
Chalice & Higginsville Projects sold for **~A$12M** (pre-tax)

2009
Zara Gold Project in Eritrea acquired for ~A$7M

2009-2011
~A$43M raised to progress Zara to DFS

2012
Zara Gold Project in Eritrea sold for **~US$114M** (pre-tax)

A$0.10ps / ~A$25M capital return to shareholders

2013
Cameron Gold Project in Ontario acquired for ~A$8M

2016
Cameron Gold Project in Ontario sold for **~A$25M** (pre-tax)

2017
Acquired East Cadillac Gold Project in Quebec and staked Pyramid Hill Gold Project in Victoria

2018
Staked Julimar Nickel-Copper-PGE Project in Western Australia

2018
A$0.04ps / ~A$10.6M capital return to shareholders

2019
Quebec Gold Projects sold to O3 Mining

2020
Major PGE-NI-Cu-Co-Au discovery at Julimar Project

2020
~$145M raised to progress Julimar

2021
Gold spin-out into Falcon Metals Ltd (ASX: FAL)

2021
Tier-1 maiden Gonneville Resource

2022
$100M raised to progress Julimar studies

2022
Upgraded Gonneville Resource

2006 2008 2010 2012 2014 2016 2018 2020 2022

Interactive 3D Model & Video: Take a tour of our globally significant Julimar Ni-Cu-PGE Project in Western Australia

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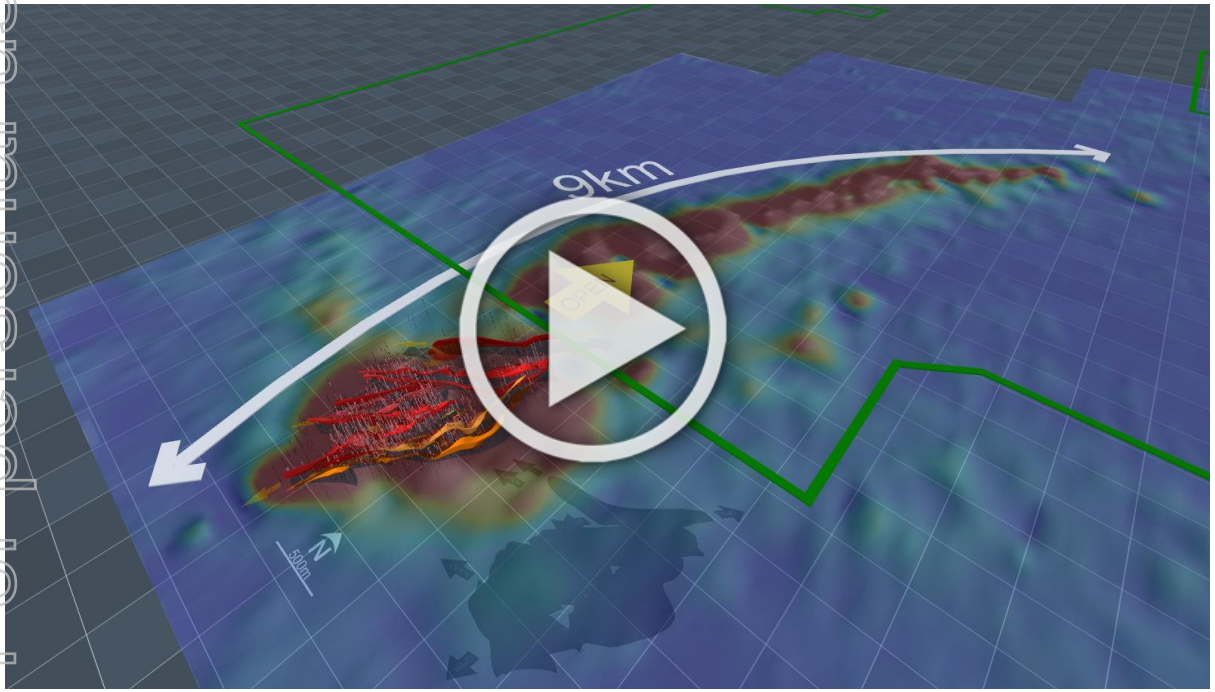
Click here to explore Julimar in 3D:
https://inventum3d.com/c/chalicemining



Click here to watch the Julimar Project Video:
https://youtu.be/zaparMvbb4g

Gonneville Mineral Resource Estimate (JORC Code 2012), 8 July 2022

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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	Indicated	8.6	1.9	-	0.06	-	-	-	-	1.9	0.52	-	0.02	-	-	-	-	0.54
		Inferred	0.4	1.9	-	0.13	-	-	-	-	2.0	0.03	-	0.00	-	-	-	-	0.03
		Subtotal	**9.1**	**1.9**	**-**	**0.06**	**-**	**-**	**-**	**-**	**1.9**	**0.55**	**-**	**0.02**	**-**	**-**	**-**	**-**	**0.57**
Sulphide (Transitional)	0.4% NiEq	Indicated	14	0.80	0.19	0.03	0.17	0.12	0.024	0.65	2.0	0.37	0.09	0.01	24	17	3	93	0.90
		Inferred	1.1	0.64	0.17	0.03	0.14	0.11	0.016	0.55	1.6	0.02	0.01	0	2	1	0	6	0.06
		Subtotal	**15**	**0.79**	**0.19**	**0.03**	**0.16**	**0.12**	**0.023**	**0.65**	**1.9**	**0.39**	**0.09**	**0.01**	**25**	**18**	**4**	**99**	**0.96**
Sulphide (Fresh)	0.4% NiEq	Indicated	220	0.73	0.16	0.03	0.16	0.10	0.016	0.59	1.8	5.1	1.1	0.20	360	230	34	1,300	12
		Inferred	110	0.71	0.15	0.03	0.16	0.11	0.015	0.58	1.7	2.4	0.52	0.10	170	110	16	610	5.9
		Subtotal	**320**	**0.72**	**0.16**	**0.03**	**0.16**	**0.11**	**0.015**	**0.58**	**1.8**	**7.5**	**1.7**	**0.30**	**530**	**340**	**50**	**1,900**	**18**
Underground	MSO	Indicated	0.03	1.7	0.33	0.08	0.16	0.15	0.016	0.99	3.0	0	0	0	0.1	0.1	0.0	0.3	0
		Inferred	2.9	1.8	0.40	0.06	0.27	0.21	0.021	1.2	3.7	0.17	0.04	0.01	7.6	6.0	0.6	35	0.34
		Subtotal	**2.9**	**1.8**	**0.40**	**0.06**	**0.26**	**0.21**	**0.021**	**1.2**	**3.7**	**0.17**	**0.04**	**0.01**	**7.6**	**6.1**	**0.6**	**35**	**0.34**
All		Indicated	240	0.78	0.16	0.03	0.16	0.10	0.015	0.57	1.8	6.0	1.2	0.22	380	240	37	1,400	14
		Inferred	110	0.74	0.16	0.03	0.16	0.11	0.015	0.59	1.8	2.6	0.57	0.11	180	120	17	650	6.3
		Total	**350**	**0.77**	**0.16**	**0.03**	**0.16**	**0.10**	**0.015**	**0.58**	**1.8**	**8.6**	**1.8**	**0.33**	**560**	**360**	**54**	**2,000**	**20**

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 (%) + 0.33x Pd(g/t) + 0.24x Pt(g/t) + 0.29x Au(g/t) + 0.78x Cu(%) + 3.41x Co(%)
PdEq sulphide (Palladium Equivalent g/t) = Pd (g/t) + 0.72x Pt(g/t) + 0.86x Au(g/t) + 2.99x Ni(%) + 2.33x Cu(%) + 10.18x Co(%)
MSO optimisation defined reasonable shapes that could be extracted by underground mining methods.
Includes drill holes drilled up to and including 18 March 2022.

Higher-grade sulphide component of Gonneville Resource (in pit and underground), 8 July 2022

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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)
High-grade Sulphide (Transitional)	0.6% NiEq	Indicated	4.8	1.3	0.31	0.04	0.20	0.18	0.038	0.99	3.0	0.20	0.05	0.01	10	9	2	48	0.46
		Inferred	0.2	1.1	0.26	0.06	0.18	0.18	0.019	0.82	2.4	0.01	0.00	0.00	0	0	0	2	0.02
		Subtotal	**5.1**	**1.3**	**0.30**	**0.05**	**0.20**	**0.18**	**0.037**	**0.98**	**3.0**	**0.21**	**0.05**	**0.01**	**10**	**9**	**2**	**50**	**0.48**
High-grade Sulphide (Fresh)	0.6% NiEq	Indicated	52	1.3	0.29	0.06	0.21	0.19	0.019	0.94	2.8	2.2	0.49	0.11	110	99	10	490	4.8
		Inferred	22	1.3	0.29	0.08	0.21	0.23	0.018	0.98	2.9	0.94	0.20	0.05	46	52	4	220	2.1
		Subtotal	**74**	**1.3**	**0.29**	**0.07**	**0.21**	**0.20**	**0.019**	**0.95**	**2.9**	**3.1**	**0.69**	**0.16**	**160**	**150**	**14**	**710**	**6.9**
Underground	MSO	Indicated	0.03	1.7	0.33	0.08	0.16	0.15	0.016	0.99	3.0	0	0	0	0.1	0.1	0.0	0.3	0
		Inferred	2.9	1.8	0.40	0.06	0.27	0.21	0.021	1.2	3.7	0.17	0.04	0.01	7.6	6.0	0.6	35	0.34
		Subtotal	**2.9**	**1.8**	**0.40**	**0.06**	**0.26**	**0.21**	**0.021**	**1.2**	**3.7**	**0.17**	**0.04**	**0.01**	**7.6**	**6.1**	**0.6**	**35**	**0.34**
All		Indicated	57	1.3	0.29	0.06	0.21	0.19	0.020	0.95	2.9	2.4	0.54	0.11	120	110	12	540	5.2
		Inferred	25	1.4	0.30	0.07	0.21	0.23	0.018	1.00	3.0	1.1	0.24	0.06	54	58	5	250	2.5
		Total	**82**	**1.3**	**0.29**	**0.07**	**0.21**	**0.20**	**0.020**	**0.97**	**2.9**	**3.5**	**0.78**	**0.17**	**180**	**170**	**16**	**790**	**7.7**

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.
NiEq sulphide (Nickel Equivalent %) = Ni (%) + 0.33x Pd(g/t) + 0.24x Pt(g/t) + 0.29x Au(g/t) + 0.78x Cu(%) + 3.41x Co(%)
PdEq sulphide (Palladium Equivalent g/t) = Pd (g/t) + 0.72x Pt(g/t) + 0.86x Au(g/t) + 2.99x Ni(%) + 2.33x Cu(%) + 10.18x Co(%)
MSO optimisation defined reasonable shapes that could be extracted by underground mining methods.
Includes drill holes drilled up to and including 18 March 2022.

Metal equivalent assumptions of Gonneville Resource, 8 July 2022

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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 sulphide domains are calculated according to the formula below:

- NiEq (%) = Ni (%) + 0.33x Pd (g/t) + 0.24x Pt (g/t) + 0.29x Au (g/t) + 0.78x Cu (%) + 3.41x Co (%);
- PdEq (g/t) = Pd (g/t) + 0.72x Pt (g/t) + 0.86x Au (g/t) + 2.99x Ni (%) + 2.33x Cu (%) + 10.18x Co (%)

Metal recoveries used in the metal equivalent calculations are based on rounded average Resource grades for the higher-grade sulphide domain (>0.6% NiEq cut-off):

- Pd – 70%, Pt – 70%, Au – 60%, Ni – 55%, Cu – 90%, Co – 55%.

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

- US$1,800/oz Pd, US$1,300/oz Pt, US$1,800/oz Au, US$22,000/t Ni, US$10,500/t Cu and US$75,000/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 x Au (g/t).

Metal recoveries based on limited metallurgical test work completed to date:

  - Pd – 75%, Au – 95%.
- 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 "Updated Gonneville Mineral Resource" dated 8 July 2022.

Australian Primary Nickel Sulphide Resources (1 Feb 2023)

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						Total Measured (Meas.), Indicated (Ind.) and Inferred (Inf.) resources								Meas.	Ind.	Inf.
Rank	Asset	Company	Stage	Source Announcement	Date	Tonnage (Mt)	Nickel (kt, %)	Copper (kt, %)	Cobalt (kt, ppm)	Gold (koz, g/t)	Platinum (koz, g/t)	Palladium (koz, g/t)	Silver (koz, g/t)	Tonnage (Mt)	Tonnage (Mt)	Tonnage (Mt)
1	Yakabindie	BHP	Feasibility	Annual Report to Shareholders	06-Sep-22	406	2,474 0.61%	- -	- -	- -	- -	- -	- -	129.6	106	170
2	West Musgrave	OZ Minerals	Feasibility	West Musgrave Mineral Resource and Ore Reserve Statement	23-Sep-22	390	1,200 0.30%	1,300 0.33%	47 120	752 0.06	1,003 0.08	1,129 0.09	10,659 0.85	91	240	59
3	Cosmos	IGO	Development	FY22 Cosmos and Forrestania Resources and Reserves	30-Aug-22	67	656 0.98%	- -	- -	- -	- -	- -	- -	13.6	38.9	14.5
4	**Julimar**	**Chalice**	**Exploration**	**Updated Gonneville Mineral Resource**	**08-Jul-22**	**350**	**560** **0.16%**	**360** **0.10%**	**54** **154**	**330** **0.03**	**1,800** **0.17**	**8,600** **0.77**	**-** **-**	**-**	**240**	**110**
5	Avebury Restart	Mallee Resources	Restart	Updated Investor Presentation	07-Jul-22	29	264 0.90%	- -	7 229	- -	- -	- -	- -	-	8.7	20.7
6	Black Swan	Poseidon	Restart	Full Steam Ahead for Black Swan Restart	15-Dec-22	30	206 0.69%	7 0.02%	5 178	- -	- -	- -	- -	1.5	10.1	18.3
7	West Jordan	BHP	Exploration	Annual Report to Shareholders	06-Sep-22	43	224 0.52%	- -	- -	- -	- -	- -	- -	-	-	43
8	Venus	BHP	Exploration	Annual Report to Shareholders	06-Sep-22	11	189 1.71%	- -	- -	- -	- -	- -	- -	1.5	7.5	2.1
9	Jericho	BHP	Exploration	Annual Report to Shareholders	06-Sep-22	31	183 0.59%	- -	- -	- -	- -	- -	- -	-	-	31
10	Fisher East	Cannon Resources	Exploration	Fisher East Resource Increased to 134.1kt Contained Nickel	15-Aug-22	8	134 1.79%	- -	- -	- -	- -	- -	- -	-	2.8	4.7
11	Sherlock Bay	Sabre Resources	Exploration	Sherlock Bay Ni Scoping Study Delivers Positive Cashflow	17-Jan-23	25	99 0.40%	22 0.09%	5 220	- -	- -	- -	- -	12.5	6.1	6.1

Note: Values presented in the above table have been rounded and where totals do not add to their components is due to rounding.

Long term PGE demand forecast: supporting assumptions & calculations

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The long term PGE demand impact from the Hydrogen economy have been generated by Company analysis using assumptions and forecasts that have been informed by recent third party research. The assumptions used below relate to the year 2040. Note: There is the potential risk that these projections will not be achieved should the adoption of a hydrogen economy be less than expected or if major technological developments reduce the PGE loadings required for electrolysers and fuel cells.

Key Model Inputs (2040)

Technology	Input	Unit	Assumption	PGE Demand Calculation
PEM electrolyser	Capacity	GW	70	70 x 75% x 0.5 / 31.1[1] = ~ 0.8Moz
	Market share	%	75	
	PGE loading	g/kW	0.5	
Light Vehicles	Light vehicle market	million per annum	100	100 x 12% x 80 x 0.13 / 31.1[1] = ~4.0 Moz
	Light FCEV market share	%	12	
	Light vehicle rating	kW	80	
	PGE loading	g/kW	0.13	
Heavy Vehicles	Heavy vehicle market	million per annum	7	7 x 40% x 250 x 0.13 / 31.1[1] = ~2.9 Moz
	Heavy FCEV market share	%	40	
	Heavy vehicle rating	kW	250	
	PGE loading	g/kW	0.13	

Source: 'Provision of PGM market intelligence and long-term metal price forecasts', SFA Oxford, April 2020 & 2021
'Strategy Update', AngloAmerican Platinum, 22 February 2021
'Australian and Global Hydrogen Demand Growth Scenario Analysis', Deloitte & COAG Energy Council, November 2019
'Fuelling the Future of Mobility' Deloitte & Ballard, 2020
'Committed to producing green metals', Green Metals & Hydrogen Conference, Sibanye Stillwater, 26 Nov 2021

(1) Calculations use a grams to ounce conversion ratio of 31.1.

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