



# HARMONY IN **PAPUA NEW GUINEA**



**17<sup>TH</sup> PAPUA NEW GUINEA  
RESOURCES & ENERGY  
INVESTMENT CONFERENCE**

**Gary Davies,  
Executive General Manager  
Operations**

12 December 2023

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JSE ticker code      HAR

NYSE ticker code    HMY

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**MINING WITH  
PURPOSE**

# PRIVATE SECURITIES LITIGATION REFORM ACT SAFE HARBOUR STATEMENT AND DISCLAIMER

## FORWARD LOOKING STATEMENTS

This presentation contains forward-looking statements within the meaning of the safe harbour provided by Section 21E of the Exchange Act and Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), with respect to our financial condition, results of operations, business strategies, operating efficiencies, competitive positions, growth opportunities for existing services, plans and objectives of management, markets for stock and other matters. These forward-looking statements, including, among others, those relating to our future business prospects, revenues, and the potential benefit of acquisitions (including statements regarding growth and cost savings) wherever they may occur in this presentation, are necessarily estimates reflecting the best judgment of our senior management and involve a number of risks and uncertainties that could cause actual results to differ materially from those suggested by the forward-looking statements. As a consequence, these forward-looking statements should be considered in light of various important factors, including those set forth in our integrated annual report. Important factors that could cause actual results to differ materially from estimates or projections contained in the forward-looking statements include, without limitation: overall economic and business conditions in South Africa, Papua New Guinea, Australia and elsewhere; the impact from, and measures taken to address, Covid-19 and other contagious diseases, such as HIV and tuberculosis; high and rising inflation, supply chain issues, volatile commodity costs and other inflationary pressures exacerbated by the Russian invasion of Ukraine and subsequent sanctions; estimates of future earnings, and the sensitivity of earnings to gold and other metals prices; estimates of future gold and other metals production and sales; estimates of future cash costs; estimates of future cash flows, and the sensitivity of cash flows to gold and other metals prices; estimates of provision for silicosis settlement; increasing regulation of environmental and sustainability matters such as greenhouse gas emission and climate change, and the impact of climate change on our operations; estimates of future tax liabilities under the Carbon Tax Act (South Africa); statements regarding future debt repayments; estimates of future capital expenditures; the success of our business strategy, exploration and development activities and other initiatives; future financial position, plans, strategies, objectives, capital expenditures, projected costs and anticipated cost savings and financing plans; estimates of reserves statements regarding future exploration results and the replacement of reserves; the ability to achieve anticipated efficiencies and other cost savings in connection with past and future acquisitions, as well as at existing operations; fluctuations in the market price of gold and other metals; the occurrence of hazards associated with underground and surface gold mining; the occurrence of labour disruptions related to industrial action or health and safety incidents; power cost increases as well as power stoppages, fluctuations and usage constraints; ageing infrastructure, unplanned breakdowns and stoppages that may delay production, increase costs and industrial accidents; supply chain shortages and increases in the prices of production imports and the availability, terms and deployment of capital; our ability to hire and retain senior management, sufficiently technically-skilled employees, as well as our ability to achieve sufficient representation of historically disadvantaged persons in management positions or sufficient gender diversity in management positions or at Board level; our ability to comply with requirements that we operate in a sustainable manner and provide benefits to affected communities; potential liabilities related to occupational health diseases; changes in government regulation and the political environment, particularly tax and royalties, mining rights, health, safety, environmental regulation and business ownership including any interpretation thereof; court decisions affecting the mining industry, including, without limitation, regarding the interpretation of mining rights; our ability to protect our information technology and communication systems and the personal data we retain; risks related to the failure of internal controls; our ability to meet our environmental, social and corporate governance targets; the outcome of pending or future litigation or regulatory proceedings; fluctuations in exchange rates and currency devaluations and other macroeconomic monetary policies, as well as the impact of South African exchange control regulations; the adequacy of the Group's insurance coverage; any further downgrade of South Africa's credit rating and socio-economic or political instability in South Africa, Papua New Guinea, Australia and other countries in which we operate; changes in technical and economic assumptions underlying our mineral reserves estimates; geotechnical challenges due to the ageing of certain mines and a trend toward mining deeper pits and more complex, often deeper underground, deposits; and actual or alleged breach or breaches in governance processes, fraud, bribery or corruption at our operations that leads to censure, penalties or negative reputational impacts.

The foregoing factors and others described under "Risk Factors" in our Integrated Annual Report ([www.har.co.za](http://www.har.co.za)) and our Form 20-F should not be construed as exhaustive. We undertake no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after the date of this annual report or to reflect the occurrence of unanticipated events, except as required by law. All subsequent written or oral forward-looking statements attributable to Harmony or any person acting on its behalf are qualified by the cautionary statements herein.

## Competent Person's statement

The information in this presentation that relates to Mineral Resources or Mineral Reserves has been extracted from our Mineral Resources and Mineral Reserves statement published on 30 June 2023. Harmony confirms that it is not aware of any new information or data that materially affects the information included in the statement, in the case of Mineral Resources or Mineral Reserves, that all material assumptions and technical parameters underpinning the estimates in the original SENS release continue to apply and have not materially changed. Harmony confirms that the form and context in which the competent person's findings are presented have not been materially modified from the original SENS release.

Eva Copper - The information in this presentation that relates to Mineral Resources has been extracted from our Mineral Resources and Mineral Reserves statement published on 30 June 2023. The Mineral Reserves will be declared once the feasibility study is concluded.

# 73 YEARS OF VALUE CREATION, 21 YEARS IN PNG

## OUR STRATEGY

To produce safe, profitable ounces and improve margins through operational excellence and value-accretive acquisitions

## STRATEGIC PILLARS

RESPONSIBLE STEWARDSHIP



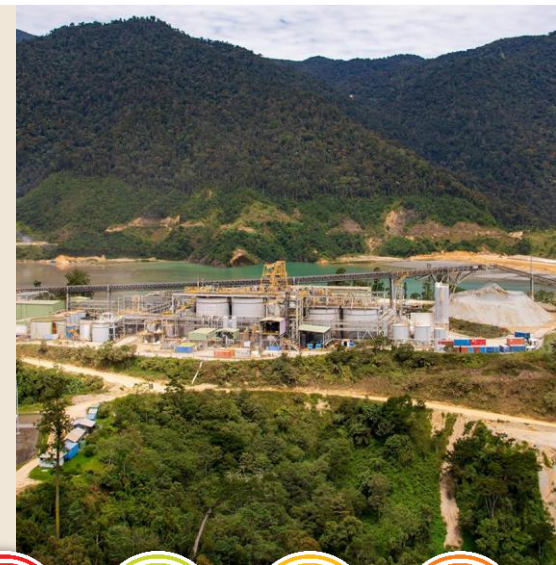
OPERATIONAL EXCELLENCE



CASH CERTAINTY



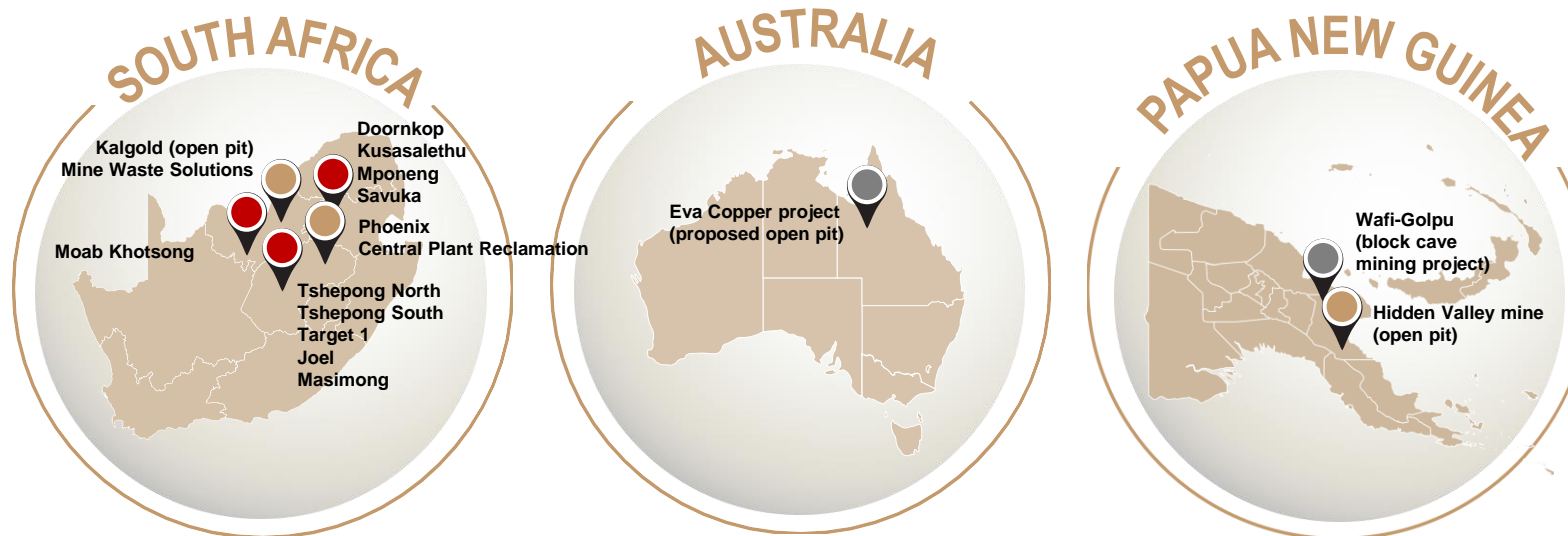
EFFECTIVE CAPITAL ALLOCATION



## OUR VALUES



# SPECIALIST GOLD PRODUCER WITH A GROWING INTERNATIONAL COPPER FOOTPRINT



Over 73 years of gold mining experience in South Africa and more than two decades operating in Papua New Guinea

<p><b>FY23<sup>1</sup> gold production</b></p> <p><b>1.47Moz<sup>4</sup></b></p> <p>South Africa's largest gold producer by volume</p>	<p><b>Mineral Resources<sup>2</sup></b></p> <p><b>137.8Moz</b></p> <p>Significant resource base placing Harmony in global top 10</p>	<p><b>Mineral Reserves<sup>3</sup></b></p> <p><b>39.3Moz</b></p> <p>Higher quality ounces as we invest in grade and margin</p>	<p><b>Operating mines</b></p> <p><b>11</b></p> <p>9 underground and 2 open-pit mines</p>	<p><b>Surface retreatment operations</b></p> <p><b>4</b></p> <p>The largest gold tailings retreatment business globally at 226koz<sup>4</sup> in FY23</p>	<p><b>International copper-gold growth projects</b></p> <p><b>2</b></p> <p>Tier 1 Wafi-Golpu and Eva Copper in Tier 1 jurisdiction</p>
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**LEGEND**

- Surface sources operations
- Underground operations
- International copper-gold growth projects

1. FY23: financial year ended 30 June 2023  
 2. Mineral Resources as at 30 June 2023 including Eva Copper  
 3. Mineral Reserves as at 30 June 2023 does not include 3.9Moz of gold and gold equivalent ounces reserves for Eva Copper which was declared by Copper Mountain Company as at August 2022. Harmony is busy updating feasibility studies.  
 4. Units: Moz - million ounces; koz - thousand ounces












## OUR PNG OPERATIONS

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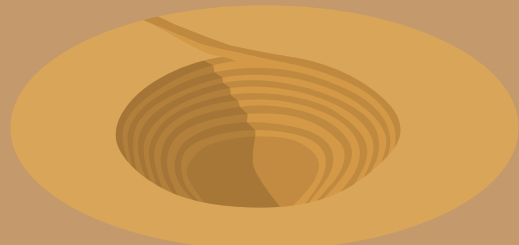
HARMONY IN **PAPUA  
NEW GUINEA**

# PARTNER OF CHOICE IN PNG FOR 21 YEARS

2004-2005	2008	2010	2015-2016	2018	2020	2021	2022	2023
 <p><b>PNG presence</b> established in 2004</p> <p><b>Hidden Valley:</b> Construction of access road to mine begun in 2005</p>	 <p><b>Morobe Province joint venture</b> (50:50) created with Newcrest (August)</p>	 <p><b>Hidden Valley:</b> Mine officially opened in September</p> <p><b>Golpu:</b> Discovery of Cu/Au deposit extension</p>	 <p><b>Kili Teke:</b> Cu/Au deposit discovered in 2015</p> <p><b>Hidden Valley:</b> Acquired 100% of mine in October 2016 – re-investment commitment of US\$180 million</p> <p><b>Wafi-Golpu:</b> Initial application submitted in 2016</p>	 <p><b>Wafi-Golpu:</b> Updated feasibility study based on deep sea tailings placement as waste disposal technology</p> <p><b>Hidden Valley:</b> Re-investment completed and commercial production begins in last quarter of FY18</p>	 <p><b>Wafi-Golpu:</b> Project's environmental permit approved in December</p> <p><b>Hidden Valley:</b> Mining lease (ML) extension application lodged with MRA in November</p>	 <p><b>Hidden Valley:</b> ML extension approved in May</p>	 <p><b>Eva Copper Project</b> in Australia acquired, extending our copper diversification</p>	 <p><b>Wafi-Golpu:</b> Framework MoU signed in April</p> <p><b>Eva Copper:</b> updating feasibility study</p>

# HIDDEN VALLEY: EXCELLENT MINING TRACK RECORD

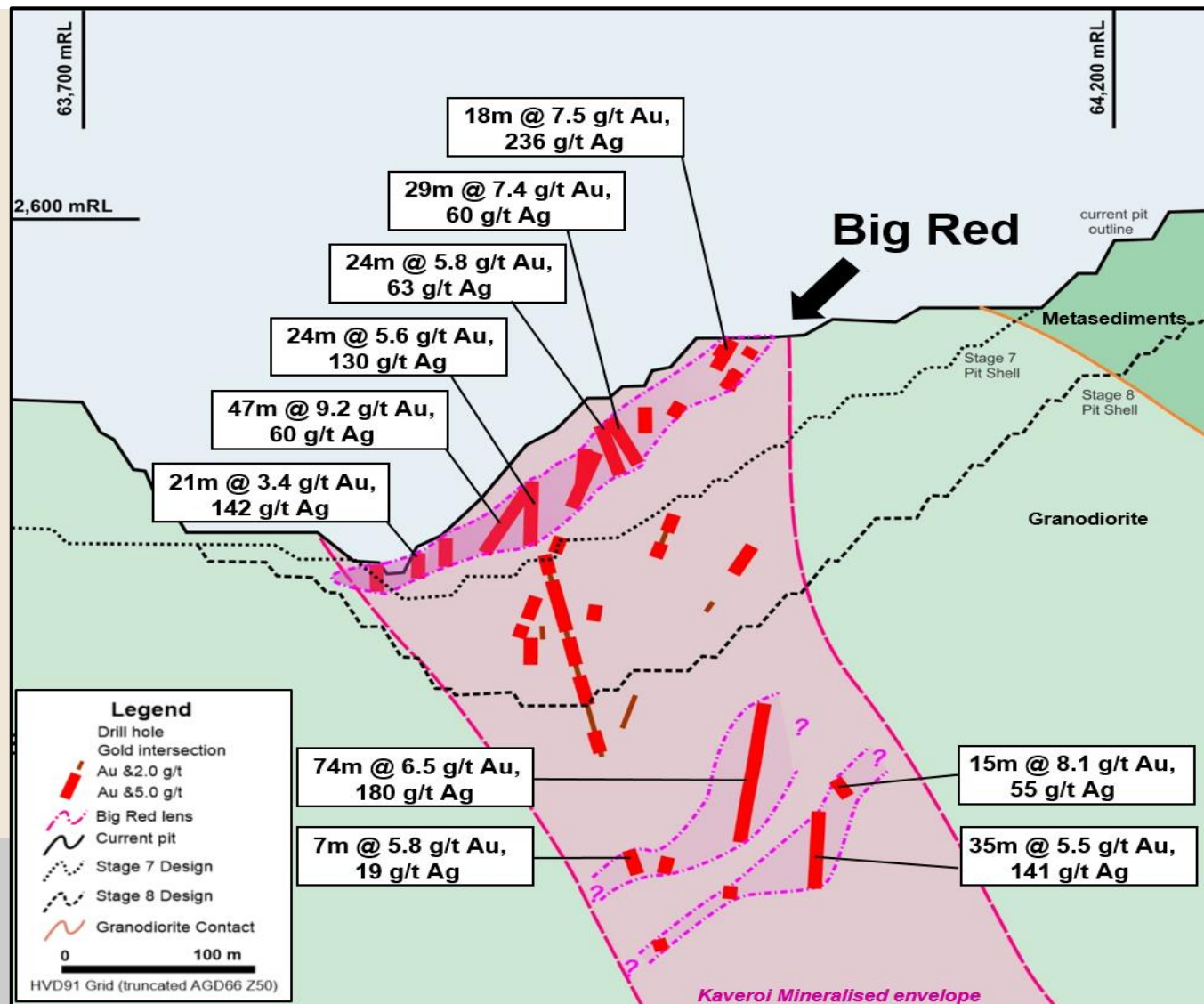
- **Excellent safety record:** no loss-of-life incidents for eight years and over 3.7 million loss-of-life free shifts achieved to date
- **Open-pit gold and silver mine:** wholly-owned
- **140 498oz** (10% of Harmony's total) produced in FY23
- **2 189** people employed (97% are PNG citizens)
- **1Moz Mineral Reserve** (19Mt @ 1.7g/t Au)
- Five-year life of mine; **mining lease extended to March 2030**
- **Brownfield exploration:** Kerimenge and Webiak



# BIG RED LODGE – IMPROVED GRADE IN FY24

## Kaveroi Deposit Section 75 625mN

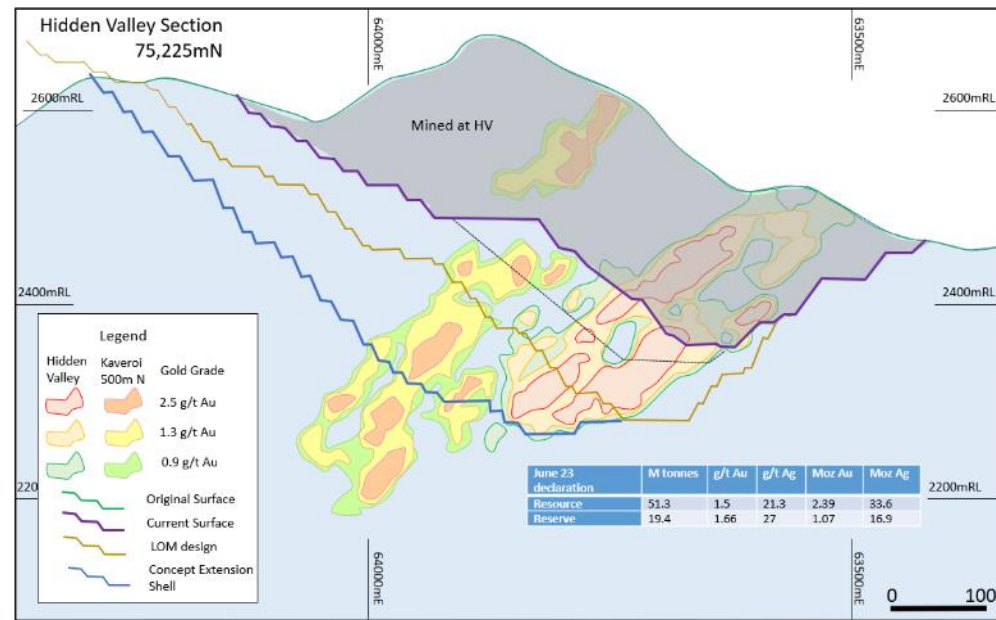
- **Big Red:** high-grade vein developed in Kaveroi orebody
- Favorable geometry; dips parallel to highwall currently being mined as stage 7 cutback, returning improved gold and silver grades
- 170m of strike; down dip continuity over 150m
- Clear potential for repeats at depth and along strike





# HIDDEN VALLEY: FURTHER EXTENSION INVESTMENT

- FY23 life of mine designs optimised and redesigned, adding additional ~200koz gold to Reserve base
- Upgrade of silver life of mine Reserve by 3.3Moz due to improved silver drill intercepts
- Construction of second tailings storage facility using existing Hamata open pit
- Further studies underway to convert ~2.4Moz gold Resources into Reserves
- Economic pit shells identified additional ~4 years of potential mine inventory
- Additional TSF capacity being studied to accommodate extended inventory potential that will maintain Harmony's commitment to ANCOLD (Australian National Committee on Large Dams) – the highest standard – and align to Global Industry Standard on Tailings Management



TSF: Tailings surface facility

# EMBEDDED SUSTAINABLE MINING PRACTICES – TAILINGS MANAGEMENT

- Hidden Valley uses land-based tailings storage facility to safely store tailings material and waste water
- Facility designed and operated in accordance with ANCOLD guidelines (the Australian National Committee on Large Dams)
- Facility comprises two cross-valley embankments, a main and saddle dam, which are constructed using downstream build methodology
- Hidden Valley tailings storage facility is first large facility of this kind to be operated successfully in Papua New Guinea



# EMBEDDED SUSTAINABLE MINING PRACTICES – TAILINGS MANAGEMENT

- Klohn Crippen Berger (Engineer of Record) provided quality assurance and quality control across construction phases
- At completion, height of main dam embankment will be ~160m
- Independent Dam Safety Reviews conducted by GHD and Independent Tailings Review Board established in July 2019
- Early-warning system now installed and activated to notify villages downstream in unlikely event of embankment breach
  - includes emergency siren towers at mine site and in two downstream villages
  - system also makes use of text messages to reach potentially-affected community members and placement of evacuation level signage in each village
- Extensive community consultation and education campaign has accompanied this programme of works



**EMERGENCY EVACUATION**

1. HEAR ALARM

2. LEAVE RIVER

3. GET ABOVE SIGN

4. COMMUNICATE

**DISPELA TOKSAVE EM BILONG PROTEKTIM YU**

SAPOS YU HARIM NOIS BILONG SAIREN YU MAS HARAP NA WOKABOUT I GO ANTAP NA ABRUSIS DISPELA MAK OR SAIN. NOKEM IGO TAMBLONG LONG WAKA WATUT.

DISPELA BAKEM O TOROKOY FOR BEL UNO DALI LUMU ELI DITTA PRA-PRENA NA P MOKNA. SA I BAKEM TOROKOY UNO. POKI TITTA SIKETA LUMU. TITTA LUMU. SIKETA PRA I WAKAP I SIKETA. SIKETA PRA I WAKAP I SIKETA. SIKETA PRA I WAKAP I SIKETA.

**HARMONY**

If you have no access to the radio you can contact APD control on +675 XXX XXXX

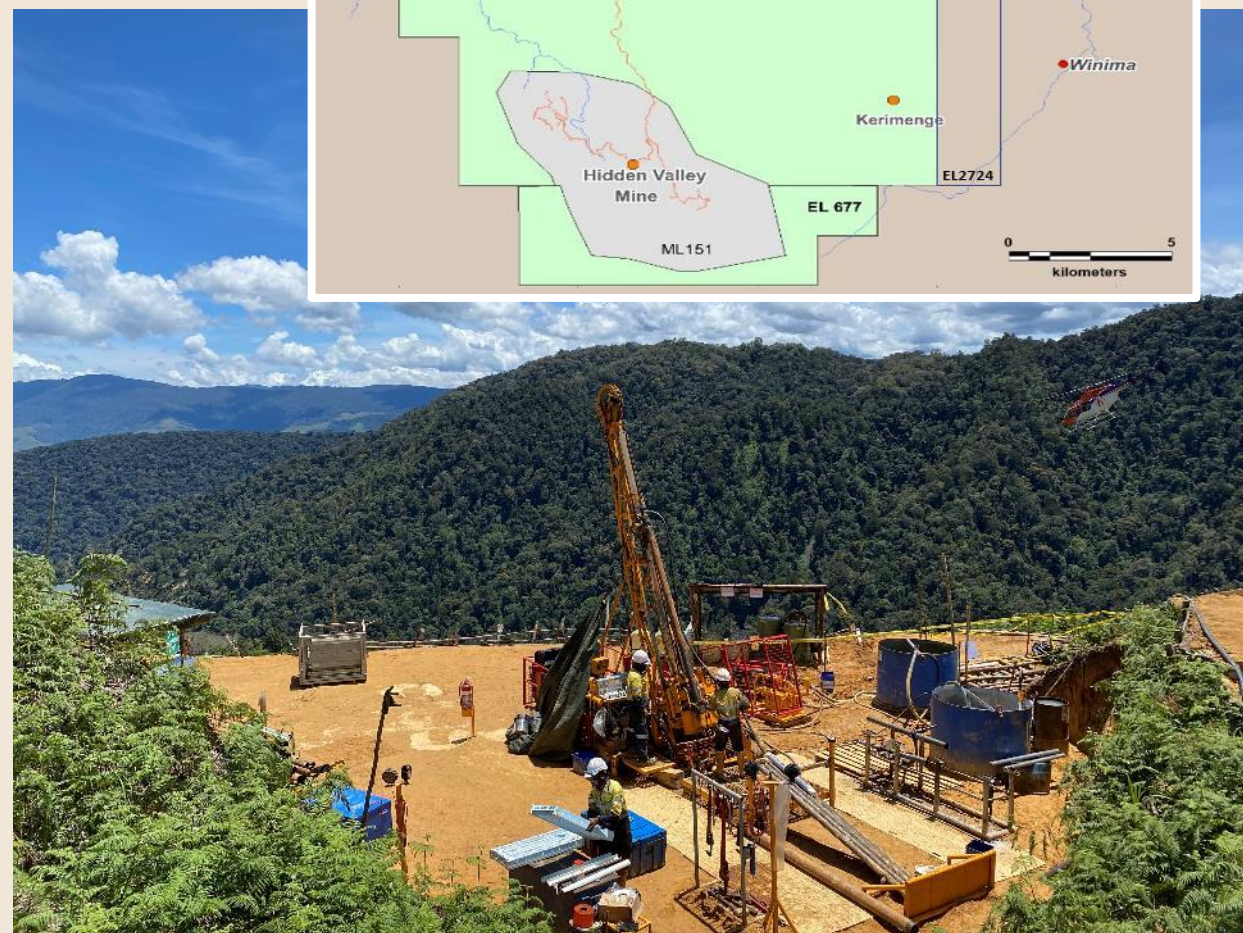
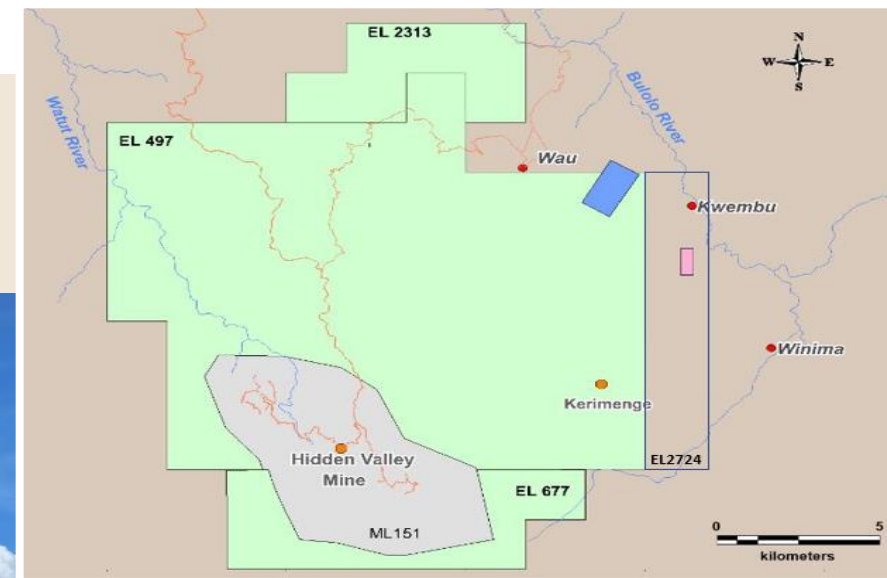
# EMBEDDED SUSTAINABLE MINING PRACTICES – ENGINEERED WASTE DUMPS

- Hidden Valley designs and constructs fully engineered waste rock facilities (WRD)
- Designed as permanent structures with long-term stability and set up to achieve rehabilitation and closure outcomes
- Includes construction of engineered rock underdrains in valley floor beneath WRD and installation of a buttress at base (toe) of WRD for stability
- Waste rock placed from bottom up in 5 meter layers to improve compaction and strength



# KERIMENGE – EXPLORATION: CONCEPT STUDY AND PFS\* UPDATE

- Targeting high-margin, low-capital intensity ounces
  - proximity to Hidden Valley – 7km
- Completed 11 115m of in-fill drilling to address risk and confidence requirements
- 1 361m of core
  - 92 samples collected for geotechnical and metallurgical lab analysis
- Metallurgical test work underway with initial positive results from Column Leach testing



\*PFS: pre-feasibility study

# WAFI-GOLPU\* – PERMITTING: TIER 1 COPPER-GOLD PROJECT

- Proposed underground copper-gold mine
- 50/50 joint venture with Newmont
- **28-year** life of mine
- **1.4Moz** of gold equivalent estimated annual production
- **1.27%** copper, **0.9g/t** gold projected grade
- Currently in **permitting phase**
- Environment permit issued December 2020
- Framework MOU signed April 2023

\* Information based on the feasibility study update which was completed in December 2017



# EVA COPPER PROJECT: NEAR-TERM COPPER IN NORTHERN QUEENSLAND\*

- 1.5Mt copper resource
- Feasibility update underway
- Project team established in Brisbane and Cloncurry
- Targeting six open pits with copper concentrator
- Annual copper production of ~50kt
- Potential mine life over 15 years, providing stable platform for continued growth
- Excellent regional exploration potential
  - over 2 500km<sup>2</sup> leases



\* Information supplied is subject to the completion of the Harmony updated Eva feasibility studies



**OUR  
CONTRIBUTION  
TO PAPUA NEW  
GUINEA**

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# OUR CONTRIBUTION TO PNG IN FY23



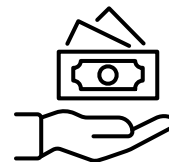
## ROYALTIES

**Project spend to date**  
**US\$71 million**  
(PGK213.6 million)  
in terms of 2005  
Memorandum of  
Understanding



## TAXES

**US\$13 million**  
(PGK46 million)  
to government in taxes



## SALARIES

**US\$28 million**  
(PGK98 million)  
paid to employees in  
salaries and wages



## PROCUREMENT

**US\$117.3 million**  
(PGK414 million)  
spent on  
in-country procurement



## ENVIRONMENT

**US\$1.7 million**  
(PGK6 million)  
spent on  
environmental management



## EMPLOYMENT

**2 189 people**  
employed  
(98% PNG citizens)



## FOCUS OF OUR CORPORATE SOCIAL AND MINE COMMUNITY-RELATED INVESTMENT

**US\$4 million** (PGK14 million) spent on initiatives covering:

- Health
- Education and training
- Infrastructure development, maintenance
- Agri-business and alternative income opportunities
- Supporting local civic institutions

# INDIRECT BENEFITS – LOCAL PROCUREMENT

- Preference given to landowners and regional business, subject to:
  - terms
  - commercially competitive rates
  - generally available and proven expertise
- In-country sourcing preferred
  - where in-country options not viable, international procurement takes place

**PGK135 million**

Average annual spend with landowner companies

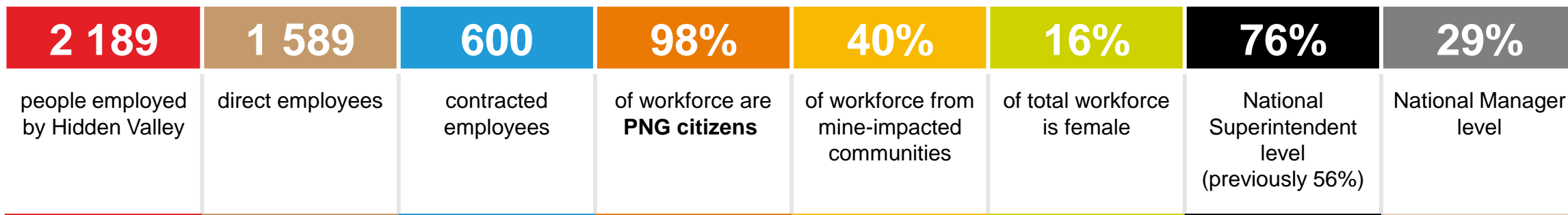


Indirect procurement benefit streams (average annualised)	PGK (m)
Local procurement (excluding PNG Power Limited)	456
Power purchased from PNG Power Limited	13
Average annual spend with landowner companies	135

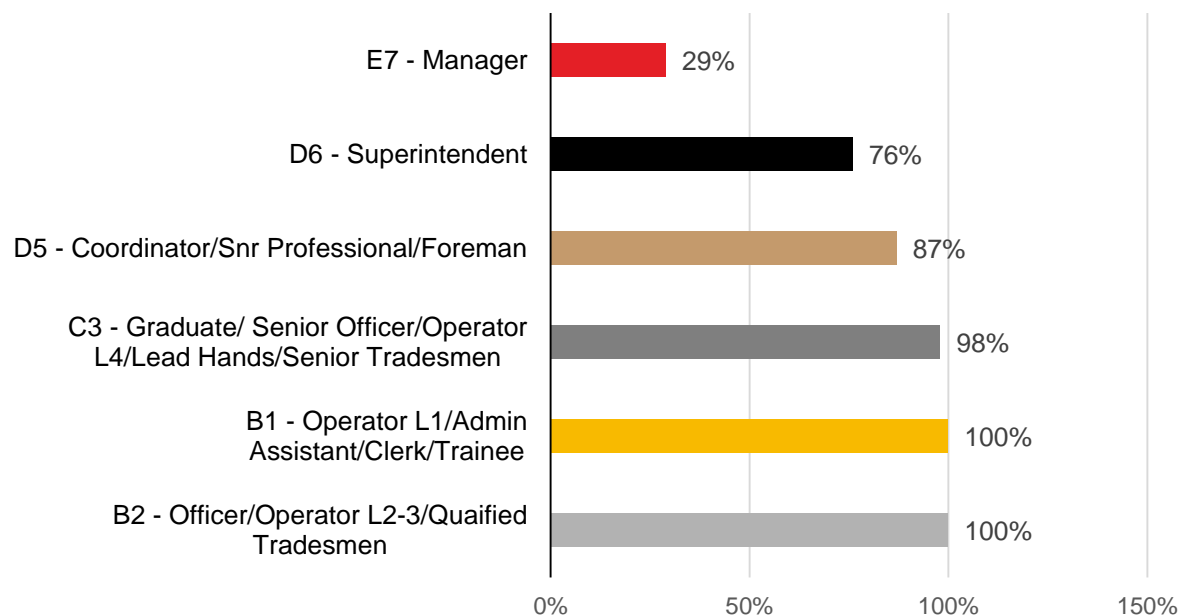
Aggregate procurement by location of supplier (FY2014 to FY2023):	
Nauti, Kuembu and Winima region	PGK1 199
Morobe Province	PGK1 340
PNG outside Morobe Province	PGK1 896
<b>TOTAL</b>	<b>PGK4 435</b>

# HIDDEN VALLEY – EMPLOYEE OVERVIEW

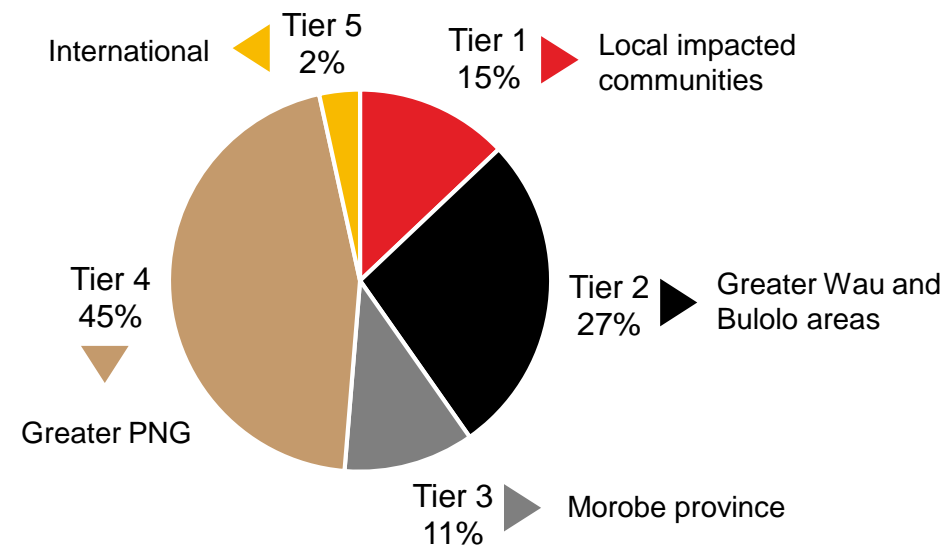
Jobs created and maintained by Hidden Valley investment



**PNG employee representation**



**Manning by tier levels**



# SCHOLARSHIP AND EDUCATIONAL ASSISTANCE PROGRAMMES



- Educational assistance programmes targeted at key Hidden Valley Mine stakeholder groups and broader Morobe Province
- Key programmes include school fees assistance for employees' dependants, university scholarships in mining-related fields, donations to schools
- Hidden Valley Bursary programme – 11 students sponsored in past two years
- In 2023, 35 students from landowner communities supported by Hidden Valley Mine Trust

## FY23 contribution:

Assisted

**300** employees, sponsoring **517** children

Contributed

**PGK1.7 million**

to education

Value of Hidden Valley Mine university scholarships

**PGK60 000**

Hidden Valley Mine Trust (Benefit Sharing Agreement)

**PGK338 000**

# COMMUNITY DEVELOPMENT PROGRAMMES

## Community development programmes:

- Aligned with district and provincial development plans
- Promote alternative income streams beyond eventual mine closure
- Advance UN Sustainable Development Goals

## Key focus areas include:

- Agricultural programmes – coffee and Irish potatoes, honey bee-keeping and tilapia programmes being piloted
- Gender and youth programmes, including baking, sewing, crafts, food processing
- Bookkeeping training for small business
- Community health outreach in partnership with Morobe Provincial Health Department and Bulolo and Wau-Waria district officers



Sewing programme - Nauti



Bookkeeping training



Potato pilot programme - Winima

# TIA HANAMA WETA COOPERATIVE SOCIETY

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Launch of cooperative society at Nauti



Nauti farmers launch their first cooperative society focused primarily on coffee production

## COMMUNITY HEALTH OUTREACH

Since 2022, over **900** community members attended mobile clinics, **199** children immunised, over **840** attended Pinktober breast cancer awareness month and **over 720** received screenings, and **25** are completing Village Health Attendant training in December 2023.



# INFRASTRUCTURE SUPPORT

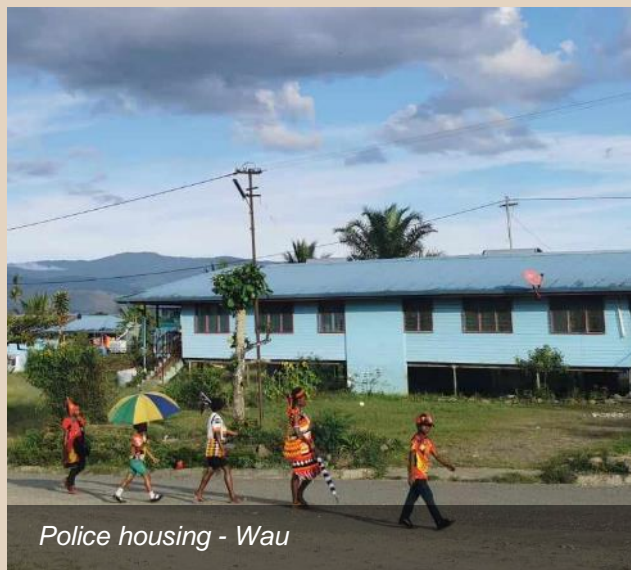
- Currently in first year of four-year Community Roads Strategy
  - over 29km of road maintenance and upgrades
  - Neranda bridge repair
- Police housing project to deliver important maintenance works and repairs to:
  - 18 police houses
  - duplexes in Wau and Bulolo
- Community solar lighting pilot project
- Trial water sanitation and hygiene project – with seven ventilated toilets and wash taps installed near community halls and aid posts



Trial WaSH project



Solar lighting pilot project - Greenhill



Police housing - Wau



Neranda bridge repairs



**CONCLUSION**

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# DELIVERING ON OUR PROMISE, LEAVING A POSITIVE LASTING LEGACY

## Mining with purpose:

- Our activities and how we conduct our business must create and preserve shared value for the:
  - people we employ
  - communities surrounding our mines and
  - environment
- As the partner of choice, we maintain our social licence to operate by engaging honestly and transparently with our communities – in line with our Harmony values

Wafi-Golpu permitting will allow Harmony to continue investing in and adding value to Morobe Province and Papua New Guinea



# THANK YOU



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[www.harmony.co.za](http://www.harmony.co.za)

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