Kumul Minerals Holdings Ltd

Energy is the Building Block for Economic Growth

KUMUL MINERALS
HOLDINGS LIMITED

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Forward-looking statements

This presentation contains forward-looking statements, which may include but statements regarding: trends in economic outlook; commodity prices and currency exchange rates; demand for commodities; medium-term guidance; reserves and resources and production forecasts; operational performance; expectations; plans, strategies and objectives of management; climate scenarios; approval of certain projects and consummation of certain transactions; closure or divestment of certain assets, operations or facilities (including associated costs); anticipated production or construction commencement dates; capital expenditure or costs and scheduling; operating costs, including unit cost guidance, and shortages of materials and skilled employees; anticipated productive lives of projects, mines and facilities; provisions and contingent liabilities; and tax and regulatory developments.

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For example, our future revenues from our assets, projects or mines described in this presentation will be based, in part, upon the market price of the minerals, or metals produced, which may vary significantly from current levels. These variations, if materially adverse, may affect the timing or the feasibility of the development of a particular project, the expansion of certain facilities or mines, or the continuation of existing assets.

Other factors that may affect the actual construction or production commencement dates, revenues, costs or production output and anticipated lives of assets, mines or facilities include our ability to profitably produce and transport the minerals and/or metals extracted to applicable markets; the impact of foreign currency exchange rates on the market prices of the minerals or metals we produce; activities of government authorities in the countries where we sell our products and in the countries where we are exploring or developing projects, facilities or mines, including increases in taxes and royalties; changes in environmental and other regulations; the duration and severity of the Ukraine conflict and the COVID-19 pandemic and their impact on our business; political or geopolitical uncertainty; labour unrest; weather, climate variability or other manifestations of climate change; and other factors.

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Kumul Minerals Holdings Limited

The National Minerals Company

- Kumul Minerals Holdings Limited (KMHL) is established by the *Kumul Minerals Holdings Limited Authorisation Act 2015* of the Parliament of the Independent State of Papua New Guinea.
- KMHL is an independent commercial enterprise owned by the Peoples of PNG with a mandate to participate in the minerals sector in PNG.
- KMHL is focused on investments in State Equity Option projects as well as direct and indirect investments in minerals assets.
- KMHL is active in pursuing opportunities across the minerals value chain:
    - Exploration and studies
    - Mine development
    - Mine operations and minerals processing
    - Mine rehabilitation and closure
    - Downstream processing

VISION: KMHL will be a responsible minerals company committed to create and enhance value in the entire chain of the minerals business.

MISSION: KMHL will seek to:

- Invest in high value assets in the complete chain of the mineral sector.
- Prudently manage and maximise shareholders' interests and returns in mineral assets.
- Develop and grow a dynamic, skilled and motivated team in the mineral industry.
- Grow the company to become a competitive player in the minerals sector.
- Be environmentally friendly and socially responsible corporate entity.

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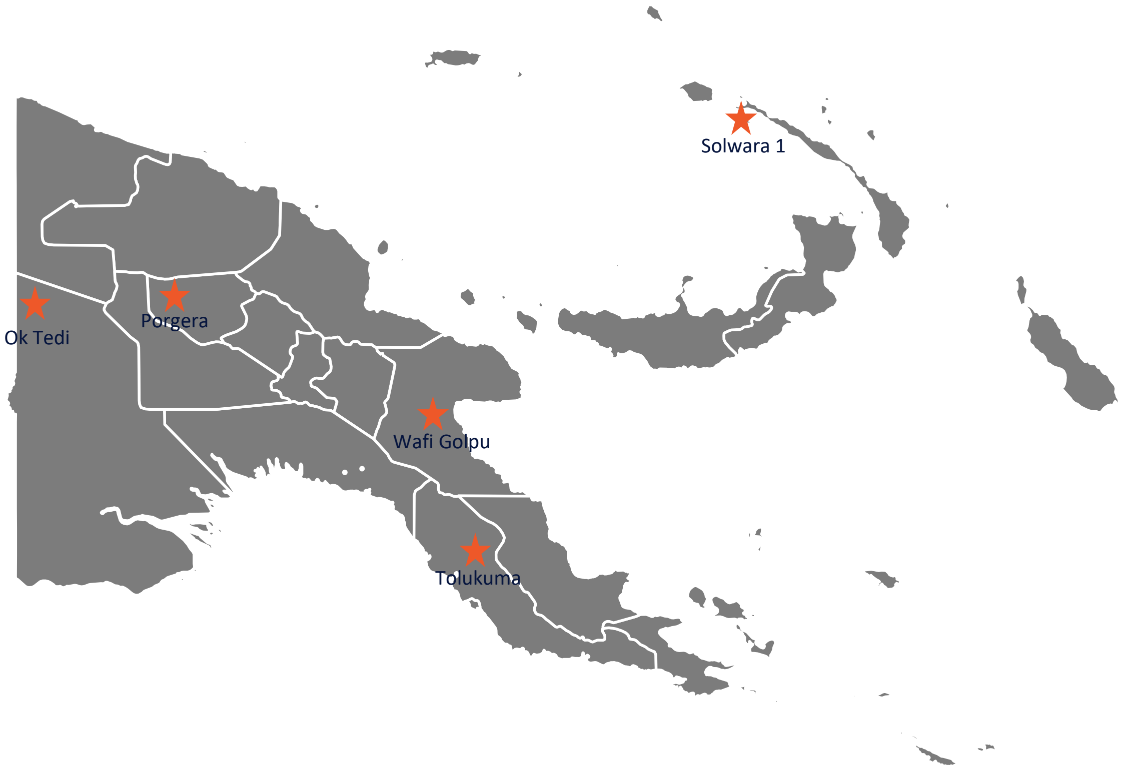
A strong mix of operating and development assets

- KMHL's role as the State nominee company for holding shares in Minerals Projects has resulted in the development of a strong portfolio.
- KMHL intends to leverage this portfolio to enter into new investments and partnerships across the PNG minerals sector.
- KMHL's primary assets are:
  - Ok Tedi Mining Limited – 67%
  - New Porgera Limited – 36%
  - Solwara 1 – 15%
  - Tolu Minerals Limited – 3.2%
- KMHL is also engaged in negotiations to secure significant holdings in future assets:
  - Wafi-Golpu Joint Venture – 20%*



*The State of PNG has announced its intention to exercise its right to acquire 30% of the Wafi-Golpu Project, with 20% retained by KMHL and 10% to be shared by the Morobe Province and landowners, subject to completion of the permitting process.

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Energy in the Mineral Resources Sector

Energy is one of the main operating costs for mining operations

- Energy costs vary widely among between mines and jurisdictions due to a variety of factors:
    - Process intensity — hard rock requiring a lot of processing will use more energy.
    - Mining method — large open-pit mines with long haul distances use lots of diesel whereas underground mines have different mixes (ventilation, dewatering, hoisting).
    - Site remoteness and on-site power — remote and off-grid sites that run diesel gensets or isolated gas plants face higher energy unit costs. PNG is a clear example.
    - Energy price volatility and fuel mix — spikes in prices push costs up quickly.
    - Electrification and efficiency — switching to grid power, renewables, or introducing electric components (trolley assist, diesel-electric haul trucks, electric shovels) reduces the cost of fuel.

Energy in the Mineral Resources Sector

Countries with developed energy infrastructure have competitive advantage

- Energy costs vary widely between countries also:
  - Australia – 10%-30% of opex
  - USA – 10%-30% of opex
  - Canada – 8%-25% of opex
  - China – 10-30% of opex
  - Papua New Guinea – 15%-35% of opex
- For remote mines in PNG the average percentage of energy costs in opex can be much higher.
- PNG's low grid penetration, reliance on on-site diesel or bespoke power plants, and remote logistics increase energy's share of opex.
- Energy solutions are a major component of any new mine development, and increase the cost and risk to developers.
- Development of a robust energy infrastructure network in PNG would significantly improve the development outlook for the Mineral Resources Sector.

Sector Development Pipeline

Large scale development in PNG requires large scale power generation

- New mining projects that have advanced studies indicate significant demand for additional power in PNG:
  - Wafi-Golpu Copper-Gold – 111MW diesel power generation plant
  - Frieda River Copper-Gold – 600MW hydroelectric power plant
  - Yandera Copper-Gold-Molybdenum – 225MW plant TBD
  - Misima Gold – 50MW mixed diesel and solar
- Additionally, downstream projects in earlier stages of development have substantial power needs:
  - Copper-Gold Smelter/Refinery
  - Nickel-Cobalt Smelter/Refinery
  - Gold Refinery

Energy for Downstream Processing

Preliminary results – financial assessment

Nickel Smelter-Refinery-Financial Assessment

- **Key Focus Areas**
  - **Capital cost**
  - **Operating cost**
  - **Project profitability**
  - **Investment return strategies**

Initial Financial Insights

- **Estimated capital cost:** US$2.3 billion for a **500kt/a facility**
- **Profitability depends on:**
  - Access to **competitively priced energy**
  - Reliable **water supply**
  - Efficient logistics and infrastructure

Next Phase Priorities

- Identify **complementary projects** to support the refinery:
  - Example: **Hydroelectricity development & Special Economic Zones**

Energy for Downstream Processing

Preliminary results – financial assessment

Copper Smelter Refinery Financial Assessment Focus

- Evaluation of:
    - **Capital cost**
    - **Operating cost**
    - **Project profitability**
- Exploration of **measure to enhance investment returns**

Key Financial Insights

- **Initial capital estimate:** US$750 million for a 200kt/a facility
- **Profitability depends on:**
    - Access to **competitively priced energy**
    - Reliable **water supply**

Next Phase Priorities

- Identify **complementary projects** to support the smelter
    - Example: **Hydroelectricity development & Special Economic Zones**
- Strengthen **infrastructure and utility integration**

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Importance of Energy in PNG

No economy can grow without the energy to develop and sustain it

- The minerals and energy sectors are tied to one another in the strongest way.
- Minerals projects stimulate energy development, and energy projects allow minerals projects to succeed.
- As the National Minerals Company, Kumul Minerals is committed to ensuring that all new developments also deliver benefits to the local and broader community of Papua New Guinea.
- This includes provision of energy and infrastructure to landowners and local grids.
- We encourage investment in and development of a robust and integrated national energy infrastructure, as it will be to the benefit of all.

Thank you.

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