MINERAL RESOURCES AUTHORITY

CORPORATE PLAN

2022-2027

MRA CORPORATE PLAN 2022-2027
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MINERAL RESOURCES AUTHORITY
OF THE INDEPENDENT STATE OF PAPUA NEW GUINEA

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Minister's Foreword

I am delighted as the Minister for Mining under the Marape-Rosso Government, to present the Mineral Resources Authority's ("Authority") Corporate Plan 2022—2027.

Papua New Guinea's (PNG) rich mineral endowments are defined by the high number of high-grade and large world-class mines and mineral deposits due its locality on the Pacific rim of fire, and undoubtedly offers a highly prospective mining investment destination, despite some manageable challenges.

In spite of the highly geological prospectiveness, many grounds remain underexplored and offers excellent potential for new discoveries, particularly deep-seated porphyry copper ore bodies.

Notable decline in exploration expenditures and the number of exploration tenements have been observed over the last five years. Whilst this trend is symbiotic with the declining global exploration expenditures, and more so, with the declining proportion available for the SE Asia/Pacific region, PNG through MRA must seriously address this worrying trend in the coming years because, without exploration, there can never be any mining.

Furthermore, the mineral sector will face a massive depletion of mineral reserves in the country's mineral inventory when the two remaining reserves in Wafi-Golpu and Frieda River enters the depletion mode when they are commissioned as mines until potential exhaustion of all existing major mines by 2063.

Given the long lead time, between 20 to >50 years from the discovery of a mineral deposit to the commissioning of a mine, there is an urgent need for investments in strategic research, new technologies and new data acquisitions to provide baseline geoscientific data for exploration today in the best interest of sustaining the mining industry.

The National Government recognize that the mining, oil and gas sectors accounts for >80% of PNG's total export revenue and as such, the economic base is unsustainable.

Despite such huge revenues generated from the extractive sectors, the share of government revenue has been appalling at only 8%. Thus, the Marape-Rosso government is embarking on improving State's revenue collection from the extractive industry and to encourage diversification of economic growth towards building sustainable economy in tourism, agriculture & livestock, marine and forestry, and more importantly, value-added downstream processing.

The Mineral Resources Authority ("Authority") as the promoter and regulator of the mining industry has aligned its activities to meet the objectives of the government, and the challenges confronting the mining industry in this Corporate Plan 2022-2027.

I am very pleased with the efforts of the Authority over the years in maintaining one of the best safety records in the world, by reducing fatalities and seriously incapacitated injuries to zero in 2017.

MRA plans to maintain its best safety record in the world so that the mining sector will continue to produce very high level of mineral production outputs over the next 5 years.

In Year 2020, the MRA released the first Annual Report after bringing the unaudited financial records up-to-date and intends to maintain this record in the best interest of good governance and transparency.

This Corporate Plan also envisaged some improvements in turn-around time for processing tenement applications, delivering timely review of the Memorandum of Agreements for mining projects, overall good governance and transparency; recruitment and retention of high quality human capital.

This Corporate Plan provides strategic work plan that would effectively address the declining interests in the exploration sector, and more importantly, focused on strategic and innovative research combined with the application of new technologies that provides highest probability of discovering deep-seated mineral deposits, and open new geological frontiers, that would excite the resurgence in the exploration sector.

This third corporate plan sets the strategic plan of the Authority towards achieving the Government's long-term and medium-term strategies and the aspirations of our people.

It encompasses key project initiatives that are strategically aligned to the Five National Goals and directive principles of the National Constitution; PNG Vision 2050; PNG Development Strategic Plan and the Medium-Term Development Plan IV.

I look forward to the execution of the corporate strategy contained in the Mineral Resources Authority's Corporate Plan 2022—2027.

HON. SIR ANO PALA, KBE, CMG, ISO, LLB, MP
MINISTER FOR MINING

Chairman's Message

As Chairman of the MRA Board of Directors, we are responsible for setting the Mission, Vision and Goals of the Mineral Resources Authority ("MRA" or "Authority") supported by this Corporate Plan 2022 to guide the performance that meets the desired progression of the Authority and mining industry during the period 2022 to 2027.

In developing this third Corporate Plan 2022 (2022—2027), the management and Board analyzed the current datasets and performances for gaps, and global metal trends for supply & demand in line with our mineral assets.

The Authority draws its powers, mandates and functions from the *MRA Act 2018*, which empowers the fiduciary responsibilities of managing the mineral resources of PNG and servicing related stakeholders in the mineral sector.

The Authority regulates and manages the industry and related issues under the *Mining Act 1992, Mining (Amendment) Act 2020, Mining Safety Act 1977* & *Regulations, Bougainville* and *Ok Tedi Acts* and fiscal regimes of the Government.

The amendments made in 2020, to the *Mining Act 1992*, provides the basis for the Authority to improve business processes with the objective to address better and equitable benefits to the State and other beneficiary stakeholders.

This plan is an enabler for strengthening the capabilities and good governance of the Authority, whilst acquiring new baseline geoscientific database for strategic minerals and deeper orebodies to replenish the depleting mineral reserves in the country.

Under this corporate plan, the Authority will be charged to ensure work are progressed in a manner that protect the sustainability of the mining industry in PNG. The empirical data indicate cessation of major mineral reserves by the year 2060, which may drastically upset the country's economy because of its heavy reliance on mining sector.

In response, MRA will search for deep-seated mineral deposits, in particular, large porphyry systems, and address the gaps in the current National Baseline Geoscientific Datasets including PGE, REE, Geology and Geochemistry and Geophysics. MRA will also position PNG in response to the foreseeable astronomical rise in global demands for low carbon, mineral energy driven economy, with the use of strategic minerals such as copper, nickel, cobalt lithium, Platinum Group of Elements, (PGE) and Rare Earth Elements (REE).

The lack of efficient management systems in the Authority had culminated to the untimely audits and Annual Reporting dating back to 2015. In this plan, there will be integration of Financial, Human Resources (HR), Information Technology (IT) and Assets systems on MYOB platform which will strengthen linkage between activities and resource allocation in order to provide real-time reports on financial status, number of fixed assets and book value, and effectively deal with staff welfare.

There will be continuous improvements to tenement management systems, live monitoring of mine production and export data of all operating mines, and geoscientific databases including drill hole.

This Plan acknowledges the achievements of the past and appreciates the opportunities within the next five years that positions the Authority to effectively promote a healthy & sustainable mineral sector and an effective regulatory environment which maximizes mining profits.

Ultimately this Plan, consolidates the Authority's commitment to the government and people of Papua New Guinea, and to the mineral sector partners by prioritizing enhanced approach to compliance on mining & productions, thus cementing ourselves as a trusted and effective regulator.

BENNY KIMISIVE
CHAIRMAN MRA BOARD OF DIRECTORS

Managing Director's Message

It gives me tremendous pleasure to oversee the development of the 2022 Strategic and Visionary Corporate Plan for the Mineral Resources Authority, (MRA).

This plan aims at improving efficiency, good governance and strengthening technical capabilities at the Mineral Resources Authority; demonstrate strong commitment towards stimulating resurgence of mineral exploration and long-term sustainability of the Mining Sector in PNG, beyond potential depletion of all existing mega mineral reserves by 2063; and, safeguards State revenue streams for the State and improves quality of lives for the mining impact communities.

Building on from our 15 years of evolutionary growth, anchored on strong foundation, this strategic plan intends to strengthen our capabilities, by improving our systems through recruitment, training and retention of highly-skilled multi-disciplinary human capital, backed by appropriate and innovative artificial intelligence systems, that can achieve our set goals and objectives effectively and efficiently.

The 2022 MRA Strategic & Visionary Corporate Plan aims at improving efficiency and good governance for the Authority when delivering its mandates.

Our people are at the heart of our plan. We also endeavor to employ the best people available, provide appropriate training and grooming, grow the knowledge and skillsets; and equip our staff with necessary resources.

Our administration system software requires ongoing improvements to effectively meet the Authority's needs; for examples:-

(a) the Land Folio Management Systems for registration, assessment, permitting and performance monitoring of mineral tenements;

(b) tailoring MYOB Exo, an Enterprise Resource Package (ERP) system to incorporate Finance and Accounts, Human Resources (HR), Information Communication Technology (ICT) and Assets management Systems aimed at achieving paperless administration.

(c) Building PNG Drillhole databases for all drill prospects/projects and mines in PNG; and

(d) the proficient application of SURPAC software already bought by the MRA to undertake independent mineral resources estimation, modelling and mine design capabilities;

We believe, in doing so, MRA can improve assessment and turn-around time for processing tenement applications, and produce timely financial audits and reports that promotes transparency and good governance.

Based on the declining number of mineral exploration tenements and the exploration expenditures experienced over the last 5 years, the MRA noted critical GAPS in the existing baseline geoscientific datasets, viz;-

a) Gaps in regional stream sediment geochemical sites, and lack of a full suite of multi-trace element analytical results;

b) Gaps in regional airborne geophysical surveys;

c) Gaps in 1:20K and 1:10K geological maps sheets;

d) New Frontier - Lack of baseline data over Fly Platform, the extension of North Australian Craton, highly prolific mineral Province; and

e) The lack of baseline data for Rare Earth Elements and strategic minerals.

The 5 Year Strategic Plan aims at addressing the above GAPS with priority set for strategic minerals to meet the global demands.

Cognizant of the potential depletion of all existing mega mineral reserves by 2063; and the long lead time of up to >50 years from discovery to commissioning of a mine, investment today for the next generation of wealth is critical for the sustenance of the mining industry. The 5 years plan sets out guidelines to test for :-

(a) deep-seated large porphyry copper—gold deposits through applications of innovative remote sensing techniques, including seismic reflection and typhoon surveys over prospective targets; and

(b) testing new geological plays and concepts based on sound research and re-interpretations of the geological framework of PNG.

MRA will continue to maintain its outstanding mine safety records achieved through collaborations with the mine operators. Mine safety incidences were reduced drastically achieving zero serious fatalities in 2017 with negligible level of incidents thereafter will be maintained and improved upon in the 5 years.

Safety performance of operating mines impacts directly on healthy production outputs. The mining industry account for about 45% of the total export revenue, in par with the worth of Liquified Natural Gas exports since 2014.

In spite of the PGK32 billion total contributions from the extractive industries in 2019, PNGEITI report was alarming, that only 18.5% (k 6.14 billion kina) were received by PNG entities, of which, the national government received only 3.7% (PGK 1.2 billion).

In order to overcome uncertainties surrounding the metal exports; MRA has already commenced the development of a data repository hub; whereby metal production in real time from each operating mine will accessed and visible to the State.

Based on these solid foundations, independent audits and reconciliations of mineral productions capabilities will be developed in a manner that ascertain mineral exports volume and State's revenues.

We will be pursuing a suite of policies and amendments to the legislations for improving the regulatory framework.

In setting our vision, we acknowledge the importance of doing things in compliance to laws of the country and with respect to the local communities, whilst maximizing profits for the stake holders, i.e., the landowners, national & sub-national governments, investors, developers & miners, the people of Papua New Guinea, and to ourselves as Staff of the Authority.

I have confidence that we remain an institution of Government that prides itself in our core values of client focus; commitment; leadership and integrity.

We are building systems that will better manage and monitor benefits for the sub-national level governments, communities and landowners, impacted by mining development, pertaining to mining benefit and social licensing.

In this plan, our vision is that by 2027, we will improve on our technical capacity, good governance, efficiency and turn-around time; provide comprehensive and high-quality baseline geoscientific baseline data; increase our exploration expenditures; discover new deep-seated copper-gold porphyries; and increase our mineral revenue base up to 30%.

JERRY GARRY
MANAGING DIRECTOR

1. Our Corporate Statement

VISION

We continue to promote, regulate and sustain the mineral sector by creating economic opportunities for Papua New Guinea.

MISSION

By 2027, we will increase mineral revenue base up to 30% with improved regulatory, scientific and management systems.

VALUE STATEMENT

CLIENT FOCUS

We take ownership in our business values and support our stakeholders to foster mutual relationships through effective collaborations.

COMMITMENT

- We commit to the national government and its citizens to manage, administer and regulate the sustainable development of the country's mineral resources.
- We commit to provide high value environment and services for our employees and their families.

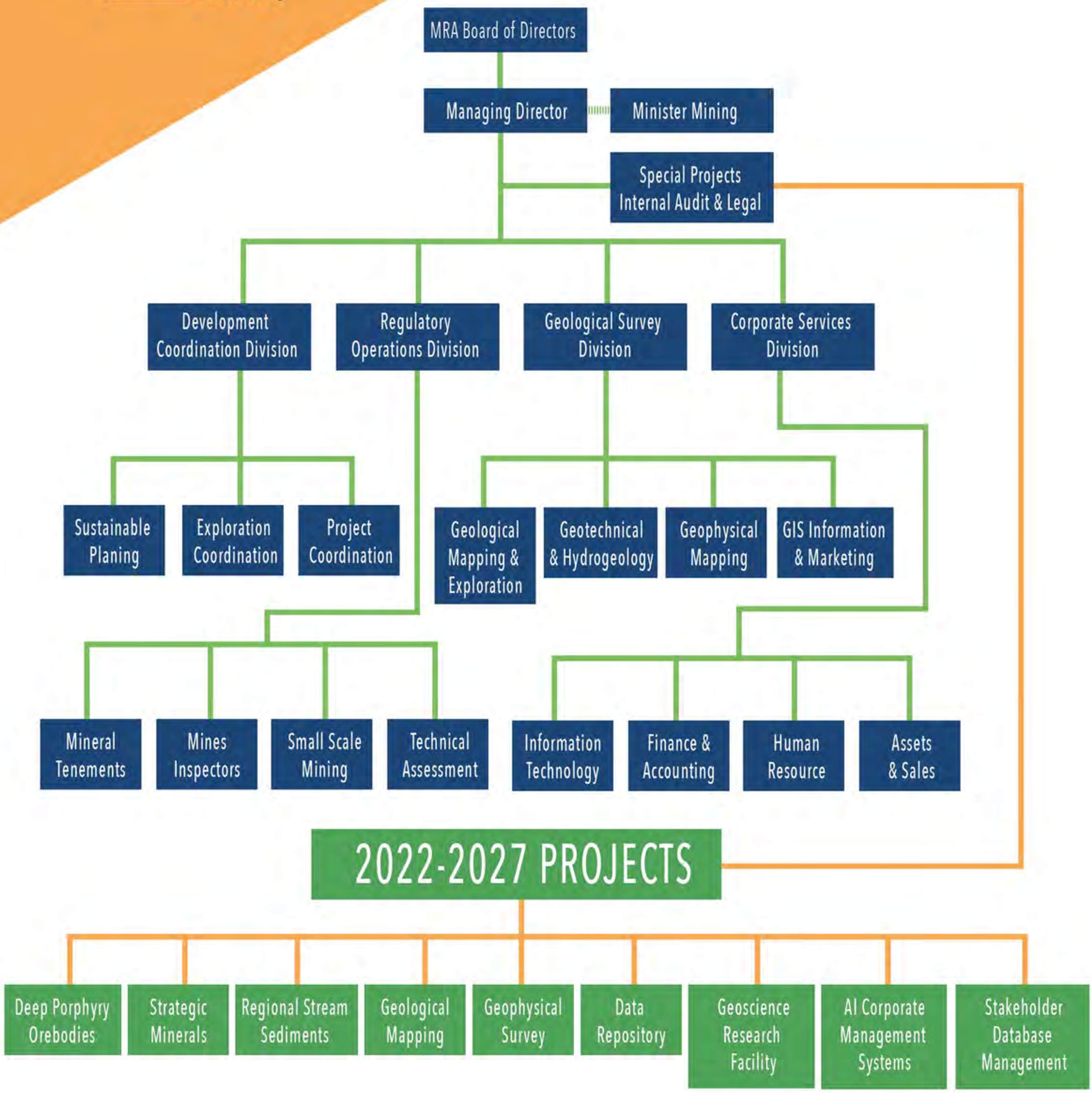
LEADERSHIP

We will provide quality leadership to enhance sound environmental, social and governance standards within the mineral sector in Papua New Guinea.

INTEGRITY

We will work with honesty and adhere to the highest standards of moral and ethical values and principles through our professional behaviour.

Organisation Structure



2. Our Strategy

2.1 STRATEGIC THEMES & RESULTS

Strategic Theme 1 Economic Growth	Strategic Theme 2 Strategic Partnering	Strategic Theme 3 Operational Excellence
Increase stake-holder value through facilitating mining develop-ment and mineral export audits lead-ing to the increase of mineral receipts in PNG.	Knowledgeable, collaborative, con-sultative relation-ships that improves effectiveness of business and effi-ciency in service delivery to our customers and stakeholders.	Transparent, timely, accurate, value added and cost-effective exe-cution of services.

2.2 STRATEGIC ALIGNMENT

This Plan is aligned to the National Government's five national goals and directive principles; long term and medium-term strategies and priorities that maps out the future of PNG and the aspirations of its people.

The Mineral Resources Authority supports these in a manner that is cascading through the implementation of the *MRA Act 2018*, *PNG Mining Act 1992* and all other relevant legislation.

1 Five National Goals and directive principles of the National Constitution

1. Integral human development
2. Equity and participation
3. Natural sovereignty and self-reliance
4. Natural resources and environment
5. Papua New Guinean ways

2 The Papua New Guinea Vision 2050

Wealth Creation
Natural Resources

3 The Papua New Guinea Development Strategic Plan 2010-2030

- The goal is to double mineral exports, while minimising the adverse impact on the environment.
- Key areas identified were in the:
    - Value of mineral exports & the government revenues from mineral exports; with a target value of PGK 18 Billion by 2030 at PGK 3 Billion per year to support government budget.
    - Increase number of mines with target at 20 operating mines by 2030; and pursue downstream processing industries for mineral smelting on shore in PNG.
    - Increase Exploration licenses, and maintaining a high level of exploration activities to 2030.

4 The Medium-Term Development Plan IV 2022 - 2027

- **The goal is to manage socio-economic beneficits and environmentally sensitive world-class mineral extraction industry.**
  Sector strategies are;
    - Provide the enabling environment of new mining projects.
    - Facilitate further exploration by simplifying and speeding up regulatory processes.
    - Strengthen capacities of state institutions to administer and enforce mining regulations.
    - Promote an integrated approach to mine development.
    - Develop and review appropriate mechanisms to address land owner's participation and industry issues.
    - Pursue manufacturing and SME that encourages downstream processing.

3. Our Strategic Objectives & Action Plan

3.1 FOCUS AREA

To track and monitor our strategy, our strategic objectives are aligned to four focus areas to achieving our mission. These four focus areas listed below:

- **Customer Oriented**
- **Financial Stewardship**
- **Internal Processes**
- **Organisational Capacity**

Note:
Customers are inclusive of our development partners, investors, host provincial and local level government, and landowners, the State and the people of PNG.

MRA is focused on prudent financial management and cost reduction for effective service delivery. In this era smart technology and internet business solutions are key to effective and efficient internal business processes & service delivery.

3.2 ACTION PLAN

Focus Areas	Strategic Objectives
Customer Oriented	1. Maximize mining opportunities in Papua New Guinea 2. Improve customer retention and increase customer base 3. Increase customer satisfaction 4. Improve staff welfare 5. Increase staff competency
Financial Stewardship	1. Cost reduction and cost analysis 2. Prudent financial management 3. Increase mine revenue generation
Internal Processes	1. Improve internal and external communications 2. Establish enabling infrastructure, improve and increase tools and technology 3. Improve mining advisory support and advisory processes 4. Build an integrated and effective database system 5. Improve and develop field and internal data processing and analysis 6. Improve marketing process and investment promotion processes 7. Strengthen the capacity of state institutions to administer and enforce mining regulations to ensure the Government's policy is implemented effectively
Organisational Capacity	1. Improve knowledge, skills and motivation 2. New organisational structure 3. Build organisational key cultures

4. Our Key Initiatives/Projects

Our key strategic initiatives are listed in the following pages. They will fulfil and deliver the goals envisioned in the overarching government's PNG Vision 2050 and the Medium-Term Development Plans. The initiatives are not listed in the order of any priorities.

Strategic Theme 1: Economic Growth

4.1 MINERAL RESOURCES INVESTIGATIONS

Project: Deep-seated Porphyry Copper Deposits & Strategic Mineral Resources Investigations; and Addressing the Gaps in the National Baseline Geoscientific Databases

The sustainability of the mining industry in PNG is confronting inevitable cessation by the year 2060 when major mineral reserves will be depleted, and may upset the country's economy because mining accounts for >45% export revenue.

All known mineral reserves including Frieda River and Wafi-Golpu deposits, in PNG will be potentially depleted by the Year 2060. The lead-time for the development of a mine from discovery in PNG is >20 years. Empirical scientific evidences at the surface, lays strong credence to the existence of large porphyry copper-gold deposits at > 1km depths in many promising prospects across PNG. Thus, the search for large deep-seated copper-gold deposits within the next five years is very critical for the sustainability of mining.

Furthermore, the globe is moving towards low carbon, mineral energy driven economy, thus applying increasing demands in the use of strategic minerals such as copper, nickel, cobalt lithium, Platinum Group of Elements, (PGE) and Rare Earth Elements (REE).

There are gaps or lack of comprehensive datasets in the current National Baseline Geoscientific Datasets held at the MRA data repository and urgent work is required to fill these gaps, in order to attract investments. These datasets include PGE, REE, Geology and Geochemistry and nine major Geophysics blocks.

Description:

This project will address the foreseeable depletion of mineral reserves in PNG and the burgeoning demand by the globe for strategic minerals in copper, nickel, cobalt, lithium, platinum group of metals and rare earth element minerals for transitional energy to address climate change.

The investigation will entail desk top studies, mapping, sampling, geochemical analyses, ground geophysical surveys, drilling and dissemination of newly acquired geoscientific data to resuscitate interests in mineral exploration for these commodities.

Furthermore, there are gaps in the baseline geoscientific data held at the MRA repository. These gaps are observed in the:-

(l) Geology Maps - Require infill mapping at l :100,000 & 1: 250,000 scale;

(2) Airborne Geophysical Data – Nine (9) major blocks and Fly Platform are devoid of airborne geophysical data;

(3) Regional Geochemical datasets - Many samples devoid of multi-trace elements analytical results, particularly for REE and strategic minerals; and

(4) Fly Platform - Devoid of systematic mapping and regional sampling The Western Province is the extension of North Australian Craton which hold potential for similar mineral deposits common in northern Australia.

The objective of these studies is to:-

(a) test for deep-seated porphyry copper targets utilizing surface geochemistry and seismic reflection/ or deep penetrating Induced Polarization (IP) typhoon, thence confirmatory drilling; and

(b) collect new samples for analyses over geologically favorable areas for strategic mineral resources, which will provide new baseline geoscientific data; and

(c) Promoting the data to excite resurgence of exploration interests in PNG to address the declining exploration activities.

Strategic Objectives

- Securing sustainable mining sector in PNG in accordance with the strategic objective of maximizing benefits from mining activities.
- Improve marketing and investment promotion processes.
- Improve customer retention and customer base.

Performance indicators

- Number of porphyry copper-gold targets tested by Seismic Reflection and Induced Polarization (IP) typhoon surveys; and drilled with successful discoveries.
- Number of geoscientists engaged on these projects gaining invaluable experience.
- Production of Explanatory Notes and map sheets showing the potential porphyry copper-gold deposits and strategic mineral areas of Papua New Guinea.
- Generate interests in mineral exploration.

Measure

- Increase in the number porphyry copper-gold deposits and strategic minerals identified.
- The number of map sheets are to be delivered in 2025.
- Number of maps (I: l 00K & l :50K maps) and data made available to interested customers and investors.
- Number of technical and scientific reports published in reputable Journals.
- Increase in exploration activities in porphyry copper-gold and strategic minerals.

Strategic Theme 1: Economic Growth

Strategic Theme 2: Strategic Partnering

4.2 GEOSCIENCE CAPACITY DEVELOPMENT

Project: National Geoscience Research Facility

Description:

Geoscientific Research laboratories are non-existent in Papua New Guinea. The facility will become state of the art modern building with laboratory equipment and smart technologies for field data preparation, analysis and reporting.

The project aims to build modern accredited scientific and research laboratories for geophysical, geochemistry, hydrogeology and engineering geology services.
The turn-around time of delivering geological, geochemical and hydrological reports will be shortened at minimal costs with added scientific capabilities for the Authority.

This project 4.1, and 4.2, are supported by the *MRA Act 2018*, Section 5, sub-sections:

(i) to conduct systematic geo-scientific investigations into the distribution and characteristics of PNGs mineral and geological resources, located on, within or beneath the country's land mass, soils, subsoil and the sea-bed; and

(j) to provide small scale mining and hydro geological survey data services, and occupational health and safety community awareness programs; and

(k) to collect, analyze, store, archive, disseminate and publish (in appropriate maps and publications) on behalf of the State gee-scientific information about PNG's mineral and geological resources;

Strategic Objectives

- Establish enabling infrastructure, improve and increase tools and technology.
- Improve and develop field and internal data processing and analysis capabilities.
- Improve knowledge, skills and motivation.
- Improve customer retention and customer base.

Performance indicators

- Construction of the National Geoscience Research Facility.
- Improved turn-around time and quality of analytical and processed data.
- Number of geoscientists and other employees working in this facility.
- Increase in the number of customers serviced.

Measure

- The facility will be fully accredited and operational by 2025.
- Number of technical and scientific reports published in reputable Journals.
- Competent Geoscientists.

Strategic Theme 1: Economic Growth
Strategic Theme 2: Strategic Partnering
Strategic Theme 3: Operational Excellence

4.3 MINING PRODUCTION AND EXPLORATION DATA REPOSITORY HUB

(Geoscientific Baseline data, Drill Hole Database, Mine audits; production & export receipts of all operating mines in PNG)

Project: Mining and Exploration Data Repository Hub

Description:

There are major GAPS in the baseline geoscientific databases in geology, geology and geochemistry including strategic minerals. Rare Earth Elements (REE) and Platinum Group of Elements, (PGE).

Furthermore, Drill hole datasets which is the most invaluable and expensive asset for every drilled projects are absent in the MRA data Repository.

Currently, the Government does not have the capability to ascertain mineral production to ascertain its revenues from all its operating mines.

The project will deliver (1) infill and new geoscientific databases (geology, geochemistry, geophysics, mineral and water resources) including PNG drill hole database and (2) live mineral production monitoring Centre and historian database.

Amalgamation of the geoscientific database will enable integration and targeting of prospective areas, whilst the drill hole database will enable independent geological & orebody modelling, mineral resource estimation and mine design for drilled mineral assets in PNG.

Accessing and live monitoring of mine production, and export data of all operating mines from within the MRA Mining Haus will enable State's direct visibility to metal production and to ascertain its share of revenue.

This project is aligned to the *Mining (Amendment) Act 2020*, Section 5A sub-sections:

I. *The State shall establish and maintain a repository for all mineral and geological data with the MRA.*

2. *Subject to sub-Section 5, the holder of a tenement or any other person in possession of mineral and geological data or information, inclusive of research activities, shall submit all data and information relating to the minerals and geology of the State to the Authority.*

3. *The State shall establish a Central Monitory Hub with the Authority, and every operating mine in PNG shall transmit their live data on mineral production and extraction, and sale data to the Authority.*

Strategic Objectives:

- Increase and secure revenue generation.
- Improve and develop field & internal data processing and analysis.
- Improve internal & external communications.
- Establish enabling infrastructure , improve and increase tools and technology.
- Strengthen the capacity of State institutions to administer and enforce mining regulations to ensure the Government's policy is implemented effectively.

Performance indicators:

- Maximized mine production revenue generation for the State.
- Established internal infrastructure at the MRA Mining Haus.
- Data from the systems are processed and analyzed.
- Extractive Industry Transparency Initiative (EITI) Reporting Indicators.

Measure:

- The system is fully operational by 2025.
- Enable the State to better regulate mineral exports generating capacity.
- Improved reporting compliance of once a year for EITI purposes.

Strategic Theme 2: Strategic Partnering
Strategic Theme 3: Operational Excellence

4.4 SYSTEMS AND PROCESSES INTEGRATION AND DIGITALISATION

Project: Corporate Management Systems & Processes Upgrade

Description:

Lack of efficient management systems have culminated to the untimely audits and Annual Reporting dating back to 2015.

The integration of Financial, Human Resources (HR), Information Technology (IT) and Assets systems on MYOB platform will strengthen linkage between activities and resource allocation. The system should be able to provide real-time reports on financial status, number of fixed assets and book value, and effectively deal with staff welfare.

This project is aligned to make effective Sections 32 and 33 of the *MRA Act 2018*, to produce financial reports on a timely manner and to maintain accurate accounting records. Furthermore, the Authority intends to achieve paperless administration.

Strategic Objectives

- Improve customer retention.
- Increase customer satisfaction.
- Improve staff welfare.
- Improve knowledge, skills & motivation.

Performance indicators

- Integration of finance, HR, IT and Assets systems.
- Training and Capacity building.
- Integrated Systems Policy.
- Integration of PIP budget and financial procedure.

Measure

- Real time access to management reports.
- Timely financial transactions.
- Successful communication interface between all systems.
- Timely audited reports.
- Fully paperless by 2027.

Strategic Theme 1: Economic Growth
Strategic Theme 2: Strategic Partnering
Strategic Theme 3: Operational Excellence

4.5 STAKEHOLDERS DATABASE AND MANAGEMENT PROTOCOLS

Project: Stakeholders Database and Management Protocols

Description:

Lack of a registry and monitoring of resource landowner population census in a formal database over the years have caused so many unnecessary land disputes leading to lengthy lands Title Commission Inquiries, and potential project disruptions, amplified by uncontrollable immigrations.

The project entails establishment of landowners' database covering exploration and mining projects, and will be managed by the Development Coordination Division of MRA. Establishment of the database will assist in land investigation study and social mapping to ensure appropriate landowners are identified on their land, and engaged in stakeholders' consultative forum as required for under Section 3 of *Mining Act, 1992* (as amended), *Section 5 of MRA Act* and *Section 98* of the *Organic Law* on Provincial Government and Local Level Government, 1995 (Parties to the Memorandum of Agreement).

This database information can be classified as quasi-spatial tabular database and a first step or attempt at quantifying the presence and magnitude of both landowners and land users of the subject project areas.

Strategic Objectives

- Maximize mining opportunities in PNG.
- Cost Reduction and Cost Analysis.
- Improve and develop field & internal data processing and analysis.
- Improve Knowledge, Skills & Motivation.

Performance indicators

- Project landowners provide social license to investors to explore, develop and operate projects on their land.
- Less grievances from project landowners, and less cost involved to attend to grievances.
- Project landowners' data available to every State Agents and processing in timely manner to assist with stakeholders' consultative meetings and land studies.
- Workshops and awareness on landowners' information relative to project area.

Measure

- Landowners to provide social license to operate Porgera, Wafi-Golpu, Frieda projects and other notable exploration projects.
- Zero grievance from landowners, and less or no cost involved.
- Timely available of LOs data and efficient processing of LOs data.
- By 2027, all State Team and other stakeholders will have knowledge on project landowners and land relative to the project areas that will enable smooth engagement in stakeholders' consultative forum.

5. Our Annual Business Plans & Monitoring of this Plan

5.1 PLANNING

Our operational activities are detailed in Our Annual Business Plans which is an enabler towards achieving our objectives and key projects set out in Our Strategy.

5.2 MONITORING OF THIS PLAN

The Managing Director is responsible for the review of this plan. Calls for the review of this plan shall originate from the MD's Office or from a Delegated Authority in the Mineral Resources Authority.

The MRA Annual Reports shall contain appraised and updated reports on the status of the various activities of the key strategic projects.

6. Our Future

THE FUTURE IS BRIGHT......................

In today's mining industry marketplace, companies and governments need to be smarter in their business; the use of artificial intelligence (AI) driven technology can lift the game up a notch without any stress on existing infrastructure and capacity.

With near surface resources dwindling and deeper resources difficult to discover or access; and land owners becoming sophisticated in their thoughts on mining and its benefits, we need to plan activities appropriately to maximize positive outcomes.

This corporate plan aspires to bring these smarter ways to enable us to implement activities, making it the trusted regulator to serve all levels of customers in the mining sector.

It is the people's call for transparency in all aspects of mining, from digging & extraction, exports and revenue, and in the use of mining revenue for public services.

The game changer in the regulatory aspects of the mining industry in Papua New Guinea is the establishment of mine audits systems in the Mining Haus.

This may give birth to supplementary actions in resources policing and downstream processing.

The future of Papua New Guinea's economy or its economic independence hinges on the use of the mining revenue to bolster other economic sectors. Therefore, the sustainability and protection of our mineral resources from over exploitation and depletion is significant. We will promote and distribute data to potential investors and explorers to assist us unfold these resources buried within the rocks.

We do appreciate the challenges in discovering new economically viable mineral resources, and are being proactive in investigations using smart tools and processes.

As AI and machine learning (ML) becomes available, these can be incorporated to our tools and process for efficiencies and effective research and discoveries.

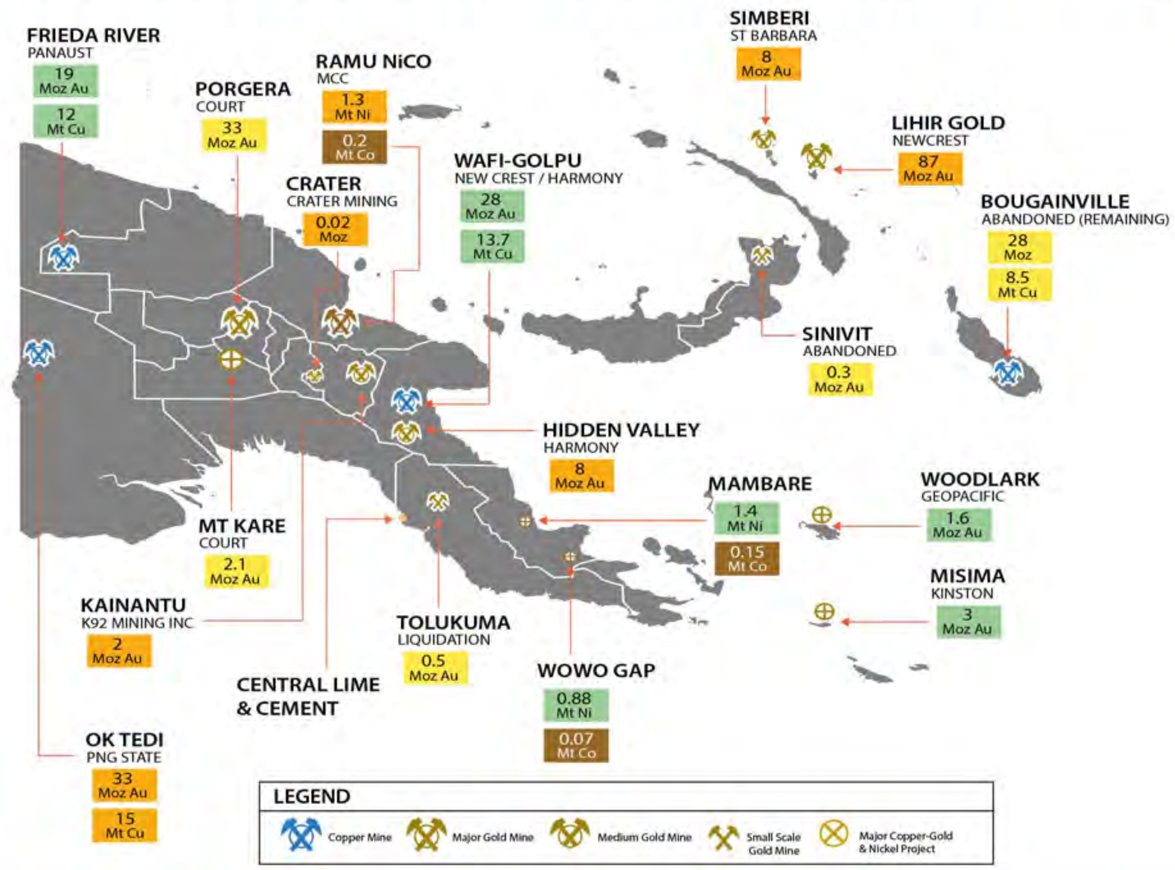
Global businesses are migrating to cloud platforms. MRA's Land-Folio Tenements Management Systems hosted on cloud.

The next initiative will be the hosting of the geological database on cloud, followed by other systems such as Finance & Accounting, Human Resources.

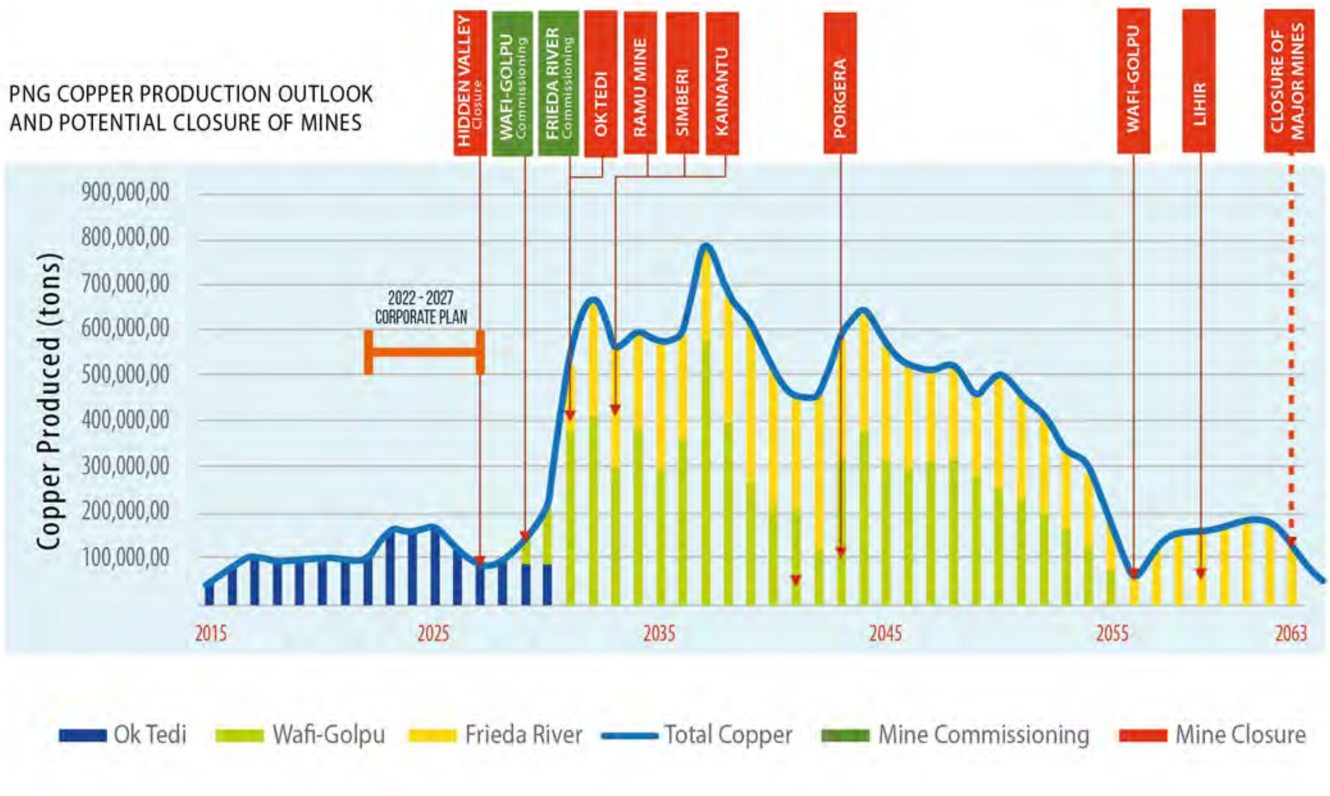
Being smart and utilizing more effective tools available is the way to managing our data, exploration and mining projects, for a brighter future for MRA and the country.

These tools have transparency aspects built into them enabling transparency in processes and procurements.

MINES & PROJECTS IN PAPUA NEW GUINEA

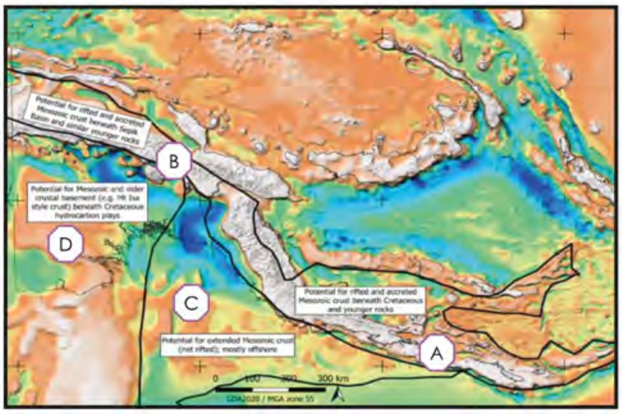


COPPER PRODUCTION & POTENTIAL MINE CLOSURE OUTLOOK

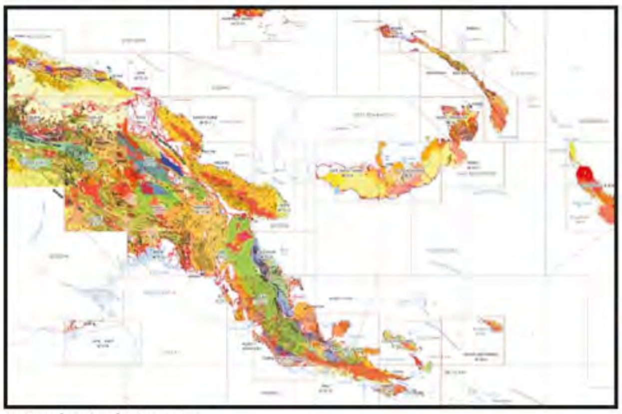


KEY PROJECTS

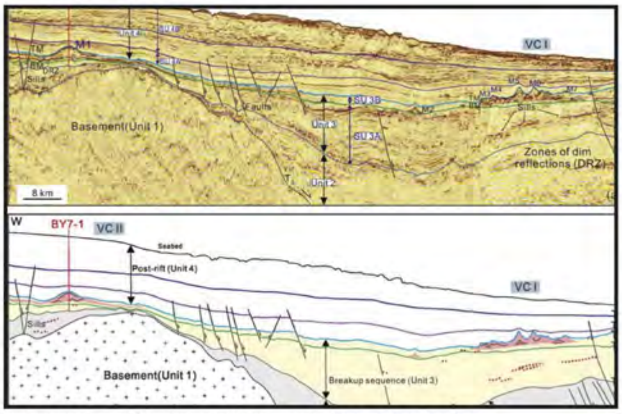
OF NATIONAL SIGNIFICANCE



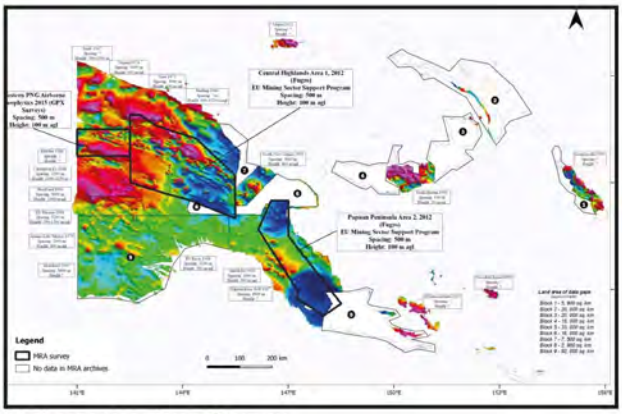
#Geoscientific Reasearch



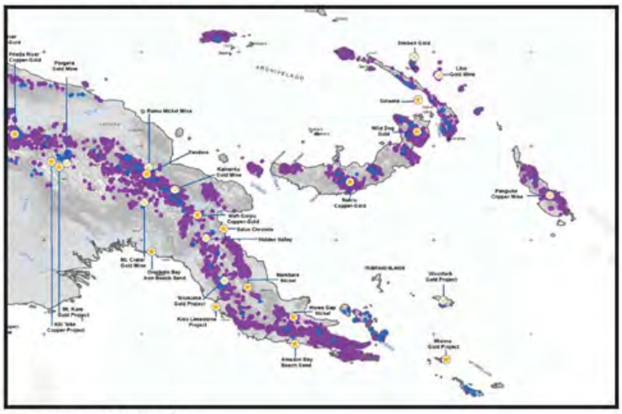
#Geological Mapping



#Seismic and Typhoon IP Surveys, Deep Orebodies



#Airborne Geophysical Survey



#Strategic Minerals

#Data Centre

Key Projects of National Significance

The following key projects are of National Significance; the MRA's annual Divisional workplans will be designed to be strategically aligned to this corporate plan 2022-2027.

RISK MANAGEMENT

These key projects are subject to risks. The management of risks will be critical to the successful implementation of these key projects. A risk management framework will be developed in managing these risks such as economic; environment; legal; political; social; and technology.

PROJECT NAME & DESCRIPTION	NATIONAL AND INSTITUTIONAL SIGNIFICANCE	ENABELLING PILLARS						YEAR
		PNG Vision 2050		PNG Development Strategic Plan: 2010-2030		PNG Medium Term Development Plan: 2022-2027		
	This project is an enabled for:	Pillars		Goal: Indicators	Double mineral exports, whilst minimizing the adverse impact	KRA 4.2	Increased Revenue and Wealth Creation	
Project Name: Mine and Exploration Data Repository Hub **Project Description:** The project will deliver direct real-time accessibility to mineral production data from every operating hard rock mine in PNG; and centralize all geoscientific databases (geology, geochemistry, geophysics, drill hole datasets, hydrogeology & other pertinent scientific datasets) into a PNG Geoscientific Central Database Centre.	The Live mineral production data and its historian, will be utilized to control metal recoveries from each operating mine against agreed recovery rates, and ascertain State's revenue stream through reconciliations and audits. Other benefits include:- • Verification of mine productions and revenue generated from these mines; • Improved & accurate national budgeting; and • Improved or increased transparency, thus the State's Transparency Index. The Central Data repository will centralize all geoscientific datasets for storage, retrieval, integration and analyses. It will also house the PNG Drill hole database which will be ultimately utilized for independent resource estimation, ore block modelling and mine design, through the application of SURPAC Software.	1	Wealth Creation	1	The value of mineral exports	1	Increase Revenue	2024
		2	Development and Service					
		3	Strategic Planning, Integration and Control	2	Government revenues from mineral projects	2	Increase Exports	
Project Name: National Geoscience Research Facility **Project Description:** This project aims to build a modern accredited scientific and research laboratories for providing metallurgical, mineralogy, petrography, geophysical, geochemistry hydrogeology and engineering geology services. Currently, such laboratories are not available in Papua New Guinea. The facility will be equipped with state of the art modern laboratory equipment and smart technologies for field sample preparation, analytical analyses and testing, and reporting.	The research facility will enhance functions of the PNG Geological Survey and geoscientific research within PNG and across the Pacific Islands region. Provide state-of-the art mineral assay laboratories for clients in the mineral exploration, mining and other companies for geoscientific analyses and testing. Create world-class research, learning and upskilling facility for geoscientists in collaborations with universities, researchers, and students.	1	Wealth Creation	Same as above		Same as above		2026
		2	Institutional Development and Service	1	The value of mineral exports	1	Increase Revenue	
				2	Exploration licenses	2	Increase Exports	
		3	Human Capital Development			3	Employment Creation and Economic	
Project Name: Corporate Management Systems **Project Description:** Integration of financial, IHuman Resources (HR), Information Technology (IT) and Assets systems to strengthen linkage between activities and resource allocation. The system should be able to provide real time reports on financial status, number of fixed assets & book values and effectively deal with staff welfare.	Integration of financial, human resources, assets and information technology systems will link all systems operating in silos onto one integrated system that can provide real time reports enabling efficient delivery of corporate, administrative, financial and business reports as required by legislations and governing policies.	1	Institutional Development and Service	Goal: Indicators	Attain high standards of public service management in all levels and institutions	KRA 4.6: Improved Service delivery		2024
				1	Regulatory quality	KRA 4.7: Improved		
		2	Strategic Planning, Integration and	2	Public service effectives	1	Effective Public Service Machinery	
				3	Control of Corruption	2	Integrated Approach for Service	
						3	Promote good governance	

Key Projects of National Significance

PROJECT NAME & DESCRIPTION	NATIONAL AND INSTITUTIONAL SIGNIFICANCE	ENABELLING PILLARS						YEAR
		PNG Vision 2050		PNG Development Strategic Plan: 2010-2030		PNG Medium Term Development Plan: 2022-2027		
PROGRAM: MINERAL EXPLORATION								
Project Name: Search for Deep Seated large Porphyry Copper-Gold Deposits **Project Description:** MRA geoscientists will utilize surface porphyry-style alteration-mineralization backed by Cu-Mo geochemistry; to generate target areas ideal for potential deep-seated porphyry deposits; by deploying innovative technologies, including seismic reflection survey coupled with deeper penetrating Induced Polarization technologies and ultimately drill testing.	All existing mines in PNG will be depleted by 2060. Lead time for discovery to commissioning of a mine range from 11 to >50 years. Near-surface to shallow lying copper - gold deposits have been explored adequately. Geoscientific evidences at the surface lays strong credence to the existence of many large copper-gold bodies deeply-seated at depths >500 meters. Successful discoveries, will secure the next generations of mineral wealth for mining; and sustain the mining industry beyond 2060, when all existing mines will be exhausted. Mining remains the main export revenue earner; and without diversification and growing sustainable economic base, the country's economy will become vulnerable without mining.	1	Wealth Creation	Goal: Indicators	Double mineral exports, whilst minimizing the adverse impact on the environment	KRA 4.2: Goals:	Increased Revenue and Wealth Creation	2024
				1	The value of mineral exports	1	Increase Revenue	
				2	Government Revenue from mineral projects	2	Wealth Creation	
				3	Exploration Licenses			
Project Name: Search for Strategic Minerals **Project Description:** MRA geoscientists will utilize limited historical geochemical data, geology and reports (if any) available to generate targets to search for rare earth elements (REE), lithium, and platinum group of elements (PGE), in addition to nickel, cobalt and copper, which are now classified as Strategic or Critical Minerals, and will be on very high demand for the manufacturing of alternate energy sources, to meet the global efforts to reduce/eliminate carbon emissions from traditional fuels.	PNG opportune time to benefits from increasing metal prices due to increasing demands projected for the Strategic or Critical minerals. Despite well-established deposit types, and terrains in PNG for copper, nickel and cobalt; the occurrence of lithium in pegmatite, clays and brines, and PGE's are poorly understood due to non-availability of past research and historical work. The studies initiated by MRA will provide baseline information, and encourage exploration, that may lead to discoveries and potentially. allow PNG to enjoy benefits immensely from very high-global demands and high prices for strategic minerals.	1	Wealth Creation	Goal: Indicators	Double mineral exports, whilst minimizing the adverse impact on the environment		Increased Revenue and Wealth Creation	2026
				1	The value of minerals	1	Increase Revenue	
		2	Environment Sustainability and Climate Change	2	Exploration expenditure	2	Wealth Creation	
		3	Strategic Planning, Integration and Control	3	Exploration licenses			
				4	Number of mines			
				5	Government revenues from mineral projects			
Project Name: National Geophysics Surveys **Project Description:** Almost 75-80% of the country are not covered by airborne geophysical data. This project entails conducting aerial airborne geophysical (aeromagnetic, radiometric, gravimetric & etc.) surveys over selected areas that are devoid of geophysical coverage which hold excellent potential for mineral deposits.	The surveys will provide new geoscientific data and promote leads into new mineral discoveries. Western Province is devoid of baseline geoscientific data for effective mineral exploration and the surveys will provide leads in a new frontier for mineral discoveries, similar to those deposit types found in northern Australia (North Australian craton) including kimberlites.				Double mineral exports, whilst minimizing the adverse impact on the environment		Increased Revenue and Wealth Creation	2027
		1	Wealth Creation	1	The value of minerals	1	Increase Revenue	
				2	Exploration expenditure			
		2	Strategic Planning,	3	Exploration licenses	2	Wealth Creation	
				4	Number of mines	3	Employment Creation and Economic Opportunities	
				5	Government revenues from mineral projects			

Key Projects of National Significance

PROJECT NAME & DESCRIPTION	NATIONAL AND INSTITUTIONAL SIGNIFICANCE	ENABELLING PILLARS						YEAR
		PNG Vision 2050		PNG Development Strategic Plan: 2010-2030		PNG Medium Term Development Plan: 2022-2027		
Project Name: Landowner Database Development	This project is an enabled for:	Pillars		Goal: Indica-	Double mineral exports, whilst	KRA 4.2	Increased Revenue and Wealth Creation	
Project Description: Create a comprehensive landowner database for every advanced exploration and mining projects based on legitimate landowner identification and social mapping studies sanctioned by the State, after thorough cross-validation, verification and approvals. This database will be integrated with the Landfolio Tenements database administered by the DCD and ROD.	Having records of validated genuine landowner's names, clans, relationships and other pertinent information tied to their land, similar to ILG, will alleviate landowner identification issues, currently experienced by many projects. MRA intends to trial this project with landowners of the Wafi-Golpu and Frieda River copper-gold projects prior to mine construction.				Attain high standards of public service management in all levels and institutions of Government	KRA 4.6: Improved Service delivery		2025
		1	Institutional Development and Service Delivery	1	Number of Miness	KRA 4.7: Improved Governance		
		2	Environment Sustainability and Climate Change	2	Integrated Approach for Service Delivery	1	Effective Public Service Machinery	
		3	Strategic Planning, integration and Control	3	Promote good governance	2	Integrated Approach for Service Delivery	
						3	Promote good governance	

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Chief Inspector of Mines:	321 3511 (Ext. 619)
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MINERAL RESOURCES AUTHORITY

CORPORATE PLAN

2022-2027