



PAPUA NEW GUINEA NATIONAL GOLD BULLION POLICY 2023

Gold Bullion Bars





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Papua New Guinea National Mint
National Bird of Paradise 1oz 9999 Proof Gold Bullion Coin

DEPARTMENT OF COMMERCE AND INDUSTRY

FOREWORD BY PRIME MINISTER



Papua New Guinea is well endowed with abundance of natural resources. However, there remains a need to add value to these natural resources that must be systematically linked to the generation of sustainable economic growth and improved quality of life for her people now and into the future.

The Marape-Rosso Government has been emphasizing on downstream processing of natural resources to add value to PNG's primary commodities including gold and precious minerals, oil and gas, agriculture, forestry, and fisheries products, which is an integral part of our policy directive deemed as 'Take Back PNG'.

I am therefore greatly honored to announce this milestone National Gold Bullion Policy developed to charter a new direction for the gold bullion industry particularly to add value through downstream processing and manufacturing.

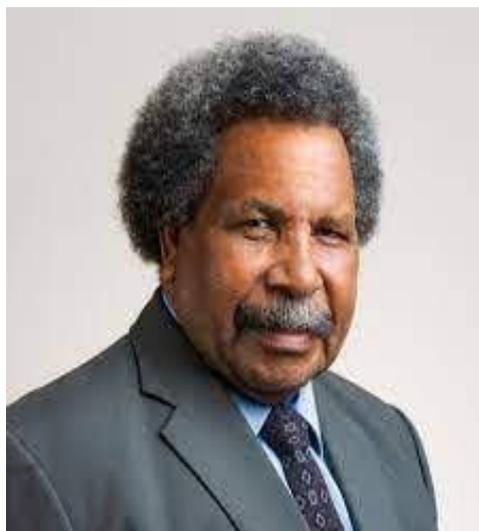
The Government requires a vibrant and competitive National Gold Bullion Policy to support its macroeconomic and fiscal policy functions which will grow and sustain our economy, create wealth, and improve quality of life for our people. This will, in turn provide economic stability in times of uncertainties.

In view of the above, I now commission the Papua New Guinea National Gold Bullion Policy to be effectively implemented by all stakeholders including the relevant State authorities and industry operators. I also call upon all Papua New Guineans to take ownership of this policy and support its implementation.

A handwritten signature in blue ink, consisting of several loops and a long horizontal stroke, positioned above the printed name of the Prime Minister.

Hon. JAMES MARAPE, MP
Prime Minister of Papua New Guinea

REMARKS BY MINISTER FOR COMMERCE & INDUSTRY



I am delighted to introduce this inaugural, home-grown National Gold Bullion (NGB) Policy designed to provide policy directions for the development of a vibrant and internationally competitive national gold bullion industry in PNG.

In the absence of a dedicated policy to direct economic activities related to the downstream processing and manufacturing of gold bullion and minerals, PNG has forfeited a significant amount of economic opportunities from tax revenues, job creation and foreign direct investment through export of raw minerals. Currently all gold and minerals are exported abroad and refined in offshore refineries.

It is a standard provision in all mining development contracts that one-third of all gold products are to be processed and stored domestically if there is a refinery of international standards established in PNG. By developing this Policy, the Government envisions to establish a competent domestic gold bullion program to refine gold, hold gold reserves, and eventually enter into trading in the world gold market.

This Policy will also ensure that PNG is recognized as a destination of choice for international standard gold and investment opportunities. This would accord the nation recognition at the world stage by international refined gold regulatory bodies such as the London Bullion Market Association (LBMA).

This Policy sets out a coherent policy framework to boost Government's fiscal and macroeconomic operations, economic stability and maximization of wealth.

On this note, I would like to acknowledge the foresight and confidence given to me and my Department by the Marape-Rosso Government to develop this Policy as a matter of national importance.

I also take this opportunity to thank the key stakeholders, individuals including Secretary David Ganai and the staff of Department of Commerce & Industry that were involved in developing this important government policy.


HON. SOROI MAREPO EOE, MP
Acting Minister for Commerce & Industry

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ABBREVIATIONS AND ACRONYMS

AAM	Artisanal and Alluvial Mining.
BIS	Bank for International Settlements.
DCI	Department of Commerce and Industry.
DMPGM	Department of Mineral Policy and Geohazards Management.
EITI	Extractive Industries Transparency Initiative.
GDP	Gross Domestic Product.
FDI	Foreign Direct Investment.
GoPNG	Government of Papua New Guinea.
IAS	International Accounting Standards.
IMF	International Monetary Fund.
ISO IEC	International Organization for Standardization International Electro-Technical Commission.
JAS-ANZ	Joint Accreditation System of Australia and New Zealand.
JV	Joint Venture.
LBMA	London Bullion Market Association.
MRA	Mineral Resources Authority.
MRO	Metal Refining Operations Ltd.
NATA	National Association of Testing Authorities, Australia
NGB	National Gold Bullion.
NISIT	National Institute of Standards and Industrial Technology.
NRPB	Non-Resource Primary Balance.
OTC	Over The Counter.
PSA	Production Sharing Agreement.
RTS	Royalty Tax System.
SAC	Singapore Accreditation Council
UNFC	United Nations Framework Classification.
GC	Gold Council.

DEFINITIONS OF KEY TERMS

Accreditation	Is the independent, third-party evaluation of a conformity assessment body (such as certification body, inspection body or laboratory) against recognized standards, conveying formal demonstration of its impartiality and competence to carry out specific conformity assessment task (such as certification, inspection and testing).
Alluvial Gold	Gold extracted from alluvial mining as per the Alluvial Mining Policy and Mining Act 1992
Assaying	Testing of a metal or ore to determine its metallic ingredients and metals content or fineness.
Benefit Sharing	The financial benefits shared with the tenement holder as per the Mining Act 1992 including the State and the customary landowners.
Central Bank	Refers to the Bank of Papua New Guinea.
Domestic Market	Refers to the local PNG gold market.
Doré Gold	Smelted raw gold which contains a mixture of unrefined gold and silver and other contaminants in the form of a cast bar.
Downstream Processing	Refers to the process of adding value to natural resources including gold and other minerals.
Fineness	In respect to gold and minerals, a specified proportion or quantity of the relevant metal expressed in parts per thousand of the pure metal in an alloy or otherwise.
Monetary	Refers to money or currency.
Gold Bullion	Refers to gold refined to not less than the minimum international standard fineness for the relevant metals and in the form of cast or minted bars, ingots, or legal tender coins.
Gold Ecosystem	A complex gold supply and value chain network or interconnected system.
Gold Intrinsic Value	The implied value of gold resources not yet extracted or recovered by reference to the market value of refined gold but discounted for factors including risk, cost of extraction or recovery and refining.
Gold Market	A market where PNG gold and minerals, in the form of investment grade value-added bullion bars, legal tender gold and precious metal coins and other products are sold to, and traded among, local and global traders and investors.
Gold Mint	A proposed National Mint for PNG, to be located in a strategic location which by law will exclusively

	produce for and at the direction of the Central Bank PNG's ordinary circulating currency coins and notes, and, in its own right, will by law have the exclusive right to mint and issue the new National Bird of Paradise PNG legal tender investment grade gold and precious metal currency coins.
Gold Refinery	Refers to a processing facility that will refine gold mined or recovered in PNG prior to export to not less than the minimum international standard of fineness for the relevant metal, and manufacture and trade in international standard bullion bars including those produced from the refined PNG gold.
Gold Reserve	<p>means, as the case requires:</p> <p>(a) in the case of a nominated bank other than the Central Bank, a quantity of gold bullion held by that nominated bank for various purposes, including to support the issue of a relevant country's ordinary circulating currency; or</p> <p>(b) in the case of PNG:</p> <p>(i) the reserve quantity or fund of gold held by the GoPNG in the National Gold Vault or, pursuant to an agreement with the Central Bank, stored by the Central Bank on behalf of the GoPNG, and where such reserve is intended for the purposes of a guarantee to redeem promises to pay depositors, note holders (paper money), or for trading purposes and other finance and investment purposes, and as a store of value (in support of the PGK); and</p> <p>(ii) in the case of the Central Bank, the GoPNG prescribed gold reserve held by the Central Bank; and</p> <p>in the case of subparagraphs (i) and (ii), the reserve must be in the form of gold bullion or other international investment grade gold and precious metal bullion bars, legal tender coins and other gold and precious metal products as prescribed by an appropriate law.</p>
Gold Smelting	means the process of melting and/or chemically treating gold and precious metal ore or concentrate to separate the gold or precious metal from the host material or impurities, but does not include refining of gold and precious minerals to

	the minimum accepted international investment grade standards of fineness or purity.
Gold Vault	An international standard high-security facility for the secured storage of gold or minerals and, where applicable, includes a global network of such facilities.
Gold Swap	a transaction by which physical gold is exchanged or sold for foreign exchange.
Monetizing of Bullion	means the minting and issuance of gold and other minerals in the form of investment grade legal tender currency coins.
Minerals	means all valuable non-living substance excluding petroleum obtained or obtainable from land
Precious Mineral	means: <ul style="list-style-type: none"> (a) gold, silver; or (b) platinum group elements (platinum, rhodium, ruthenium, osmium, iridium, and palladium), and (c) any other precious minerals (such as diamond), and (d) any such minerals produced as by-product minerals from the production of ores.
Royalty Tax Concessionary Regime	means the GoPNG current regime of taxes and royalties payable by persons involved in the exploitation in PNG of PNG's natural resources to State.
Value-adding	means, in respect to gold and other minerals, the refining of the relevant metal to not less than the minimum international standard of fineness for that metal and the subsequent processing, manufacturing and/or minting of that metal into international investment grade bullion bars, legal tender currency coins or other industrial or retail consumer products which command higher sale prices in local and international metals markets than the raw and unrefined gold and minerals.

CHAPTER 1: BACKGROUND

Since 1970, the mining industry has been the dominant industry in PNG's economy. The mining industry is by far the largest source of revenue for the country. It is also the second largest employer and a significant contributor to the development of rural infrastructure.

In 2019, the mining industry generated a production value of K14.2 billion, a share of total exports of 40%, contributed 17.2% of GDP, and created 13,314 employment positions (EITI Report, 2019), and was a major source of foreign exchange.

Active exploration and mining companies in PNG include large international companies, State-owned enterprises, and many small companies including up to 80,000 small-scale alluvial miners.

In recent times, like the other extractive industries, mining has become an important priority for the reform under the current government. The country holds significant deposits of gold, copper and other precious minerals, many of which remain untapped that offers PNG competitive edge in value addition of its precious minerals.

The global trend with respect to accumulation of Gold as a State Reserve Asset is increasing, particularly amongst developing and emerging economies. The central banks collectively hold the World's largest stockpile of surface gold, amounting to some 33,200 tonnes at end of 2018, representing about 20 percent of the total surface gold that in existence in various indestructible forms. Gold with its intrinsic and implicit values, plays a key role in influencing the international monetary system. Gold reserves provide economic security, stability and confidence and creates growth and prosperity for countries that hold gold as part of their monetary reserves.

However, the State's participation is only limited under the current royalty-tax regime with foreign owned mines in PNG. Hence, GoPNG is keen to rebalance the sector towards a greater public ownership of mines, undertaking explorations, engaging in mining activities, supporting this policy for refining, minting, and trading of State-owned gold. Through this Policy, GoPNG will provide a regulatory framework and build a vibrant domestic gold bullion ecosystem to create sustainable wealth to improve quality of life and the socio-economic status of its population.

1.1. Intent of the Policy

This Policy provides a framework that will encourage the accumulation of the national wealth through extraction, production, storing and trading of gold.

This Chapter identifies two broader background objectives of this Policy.

1.1.1 Influence on Fiscal Policy

Support Government's fiscal Budget against internal and external shocks.

Short-term domestic emergencies and global events that lead to down turns in the domestic economy not anticipated in the budget demonstrate a need for PNG to have a national gold reserve as a buffer. The international practice is to expand gold reserves in central banks when government generates excess revenue. An objective of this Policy is primarily intended to provide this level of fiscal security through the



establishment of a state gold reserve system with the Central Bank of PNG. This can be used as a guarantee or collateral for domestic and external debt financing or loans as well as financial insurance to manage the State working capital (treasury bills and notes).

Paper trades, or domestic and international trade in treasury bills, bonds and notes are considered trades in securities. These are redeemed in the short term for cash, which the Government would buy back after a set term. The single best insurance that makes these investments low risk is the State's gold reserve stored as security with the Central Bank or the issuer of the paper certificate (bills, bonds and notes).

In the current state of our economy, the State's high indebtedness and lack of collateral for its securities or retire timed securities, diminishes the trust investors have in treasury bills, bonds and notes making them increasingly risky investments. This leaves the State vulnerable to short term shocks because it reduces its ability to raise capital domestically. Building the State's gold reserve and storing that gold reserve in the Central Bank and the Gold Vault provides buffer, reduces investment risks and cushions the economy against shocks. Hence, the Policy for the establishment of a state's gold reserve presents the opportunity to increase the State's capacity for revenue generation and increase investor confidence in investing in PNG.

Securities for Long-term external financing

International credit rating agencies assess the ability of economies to repay loans and the potential for default. In addition, these agencies also consider asset types and a state's ability to liquidate these assets. Loan rates are based on this assessment. Where there is a high probability of default or non-repayment, the repayment rates will be higher.

Historically, the State has used the extractive industries, particularly mining projects, as collateral when negotiating international financing. PNG's current debt levels and dwindling gold reserves make international financing costly as current production and cash flows are largely tied to existing debt obligations.

To improve PNG credit ratings, PNG needs to source State gold, process State gold and store State gold as gold reserves to be stored with the Central Bank and/or in the Gold Vault. This will also allow for part or all the State's gold reserve to be securely stored offshore and be traded in the world gold market.

1.1.2 Influence on Macroeconomic Environment Stabilization

Gold reserves to cushion against internal and external shocks.

PNG is a small and open economy vulnerable to both external and domestic shocks such as the collapse in the international commodity price, infectious diseases like the COVID-19 pandemic, wars as well as natural disasters such as flood, El Nino and La Nino weather conditions and earthquakes. These events have all adversely affected the economy at one point or another impacting the livelihood of people.

The Government in many of those instances has resorted to large unplanned debt financing to partly offset these adverse effects.

The idea of having the Government to accumulate gold bullion as part of the State's asset or reserve from now, will greatly benefit the Government in cushioning the economy in the future against any shocks and minimize their impact on inflation and growth.

Exchange Rate Fluctuations

To make PNG exports competitive in international markets, a flexible exchange rate regime was adopted in 1995 and the Kina was floated. The Kina value is now determined by demand and supply on the foreign exchange market. The recent domestic and global economic activity has adversely affected the value of the Kina and PNG's capacity to finance trade and attract foreign direct investment.

The State, through the Central Bank, can support the Kina exchange rate to ensure flexibility and Kina convertibility allowing for the smooth functioning of the foreign exchange market demand for the Kina through trading of gold and holding gold reserves. This will ensure that Kina is tradable and competitive to meet the development needs of the different sectors of the economy.

To achieve this, and to bring more stability to the value of the Kina, this Policy provides for:

- (a) Refining of PNG gold by the Gold Refinery into international investment grade gold bullion bars for the sale of those bullion bars into the international gold markets;
- (b) Minting of refined PNG gold into international investment grade PNG legal tender gold bullion currency coins and other gold products, and the sale of the bullion currency coins and other gold bullion products into international gold investment and gold trading markets;
- (c) Building the State's gold bullion reserves, and storage of the State's gold bullion reserves with the Central Bank and Gold Vault; and
- (d) GoPNG engaging in trading of gold bullion in World gold bullion market(s).

The State can participate and trade in the global bullion market through gold swaps between monetary authorities. This process involves the exchange of physical gold for foreign exchange deposits (or other reserve assets) with an agreement that the transaction be unwound at an agreed future date, at an agreed price. The Policy allows for PNG's monetary authority, the Central Bank, to acquire the foreign exchange and pay interest on the foreign exchange received and to reclaim ownership of the gold where we do not wish to sell outright.

Offsetting Balance of Payment deficits

Gold held at central banks can help to offset a state's balance of payment deficits from time to time when the need arises.

This Policy seeks to ensure that gold reserves held at the Central Bank and Gold Vault provides a cushion for the State against deficits from foreign exchange or in the event of a balance of payment crisis.

Optimization of intrinsic resource value

In the context that a dwindling investor base continues to demand greater returns despite a significantly lower risk appetite, the Policy provides for the optimization of the intrinsic value of locally produced minerals, especially gold. This safeguards against expected down-turns in economy-driven exploration and production and ensures that value is added to the minerals that are being mined. In addition, the Policy provides an avenue to attract higher reward from production sharing which is a migration away from the traditional royalty-tax concessionary regime.

1.2 Historical Context

Since the gold rush of the 1800s, miners in PNG have produced and exported raw gold.

Large - scale mineral development has taken place over the last 40 years. Over this period, mineral development has become more and more contentious, not for reasons that relate directly to mining activities, but to the distribution of benefits.

After over 100 years, there has been limited downstream processing and value-adding; or introduction into and use of gold bullion in domestic commerce; or the accumulation of national gold reserves for fiscal policy operations.

A majority of the early and existing mineral production contracts are taxation and royalty focused. There is now a marked global transition from this taxation and royalty regime to a predominantly production sharing regime. These shifts have been embraced by the Marape Government.

This Policy aims to build on that by providing the basis for the State to increase its equity participation in and, where appropriate, increase its management involvement in and to take a greater control of gold mining and for other related industries along the domestic supply chain.

The GoPNG has the obligation to ensure these transitions are captured in an enabling policy and legislative framework for the greater good of PNG.

The Policy interventions will provide for the conformance, promote global best practice, standards and conventions as well as complementing other national policies and regulations for the production, value-adding to and trading in gold.

The Policy provides direction for actions in the downstream and mid-stream processing aspects, and aligning with the London Bullion Market Association's (LBMA) prescribed standards, so as to leverage broader international acceptance of gold bullion products originating from PNG. In this way the nation benefits from the realization of the intrinsic value of gold bullion and not just raw ore production values.

The Policy is designed to provide a framework that translates this intrinsic value into broader development outcomes.

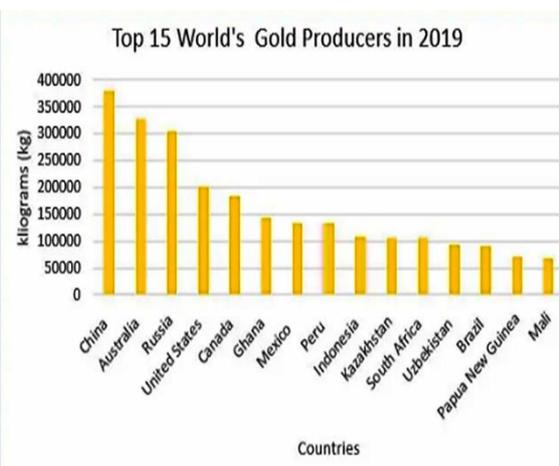
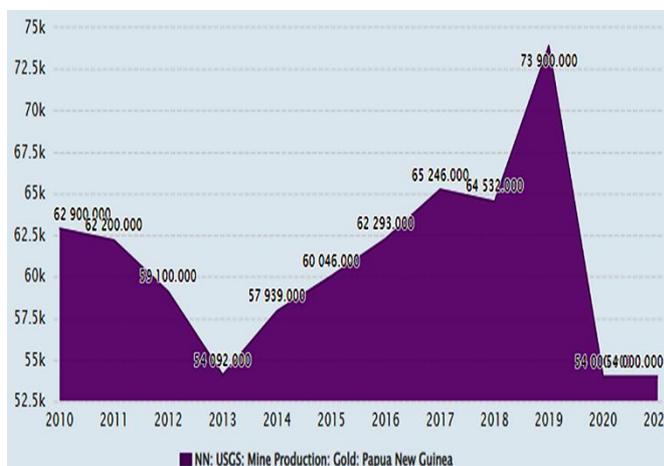
The Policy caters for the downstream processing and minting of gold and other minerals into bullion; increase the State gold reserves; direct control by the State of the production shares with PNG gold miners in order to improve fiscal policy operations; and development in PNG of a new value-adding refined gold industry and ecosystem.



Source: <https://mra.gov.pg>

There are occurrences of gold mostly along the central mountain range of PNG. As at the end of 2019, a total of 10 advanced mining prospect areas across various locations of PNG, have been identified with the total known mineral reserves base of 1,300 tonnes of gold metal assessed through various explorations. The known reserves are spread over 12 provinces (indicated on the map). Thirty eight percent (38%) of the known reserves are classified as economically mineable reserves and the remainder of the metallic gold are classified as resources of which ten percent (10%) is the actual drilled resource which fall under 331/332 United Nations Framework Classification (UNFC). Gold is the most common mineral mined in PNG.

Since the start of commercial mining in the 1960s, almost all the mining, except Ramu (nickel, chromite) have been mining gold. Bougainville (copper) and Ok Tedi (copper) had mostly been copper mines with associated Gold & Silver. Following the closure of Misima (2004) and Tolukuma (2010) old mines, PNG now has nine (9) operating mines with five (5) large scale mines with Special Mining Lease and four medium scale with Mining Leases. With Porgera being closed down upon expiry of license and is now being commercially negotiated to have it opened with State Parties, Investor and Landowner with equal share of benefits of the value.



Sources: *Quarterly Economic Bulletin Central Bank and Gold Council, 2018*

In 2018 PNG was one of the World's largest gold producers and ranked 14th out of 90 gold producers according to the World Gold Council (WGC). In 2019, PNG produced a total gold output of 70 tons, a modest increase of 30 per cent from 2018 total output. From December 1990 to 2019, an average annual gold output of 61.9 tons (or 1.5 million ounces) were produced. Over the period of the analysis, PNG produced an all-time high of 74.5 tons in year 2000 and a record low of 31.9 tons in 1990. The outputs from the mainstream operating gold mines collectively account for ninety-five to ninety-six percent while the alluvial gold mines account 4-5 percent of the total gold output over the period analyzed. Limited State's capacity has led to lack of scrutiny and therefore less visibility of the transactions made for alluvial gold mining.

1.2.1. Undisclosed gold and minerals exported from PNG

The Policy provides for an international accredited measurement system for verification and certification to be put in place to enable the State to measure accurately the volumes of gold and minerals taken out of PNG, and to keep measurement uncertainty as minimum as possible.

The current regulatory and legislative frameworks do not clearly prescribe a system for certification of the concentrates, volumes and resultant value of the minerals shipped out of PNG for downstream processing, value-adding, and trading in offshore markets.

This Policy proposes that each gold production site from the large mines to alluvial mining and trading sites adhere to a prescribed process where on-site representatives report values as they are extracted and moved away from the site of production. This set of prescribed processes will attract a certificate for each load moved away from a production site and gives the State the opportunity to track the minerals shipment through domestic to international markets.

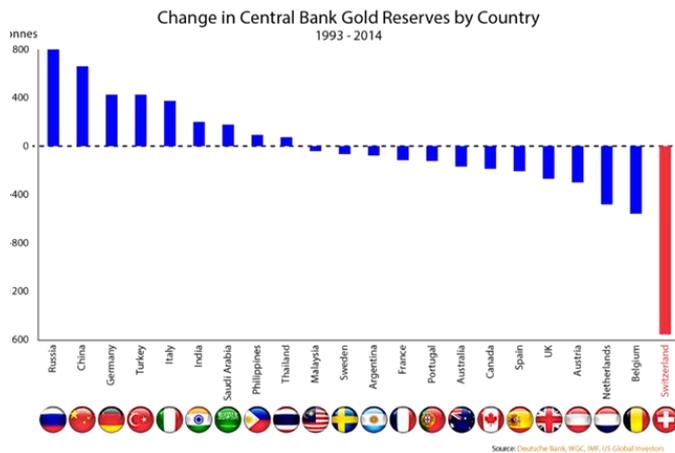
This Policy also proposes that new mineral and especially gold mining projects will capture these provisions in their contractual agreements.

1.2.2. Central Bank Gold Reserve – Current Status

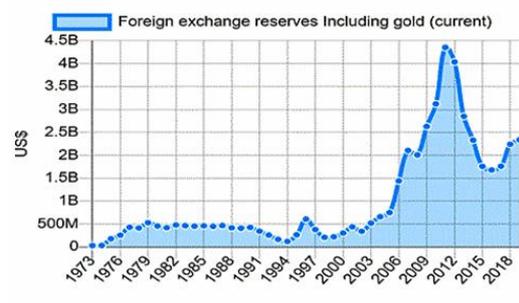
An economy's international reserve assets may comprise foreign currencies, assets denominated in foreign currency, special drawing rights, IMF reserve positions and gold reserves, with latter necessitating the rapid accumulation of gold bullion.

As shown by the figures below, more than 20 countries, half of which are developing, hold close to 20 percent of their total assets in gold bullion.

PNG's national gold reserves, unfortunately do not reflect this trend.



Transition Chart Of "Foreign exchange reserves including gold (current)" (Papua New Guinea:1973 - 2019) [graphtochart.com]



Source: International Monetary Fund

The Central Banking Act provides for PNG to hold gold reserves as part of its reserve assets. However, PNG's gold bullion reserves have dwindled since the Kina was floated and little action has been taken since then to reverse this as per the above graph.

The graph shows fluctuations between 1997 and 2001, followed thereafter by a huge increase in the value of the foreign exchange holdings including gold holdings. However, this pattern correlates positively with the inflation-adjusted price movements of gold and not so much by the gold accumulation which appears minimal.

1.2.3. No Domestic International Standard Gold Refineries or National Mint

PNG does not have an international standard gold refinery or its own national mint. More than 90 percent of PNG's gold has been refined in offshore refineries (mainly the Perth Mint) via long term refining contracts. Top gold producers in the Asia-Pacific region like Australia, the People's Republic of the Philippines, China and Indonesia have vibrant onshore metal refineries that refine the bulk of their domestic gold production.

Metal Refining Operations (MRO) Ltd was a domestic gold refiner but shut down in 2008 due to inconsistent ore supply. Supply constraints meant that only an average annual output of 5 tons was being refined before the closure of their operations.

Golden Valley Refinery, a nascent refinery in Wau-Bulolo, has the total refining capacity of 2000 metric tons of gold every year, but is currently refining on an average of 1500 metric tons of gold per year.

Between 2000 and 2020, a total of 10 prospective investors submitted proposals to the GoPNG through the Department of Commerce and Industry to set up onshore refineries. These proposals were not approved or implemented, due to lack of a legislative framework governing Doré supply guaranteed by GoPNG.

The Policy encourages Artisanal Alluvial Mining (AAM) and future gold production to be part of the supply quantities that will support the onshore processing of gold in PNG.

1.2.4. Domestic gold smelting but not international standard gold refining

The Policy acknowledges that some of PNG's raw gold and precious minerals production is smelted in PNG by large scale miners at the mine site, or, in the case of



alluvial gold produced by small scale miners, by local smelters, in each case into doré bars of varying degrees of fineness.

Those locally produced doré bars are then exported to foreign refineries where the gold and precious minerals content is stripped out and refined into international investment grade bullion bars.

However, the Policy recognizes that the smelting of gold and precious minerals into doré bars is not the same as refining of gold and precious minerals to the minimum international investment grade standard.

A doré bar is unrefined gold and precious minerals all mixed together with other contaminants. Importantly, doré bars are not investment grade refined gold bullion and they are not traded in the international gold and precious minerals markets.

Instead, doré bars are the feedstock for sophisticated gold and precious minerals refineries who then undertake the expensive and skilled process of refining and separating out the gold, silver and other precious minerals and produce gold, silver and platinum bullion bars which meet the internationally recognized standards of purity or fineness of the relevant metal required for internationally accepted and traded investment grade bullion.

This Policy also acknowledges that one hundred percent (100%) of PNG's gold and precious minerals production, whether in the form of unprocessed concentrate or doré bars, is exported to offshore gold and precious metal refineries (mainly the Perth Mint).

The foreign refineries then process the concentrate or melt the doré bars and refine the gold and precious minerals into international standard investment grade gold and precious metal bars.

Importantly, the Policy recognizes that these gold and precious mineral bullion bars made from PNG gold and precious minerals are then branded as a Perth Mint bullion bar and therefore as an Australian product.

Further, the Policy also recognizes that since the 1980's, some of the PNG sourced gold and silver, once refined, has been minted by the Perth Mint into their now famous international investment grade legal tender gold and precious metal currency coins which are issued as Australian currency.

1.2.5. Foreign refining disadvantages to PNG

The Policy recognizes that there are three important national reputation and economic consequences which flow from foreign refining of PNG's gold and precious minerals, being:

(a) *Loss of Value-Adding Benefits*

The foreign refining of all PNG's gold and precious minerals means that all the economic and social benefits of downstream processing and value-adding to PNG's gold and precious minerals is being exported to foreign countries, such as Australia.

This means all the jobs, taxes, forex earnings, and ancillary industries, all worth in the billions of dollars and directly created by refining of gold and precious

minerals, is lost to foreign countries instead of staying in PNG for the benefit of this country and its citizens.

(b) *Loss of Resource Identity*

The branding by, for example the Perth Mint of PNG sourced gold and precious minerals in the form of international investment grade bullion bars or currency coins as an Australian product means there is no recognition in the international finance or gold and precious minerals markets for PNG despite being a major World gold producer.

This means that PNG loses the actual and implied credit enhancement that would otherwise enter these markets with the global knowledge and recognition.

(c) *Loss of International Reputation*

Following on from the loss of resource identity is the consequential loss of international standing and reputation, and associated economic and direct foreign investment benefits, that should be enjoyed.

1.2.6. Domestic refining and minting benefits to PNG

Unlike PNG, top gold producers in the Asia-Pacific region like Australia, the People's Republic of the Philippines, China and Indonesia have vibrant onshore gold refineries that refine the bulk of their domestic gold production to international investment grade standard "in-country" before it is then sold and traded in local and international gold markets.

This Policy will place PNG in a comparable position with the other top gold producers through the establishment of an international standard Gold Refinery and Mint.

Importantly, the Policy will ensure PNG's status as a top global producer of gold is recognized through the production by:

(a) the Gold Refinery of PNG branded international investment grade gold and silver bullion bars; and

(b) the Gold Mint of PNG branded investment grade legal tender currency coins,

which in each case will then be sold and traded in international gold and silver markets.

The Gold Refinery will by an appropriate legislation, refine all PNG sourced gold international investment grade bullion bars which meet the standards required of globally recognized accreditation organizations, such as the LBMA, before the refined bullion can be sold and exported.

The Policy means that all the economic and social benefits of downstream processing and value-adding to PNG's gold will now remain in PNG instead of being exported to foreign countries as is currently the case.

The Gold Refinery will be the gold refinery in PNG and this represents a significantly different scale of investment and standard of operation when compared to previous small-scale refineries, such as Metal Refining Operations (MRO) which shut down and other similar operations.

The Policy acknowledges that current local gold smelters, and any future gold smelters, can continue to provide their smelting services.

However, the doré bars produced by local smelters will now be required to be refined in PNG by the State owned or nominated Gold Refinery before the refined gold bullion is exported. This is advantageous to the owners of the doré bars, such as the alluvial gold miners, as it means they will be paid for their refined gold bullion earlier and with less expenses involved than currently applies with the export of doré bars to foreign refineries.

The mandatory refining of all gold through the Gold Refinery is also beneficial to GoPNG for it will have more accurate data on actual gold production and when fully enforced will minimize gold theft and smuggling and other malpractices in the PNG gold industry which GoPNG acknowledges cost the State in excess of K1 billion per annum in lost taxable revenues.

In addition, the structuring of the Refinery in accordance with this Policy, supported by an appropriate legislation that all gold mined or recovered in PNG be exclusively refined by or through the Gold Refinery.

The Policy also means that all gold production in PNG, including from Artisanal Alluvial Mining (AAM) and large-scale mining, be part of the supply quantities that will support the onshore refining of gold in PNG by a Gold Refinery.

1.2.7. Fiscal Regime for the Mining Sector

Under the present Royalty-Tax Concessionary regime, miners are granted rights to trade minerals produced based on a profit-sharing arrangement. The State, landowners, local governments and the mining companies are beneficiaries.

Generally, the industry considers that the State gets a fair share of the benefits. Resource developers are entitled to a portion of the benefits on agreed terms for willingly incurring the costs and risks and for applying the managerial and technical expertise to discover, develop and operate a mineral resource project.

1.3. Audience

This Policy ultimately seeks to benefit all Papua New Guineans by guiding all stakeholders with vested interests in the broad windows of investment and commercial opportunities along key supply and value chains of gold. These include:

- (a) All tiers of Governments;
- (b) National Fiscal and Monetary Authorities;
- (c) Relevant State Institutions and Commercial and Investment Vehicles;
- (d) Relevant Regulatory Authorities;
- (e) Private Sector Players with commercial interest in the supply and value chain of gold;
- (f) Key Players in the mining industry including supply value chain; and
- (g) Peak industry representative bodies that are involved in the promotion, regulation, production, refining and minting, assaying, distribution, marketing, trading and investment, collection and administration of benefits arising from gold.



1.4. Policy Development Process

The Policy is an initiative of the Government of PNG under various political leaders, and commenced ten (10) years ago. The Government in 2012 took the first serious step of optimizing the resource value of gold when it opted for the mineral production sharing arrangements, and made considerations for the gold bullion policy in the Alotau Accord I and II. This Policy provides the direction to optimize the intrinsic value of gold, which has been lost through export of Doré Gold since mining began in PNG.

The Marape Government recognizes and gives prominence to this sector by initiating policies and legislative reforms to encourage downstream processing and value adding of natural resources. Some of these reforms will encourage production sharing arrangements which will further promote onshore processing of Dore gold.

In March 2022, the directive was issued to the Ministry and the Department of Commerce and Industry to develop this Policy.

CHAPTER 2: POLICY DIRECTIONS

This Chapter provides the overall strategic direction and guidance towards addressing the policy intent.

2.1 Primary Goal of this Policy

Create a vibrant national gold bullion value chain that is internationally recognized and competitive to support the macroeconomic policy operations of the Government for national wealth creation, economic stability, sustainable growth and prosperity.

2.2 Objectives

The objectives of this Policy are to:

- (i) Source Gold internally and externally for downstream processing in PNG,
- (ii) Support and promote development of AAM, as to establish a reliable and consistent source of gold supply for the National Gold Refinery,
- (iii) Establish and develop an international standard, accredited, competitive and integrated gold and minerals value-adding industry in PNG,
- (iv) Store and trade gold to support the Government Monetary and Fiscal Policies,
- (v) Develop appropriate policy and legislative frameworks to promote, facilitate, and govern the production of gold bullion and trading and investment in gold bullion,
- (vi) Ensure mining wealth supports sustainable economic and social development in PNG.

2.3 Guiding Principles for this Policy

This Policy adopts a set of principles to guide the effective policy implementation and institutional operations.

Principle 1: Optimization of the intrinsic resource value and economic benefits of gold and other minerals as a national interest.

PNG Government encourages downstream processing and value-addition of its natural resource. This includes gold and other minerals.

Principle 2: Conformance to international standards to maintain credibility and acceptability and realization of higher value-addition of gold and other minerals.

All businesses involved in the supply and value chain will maintain internationally accredited standards and sustainable practices in sourcing, handling, value-addition and marketing of gold and other minerals.

Principle 3: Strict compliance with the rules, guidelines and laws governing the National Gold Bullion Policy Programs.

All operators within the supply chain of gold and other minerals must comply with the guidelines towards achieving of goals and objectives this Policy.

Principle 4: Avert risks at all stages of the supply and value chain as well as in gold trading.

As gold and minerals are high valued commodities, high level of handling and security measures must be taken along the supply and value chain.

Principle 5: Prudent governance and management of the Policy.

It is the priority of the Government to maintaining good governance, transparency and accountability in the handling, processing and management of the gold and minerals in the country.

2.4 Principal Regulatory and Policy Framework

The Policy is developed within the parameters of the existing National Policy Frameworks. The Policy recognizes/supports the PNG Development Strategic Plan (DSP) 2010-2030, and the Medium-Term Development (MTDP) Plan IV 2023 - 2027 which will translate the aspiration captured within the Vision 2050. The Policy also complements other national policies and plans.

- *National Goals and Directive Principles (effective management of national resources)*

The National Goals and Directive Principles call for PNG's natural resources and environment to be conserved and used for the benefits of all. In this regard, this Policy acknowledges the constitutional mandate for all stakeholders to carry out activities in the gold bullion supply and value chain. The Policy simultaneously acknowledges and recognizes the economic considerations for current and future generations.

The Third Goal of the National Goals and Directive Principles calls for Papua New Guinea to be economically independent and self-reliant. Goal number four (4) envisages for the natural resources and environment to be used in a conservative manner and for the benefits of all. In this regard, the Policy will ensure that all the relevant stakeholders involved or to be involved in carrying out activities in the gold bullion supply and value chain observe or reflect the earmarked constitutional duty. This Policy will also give fair and adequate economic considerations for current and future generations.

- *PNG Vision 2050 (wealth creation)*

Vision 2050's provision under Pillar 2 calls for the government to pursue Wealth Creation.

Vision 2050 ensures that PNG has a strong, dynamic and competitive economy by 2050. The focus is to develop manufacturing and other sectors to generate 70 percent of the Gross Domestic Product (GDP).

- *PNG Strategic Development Plan 2010 – 2030 (wealth creation, sustainable economic growth leading to achievement of economic stability and prosperity)*

A major goal of the Strategic Development Plan (SDP) 2010 – 2030 is for PNG to be one of the “Middle Income” countries by 2030. It gives clear policy directives to all other national policies.

- *Medium Term Development Plan (MTDP) IV (Strategic Priority Area 1 Focuses on PNG making Strategic Economic Investment)*

MTDP IV 2023 - 2027 elaborates on the policy directives of PNGDSP into achievable targets with specific indicators for all economic sectors including mining, processing and trading. The MTDP IV has twelve (12) Strategic Priority Areas and Deliberate Intervention Programs. In the MTDP IV under the Strategic Priority one, it focuses on the Strategic Economic Investment with specific Deliberate Intervention programs for Mining and Petroleum sub sector. The MTDP IV under the SPA1 and its respective DIPs in for the Mining Sector identified key investments such as the State equity, Gold Bullion, landowner benefit sharing agreements and down-stream processing.

- *National Trade Policy 2017-2032*

The National Trade Policy (NTP) calls for sound trading systems that will directly support the growth of the domestic economy as well as strengthening PNG's international competitiveness and attractiveness as an export-led economy. In this regard, NTP will be an enabler to the Policy.

- *Micro Small Medium Enterprise Policy 2022*

The Micro Small Medium Enterprise (MSME) Policy encourages resource developers to support creation or development of a sustainable local economy, which will support and sustain the local communities after cessation of the resource projects. The mining sector accounts for 1.7% of the total MSME's in Papua New Guinea. The National Gold Bullion Policy will support the growth of the MSME in the non-renewable sector.

The MSME Policy 2022 primary objective is to support, facilitate growth and development of MSME in all sector including mining. It calls for the MSME sector to help build a strong, stable and resilient economy, increase employment opportunities and create wealth and prosperity for every citizen to participate in nation building.

- *Alluvial Mining Policy 2021*

The Policy acknowledges the Alluvial Mining Policy and the regulatory regime administered by the MRA for the regulation of the alluvial mining sector.

2.5 Sectoral Coordination Framework

- *Resource Contracts Fiscal Stabilization Act 2000*

The Central Bank and the Department of Treasury are the custodians of the Monetary and Fiscal Policies of PNG which, amongst other things, influences price, ensures financial stability, and supports economic growth. The Fiscal Stabilization Policy ensures increased revenue opportunities and economic independence. This Policy will support and compliment the above two policies.

- *Central Banking Act 2000*



The Central Banking Act regulates foreign exchange and gold trading. Central Bank is the only government entity mandated to administer and trade gold on behalf of the State. The Policy will encourage development of an appropriate system and any subsequent legislations to support the role of the Central Bank and the Gold Vault in storing and trading of the State's gold reserves.

- *Mining Act 1992*

The Policy takes into consideration the acquisition of the State's interest in the mining of gold and any other minerals as contained in the Mining Act 1992 and looks to and will complement this legislation in terms of governance for the alluvial mining (AM) sector.

The Mining Act 1992 is a principal legislation that regulates mineral exploration and mining operations in PNG. The law administers tenement licensing processes including downstream processing.

Mining Act 1992 provides for the State to take up equity interest in any mining project. The State has a right to take up to 30% interest in any mining project.

- *Mineral Resources Authority Act 2018*

The Mineral Resources Authority Act 2018 regulates the mining industry and gives licenses to investors for exploration or development of mining projects in the country.

The Policy will complement the regulatory operations of the exploration and mining including downstream processing of minerals in PNG.

- *Environment Act 2000*

The Environment Act 2000 exist to protect the flora and fauna, rivers and seas, land and skies of PNG. The Act gives effect to the National Goals and Directive Principles and in particular –

- (a) to provide for protection of the environment in accordance with the Fourth National Goal and Directive Principle (National Resources and Environment) of the Constitution; and
- (b) to regulate the environment impacts of development activities in order to promote sustainable development of the environment and the economic, social and physical well-being of people by safeguarding the life-supporting capacity of air, water, soil and ecosystems for present and future generations and avoiding, remedying and mitigating any adverse effects of activities on the environment; and
- (c) to provide for the protection of the environment from environmental harm;
- (d) to provide for the management of national water resources and the responsibility for their management.

All conduct and activities carried out within the context of this Policy shall follow the relevant requirements under the PNG Environment Act 2000.

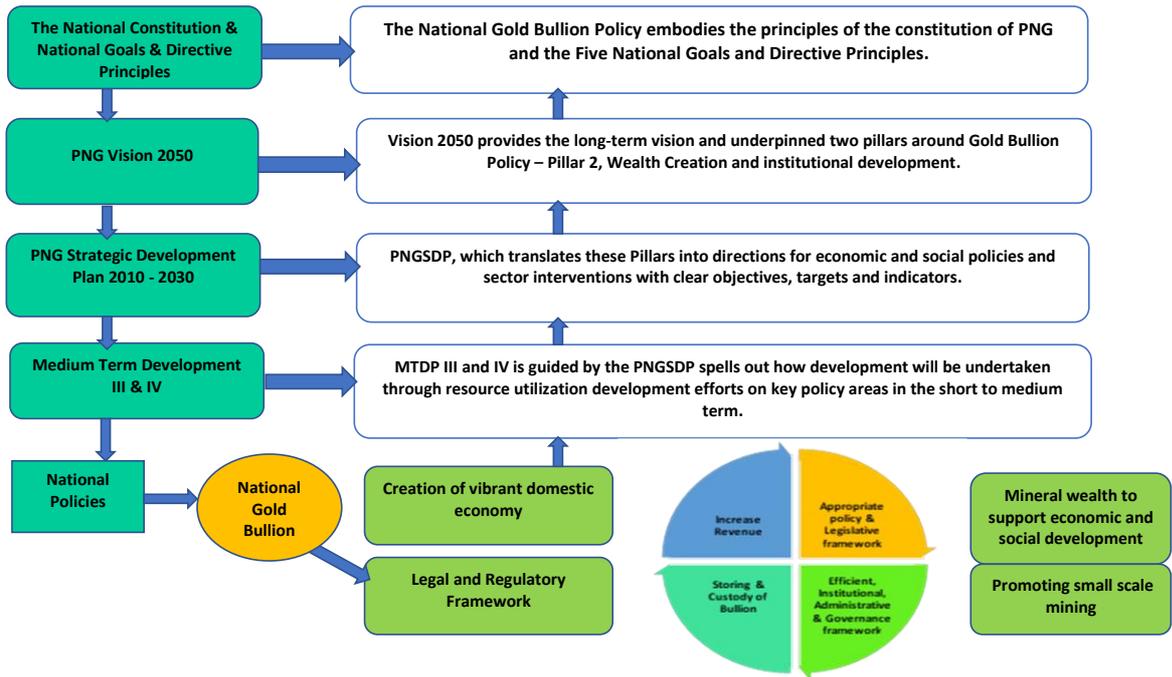
- *Other Relevant Legislation*

This Policy as much as possible is drafted to support the existing legal and policy framework in the economic sector. However, given the fact that Papua New Guinea is for the first time venturing into new frontiers with this policy, there will be requirements for legislative and policy reforms on specific sections relating to this policy for clarity, alignment, compliance and realizing the objectives of this policy.

2.6 Alignment to the National Development Framework

The following Figure shows the linkages of National Gold Bullion Policy in the overall national development planning framework of the GoPNG.

The Alignment to the National Development Framework.



CHAPTER 3: POLICY APPLICATION

This Chapter identifies three broad categories of the state-owned gold for this Policy application.

3.1. Functional Categories of Gold

Without discriminating the other areas of the Policy, the minerals and gold bullion to which the State is entitled under re-negotiated and future potential production sharing arrangements, will be classified into the following three functional categories –

Merchandise Gold - comprises the State's share of gold bullion that is immediately sold in the market or to buyers under an existing forward contract on the date of its maturity, to realize immediate cash flow for the State through the authorized collecting enterprise. The sales proceeds from public revenue may be directly used in the national budgets as determined by fiscal policies;

Monetary Gold - comprises the State's share of gold bullion held as part of the monetary reserves by the Central Bank, under an arrangement with the State; and,

Investment Gold - comprises the portion of the merchandise gold that the Central Bank may hold and trade as a financial asset, or excess monetary gold that the Central Bank may manage to generate returns, or to create liquid foreign exchange reserve.

3.2. Application of gold in the macroeconomic policy operations

Fiscal support – Merchandise gold will support GoPNG's fiscal operations through the fiscal arrangement under relevant legislation,

Additional earnings – Effective management of merchandise gold can generate additional earnings for GoPNG. The fiscal or monetary gold held as investment can generate returns via lending to miners. GoPNG may reserve right to lend gold to miners when they require funds to meet operational obligations.

Role in external debts - Gold becomes a key instrument in the restructure of the public debt, where the source of debt raising is shifted from the domestic market to external concessional borrowings. Monetary gold can support debt strategy by helping to lower the risk premium, hence, borrowing cost on offshore borrowing, and, as a last resort, may be liquidated to finance debts in time of shortage of foreign currency reserves.

Ease of external loans - The monetary gold reserves can enhance the capability of the GoPNG to seek alternative lower cost and easily accessible funds from external sources.

Collateral assets - GoPNG can use future or existing stock of gold in a direct collateralized financing against offshore borrowing from multilateral financial institutions.

Macroeconomic shock absorption - Anticipated revenue raised in lead years from trading of gold bullion may be saved in sovereign wealth fund for the purpose of

financing contingencies that may arise in the unexpected economic shocks. PNG's economy does not have an unlimited capacity to absorb the increased spending. This can create macroeconomic imbalances. The National Gold Bullion Policy may serve as an alternative macroeconomic stabilization program as follows:

- (1) **Precautionary role** – PNG's trade sector is small, the economy is commodity-based, export earnings are volatile, and its key sectors of production are mostly under the ownership/ control of non-residents. PNG is susceptible to balance of payment (BOP) crises. Full reliance on the IMF for BOP support is not advisable, as its support comes after a time lag or the level of resources provided may be insufficient. The IMF's resources are appropriate for longer term adjustment. For short term adjustment, PNG may rely on its own convertible resources like gold. In this regard, the monetary reserves can provide an effective hedge against any BOP crisis;
- (2) **Exchange rate management** – in the situation of an exchange rate crisis, where the domestic banking sector lacks the foreign exchange liquidity, the central banks intervene in the foreign exchange market to relieve the national currency from facing excessive stress by selling the foreign currencies or buying the PNG Kina. Where there are foreign exchange reserve shortfalls, the Central Bank may experience periodic inability to effectively carry out this function. This Policy and the resultant NGB program propose the State's gold bullion reserves as a relief measure for exchange rate management;
- (3) **Credit rating** – a country's credit rating is used in the assessment of its credit worthiness. The country's ability to access foreign currency to meet its obligations is a key factor in its sovereign risk assessment. The implications of a higher credit risk rating are an increase in the interest rate, and, in some cases, difficulty in securing offshore loans. This Policy, subsequent legislation, and the resultant NGB program is relevant for this period in the country's economy where our debt management strategy has been focused on retiring the short-duration domestic debts while switching to longer-term international concessional debts; and
- (4) **Foreign Direct Investments (FDIs)** - Macro-economic factors affect investor decisions (it can attract or dissuade FDIs). National gold bullion reserves increase macroeconomic stability on which FDIs decisions are based. PNG, like many developing economies, relies on FDIs to achieve economic growth, income and job creation, and social and economic prosperity. The Policy and NGB program will create a conducive environment for FDIs attraction.

CHAPTER 4: POLICIES AND STRATEGIES

The following are key policy focus areas, policy goals and key strategies for gold bullion:

4.1 Securing of/the Gold Supply Base

This Chapter makes considerations for the long-term security of gold production from the mainstream and AAM gold production sector for the Gold Refinery.

Policy Focus Area 1: Mainstream Mining Gold Supply

Policy Goal: Securing Baseline Gold Output/Supply for Downstream and Midstream Activities

Evolving international practice has seen countries¹ stipulating that resource payments be made in-kind through physical transfers of the mineral production or ownership of shares of the State in a production license. A related issue is the lack of clarity over a prescribed system for physical verification and certification of ore production volumes and concentrations consigned for shipment abroad.

Key strategies:

1. Gold (Ore) Production Sharing Arrangements

An adequate and guaranteed supply of physical gold is required to establish a Gold Bullion Reserve and key domestic industries along the gold value and supply chain. The Policy proposes that production sharing agreements be based on the sharing of physical profit gold.

In addition, this Policy suggests:

- a) The State to consider the option of contracting gold miners to extract gold ore for the State. The State may under this production sharing scheme conduct mineral explorations, either exclusively or on joint venture arrangement, to identify volume of the gold ore, and secure the tenement for mining the gold. Thereon the State shall invite a developer through the tendering process to harvest gold ore on the Production Sharing Agreement regime.
- b) Existing mines who have assumed ownership of State gold through respective tenement, on the expiration of those tenements, these tenement holders and the State are encouraged to negotiate the renewal of tenements on the Production Sharing Agreement regime, under the unincorporated joint venture arrangement.

2. State's Equity Participation in Mineral Production

The State to also considers a direct equity participation in a mineral production license where it is viable or desirable to do so with a view of not only making commercial gain but also securing control over gold, including receipts denominated in payment of a share of profit gold under contractual agreements.

¹ Russian Federation

State has the right to take up to 30% of equity or more in any mining project to support the operation of PNG Gold Refinery & Mint. The State may enter into joint venture arrangements with the mining companies either through Incorporate Joint Venture (IJV) or Unincorporate Joint Venture (UJV). Incorporated Joint Venture or Unincorporated Joint venture are business arrangements in which dividends are shared in the former whilst minerals are distributed between the State and the gold developer according to equity contribution in the later.

3. ***One-third of Gold Production to be downstream process in PNG***

The Mining Development Contract (MDC) currently stipulates for one-third (1/3) of gold extracted by a mining company on Special Mining Lease (SML) to downstream process gold in PNG. Mining companies who are involved in the downstream processing at the level not equivalent to one-third of gold extracted, shall enter into Mineral Production Sharing Agreement with the State to offload the residual of one-third production not refined to State on the Unincorporated Joint Venture arrangement.

4. ***Implementation of Mineral Production Sharing Agreements under transport arrangements***

Create mechanisms that promote a prudent implementation of Mineral Sharing Production Sharing Agreements (MPSAs) under transparent, accountable and full information disclosure arrangements with the view to ensuring that every amount of gold is reported and accounted for as well as ensuring that all operating activities including costs are fairly reported or disclosed.

Policy Focus Area 2: Alluvial Gold Mining

Policy Goal: Mobilizing alluvial gold for the mainstream gold supply and value chain

Alluvial gold is estimated to contribute up to five percent (5%) of PNG's total gold outputs. Alluvial gold also represents a viable source of domestic gold supply base for the purposes of this Policy.

In 2019 production of alluvial gold in PNG was 119.904 ounces. In the same year (2019) the declared alluvial gold export revenue under Gold Export Licenses by the Central Bank totaled K549,698,436 and silver was K2,051,239².

Successive governments have given little attention to the alluvial mining sector in terms of appropriate policy interventions. As a result, many of the alluvial gold miners, based

² It is widely acknowledged that significant quantities of, and value in, gold sourced from PNG alluvial mining is not declared as required by

PNG gold industry "middlemen" resulting in material shortfalls in recorded exports and values. CENTRAL BANK Report. Money Laundering and Financing of Terrorism National Risk Assessment September 2017 (<https://www.bankpng.gov.pg/wp-content/uploads/2019/04/MoneyLaundering-and-Financing-of-Terrorism-National-Risk-Assessment-4.pdf>).

Papua New Guinea Mine Watch. Gold Stolen on a Massive Scale in PNG. 15 January 2019 (<https://ramumine.wordpress.com/2019/01/15/gold-is-stolen-on-a-massive-scale-inpng/> and <https://www.pngattitude.com/2020/06/goldstolen-on-a-massive-scale-1.html>).

Financial Action Taskforce: Report. Money Laundering/Terrorist Financing Risks and Vulnerabilities Associated with Gold July 2015 (<https://www.fatf-gafi.org/media/fatf/documents/reports/ML-TF-risks-vulnerabilities-associated-with-gold.pdf>).

on anecdotal evidence, are reportedly exploited in terms of price under cutting. The alluvial miners lose out, while "middlemen" buyers make unethical gains of up to 80-90% of the total value of gold.

This Policy will ensure that the notorious PNG gold industry middlemen are eradicated from the domestic gold market and are replaced by formally appointed buying offices, and trained and supervised buying agents, of the Gold Refinery located throughout the alluvial gold mining areas. The alluvial gold miners will be able to deal directly with the Gold Refinery rather than the middlemen.

In addition, by exposing the malpractices of the middlemen and those participants in PNG and elsewhere, including foreign gold refineries, who have directly or indirectly aided, protected or benefitted from their abusive and, in cases, illegal activities, this Policy seeks to:

- (a) reform the alluvial gold mining sector;
- (b) ensure that accurate records are kept of actual alluvial gold production;
- (c) ensure that alluvial gold miners become an important, protected and valued part of the refined gold industry in PNG; and
- (d) importantly, that alluvial gold miners fairly share in the benefits of the new refined gold industry in PNG, and the benefits provided to the PNG gold industry, by the establishment and operation of the gold refinery.

Key Strategies:

1. All alluvial gold shall be refined onshore in PNG by Gold Refinery & Mint

Alluvial gold mining shall be regulated to rid leakages that are occurring through golds being smuggled out of PNG. PNG authorities that are manning the borders will mobilize necessary resources for surveillance, and will deal with citizens and foreigners that are involved in gold smuggling under their respective jurisdiction.

The Government will establish the Gold Refinery & Mint with its refining facilities in the country and shall become the major market for all PNG alluvial miners with competitive pricing.

All gold found through alluvial gold mining or recovered by PNG citizens will be the guaranteed source of dore gold supply for the PNG Gold Refinery & Mint. PNG National Refinery & Mint will purchase the alluvial gold at the competitive market prices, and will refine alluvial gold to 99.99% purity level in PNG.

2. Creation of efficient and effective market access for Participants in the Alluvial Gold Industry

Creation and implementation of appropriate programs under public private partnerships to promote or create broader market access opportunities, including creation of broader, reliable and competitive market or buying outlets across key gold producing districts and centers as strategic ways of integrating gold/AMM into the mainstream gold supply and value chain.

3. Design targeted programs to increase alluvial gold production

Establish and provide tailored business development support programs and services for alluvial gold miners across PNG through measures such as business development training, transfers of technical knowledge, provision of grants and subsidies are few particular actions amongst other broader actions.

4. Increase Information Awareness on Gold for Participants in the Alluvial Gold Industry.

Awareness programs be rolled out in small scale mining communities and districts around the country to inform the participants on key market information including pricing information, and importance of the alluvial industry to rural economic development and livelihoods. Gold pricing information must constitute the core of any information material or resources.

5. Promote and Provide Education on Ethical Sourcing of Gold.

Promote legal and ethical alluvial gold extraction and source practices in full compliance with national and international industry's best practice rules, standards, guidelines and regulations.

In 2021 the Cabinet approved the Alluvial Mining Policy in its Decision No; 238/2021 that reserves the alluvial mining activity and export of alluvial gold for PNG Citizens only. From about 80,000 plus people engaged in the alluvial sector, only 10% have proper Alluvial Mining Lease (AML). About 90% of them are operating without a license from MRA.

Alluvial Mining Lease holder and a foreign investor can enter in Joint Venture on 51/49 benefit sharing arrangement, and joint venture between AML holders and Provincial Governments is encouraged to develop alluvial gold. Morobe Provincial Government is one example that AML holders and Provincial Government are partnering to mine gold under AML.

Policy Focus Area 3: Sourcing of Gold off shore

Policy Goal: To meet the supply requirement for the onshore Gold Refinery

State ownership of gold is transferred forthwith to a private firm when the private firm applies and secures the right over a tenement. This arrangement is referred to as royalty-taxation regime in which the State only benefit from dividends paid on its equity contribution.

With this royalty-taxation regime in place, the guarantee of adequate State gold supply consistently reaching the Gold Refinery & Mint for production of gold bullion is at stake, and may undermine the effort of GoPNG to develop a gold refinery and mint, and associated industries along the gold value chain in PNG. Unless radical changes are made immediately for State to own its share of dore gold in existing Mining Development Leases, the State has to explore alternate arrangements to manage this supply risk.

Key strategies:

1. Making PNG Gold Refinery Competitive at the world stage

PNG Gold Refinery shall establish itself as a competitive player at the gold global stage, and shall set its gold prices at the international competitive gold price levels to fetch dore gold from gold mines around the world to support the onshore production of gold bullion.

2. Consolidate supply for onshore processing

There is no guarantee that alluvial gold mining alone in PNG will adequately support the onshore operation of PNG Gold Refinery & Mint. To address this supply risk, PNG Gold Refinery & Mint will enter into commercial contracts with gold mines around the world, and shall take this measure to consolidate the flow of dore gold supply to the PNG Gold Refinery & Mint for gold bullion production in PNG.

3. Market for existing mines in PNG

Offering of premium prices to gold mines around the world may be useful to allow gold abroad to be sourced in to support the operation of PNG Gold Refinery & Mint. PNG Gold Refinery & Mint therefore will establish a domestic market, and shall negotiate purchase-sales contracts on competitive prices with existing gold mines in PNG, to acquire their dore for the purpose of producing and storing gold bullion in PNG.

4.2 Downstream Processing and Value-Adding

Policy Focus Area 4: Onshore Gold Refining

Policy Goal: Development of a recognized and competitive gold downstream processing industry.

In order for the GoPNG to achieve the resource value optimization objective, refining is the most critical activity in the minerals value and supply chain. The GoPNG must, therefore, employ consistent effort to support the development, establishment and regulation of refining and minting gold in PNG.

Key strategies:

1. Establishment of PNG National Gold Refinery

The State will promote national content in the establishment of the business aspect of the PNG Gold Refinery.

A PNG Gold Refinery shall be built and operated either solely by State or a State Nominee, or through commercial partnership with a private entity having met the

necessary accreditation and standards and the financial capacity. The former shall have the majority shareholding in the joint venture company.

2. Secure or Guarantee Doré Supply for onshore downstream processing and value-adding

(a) Mineral Production Sharing Agreement

Production Sharing Agreement regime under this Policy must strive to ensure there is consistent doré supply from the gold extractive activities to support the Gold Refinery program.

(b) Control on Export of Raw Gold

The Policy goal is to effectively control and regulate the PNG gold industry, and to support the Policy objectives for the industry, by minimizing the export of raw gold and minerals mined or recovered in PNG. This control will apply without exception across the AAM sector and all current and any future mining development and production sharing agreements.

This control is a necessary part of this Policy and goes beyond the quantitative restrictions imposed by much larger gold producing countries than PNG where the commercial operation of multiple refineries can be commercially justified and sustained³, and which are not experiencing the abuses and malpractices currently occurring in PNG's gold industry.

The control on the export of gold and minerals is essential to the successful operation of the single gold and other minerals refineries to be established in PNG. Under this Policy in the context of the relatively small volume of annual gold and minerals production in PNG and for the certain achievement of two of the principal objectives of the Policy, being:

- I. transparency for the first time in PNG of the actual gold and other minerals production, which will in turn enable the more accurate assessment and collection of taxes and royalties due on that production; and
- II. the termination of costly malpractices that have plagued the PNG gold mining industry and, in particular, the alluvial gold mining sector, for decades.

The Policy also proposes enforcement of compliance on operating mines, bound by Mineral Development Contracts under the Tax Royalty Concessionary Regime with respect to offloading of the contractually prescribed doré volume for onshore processing and refining.

The control on the export of gold and minerals, and the requirement by appropriate legislation that all gold and minerals mined or recovered in PNG must be refined through the proposed single gold and other mineral refined in PNG will support achieving the objectives of NEC Policy decisions and this Policy.

³ China and Canada, the world's top five gold producing nations, have quantitative export restrictions on all raw gold.

- (a) Regional or Bilateral Economic Arrangements for Refining in PNG of foreign gold

Explore and secure the country's interest in onshore gold processing and value-adding under regional or bilateral treaties and arrangements for PNG's importation of raw doré gold from neighboring country's' mines considering that PNG has consistently produced an average of 70 tons of gold per year over the last 10 years, which is below the prescribed processing thresholds of 200 tons for obtainment and maintenance of London Bullion Market Association (LBMA) accreditations by domestic refiners.

3. Support accreditation requirements for a Gold Refinery

Various international industry bodies including the LBMA, and ISO 24018:2020, have specific standards for gold and precious minerals along the gold supply and value chain.

The GoPNG through this Policy, and as required under an appropriate legislation, will assist the gold refiner to obtain accreditations with recognized international accreditation organizations, and certifications.

Policy Focus Area 5: Establish Minting Operations for coinage services for PNG as well other countries

A mint is an industrial facility which manufactures coins that can be used as currency. Whilst it is common knowledge that the main purpose of most minting operations around the World is to mint their own currency coins or of other countries, a mint can also utilize its industrial set up and technology to manufacture collectable coins and recognition metal or coin awards (medallions).

Currency coins have a legal tender face value, irrespective of their metal composition. The minting of gold and precious minerals into legal tender coins means valuable gold and precious minerals otherwise subject to various taxes can in most cases be traded, exported and import duties, sales taxes or value-added taxes.

These tax advantages for legal tender coins provides an attractive means for international trade and investment in gold and precious minerals in the form of currency coins.

Key Strategies:

1. Mint Operation for Coin Services

This Policy encourages the establishment of a single minting operation in PNG for the production of:

- (a) PNG's ordinary circulating currency coins and notes as when required by the Central Bank; and
- (b) gold and precious metal coins, including the National Bird of Paradise international investment grade PNG legal tender gold and precious metal currency coins, and minted gold and precious metal bars, for sale, trade and investment purposes in the domestic and international gold markets.

2. Coinage of PNG Kina and Toea



PNG Kina and Toea currency coin will be minted here in PNG in this mint instead of the Perth Mint as currently is the case. Domestic minting is encouraged to basically reduce cost of minting overseas and enable effective and efficient circulation and management of the various denominators of the PNG coin currency.

3. ***Production of Currency Coins for other Countries***

The PNG Mint to adopt the best and latest minting technology to be able to compete at the global market in the coinage minting industry which can offer such service to other countries as another option for their currency coins minting.

4. ***Production of Other Collectable Coins and Medallions***

The PNG Mint to adopt the best and latest minting technology which will enable the mint to also produce other customized collectable coins as well as customized medallions for purposes of recognition and awards.

5. **Government Stakeholders Support to the Establishment and Sustainability of the PNG Mint**

The Government through its appropriate department and agencies will provide all necessary assistances through incentives/concessions, both fiscal and non-fiscal that are currently being offered to foreign direct and domestic investments during the construction of industrial facilities. Such incentives or government support will be provided through import tax exemption of required materials, machinery and equipment for construction, GST exemption, etc., to ease high cost of construction.

Similarly, to support recovery and sustainability of PNG Mint, incentives like corporate tax holiday, income tax holiday, or similar, etc., can be applied so long as it is legally in order. This will be facilitated and implemented at least for the first ten (10) years of operations. Where other relevant support is identified in the process, it will be considered for government support to the gold mint industry.

Whilst the government supports the PNG Mint for its purposes in country, the government through its appropriate departments and agencies led by DCI will market minting services to potential overseas clients through the appropriate programs on marketing and promotion.

Where there is a need for relevant alignments or realignment of sections or subsections, whichever the case maybe of such related policies or legislations to successfully establish the PNG Mint and effectively operate and sustain, such related sections or subsections of the concerned policies and legislations will be considered for review.

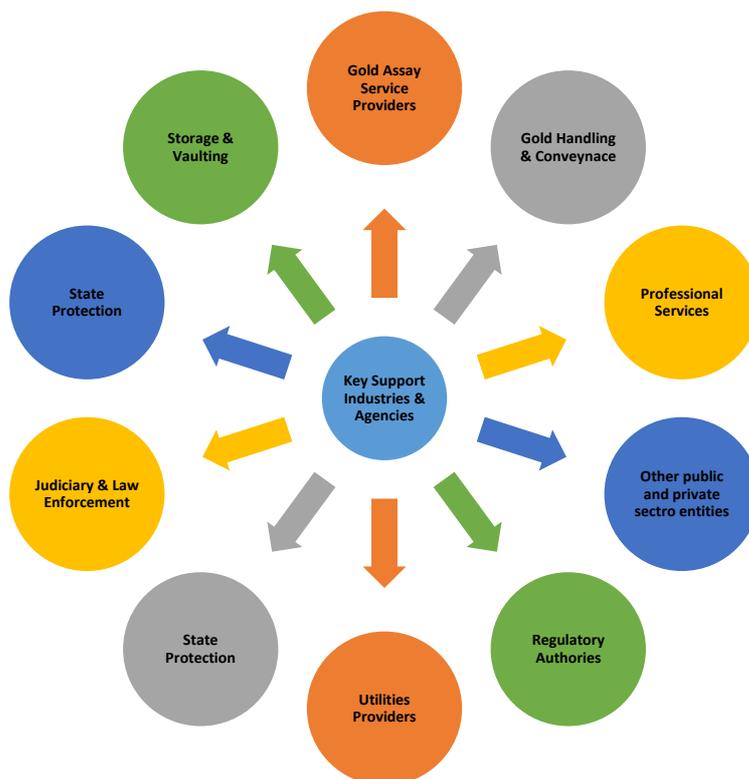
6. **Management and Operations of the PNG Mint**

The PNG Mint will be a parallel and specialized set up and operation complementing the PNG Gold Refinery and can be located within the refinery operations area or located

at a separate location from the refinery, whichever the case may be based on cost, effectiveness and efficiency of precious minerals /minerals inputs into the mint for finished products. Its operations can be managed by the same operator managing the refinery and must be a private sector management/operator. A separate management from the refinery can also be considered depending on its feasibility and government preferences.

4.3 Support Services and Industries in the Bullion Sector

Policy Focus Area 6: Development of vibrant PNG Support Services and Industries for the Nominated Entity and PNG Bullion



There are number of industry players which provide necessary support along the gold supply and value chains. This Policy needs these players to be robust. These include but are not limited to Assay Services for raw and refined gold and minerals; and Gold Storage, Vaulting and Handling services.

Key Strategies:

1. Assay Services

An Assay Service is critical for establishing the pure metal fineness or purity content of the bullion. An accurate and reliable assay service and report from an internationally accredited assay service is necessary to support the role of domestic gold trade and investments and the international sale and trade in bullion products manufactured in PNG.

Gold miners, traders and investors in domestic and international metals markets rely on the veracity of the declared assay report and marking on each bullion product as to the



fineness of the metal content of the particular product. This reliance means that the trader or investor need not require that the gold bar or coin to be smelted again, at its cost and inconvenience, prior to purchase to prove that the stated metal content of a gold product is correct.

Accordingly, under this Policy, the standing and procedures of the gold refinery, the assaying service must be without question and be subject to regular independent audit and certification by recognized accreditation organizations, such as the London Bullion Market Association, so that the assayed bullion products are accepted in gold markets and domestic and international gold traders and investors can confidently trade and invest in those products.

In addition, international standard gold vaulting and storage are key services to support the PNG gold industry.

This policy will provide the solutions to these critical support services through the establishment and operation of the following:

(a) National Assay Laboratory:

The accredited body will provide the principal and determinative Assay Service for all gold and minerals mined or recovered in PNG. The National Assay Laboratory to be accredited to ISO/IEC 17025 which is the international standard for accreditation for Testing and Calibration Laboratories where the laboratory test reports can be accepted anywhere in the world.

The Gold Refinery will also provide that assay service to foreign miners and as an independent testing service for disputed assays.

(b) Gold Refinery Assay Service and the Gold Production Cycle

This Policy recognizes the critical role the determinative Assay Service provided by the Gold Refinery will have to the smooth commercial operation of the PNG gold mining sector as a whole, and the refined gold value-adding industry which follows the refining of all gold and minerals mined or recovered in PNG.

It is a primary function of Gold Refinery under this Policy with relevant legislations will provide binding assay assessment and reports for all refining throughput for the National Refinery and, importantly, for the purchase by the Gold Refinery of gold and precious metal throughput from PNG gold miners.

(i) Policy Objective

This Policy objective is for the Gold Refinery Assay Service to be the central laboratory coordinating and conducting the assay of all raw gold and minerals, usually in the form of doré bars produced by the gold miners, when delivered by the gold miners to the National Gold Refinery.

The conduct of the assay in accordance with international and verifiable standards is a critical stage in the transition of raw gold and minerals from the mine to acceptance by the Gold Refinery and, importantly, the payment by the Gold Refinery to the miners based on the assayed pure metal content of each doré bar.

(ii) PNG Gold Production Cycle

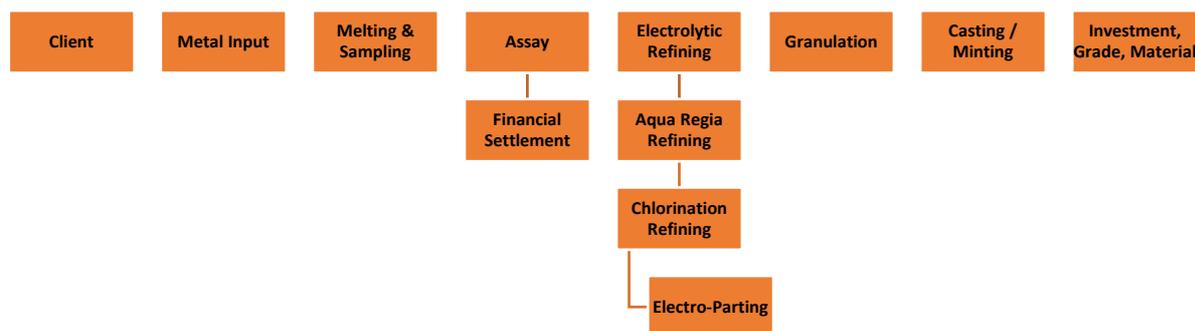
The gold production cycle means that in most cases the PNG gold miner will sell its gold and precious metal production in the form of doré bars to the Gold Refinery based on the initial test or assay of the doré bars.

There are occasions where gold miners wish to avoid the risk of gold price movements between the time the gold is mined, refined and ultimately turned into refined gold bars or other finished products and then sold.

That whole process when doré bars have to be manufactured by the gold miner, transported overseas, and the assay conducted in a foreign refinery. Also, gold miners need consistent cash flow to meet their debt funding obligations and ordinary operating capital needs.

The diagram below shows a simplified gold production cycle in which the PNG gold miner is paid by the Gold Refinery after the initial assay of the quality and quantity of gold, and then the Gold Refinery further refines the gold into saleable finished gold products.

Those finished products may, for example, be owned by the Gold Refinery or by the gold miner or one or more gold bullion banks providing financial accommodation to the gold miner.



Source: Gold Council

(iii) Roles of the PNG Gold Refinery

This Policy recognizes that the PNG Gold Refinery will have two key roles:

- Refiner



PNG Gold Refinery is the gold and minerals refiner in PNG and will produce international investment grade bars and other products which conform to international standards (LBMA).

All PNG gold miners, whether alluvial gold miners or small and large mining companies, must by law refine their gold and minerals through a domestic Gold Refinery.

- Gold Industry Financier

A Gold Refinery also has a critical role in the successful and profitable functioning of the entire PNG gold mining industry as the principal gold financier because it funds its PNG gold mining clients by providing various forms of financial payment as and when the gold miner produces gold for refining.

The Policy also recognizes that a Gold Refinery must, and will have, the financial resources to be able to buy the gold and minerals mined by PNG gold miners as and when delivered at the international competitive price.

2. National Gold Vault

The National Vault will provide PNG's international high-security multi-level underground gold and mineral storage facility at a strategic location.

The National Gold Vault will have airside bonded facilities for the import and export of refined gold products and it will provide its storage services for private domestic and international customers as well as PNG Government agencies, such as the Central Bank, and for regional and other governments.

Consistent with this Policy, the National Gold Vault will have branch vaulting facilities in major gold trading and investment centers, capital cities and other locations around the World to:

- (a) support the global loco gold swaps for gold refinery in the domestic and international trading and investment customers, and the similar service for Government agencies, including the Central Bank;
- (b) provide the "*at market*" inventory for the global sale and trading in international investment grade bullion bars and National Bird of Paradise legal tender currency coins;
- (c) provide reserves of National Bird of Paradise gold and precious metal coins to meet "*at market*" demands for redemption of National Gold Notes by holders of noted in foreign jurisdictions;



- (d) diversify the geographical location of the allocated gold bullion in the form of National Bird of Paradise gold and precious metal coins comprising the National Gold Note Reserve Account as required by law under an appropriate legislation; and
- (e) diversify geographical risk as part of the refiner's prudential risk management protocols for gold inventory and reserves, and gold holdings of the refiner or of third parties.

3. Ancillary Services

The bullion industry and trade involve the participation of various agents, including logistical and transport companies, security firms, custom authorities and insurance firms, and rules including custom rules and standards relating to conveyance and handling of gold.

The GoPNG will promote infrastructure and utilities development, safety, efficiency of handling, conveyance and delivery of gold through this Policy.

(a) Customs Rules and Procedure

Appropriate policy and legislative reforms are encouraged to facilitate trade in refined gold products by the gold refiner and the operations of the refiner is not disadvantaged.

(b) Transport

Gold refiner will be responsible for the transport of all raw and refined gold and minerals under its control. Under an appropriate legislation will provide for the necessary transport infrastructure at the nominated entity facilities to be constructed at strategic location.

The nominated entity will, through their network of PNG offices and buying agents, provide secure transport services for gold purchased from alluvial gold miners.

The refinery secures transport arrangements will likely include sub-contracting of land and air transport services from qualified PNG security transport services providers.

Under this Policy, all other PNG gold miners are responsible for the secure transport of their doré bars from mine site to the Gold Refinery receivable facilities.

(c) Security

A refinery will be responsible for providing all external and internal security for its facilities.

The refiner's security arrangements will likely include sub-contracting of security personnel from qualified and certified PNG security services providers.

(d) Insurance

A gold refiner is required to maintain specific insurances in addition to normal business and operational insurances.

The refiner's insurance arrangements will likely include insurances being place with and/or arranged by PNG insurance services providers.

(e) State Infrastructure and Utilities

Gold and minerals processing, refining and minting require consistent supply of electricity and water, as well as other infrastructure, including Airport and Port facilities, materials handling facilities and suitable roads

The GoPNG to ensure that critical infrastructure is provided for the establishment and operation of the refiner including that the necessary utilities are consistently available for its operations.

Policy Focus Area 7: Conformity to Standards

Key Strategies

1. *Promote development of Gold Assay and Quality Assurance Service Providers*

(a) LBMA Accreditation of Domestic Assay Services

Provide regulatory mechanisms for voluntary or compulsory accreditations to LBMA standards for domestic assayers (including refiners and independent assay service providers).

In the case of a Gold Refinery, this Policy, an appropriate legislation when enacted, a Gold Refinery's assay laboratory will operate in accordance with the LBMA requirements and, when the Refinery achieves formal accreditation with the LBMA, it will be mandatory that it continues to operate in accordance with those standards as a condition of its accreditation.

(b) Promoting onshore establishment of assay services by International Gold Assayers

Appropriate interventions to be adopted to promote the investment, establishment and operational presence in PNG of internationally accredited assay service providers that are able to offer broad spectrum of independent quality and quantification services for minerals.

(c) Accreditation of national assayers to regional assay certification bodies

Promote collaborations amongst Public Institutions responsible for accrediting quality certification and standards regional accreditation bodies (such as JAS-ANZ) and dissemination of standards and assessment and certification of national assay laboratories.

(d) Establishment of Hallmarking and Official National Standards

The National Mint will have the sole responsibility for the hallmarking of all refined gold and precious metal products produced by a gold refiner.

Other private assay offices accredited by the recognized accreditation body can also carry out the hallmarking of derivative gold products, including jewelry, produced from refined gold and minerals produced by the gold refiner.

PNG membership under the International Convention on Control and Marking of minerals must be the long-term goal for the State.

2. *Ensure safe and efficient Gold Storage and Vaulting and Handling of Gold*

(a) Development of Domestic Gold Vaulting Infrastructures and Gold Carriers.

This Policy proposes that, in addition to the National Gold Vault, the regulatory framework be provided for domestic vaulting infrastructure to be developed, maintained and operated in conformance to credible and transparent vaulting of gold as prescribed and this includes the domestic upgrade of banks and currency dealers presently conducting currency vaulting and operations to cater for storage of bullion by domestic bullion holders on either allocated or unallocated accounts.

(b) Efficient Procurement of international gold vaulting or storage services for State's Gold.

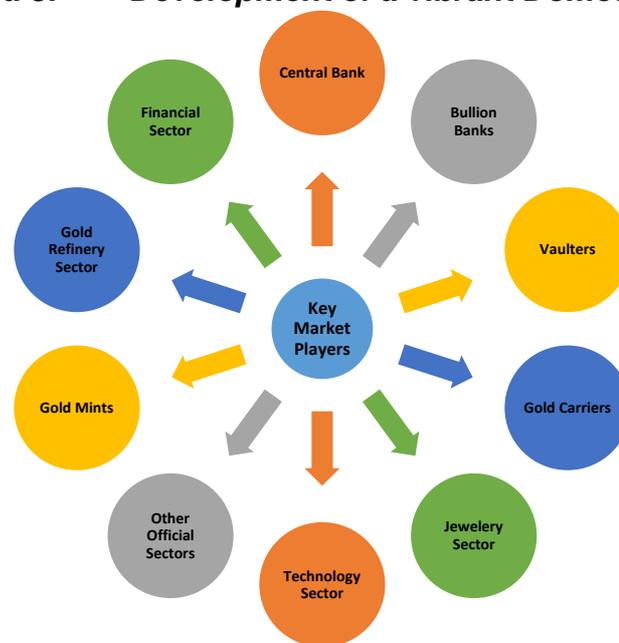
The State's gold reserve to be securely stored in the Central Bank's current facilities or other arrangements. In each case, the objective is to provide international standard storage facilities in PNG and in selected foreign jurisdictions.

3. *Institute regulatory measures to promote safe and credible handling of Gold*

The regulatory framework provides for conveyance and handling of consignment or conveyance of gold conform to industry standards, including LBMA standards and for the gold handlers to maintain and conform to best industry standards and practice and develop integrity through strategic initiatives. Conformance to these standards give credibility and trust that the bullion originating from PNG has not been altered or tampered with along the supply chain.

4.4 Domestic Bullion Ecosystem

Policy Focus Area 8: Development of a vibrant Domestic Bullion Ecosystem



This Policy provides the impetus for developing the basic sectors including refinery, minting, assay, storage, vaulting and trading, logistics and transportation, manufacturing technologies, and jewelry-making. These describe the areas that are development prospects for the domestic bullion ecosystem.

1. *Gold Bank Accounts*

The Central Bank will provide gold depositary services and accounts, including physical gold accounts.

2. *Gold Bank – Central Bank*

The Central Bank by law will be the gold and minerals-based bank in PNG and will provide gold and minerals financing and domestic and international trading services to the PNG gold industry.

In addition, the Central Bank will also provide domestic and international trading services to the PNG gold industry.

Key Strategies:

1. **Establish one-stop-shop for gold bullion production & trade**

For this Policy to realize its full potential, cluster of sectors need to be interconnected. Clusters of various sectors are groups of inter-related sectors that through their existence and functions compliment and support each other with their respective business provision in a sector or industry. Clusters will consist of companies, suppliers and service providers, as well as government agencies and other institutions that provide education, information, research and technical support to a regional economy.

In the proposed PNG gold bullion ecosystem, the cluster of various sectors will include mining sector, financial sector, transport sector, banking sector, information and communication sector, social sector, and economic sector.

2. **Improve and expand financial sector**

To add value to the production of gold bullion in the tertiary sector, this Policy further suggests improvements for and expansion and modernizing of PNG financial system. A sound and modernized financial sector that encompasses enablers of derivative markets, and strong government regulation to regulate the operation of a gold bullion derivative market allows gold bullion backed securities to be commercialized and traded. An improved financial system that supports real time transactions is necessary for PNG to participate in the international gold bullion markets.

3. **Create reliable domestic gold bullion markets**

For gold bullion to become a tradable commodity, a gold bullion market must exist to allow buyers and sellers to convene and perform transactions.

Hence, to buy and sell gold bullion domestically, the gold bullion policy proposes for establishment of gold bullion market mechanism that enables gold bullion to be traded in the domestic financial sector.

4. **Gold as an Input to Industrial Manufacturing**

Gold in its refined form is also a requirement to the manufacture of various high-tech products as well as other social and health-based product. Some of the industrial uses of gold are includes;

- Jewelry, decorations and medals,
- Electronics Sector,
- Space exploration,
- Dental,
- Glass manufacturing,
- Gilding,
- Manufacturing,
- Drink food,
- Cosmetics/beauty, and
- Printing.



This policy in addition to its main background intend focus on the influences of gold on PNG fiscal policies, it intend to also explore international market opportunities and also try to develop industrial manufacturing opportunities in PNG in the above industries where gold is an input into their respective production operations.

- ***Decorations, jewelry, and medals:***

The largest use of global gold is in making jewelry and other decorative gold products. It is easy to forge and can be easily used to create luxurious and elegant pieces.

Gold is used to increase the value of a large range of medals, badges, etc. Gold leaves are traditionally used to glorify works of art. It is surveyed that around 52% of the world's total gold is used for the purpose of making jewelry.

- ***Electronics industry:***

There is a widespread application of gold in the electronics industry due to its unique properties such as heat and electrical conductors, softness and it can be easily stretched or coated into a thin coating. Gold is used in mobile phones (50 mg in each mobile phone). Gold is also found in computer chips or laptops for easy transmission and receipt of information.

All sophisticated electronic devices such as smartphones, calculators and GPS positioning devices use gold in small quantities. Gold is used in switches, relay contacts, solder connections, connecting wires and extension chips.

- ***Space Exploration:***

Gold is used in space research. A thin coating of gold is used for shields and visors. Gold particles can reflect infrared radiation coming from the sun and help maintain the temperature on darker panels and visors. Gold is used on space vehicles to protect against the reflection of infrared radiation and stabilize the core temperature. Gold is used as a lubricating element among the important parts of a moving spacecraft.

- ***Dental:***

Gold has played an important role in the dental industry since ancient times. It is mainly used in crowns, patches, and bridges. Gold is a durable metal and can be in constant contact with the mouth.

- ***Glass manufacturing:***

Gold is used for different purposes in the glass manufacturing industry. A small amount of this metal is added to the glass to create a rich pomegranate color. Cranberry glasses and 'Ruby gold' glasses are used to make valuable décor items. The most significant use of gold in this industry is to provide special glasses for climate-controlled buildings. Gold-plated glass can reflect solar radiation and keep building temperatures low.

Special glass of this type reflects the internal heat to maintain room temperature in winter.

- ***Gilding***

Gold can be beaten into very thin pieces, known as 'golden leaves' because of its softness. These gold leaves are used as a decorative enhancements of furniture mold. Gold is used to cover the exterior and interior of the building.

- ***Manufacturing***

Gold is often used in the manufacturing industry due to its conductivity and thermal reflection ability. Gold can be used as a lubricant in the engineering industry because it has the ability to cold weld resistance.

- ***Drink and food***

Some restaurants use gold leaf as a decorative ingredient for their luxurious dishes.

- ***Cosmetics/Beauty***

Gold is often used in the cosmetic industry as an element in moisturizing topical skin care creams and lip balms. Gold nanoparticles are used in some beauty products.

- ***Printing***

The popularity of gold ink is growing in the printing industry as it can produce high-quality and durable images. The gold coating can protect CDs and DVDs from scratches. In addition, gold is also used in 3D Printing.

4.5 Strategic Control of Minerals and National Gold Reserves

Policy Focus Area 9: Strategic Control of Gold in the Gold Supply and Value Chain

Policy Goal - Exercise of State's Interest in the Bullion Sector

In a free-market economy, a state's participation in an economy is only necessary for the provision of essential services (beneficial to public welfare) and strategic activities that can give rise to greater developmental impacts. The direct commercial participation by the State in PNG's supply and value chain of gold bullion will help to achieve this outcome for PNG. The State's participation can create greater leverage for the State to exercise direct control over the country's gold along the key supply and value chain.

Key Strategies:

The key strategies for enabling the State to exercise its interest are:

1. ***State's Interests through the nominated Entity Group***

The states nominated entity, will be the sole entity or an equal joint venture partner, as the entity to represent the State's development and commercial interests in key supply and value chain stages of the value-adding to PNG gold and minerals.

This Policy advocates for an appropriate legislation to provide for fiscal arrangements between the State and the nominated state entity for the collection and transfers of gold proceeds to the State's treasury to be based on global best practices and principles.

2. *Participate in in key gold supply and value chain opportunities*

The Policy proposes for the state-nominated entity to make commercial participation in key activities at critical supply and value chain stages through its subsidiary vehicles. Each Group subsidiary participates in a unique activity or vertically integrated activities across key supply and value chain stages.

Where appropriate, these activities may be undertaken in partnership with internationally reputable partners with relevant industry recognition and affiliations; expertise and experience; and access and network in the global bullion supply chain and trade.

Policy Focus Area 10: State Ownership and Control Structures for Gold

Policy Goal: Ownership Title, Rights and Interest in Gold is fully vested in the State

In almost all jurisdictions that hold State official gold reserves, the ownership of the gold reserves is exclusively vested in governments of sovereign States. The institutional framework relating to holding and management of the official gold reserves differs between countries. For example, the UK's official gold is entrusted on his Majesty's Treasury. The Bank of England manages the official gold for His Majesty's Treasury under an annual agreement. The US Government's official gold reserves are held by the US Department of Treasury, while the US Federal Reserve Bank keeps the official gold reserves in its vault for the US Treasury under a custodial arrangement.

In the case of the Independent State of Papua New Guinea, the title, rights and interest in the official PNG gold reserves under this Policy will be solely vested with the State.

The key strategies to support prudent management of the State's gold reserve by its legal representatives, assignee, trustees and successors in title to ensure maximum benefit flow to the State and the country are:

Key Strategies:

1. *Gold Management Structure compatible with the Gold's role in the fiscal operation of GoPNG.*

The State's share of gold under the MPSAs is intended to support the GoPNG in the performance of both its fiscal and monetary policy operations in order to achieve broader development goals of PNG. Under the recent reform to the legal framework covering the mining sector, the MRA is granted the rights over the mineral resources under trust for the State. The Mineral Resource Authority (MRA) can transfer or assign its rights to a State Trading Enterprise to carry out the commercialization of the mineral

resources. The miners, under the proposed reform, to pay the GoPNG's share of the net balance of the profit gold to a State Trading Enterprise, which immediately collects on behalf of the GoPNG, for commercialization. The State's share of gold under this arrangement only supports the fiscal operations of the GoPNG.

2. ***Legislative framework to provide for the concurrent assignment or transfer of rights in respect of Monetary Gold to the Central Bank***

The State's share of the profit gold to be paid directly under viable arrangements to a State nominated entity and the Central Bank (the latter subject to further arrangements below), respectively, pro rata to the State prescribed share of the profit gold in each batch of production or sharing period for their respective application.

Under the IMF's international standards for macro-economic accounts, gold held by the monetary authorities as official reserves is classified as monetary gold and a financial asset. Thus, the State's gold allocated as monetary gold shall be immediately placed under the custody of the Central Bank

3. ***Creation of effective and prudent management structure for the State's monetary gold.***

The Central Bank to act as an agent of Department of Treasury (DoT) with respect to the official gold. The Central Bank and DoT have been implementing the Central Banking Act 2000 by which the Central Bank under a Memorandum of Understanding (MoU) with DoT has been appointed as the authorized agent to act for DoT with respect to Treasury's Bond.

The overall management framework and principle for this policy will align to the above arrangement. The Government's debt instruments serve, on the one hand, to raise debt capital domestically and to finance its budget deficits and, to assist the Central Bank to vary an official interest rate in order to manage the circulation of the Broad Money Supply (M3), hence the level of domestic economic activities and overall inflation in PNG. Monetary gold can also serve the foregoing role under this policy.

Policy Focus Area 11: Governance Framework for State's Gold

The full governance framework should be clearly set out in a Governing Act.

Key Strategies:

The key strategies promoting governance are:

1. ***Effective Coordination and Oversight over the Mineral Production Sharing Agreement (MPSA) of Gold Production Outputs***

The National Gold Committee will provide the oversight and coordination of the gold production output.

MRA through the National Gold Committee is responsible for the enforcement and compliance aspects in the mining sector. MRA coordinates and ensures that miners comply with the MPSAs.

In accordance with international practice, the State control over the implementation of the MPSAs should be exercised on behalf of the State by the MRA in collaboration with other appointed or delegated government bodies within their respective authority.

The authorized representatives should have unrestricted access to the sites comprised in the mineral production sharing agreement including documents relating to the conduct of the operations of the miners for monitoring and compliance.

The authorized representative may, as a supplement to the primary inspection and audit conducted by the National Gold Committee assist the state-nominated entity in overseeing the entire aspects of the smelting and casting into doré gold bars at the smelting site, taking the physical count of the doré gold bars, ensure that the gold is collected at the specified location by the authorized carrier or an authorized agent of the carrier under supervision of the authorized personnel from the state-nominated entity, and ensure on behalf of the State that the doré gold bars are transported under secured consignment to the Gold Refinery.

2. *Integration of fiscal and monetary gold with the national fiscal and monetary frameworks*

The functional distribution of gold must be appropriately integrated with national budgets and the overall fiscal framework. A good fiscal framework is vital for supporting effective management of the State's share of the profit gold. Good fiscal framework provides for fiscal rules, which in turn governs spending, and improves fiscal discipline.

The total share of the profit gold that the GoPNG is entitled to or entitled to be paid under the mineral producing sharing scheme that is based on the splitting of the physical gold in a relevant sharing period is allocated principally into fiscal gold and monetary gold subject to and in accordance with the distribution arrangement, which must not be inconsistent with the broader fiscal frameworks.

For optimal outcomes, the gold distribution arrangement may be linked to the performance of key variables such as the Non-Resource Primary Balance, or Normal and Additional mineral revenues. The two variables in relation to the distribution of gold into the respective categories are just two, but key ones, of the many sets of possibilities.

3. *Prudent Governance over the Fiscal and Monetary Gold*

The Central Bank must introduce appropriate operational level policies including Risk Management Policies to ensure that the gold reserves are effectively and safely managed. More so in the case of monetary gold, the monetary gold are fiduciary assets placed under the fiduciary care, control and authority of the Central Bank. The extent of the Central Bank's ability to exercise its fiduciary rights and authority over and actively manage the monetary reserves and related activities under the NGP are to be specified in the agency agreement. This includes the accounting treatment in respect of all the assets and liabilities and all related activities arising under the National Gold Bullion



Policy (NGP), and the international accounting standards (IAS) on fiduciary assets may apply accordingly to that effect.

Moreover, the control, management and disposal and the proceeds arising thereof must be subject to proper audits by both the independent auditors and the Office of the Auditor General in accordance with the Audit Act and the audited report shall also be provided to the Treasurer and the Cabinet.

Moreover, the Treasurer should be able to inform the Cabinet about the activities of the State's gold regularly, including the short, medium- and long-term strategic and operational level plans as well key or pertinent risks and mitigative measures. The Cabinet and the Treasurer may also give approval on certain matters specified in the agency agreement and the governing law. Parliament will also be made informed of the operation of the NGP in every fiscal year by the Treasurer.

CHAPTER 5: MANAGEMENT OF THE POLICY

5.1 Department of Commerce & Industry

The Department of Commerce & Industry who is mandated to promote and facilitate downstream processing activities in PNG, will coordinate and monitor the implementation of this policy.

For the purpose of supporting the operation of on shore Gold Refinery, the Department of Commerce & Industry will collaborate with the Mining Department on the upstream production for sourcing of gold ore, and the Department of Treasury on the trading of gold bullion in the gold markets.

5.2 Mineral Resources in Primary Stage

Minerals are the property of the State as per Section 5 of the Mining Act 1992. State shall exercise that right to ensure its mineral resources are managed, extracted and refined onshore. State owns the minerals being mined through its stake in equity participation in the mining project.

A mechanism can be adopted by the nominee of the State to manage the State's rights and interest in new production sharing agreements and existing projects whose contractual provisions have been revisited.

5.3 Transfer of State's Rights - Merchandise and Monetary Gold

Current regulatory frameworks prescribing management process for the extractives sector (mining) will require some reworking to capture the provisions in this Policy.

This may include amendments to existing legislative frameworks that govern benefit sharing to include production percentages that belong to State, interest and reserves managed by the Central Bank, and certain regulatory functions that fall under MRA.

5.4 State owns National Gold Reserve

It is prescribed that under this Policy, the official gold reserves in gold bullion must be owned outright by the State. The management and operation arrangement may be drawn from the UK or US's models where the Department of Treasury is given the powers to manage these official gold reserves.

5.5 Central Bank acting - agent of the Ministry of Treasury

The Central Bank already has the necessary expertise and resources that are fundamental to the efficient functioning and achievement of the Policy in respect to the management of the State's gold reserve and it can continue to exert its mandated roles over national monetary and financial policies. This ensures stability in relation to holding the national gold reserves regardless of their source.

The Central Bank Act makes adequate provision for the Central Bank to manage the State's gold reserves. Under this Policy and through future consultations, prescribed

provisions to amend the ownership of these powers to ensure that they are exercised through collaborative consultations with the State.

The Central Bank may act as an agent for State under Section 53 of the Central Banking Act 2000 with respect to the management and operationalization of the Policy in respect to the management of the State gold reserve. The Central Bank and Treasury have already been implementing Section 53 provision by which the Central Bank under a Memorandum of Understanding with Treasury has been appointed as the authorized agent to act for Treasury in receiving and dealing with the applications for the inscribed stocks and make payments of monies due on the inscribed stocks.

The overall management framework and principles for the Policy in respect to the State's gold reserves should be analogous to the existing arrangement. Any other foreseeable arrangements to supplement or complement must be done in a collaborative manner.

Government debt instruments, leading on from the above, may in essence serve both the fiscal and monetary functions in that, on the one hand, the GoPNG raises debt capital domestically to finance its budget deficits and, on the other hand, the Central Bank to vary the official interest rates and is able to control the circulation of the Broad Money Supply (M3), hence the level of domestic economic activities and overall inflation in the country.

5.6 Distribution of State's Profit Gold into the respective categories of use and functions

The gold distribution arrangement be made subject to the performance of key variables such as the Non-Resource Primary Balance (NRPB) or the concept of normal and additional mineral revenues. The actual distribution of gold into the three respective categories may be affected in accordance with legislatively prescribed distribution formula. The periodic allocation of gold bullion will reflect the State's current fiscal position of the GoPNG and broader macroeconomic circumstances of the period.

5.7 Fiscal Gold

The fiscal gold serves fiscal policy operations. Payments of the physical gold under the Production Sharing Agreements represents the foregone fiscal benefits, being the benefits that could otherwise have been paid directly in money equivalent terms to the GoPNG via relevant fiscal instruments.

A greater percentage of the State's share of mineral production under this Policy proposed PSAs is expected to support GoPNG's national budgets and fiscal operations. Fiscal arrangements will dictate how proceeds from the sales of the fiscal gold is managed, where it is transferred to and what it is used for by the relevant administering authorities. The Policy makes these provisions, including that proceeds of international trade of fiscal gold may not immediately be remitted but may be held offshore in foreign currency.

5.8 Monetary and Financial Gold

One of the principals underlying purpose of the Policy is to increase official gold reserves of the State.

Legislation to govern this function exists but may be amended based on past experience and informed by approaches to gold reserves management as observed in Switzerland, South America and in other economies with similar aspirations and sector development experiences. Policy may define thresholds for GoPNG and Central Bank (in terms of the number of Good Delivery Bars, or the maximum weight in ounces of the entire Good Delivery Bars or the Dollar value of the total Good Delivery Bars held in reserves at marked to market value).

A legal mechanism to be established to improve the ability of the State to build the nation's gold reserves and ensures so far as practicable reserves are built from London Good Delivery Bars, PNG international investment grade bullion bars, National Bird of Paradise legal tender gold and minerals and National Gold Notes backed by Bird of Paradise coins and all of which are sourced from PNG gold and minerals.

5.9 Management and coordination of Gold Production

Mineral Resource Authority is primarily responsible for carrying out the enforcement and compliance aspects for mining of gold and precious minerals under existing legislation.

This Policy provisions authorize representatives of the regulating entities to have the right of unrestricted access to the sites comprised in the mineral production sharing agreement. In addition, the provisions cater for monitoring and compliance, and onsite verification and registry of any outputs.

The authorized representatives of the proposed National Manufacturing Authority will oversee the entire aspects of the gold and minerals refining, value-adding and handling process as specified in this Policy.

5.10 Management of Merchandise Gold

Other than the payments of royalties, Kumul Minerals wholly retains the State's share of the profit mineral for its purposes and only pays corporate income taxes to the GoPNG. Consistent with other internal practices especially in the case of production sharing agreement for oil, Kumul should ensure only a certain share of the sales proceeds is retained and the balance is wholly paid to the State's treasury.

5.11 Management of Monetary Gold

An appropriate legislation will set out the broader governance framework for the Policy, including the governance structures and various bodies together with their duties and powers.

In respect to the State's gold, a legislation should set out the broader governance framework for that important aspect of the Policy, including the governance structures and various bodies together with their duties and powers. Implementing details and arrangements are to be elaborated in a MOU.

The Central Bank currently exercises the oversight function over the Policy in respect to the State's gold reserves. All major activities on the operations of the Policy in respect to those reserves are subject to the Central Bank oversight and vetting to the extent set out in an MOU and Legislation.

5.12 Monetary gold as fiduciary assets under the care of Central Bank

Monetary gold are fiduciary assets placed under the fiduciary care, control and authority of the Central Bank. The extent of the Central Bank's ability to exercise its fiduciary rights and authority over and actively manage the monetary reserves and related activities under the NGP are to be specified in the agency agreement.

This includes the accounting treatment in respect of all the assets and liabilities and all related activities arising under the Policy. International Accounting Standards (IAS) on fiduciary assets may apply.

CHAPTER 6: INSTITUTIONAL ARRANGEMENTS

GoPNG will play a significant role in ensuring the effective coordination and implementation of this Policy. The following institutional arrangement will oversee and monitor this policy.

6.1 The National Gold Committee of PNG (NGCPNG)

The NGCPNG shall provide oversight on the implementation of this Policy, on behalf of the government. NGCPNG will align with existing regulatory systems for upstream industry and provide overall leadership, advisory, coordination and monitoring of the implementation of this Policy on downstream processing activities including sourcing, refining, minting, storing and trading of gold. This requires unified action by policy agencies, regulators and private sector to create the enabling environment to source gold from suppliers (domestic/international) for downstream processing, trading and government purposes.

The composition of the NGC shall be:

- Department of Commerce and Industry (Chair);
- Department of Prime Minister & National Executive Council;
- Department of Mineral Policy & Geohazards Management (Deputize);
Department of Treasury;
- Department of National Planning
- Bank of Papua New Guinea; and
- Mineral Resources Authority.
- Proposed National Manufacturing Authority

The Committee through the chair will report to the Minister responsible for Commerce and Industry on matters that requires Cabinet approval and directives. The Committee will undertake all administrative and technical decisions regarding this Policy. Hence, DCI as the chair will provide a Secretariat Unit to provide the secretariat services to support the committee. The Government through the committee membership makes available resources to fund the cost of the committee on an annual basis.

A Terms of Reference will be developed to set out the specific roles, functions and activities of the Committee.

6.2 Mineral Resources Authority

MRA continues to be the regulator in the production of gold in the upstream stage.

6.3 National Manufacturing Authority (NMA)

This Policy acknowledges the regulatory gap brought about due to downstream processing activities, both in the extractive and non-extractive industries, therefore will establish the regulator (National Manufacturing Authority) that will regulate the downstream processing and manufacturing activities of gold bullion and other extractive resources in the country.

As this regulation will involve downstream processing, this function will fall explicitly under the auspices of Ministry of Commerce & Industry. Department of Commerce & Industry therefore is obligated by this policy to establish an Authority that will regulate the gold bullion production and its trading in harmony with existing legislations.

Bank of PNG

BPNG shall manage, save and trade gold for purposes of the government on behalf of the GoPNG while executing its normal regulatory role on the trading of gold and other minerals.

Policy Oversight, Coordination & Monitoring

The diagram below shows the institutional arrangements for core leadership and oversight, coordination and monitoring for this Policy



CHAPTER 7: ADMINISTRATION AND IMPLEMENTATION

Key Organizations and their Responsibilities in implementing this, Policy.

7.1 National Executive Council

The NEC shall provide the overall policy guidance, direction and resources towards the development of a vibrant domestic gold bullion market and the Government's role in sourcing, refining, storing and trading of State gold in the country.

The Minister for Commerce and Industry after receiving policy submissions from the NCGPNG shall report to the Prime Minister and/or the NEC through the normal process on matters that relates to value chain of gold bullion from upstream, downstream and trading of Government gold in the country.

The respective Ministries through their representatives in the NGCPNG will provide oversight, and leadership over the enforcement of their respective regulatory powers to ensure this Policy in implemented within their mandatory responsibilities and functions.

7.2 Lead Implementing Government Institutions

(a) Department of Commerce and Industry

Department of Commerce & Industry (DCI) is the lead Economic Agency responsible for the overall development, management, and supervision of economic and industrial development policies. DCI draws its mandate from various legislations, Ministerial Determinations, Policies and NEC Decisions particularly on matters relating to private sector development and growth. It achieves this through its statutory commercial arrangements on foreign direct investments, sectoral impact project development, micro small and medium enterprises, industrial centers development, trade and national content development as mandated by the NEC.

DCI, in its capacity as the central policy coordinating body for the ministry, will develop appropriate commerce, investment, industry and related policies and programs to support the downstream processing of natural resources including gold and minerals. DCI will provide the leadership in ensuring all gold resources belonging to the State will be downstream processed onshore to create a strong vibrant domestic gold market, also storing and trading of gold bullion for Government purposes.

(b) Department of Mineral Policy and Geohazard Management (DMPGM)

Department of Mineral Policy & Geohazard management (DMPGM) is responsible for policies relating to minerals and geohazards management and in ensuring an internationally competitive mining industry is developed in the country. DMPGM shall play an important role with MRA in ensuring alignment of its current policies and regulatory practices to facilitate onshore downstream of gold and pave active national participation through State's share of gold ownership, refinery, trading and storage of gold bullion with BPNG.

(c) Mineral Resources Authority

The MRA is the government's competent regulatory authority on all exploration and mining activities in the country. It provides regulatory services to companies holding exploration and mining tenements in Papua New Guinea. MRA conducts scientific surveys and explorations to understand better the geology and minerals in PNG. It manages all gold and other mineral data. With its capacity in issuing exploration licenses and tenement license for mining activities, MRA shall make necessary amendments within its regulatory functions to ensure onshore processing of gold and will make mandatory provisions and requirements to increase equity percentages and participation through competent operator(s) nominated by the State.

(d) Department of Treasury (DoT)

DoT is the central fiscal authority of the GoPNG. DoT has the authority to carry out monitoring and implementation of the public revenue collection and national budget allocation and observe financing to government departments. It also has authority over public finance and expenditure planning, customs monitoring, indirect and direct taxation, cash-flow management, annual national budget formulation, and broader macroeconomic policies aimed at creating a conducive macro-economic environment for investments and private sector growth.

DoT shall work with the Central Bank to ensure that the State's gold is managed, saved and traded in accordance with the instructions and directions given by the Government through the NGCPNG.

DoT, in its capacity as the national fiscal policy authority, will:

- allocate budgets for the sector under annual national budget appropriations bills;
- release timely operational budgets for coordination and implementation of this Policy;
- provide fiscal guidance and grant approvals on raising by implementing agencies of revenues other than monies appropriated under the national budget appropriation bills; and
- establish pro-investment macro policies to drive private sector investment and economic growth.

(b) Bank of Papua New Guinea

The Central Bank is established under the Central Banking Act 2000 to:

- confer upon the Central Bank certain functions and powers including formulation and implementation of monetary policies and regulation of the financial system;
- print Kina and circulate in the economy; and
- manage foreign exchange reserves including gold. Receive and store the gold reserves on behalf of the Government for safe keeping.
- Trade gold reserves on behalf of the government.

Under this Policy, the Bank of PNG will continue to manage the State's gold bullion reserve and trade it for financial purposes or adjustment of the level of reserves, interest bearing deposits, or use it as collateral for market loans, or debt-servicing purposes.

(g) Investment Promotion Authority (IPA)

The Investment Promotion Authority (IPA) is the government's competent authority for promoting, facilitating and regulating the business and investments registrations in the country. IPA promotes export of commodities to the World markets.

IPA also administers reserved activities, including alluvial mining in order to encourage national participation, create income earning opportunities, employment and improved quality of lives in the rural areas of PNG.

(h) Conservation and Environment Protection Authority (CEPA)

CEPA is the competent authority that ensures PNG's natural resources are managed well as much as possible to maintain environmental quality, human well-being and support improved quality of life.

CEPA Act 2014 gives CEPA its mandate to conserve and protect PNG's environment in accordance with the Fourth National Goal and Directive Principle (National Resources and Environment) of the Constitution. Hence, CEPA plays an important part in issuing environmental permit to every resource development project, including exploration and mining licenses.

(d) Lead Industry Regulatory Bodies and Representative Organizations

Industry bodies are the industry associations and industry partners that monitor the trend or emergence of new development and keep their members informed before such trends become a central part of the competitive dynamic of the sector. These bodies associate in exploring and promoting specific aspects of sustainable or responsible business practice in the industry. For gold bullion, the principal international industry bodies are:

I. London Bullion Market Association

- the principal global regulatory body for gold and minerals refineries;
- provides accreditation for gold and silver refineries which meet LBMA standards;
- regularly audits compliance by accredited refineries; and only LBMA accredited refineries are permitted to produce London Good Delivery Bars traded in global OTC bullion markets.

II. Gold Council

- global representative industry body for the gold industry;
- principal global market research and reporting body; and
- principal market development organization for the gold industry.

III. Other recognized accreditation organizations in regional markets

IV. Within PNG, the relevant industry bodies apart from the above government institutions are:

- PNG Chamber of Commerce - plays important role as representative voice of the community in the country by providing a unified approach to the government another association. Ongoing commitment for the development and growth of the country's economy.
- Business Council of PNG - peak body representing private sector in PNG across all sectors, promoting the importance and role of the economic growth, freedom and enterprises.
- Manufacturers Council of PNG – peak body for local manufacturers and downstream processors including those operating small-medium scale gold refineries in PNG. It advocates for and on behalf its members on all business matters and issues of concern to its members particularly on government policies and regulations, ease if doing business, and other issues that affects their businesses.
- NISIT – is the national standards competent authority responsible for overseeing all standardization, quality assurance and conformity assessment activities in PNG.
- Conservation and Environment Protection Authority (CEPA) – is the competent authority that ensures PNG's natural resources are managed well as much as possible to maintain environmental quality, human well-being and support improved quality of life. CEPA Act 2014 gives its mandate to conserve and protect PNG's environment in accordance with the Fourth National Goal and Directive Principle (National Resources and Environment) of the Constitution. Hence, CEPA plays an important part in issuing environmental permit to every resource development project including exploration and mining licenses.

(e) *PNG Gold Miners*

Miners in Papua New Guinea conform to the Mining Act 1992 and the Mineral Resource Authority Act 2018.

Miners extract gold and other minerals and smelt it into doré gold bars which until now have been exported offshore for refining in foreign refineries. Under this Policy and related legislation(s) when enacted, miners in PNG will be required to refine gold and other minerals mined or recovered in PNG.

Those having existing contractual obligations under the Mining Contract Obligations shall transfer 1/3 of gold mined to the nominee of the State to refined as well as the current 30% equity participation of the State to be transferred in gold and/or increase equity participation of State to 50% or more.

The Policy, as implemented through the gold related legislations will provide the specific provisions required to formally establish and regulate the new integrated downstream processing and value-adding industry and provide the necessary legislative infrastructure.

CHAPTER 8: MONITORING AND EVALUATION

8.1 Monitoring, Evaluation and Reporting

The Department of Commerce & Industry shall be the custodian of this Policy and will be responsible for periodic monitoring of strategic interventions and shall report to the Cabinet via Minister of Commerce & Industry on the progress of the Policy particularly on the downstream processing of gold bullion in the mining sector.

At the fourth (4th) year of the implementation, the Department of Commerce and Industry will undertake an evaluation exercise to measure the impact on the implementation of the Policy and shall report to the Cabinet via Minister responsible for Commerce & Industry matters.

The Department in the fifth year of implementing the Policy shall use the findings and recommendations will set the basis for further any required revision of the Policy for implementation in the next five (5) year period.

The report will be endorsed by the quorum of Committee members before the Minister responsible for commerce and industry presents it to the NEC.

8.2 Summary of Key Action Plans

Tabulated below are the summary of the action plans the Department of Commerce & Industry will coordinate in the implementation, and conduct periodic monitoring to track success of interventions, and evaluate to determine the impact of the Policy:

No.	Strategic Intervention	Action Plan	Output
1	State equity participation	State to participate in the equity investment in gold bullion production in PNG	State to have controlled interest in the gold bullion project
2	Regulation	An Act shall create a conducive environment for investment, and a regulatory authority to regulate the manufacturing activities in the mining sector	Production of gold bullion in PNG is regulated
3	Benefits accruing from gold bullion production	Devise and adopt a benefit regime that will channel benefits in the form of royalties, dividends and tax revenue to the government and the citizens	PNG net benefit in hosting gold bullion refinery is maximized
4	Downstream processing of gold	Negotiate and conclude a Project Agreement to construct and operate a gold bullion refinery in PNG	A gold bullion refinery is established and operational in PNG

5	Diversifying gold bullion sources	Identifying and securing refining throughput for the gold bullion refinery	Adequate volume of gold supply is secured to sustain the production of international standard gold and minerals in PNG
6	Gold bullion markets	Identify and facilitate trade of gold bullion in the physical gold markets and gold derivative markets	Markets for the gold bullion and gold derivatives secured

8.3 Monitoring Framework

The evaluation framework for determining the amount of the total refined gold as the cost gold must be robust as specified in resultant legislation that will govern this sector's operations / activities.

The cost and pricing information used in the valuation to be symmetrical to all parties, and each party can be able to establish its veracity.

Monitoring and evaluation (M&E) is the essential component for policy implementation to ensure success of the Policy. Monitoring framework designed below must be used in the Policy implementation to monitor and measure the success of the Policy actions addressing the Policy issues.

- The monitoring exercise will culminate in the evaluation to measure the impact of the Policy.
- The evaluation framework therefore will guide the evaluation to measure the impact of the Policy.

The National Gold Committee will oversee and coordinate the implementation of this Policy.

Annual and quarterly meetings, reports and briefs with relevant stakeholders will form the basis of the M & E.

Monitoring Framework (Tables below show the monitoring and evaluation framework for this Policy)

INDICATOR	DEFINITION	BASELINE	TARGET	DATA SOURCE	FREQUENCY	RESPONSIBLE	REPORTING
	How calculated?	Current value?	Target value?	How measured?	Schedule?	Who?	Where?
State equity participation	Shareholding percentage	0%	51%	Shareholding structure	Annually	State Nominee/MRA	National Gold Committee
Regulation	No. of regulatory institutions	0%	100%	Counting the institutions	Bi-annually	MRA	National Gold Committee
Maximizing net benefits	Accounting for smelted gold volumes	0%	10% of processed gold in PNG	Recording of smelted gold	Daily	Central Bank	National Gold Committee
Downstream processing	Gold refinery & mint	0	One refinery & mint	Monitoring the plant construction	Monthly	DCI /MRA	National Gold Committee
Diversifying gold bullion sources	Supply and purchase agreements	0	10 supply and purchase agreements	Signing of agreements	Bi-annually	MRA	National Gold Committee
Gold bullion markets	Futures and derivative markets	0	1 market	Trading of gold derivatives	Annually	Central Bank	National Gold Committee

Evaluation Framework (Tables below show the monitoring and evaluation framework for this Policy)

	INDICATOR	DEFINITION	BASELINE	TARGET	DATA SOURCE	FREQUENCY	RESPONSIBLE	REPORTING
		Calculated?	Current value?	Target value?	How measured?	Schedule?	Who?	Where?
Goal	PNG gold bullion ecosystem	Accounting for gold bullion ecosystem infrastructure and systems	0%	100%	Tracking the establishment of the gold bullion ecosystem	Monthly monitoring	DCI	DCI report
Outcomes	Rise in manufacturing activities in the mining sector	Total volume of processed gold	70 tons	200 tons	Gold observatory report	Daily	Regulator	Regulator report
Outputs	Gold bullion and gold notes	Volume of gold bullion and gold notes	0	200 tones	Gold observatory report	Daily	Regulator	Regulator report

CHAPTER 9: RISK MANAGEMENT

As the level of liquidity in the gold bullion business is considerably high, managing risk presents well known and manageable challenges. This Policy offers strategic risk aversion measures based on the probability of risk.

9.1 Operational Risk

Gold passes from the production site to the refinery and then to the vault which exposes the gold to potential risks along the value chain. In the absence of a government nominated or approved security and monitoring systems, fraud, theft, tampering and undervaluing can threaten the operation of the bullion program.

The objective of this Policy is for appropriate arrangements to be instituted, including as envisaged and required under the gold related legislations when enacted will institute and enforce high-level security standards via companies/systems well versed in the industry supported by principled Government Officials stationed in mines, refineries and vaults. Also, the industry requires, and will need to engage or provide, trustworthy and reliable gold and minerals transport services with reputable track records in handling and conveyance of gold and minerals. This will ensure safe, efficient and timely delivery of gold and minerals while maintaining its expected value along the whole value chain.

9.2 Price Volatility in International Markets

Price fluctuations can play a significant role in gold bullion management and, in terms of building a national gold reserve, this issue principally focuses on the timing of acquisitions and disposals of gold in the reserve.

The USD market price for gold is determined twice daily and is affected by a number of macroeconomic factors including financial markets stability/instability, interest rates, wars and civil unrest and supply and demand.

The global market for investment grade gold is USD denominated, highly liquid and is not materially affected by distance or lack of availability in most countries or internationally of buyers and sellers.

PNG Gold Refinery to produce international investment grade standard refined gold products, which will be accepted and traded in international metals market. This means there will be minimal risk in respect to market acceptance of Group products and those products will command the premium prices reserved for only the highest quality international standard gold products.

If a jewelry manufacturing business is eventually developed in PNG, a Gold Refinery will produce the standard range of gold and silver granules and wires required to support that industry.

As a rule, the resale value for manufactured jewelry, particularly low-cost jewelry using low purity gold and silver, is not tied to the global market prices for investment grade gold and silver.



Accordingly, consumers of jewelry, other than in exceptional cases, do not buy the gold and silver metal comprising the jewelry in the expectation that the metal itself is an investment equivalent to international investment grade bullion. Consequently, liquidity in the jewelry resale market is not a primary concern under the Policy.

9.3 Exchange Rate Risk

Exchange rate volatility also poses a substantial risk on bullion trade which can affect a company's profitability and operations. Unfavorable economic performances and capital flows as well as interest rate differentials often worsen the level of risk.

Hedging, forward contracts and options contracts against inflation and markets are smarter ways to avoid exchange rate fluctuations or inflation.

This program will strive to avert this risk through the above strategies as well as offshore vaulting in reputable Reserve Banks for accessibility and convenience in trade.

9.4 Geographic Risk

Both the refiner and the Central Bank will adopt prudential management policies and practices to diversify the geographic risk of physical gold holdings by spreading the physical gold among approved high security storage facilities located in various countries.

Once the National Gold Vault is constructed and operating it will become a formal member of this network of global facilities and can expect to be the recipient of physical gold deposits by other countries and major international financial institutions adopting the same prudential risk management strategies.

9.5 Liquidity Risk

PNG can be hit hard by external shocks requiring immediate attention to restore macroeconomic and financial market stability.

This Policy aims to minimize liquidity risk in respect to the State's gold reserves by ensuring that those reserves are comprised only of London Good Delivery Bars and international investment grade bullion products and by engaging and choosing a minerals dealer operating in the global Over the Counter and metals markets who is able to provide immediate liquidity or forex.

9.6 Other Risks related to Bullion Trade

About 90 percent of the daily minerals especially gold bullion trade is paper based and settled in cash, and 10 percent in the physical gold. Trading in the paper gold involves huge costs and risks.

There are also international obligations which the State must comply with, that may pose a risk to the Bullion Trade. These International obligations must be properly managed and risks mitigated.

Physical Gold Trade on the OTC markets and exchanges by PNG Traders

GoPNG via Kumul Minerals may trade the State's merchandisable gold on the spot, futures or forward markets. The spot trading associates with the physical gold the GoPNG already has and the futures or forward trade with the clearly defined volume of gold under production.

Physical Gold Trade delivery arrangements

The GoPNG may consider establishing arrangements to facilitate for on time delivery of gold to the buyer via measures such as internal swaps, location swaps, or gold loan from a bullion bank.

Motivation and position taking at the OTC markets and exchanges

Domestic participants in the gold markets are broadly categorized into speculators, who willingly take a great risk in attempting to make profits by speculating on future price movements, arbitrageurs who seek to make a riskless profit by exploiting price differentials and hedgers who seek to hedge against risk of price volatility of gold.

GoPNG via the proposed entity would employ bias to benefit of these forms of trade for revenue generation from OTC markets.

Gold bullion meeting standards specifications.

Where opportunities for trade of merchandisable gold do not exist, is unable to produce or have bars that conform to the prescribed standard specifications, the proposed regulating entity and other stakeholders may –

- i. undertake a quality swap (i.e., swaps its non-Good Delivery Bars for Good Delivery Bars) with the BIS or Bullion Banks to upgrade its gold;
- ii. work directly with Good Delivery refiners and specialist transportation companies to undertake its own upgrading program; or
- iii. producing the Good Delivery Bars from the Gold Refinery as covered in the foregoing (this should be the most preferred strategy).

Security Risk

The State through the National Gold Committee will coordinate with relevant State authorities to provide all external and internal security matters relating to the bullion ecosystem.



Papua New Guinea



PNG GOVERNMENT
GOLD BULLION

