ZONGOIRI GOLD PROJECT (ZGP)
Maripoma Mining Services Ltd (MMS)
Upper East Region – Ghana
Coordinates: 10° 42′ 15″ N | 0° 26′ 50″ W

1. Project Overview

The **Zongoiri Gold Project (ZGP)** is an advanced-stage gold development located within the **Paleoproterozoic Nangodi Greenstone Belt** in northern Ghana. The belt forms part of the Birimian geological province, which hosts several producing gold mines across Ghana and neighbouring Burkina Faso.

The project covers a **total concession area of approximately 157.5 km²**, comprising:

- **94.5 km² held under a Prospecting Licence**
- **63 km² covered by a granted Mining Lease**

The project is currently being advanced toward construction based on a **Preliminary Feasibility Study (PFS)** undertaken by **Afrobullion Ltd**, a Ghanaian Qualified Person (QP) consultancy.

The PFS outlines a **conventional open-pit mining operation feeding a 3,500 tonnes per day (1.3 Mtpa) gravity and Carbon-in-Leach (CIL) processing plant**, designed to treat free-milling Birimian gold mineralization typical of the Nangodi belt.

2. Mineral Resource

Mineral Resource Estimate (NI 43-101 aligned)

Category	**Tonnage**	**Grade**	**Gold**
Indicated	2.87 Mt	2.14 g/t	197,644 oz
Inferred	7.09 Mt	2.69 g/t	612,997 oz
Total Resource	**9.96 Mt**	**2.53 g/t**	**810,199 oz**

The PFS economic analysis indicates that approximately **600 koz of this resource inventory is economically mineable at a gold price of US$2,200/oz**, forming the basis of the initial mine development plan.

Within the current resource:

- **197 koz are classified as reserves**
- **More than 400 koz are expected to convert through planned infill drilling**

3. Geological Setting

The project lies within the **Nangodi Greenstone Belt**, part of the **Birimian Supergroup** of West Africa.

Regional geology consists of:

- Metavolcanics and metasediments
- Porphyritic granodiorite intrusions
- Regional shear structures related to Birimian tectonics

Gold mineralization occurs primarily in:

- **Quartz-sericite-pyrite (QSP) vein systems**
- Hosted in **sheared granodiorite and altered volcanic rocks**
- Controlled by **ENE-trending brittle-ductile fault systems**

The mineralization style is consistent with **orogenic lode-gold deposits** observed elsewhere in the belt.

Geology _zongiri

Mineralized zones form **multiple steeply dipping lenses (approx.60° NW)** that remain open along strike and at depth.

4. Location and Infrastructure

Project Location

The Zongoiri project is located in the **Bawku West District of Ghana's Upper East Region**, within an established mining jurisdiction.

Location	**Distance**
Bolgatanga (Regional Capital)	approx.55 km
Tamale International Airport	approx.285 km
Accra (National Capital)	approx.800 km

Access to the project is via the **Bolgatanga–Bawku highway corridor**, supported by regional transport infrastructure and telecommunications networks.

Site infrastructure currently under development includes:

- Construction camp and administration offices
- Site clinic and security infrastructure
- Fuel storage and supply facilities
- Tailings storage facility (TSF) platform and civil works

5. Development Strategy

The development strategy for ZGP is structured as a **phased approach**, allowing capital efficiency while maintaining long-term exploration upside across the concession.

Phase 1 – Initial Development (2025–2027)

Phase 1 focuses on the development of the **core deposit area covering approximately 10.684 km²** within the mining lease.

Key components include:

- Development of **conventional open-pit mining operations**
- Construction of a **3,500 tpd (1.3 Mtpa) gravity + CIL processing plant**
- Establishment of site infrastructure including camp, power generation, and water supply

The process plant will be delivered under a **turnkey EPC contract with Yantai Xinhai Mining Design Co. Ltd**, covering:

- Engineering design
- Equipment manufacturing
- Installation and commissioning

Phase 1 Capital Requirement

Component	Estimated Cost
Process plant EPC	$56.5 M
Mining and infrastructure	$100.5 M
Total Capital Cost	**$157 M**

Funding is structured through a **hybrid debt-equity financing model**, with optional repayment structures including:

- Cash repayment from operations
- Bullion delivery at a discount to LBMA pricing
- Structured gold streaming agreements

6. Metallurgical Testwork and Processing

Metallurgical testwork was conducted by:

- **Jet-Rom Engineering (Ghana)**
- **Xinhai Metallurgical Laboratories (China)**

Testing confirms the Zongoiri ore is **free-milling with low sulphide content**, making it highly amenable to gravity recovery followed by cyanide leaching.
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Key Metallurgical Results

Parameter	**Result**
Head grade	2.34 – 4.10 g/t
Gravity recovery	11 – 44 %
CIL recovery	92.9 – 96.1 %
Overall recovery	93 – 96 %
Bond Work Index	15.4 – 18.7 kWh/t
Cyanide consumption	1.5 kg/t
Lime consumption	3 – 3.5 kg/t

These results support a **standard gravity + CIL processing flowsheet with overall recoveries exceeding 93%**.

7. Power Infrastructure

Power for the project will be supplied through a **16 MW hybrid power system** engineered by **Tilt Energy Ltd**, integrating:

- Solar photovoltaic generation
- Diesel backup generation
- Future grid connection

Estimated power costs:

Power Source	**Estimated Cost**
Solar + Diesel Hybrid	\$0.18 – \$0.20 /kWh
Solar PPA	approx.\$0.06 /kWh
Post-Capex Solar Cost	approx.\$0.011 /kWh

This configuration improves **energy reliability while lowering long-term operating costs and carbon intensity**.

8. Project Development Timeline

Milestone	Target
Mining Lease Issued	2024
Environmental Permitting	2024 – 2026
EPC Contract & Mobilization	2024 – 2026
Camp and Civil Works	Q3 2026
Resource Upgrade Drilling	Q4 2026
Process Plant Manufacturing	Q2 – Q4 2027
Installation & Commissioning	Q2 – Q3 2028
First Gold Production	**Q4 2028**

9. Financial Overview

Metric	Value
Estimated Project Value	**approx.USD 520 million**
Gold Price Assumption	**$2,200/oz (Base Case)**
Total Resource Inventory	**810 koz Au**
Initial Capital Requirement	**USD 157 million**

Capital allocation includes:

Category	Estimated Cost
Civil infrastructure	$38.2 M
Community resettlement	$29.1 M
Mining fleet and operations	$23.5 M
Process plant manufacturing	$22.4 M
Power infrastructure	$9.05 M
Exploration and drilling	$8.21 M

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10. Investment Highlights

- **810 koz gold resource at 2.53 g/t Au**
- **approx.600 koz economically mineable under PFS assumptions**
- **Mining Lease granted (2024)**
- **Free-milling ore with >93% metallurgical recovery**
- **Low projected AISC (< $800/oz)**
- **3,500 tpd gravity + CIL plant**
- **Hybrid solar-diesel power infrastructure**
- **Payback period expected to be less than three years**