THE MINERAL INDUSTRY AND INVESTMENT OPPORTUNITIES IN ETHIOPIA

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OUTLINE OF PRESENTATION

1. Country Background
2. Geology, Mineral Potential and Basic Geosciences Data Coverage
4. Current Exploration and Mining Status
5. Investment Environment and Opportunity
6. Conclusion
1. COUNTRY BACKGROUND

**Surface Area:** 1.14 million Km $^2$

**Capital City:** Addis Ababa (the seat of the African Union, the Headquarter of the UN Economic Commission for Africa and Other Regional and International Organizations)

**Population:** more than 100,000,000

**Government:** Federal Democratic Republic (Federal Government, 9 National Regional States & 2 City Administrations)

**Main Exports:**
- **Agro- industrial products:** mainly coffee, meat, oil seed, flower, leather etc.,
- **Minerals:** mainly Gold, tantalite, gemstones & dimension stones
2. Geology, Mineral Potential and basic geoscience data coverage

2.1. Geology

- Precambrian basement rocks:
  - cover 25% of the land mass of the country.
  - Exposed in three parts of the country & known as Northern, Western & Southern Green Stonebelts

- Palaeozoic to Mesozoic sedimentary rocks - 25%

- Cenozoic volcanic & sedimentary rocks - 50%

- Highland Tertiary volcanics (basalts)
- Tertiary as well as Quaternary volcanics & sediments of the rift valley
2.2. Mineral Potential - Ethiopia is Endowed with various Metallic & industrial minerals

Western & SW Belt:
- Tulu Kape, Dul, Metekel, Chamo, Oda- Godere Primary gold deposits
- Yubdo Platnium deposit
- Bikilal, Sirba & Kore iron deposits & mineralization
- Keta & Abetselo Base metals Mineralization.
- Placer Gold deposits

Southern Belt: Adola & Moyale
- Lege – Dembi, Sakaro, Moyale, Dawa, Okote Primary Gold deposits & occurrence.
- Adola Nickel
- Kenticha Tanatalum
- Placer gold deposits
- Chromite mineralization

Northern Belt:
- Terkemti, Adi Zersenay, zager
  - Primary gold mineralization
  - Base Metals mineralization
  - Placer gold occurrences & deposits
INDUSTRIAL MINERALS

Cement Raw Minerals:
Limestone, Gypsum, Clay, Pumice: Million tonnes

Fertilizer Raw Minerals:
Potash: billion tones & Phosphate: 81Mt

Ceramics Raw Minerals:
Kaolin: 20Mt, Feldspar: 500000t,
Quartz-: 00000t

Glass Raw Minerals:
Silica Sand: more than 3.4Mt,

Dimension Stones:
Marble, Granite, Limestone, Sandstone: in million tonnes.

Diatomite: 120Mt, Bentonite: 172Mt, Soda ash: 460Mt, Salt: 4.3Bt,
Graphite: 460000t, Sulphur: 6Mt
BASIC GEOSCIENCE DATA

- Basic geological mapping coverage at a scale 1:250,000 is **94%**
- Ground gravity coverage at 1:500,000 is **100%**
- Airborne geophysical (Electro-magnetic, Magnetics & Radio metrics) coverage up scaling underway to cover the landmass of the country
GEMSTONE POTENTIAL OF ETHIOPIA

PRECEIOUS OPAL/ ETHOPIA OPALS
OTHER GEMSTONES OR NON OPAL
ETHIOPIAN PRECARIOUS GEMSTONE
EMERALD

3.1. Mineral Legislation

- Mineral legislations (proclamations, regulations, etc.) are based on the principles of:
  - Free market economic policy;
  - Transparency & accountability in the licensing & administration system and investment attraction;
  - The Ethiopian people’s ownership of the mineral resources of their country and the custodianship of the government to ensure the mineral resources development benefit its people;
  - Operations undertaken in an environmentally friendly manner and benefit the community;
  - Guaranteed private investment;
  - Recognizing private investment as an engine for development.
Mineral Legislation & Institutional Framework

- Mining proclamations and regulations for mineral operations in Ethiopia:
  - Mining Proc. No. 678/2010 (as amended)
  - Mining Regulation 182/1994 (currently amended)

- The mineral legislation is aimed to attract private investment & bring sustainable mineral resource development that will support the economic development of the country. The role of government is restricted to regulation of the sector, generation and dissemination of basic geoscience data.
The main features of the legislation are:

- Invite private investment in all kinds of mineral operations;
- Requires adequate health and safety of employees and environmental protection including completion of environmental impact studies;
- Guarantee licensee's right to sell minerals locally or abroad;
- Provide exemption from customs duties and taxes on equipment, machinery and vehicles necessary for the mining operations;
- Guarantee the opening and operation of a foreign currency account in bank in Ethiopia;
- Retention of portion of foreign currency earning and remittance of profits, dividends, principal and interest on a foreign loan etc. out of Ethiopia;
- Require royalties of 2 to 7% *ad valorem* on production site;
- Provide for dispute settlement through negotiation & arbitration;
- 25% corporate tax rate & permits 10 years loss carry forward;
- Exploration cost recovery for successful companies that commenced mining operation;
- 5% free government equity.
Four types of licenses stipulated in the legislation are:

1. **Reconnaissance** license: issued for 18 months period, non renewable and non exclusive

2. **Exploration** license: issued for maximum of 10 years (3 years initial, 7 years renewals of 1 year each) and exclusive

3. **Retention** license: for maximum 6 years (3 years initial & a 3 year renewal) and gives exclusive rights. Granted upon discovery of mineral deposits of economic significance and existence of adverse market conditions or unavailability of processing technology.

4. **Mining Licenses** are of four types:
   - **Large scale** is issued for 20 years initial, 10 years each renewal & exclusive.
   - **Small scale** is issued for 10 years initial, 5 years each renewal and exclusive.
• **Artisanal Mining**: is issued 2 years, exclusive and non renewable.

• **Special Small Scale**: license is issued to upgrade artisanal mining licensees to use machineries & equipment. It is issued for 10 years initial, 5 years each renewal and exclusive.
3.1. INSTITUTIONAL FRAMEWORK, DUTY & RESPONSIBILITY

Federal, 9 Regional States and 2 City Administrations

Ministry of Mines, Petroleum & Natural Gas

issue reconnaissance, exploration, retention and mining license other than those to be issued by the states

Bureaus of Mines, Energy/Water Resources of the National Regional States & City Administrations

- Issue artisanal mining licenses for nationals
- Issue for domestic investors:
  - reconnaissance, exploration and retention licensees with respect to construction and industrial minerals,
  - small scale mining licenses for industrial minerals,
  - Small and large scale mining licenses for construction minerals,

Geological Survey of Ethiopia

- Autonomous and accountable to the MOMPNG
- Responsible to carry out basic geological mapping, mineral exploration & other related geological activities and provide Services (data dissemination, drilling & lab. analysis).
3.2. CONTINUOUS IMPROVEMENT OF THE GOVERNANCE OF THE MINING SECTOR

1. Although there are challenges encouraging achievements to date have been achieved. Ethiopia is looking strategically at leading practices from Canada, Africa and other jurisdictions;

2. Firms need established suppliers, contractors: inventory and coordination mechanisms are growing and government will share the burden and support investors;

3. The Supporting the Ministry of Mines Project (SUMM) is a large scale technical assistance project funded by GAC implemented jointly by MoMPNG and CIRDI already underway to help systematically and strategically reform the legal, regulatory and administrative framework and management of geosciences of the mining sector in Ethiopia, including building capacity of staff to work under clear guidelines, rules and standards;

4. An enhanced, transparent and efficient mineral licensing system link to quality geo-data is being set in place.
Policy and Strategic Mineral Reforms

- National Mineral Development Policy underway with the National Planning Commission
- Development of Mineral Master plan with MoMPNG
- Finalization of Mineral policy
- Strategic Planning and organizational review
- System for Codification process established
Reforms Jointly implemented by Ethiopia with the support of Canada

• Establishing a consistent and transparent Licensing system
• Develop inclusive stakeholder-responsive frameworks, structures and processes
• Provide world-class geosciences information and promote priority industrial mineral services
• Support the development of mining supply and value chains
• Consolidate human resource capacity to support the sector
4. CURRENT EXPLORATION AND MINING STATUS

• A surge in mineral exploration licenses and mining licences (gold, potash, tantalum, marble, coal, iron etc.) granted to foreign, joint-venture and local investors is underway.
• Kefi Minerals, (Tulu Kapi)
  o Gold and silver mining licenses
• Midroc Mining license (Metekel Skarn Type Gold)
  o Gold and silver mining license
• MSP (Bikilal iron)
• ASCOM (Mt. Dish Gold)
  o under feasibility study
• Yubdo Platinum
• Bikilal Phosphate

• Lege Dembi & Sakaroo Gold Mine under operation by Midroc
• Okote Gold deposit – prefeasibility study by National Mining company
• Kenticha Tantalum Mine under operation by government

• TRI at Adi Dairo & West shire at pre-feasibility stage of gold & Base metals.
• Harvest at Adyabo projects by East African Metal discovered three VMS type gold-copper-silver-zinc deposits
• Other VMS & Orogenic type prospects in very near area.
• Ezana (Meli Gold Mining)
Circum minerals – acquired large scale mining (2.75 million tons annual production plan)

Yara Dallo - applied large scale mining (0.6 million tons annual production plan)

Total annual production plan of 3.35 million tonnes potash is currently planned and Ethiopia will be major world potash producer in the near future.
5. Investment Environment and Opportunity

5.1. Investment Environment: continuously improving investment climate and environment in Ethiopia;

a) Infrastructure

• Power - Ethiopia is endowed with renewable energy resources
• Hydro - 45,000 MW potential
• Wind - over a billion
• Geothermal -10,000 MW & solar
• Developed to date over 4,000 MW
• Mega power projects on pipeline

Great Renaissance dam
Under construction to generate 6,000MW

THE ALUTO-LANGANO PILOT POWER PLANT (BINARY)

GIBE III hydro power plant generates 1870MW
TRANSPORTATION INFRASTRUCTURE

- **Roads:** All the regional states and the major cities are connected with paved asphalt roads.
  - Villages are connected with seasonal and all weather gravel roads.
  - A number of road construction & improvement projects underway.

- **Railways:** New, modern 656 km long railway connecting Addis Ababa & Djibouti
5.2. Mining Investment Opportunities

There is wide investment opportunity in the mineral sector of Ethiopia.

**Exploration for:**

- **Gold and associated minerals exploration** in unexplored areas and unoccupied areas in the three green stone belts.
- **Energy Minerals** such as graphite, lithium, etc.
- **Base metals** (Cu, Pb, Zn, Sn, etc.) in western and northern green stone belts.
- **Tantalum** in pegmatite in Southern Ethiopia/Keticha area.
- **Platinum** in most favourable geological settings.
- **Epithermal gold** and associated metals in cenozoic rocks, molybdenite, Magnesite, malachite, precious stones, etc.

**Mine development potential in already identified deposits of:**

- Iron/steel, manganese, phosphate, bentonite, diatomite, silica sand, graphite, dimension stones, coal etc.

- **Engage in joint venture operations** with already licensed companies/licensees.
6. CONCLUSION

The investment in the mineral sector is growing from time to time and Ethiopia is becoming a good investment destination mainly due to:

• Conducive mining investment legislation and environment;
• Attractive and competitive legal frameworks;
• Geological favourability to host a wide variety of minerals;
• Highly prospective but under explored geologically;
• Availability of numerous mineral occurrences;
• Availability of labor and hospitable people;
• Intensive infrastructure development.

The government of Ethiopia welcomes potential investors to invest in the mineral industry of Ethiopia for mutual benefits.
CONTACT INFORMATION

Ministry of Mines, Petroleum and Natural Gas

- Website: [www.mom.gov.et](http://www.mom.gov.et)
- E-mail: mineral_operations@mom.gov.et
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Geological Survey

- Website: [www.gse.gov.et](http://www.gse.gov.et)
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