Current state of the Mining Sector and the Strategy for its Future Development

Cracow, Poland
28 February 2019
Mining sector institutional framework in Colombia

Responsible for the National Policy

Deputy Minister of Mines

Mineral Authority

Mining Authority and Mining Resources Manager

Sectoral Planning and Market Monitoring

Geological Knowledge and Monitoring of Geological Threats
A country to explore

Caribbean tectonic plate
Andes System
Caribbean Sea
Pacific Ocean
South American tectonic plate
Amazonian Craton

KNOWLEDGE OF SUBSOIL
- GEOLOGICAL: 71%
- GEOPHYSICAL: 68%
- GEOCHEMICAL: 35%

HIGH POTENTIAL
- GOLD
- COPPER
- URANIUM
- PHOSPHATE
A country to explore

Mineral potential

9,471 Mining Concession Proposals 8.35% of the territory

GOLD 39%

“High gold potential”

Antioquia Gold

20% → 69%

Rest of the country

80% → 32%
A country to explore

Mining activity is only 3.26% of the territory

- Titled area: 3,723,379 ha
- 7,935 Mining titles
  - Antioquia: 16%
  - Rest of the country: 84%

Total area: 114,218,901 ha

MINERALS

- Construction materials: 41%
- Gold and precious metals: 21%
- Other minerals: 18%
- Coal: 16%
- Emeralds: 4%
Gold mining activities

Gold deposits are clustered in districts associated with metallogenic belts in the provinces of Antioquia, Santander, Tolima, Huila, Caldas, Nariño, Cauca and Bolivar. Deposits are also found along the Pacific coast, which are formed by the erosion of the western branches of the Andes mountain chain. With an average tenor between 0.7 g/t and 10.8 g/t Au.

1,678 Titles
(1.76% of national territory)

217 Titles – Exploration

174 Titles - Construction & Assembly

1,287 Titles - Exploitation
Colombia presents **three (3) belts** of copper porphyries in which important prospects for copper are found:

- **Central**: El Alacran, Quebradona, El Pisno, Piedrasentada-Dominical and Mazamorras.
- **Western**: Acandi, Murindo, Pantanos-Pegadorcito, Andagueda and Piedrancha.
- **Eastern**: Andes, Infierno-Chili, Dolores and Mocoa.

**442 Titles** (0.6% of national territory)
(682,066 ha)

**130 Titles** - Exploration
**80 Titles** - Construction & Assembly
**232 Titles** - Exploitation

In Colombia deposits with an average tenor between **0.70 %** and **3.46 % Cu**, are explored.
Coal mining activities

Colombia is the world's fourth largest exporter of coal with low ash content and low sulfur dioxide emissions and one of the largest coal proved reserves of anthracitic and bituminous coal in Latin America with a share of 48.3% (4,881 million tonnes).

1,263 Titles (0.66% of national territory). 756,183 ha

28 Titles - Exploration

123 Titles - Construction & Assembly

1,112 Titles - Exploitation

Colombia produces high quality thermal coal due to its high calorific value: about 13,068 BTU.

Colombian coal production represents 81.2% of Latin American production.
Emerald mining activities

Colombian emeralds are number one in the world for quality, due to their hydrothermal sedimentary origin that gives them a brightness, transparency, color, play of lights and optimal hardness.

330 Titles
(0.06% of national territory)
(63,018 ha)

9 Titles - Exploration

44 Titles - Construction & Assembly

277 Titles - Exploitation

446 Mining Concession Proposals
(251,675 ha)

Hydrothermal sedimentary origin is unique in the world.
Gold production is expected to increase by 24% in 2020.

### Investments 2017 / 2018

- **BARRICK**
- **AGNICO EAGLE**
- **Newmont**
- **FURA**
- **ROYAL ROAD MINERALS**
- **Red Eagle Minerals**
- **Miranda Gold Corp.**
- **Antioquia Gold Inc.**
- **Au Vert**
- **Aljucos Mining Corp.**
- **IAMGOLD**
- **AngloGold Ashanti**
- **ParaResources**
- **Metminco**
- **Max Resource Corp.**

### Gold projects with an approved environmental license

- **2018 - Cisneros**
- **2018 - Rionegro**
- **2020 - Buritica**
- **2022 - Gramalote**

### Projects in pipeline

- **2021* — Miraflores**
  - 0.51 g/t Au, 2.28 g/t Ag
- **2021* — Anza**
  - 3.43 g/t Au, 30.6 g/t Ag
- **2021 — Soto Norte**
  - 9 million oz Au
- **2021* — Soto Norte**
  - 0.81 g/t Au, 1.8 g/t Ag
- **2023* — Batero-Quinchia**
  - 3.3 g/t Au, 26.8 g/t Ag, 2.74% Zn
- **2023* — Andes**
  - 1.5 g/t to 11 g/t Au, 1% to 10% Cu
- **2023* — San Matias**
  - Estimated projection by NMA
How to invest?

Two ways to obtain a Mining Title

Application process
First-come First-served

30 years → renewable for 30 additional years

Negotiation
of an existing title

Mineral rights can be freely transferred between investors

- Any mineral
- Any available area
- Any natural or legal person, Colombian national or foreigner
- General requirements

Concession Contract

Exploration
Concertation with local authorities
Public Hearing

Construction and assembly
Exploitation

30 years → renewable for 30 additional years
Application process

01
* Identify polygon of interest using coordinates
* Verify territory's availability.

02
* Purchase PIN – Submit Concession Proposal online – *3 days to physically submit all documents required by the National Mining Agency (head office and Citizen's Attention Regional Office – PAR).

03
The NMA initiates administrative procedures to verify if legal, technical, environmental and economic requirements are met.

04
Concertation with local authorities (NMA) – Public Hearing (NMA)

05
Signing of Concession Contract (if accepted)
Local stakeholder engagement strategy

The first step in Colombia regarding the relationship with the territory is taken by the National Government!

**Concertation**
- 198 local authorities
  - Antioquia (45)
  - Boyaca (26)
  - Nariño (13)
  - Cesar (12)
  - Bolivar (12)

**Public hearings**
- 46 municipalities

**Incorporation of the mining component in the territorial planning instruments**
- 90 documents

**Territorial entity**
- Communities
- Social Accountability Committees

**Signed concession contracts**
- 81
Milestones and challenges of the Mining Authority Website for investors

- **EFFICIENCY**
  - Mining Management Integrated System (New Colombian Mining Cadastre)
  - Use of satellite images to support the control

- **MODERNIZATION**
  - Online services

- **TRANSPARENCY**
  - Digitization of mining records

Website for investors: miningincolombia.anm.gov.co
Thank you!!!