

# COLOMBIAN MINING TRANSFORMATION



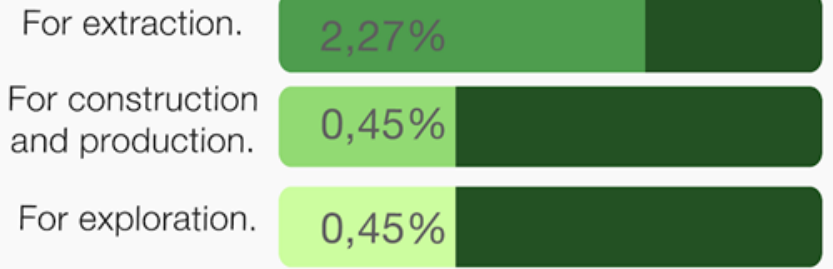
El futuro  
es de todos

Minenergía

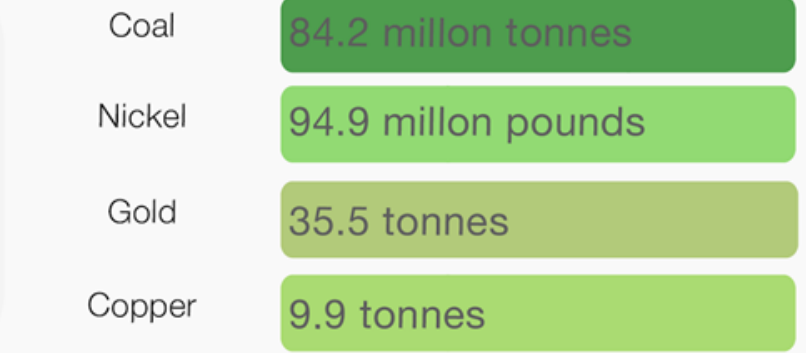
Mineral resources are a great economic opportunity to increase revenues for our country.

---

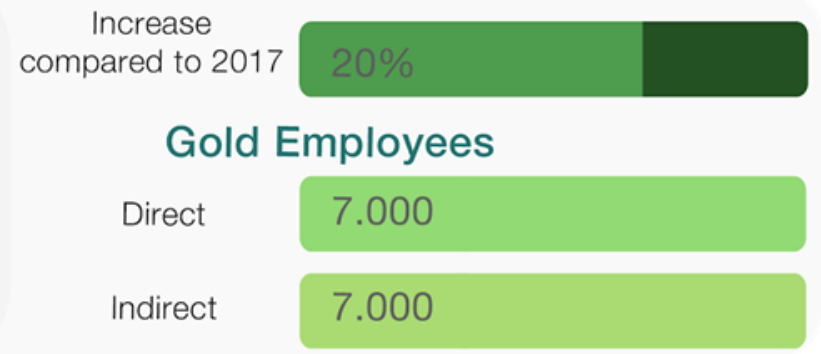
**3,17%**  
of the territory  
is under title



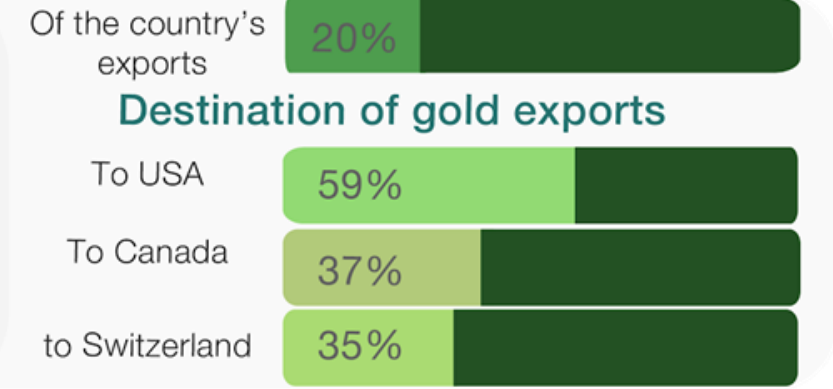
**Mineral production**

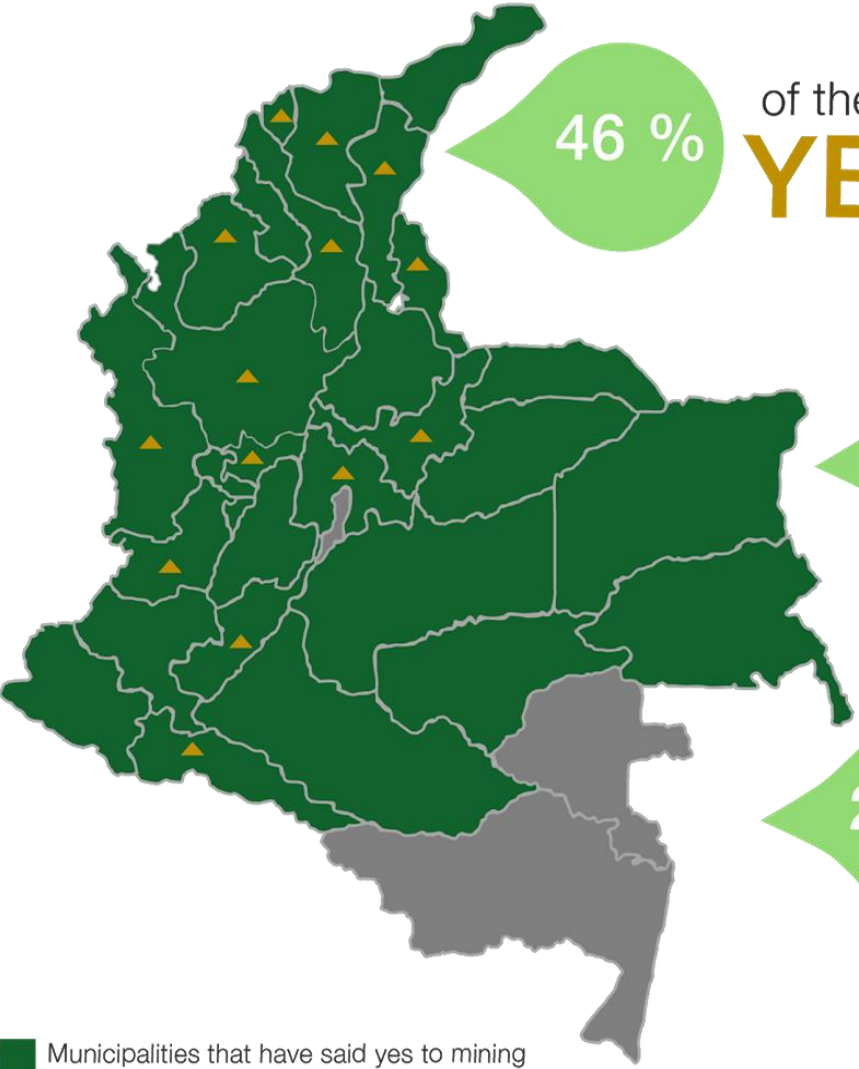


**Royalties and considerations**



**Mining**





46 %

of the municipalities that have said  
**YES** to mining have potential for  
gold and copper extraction

67 %

of the hectares in  
**2017 and 2018**  
was for **gold  
and copper**  
extraction

25 %

of the new titles in  
**2017 and 2018**  
was for **gold  
and copper**  
extraction

- Nation and Territory Coordination and Concurrence.
- The inexistence of Veto Power.
- Territorial Focus.
- Sustainable Development.
- Dialogue, Communication and Trust.
- Respect, Protection, and Guaranteed Human Rights



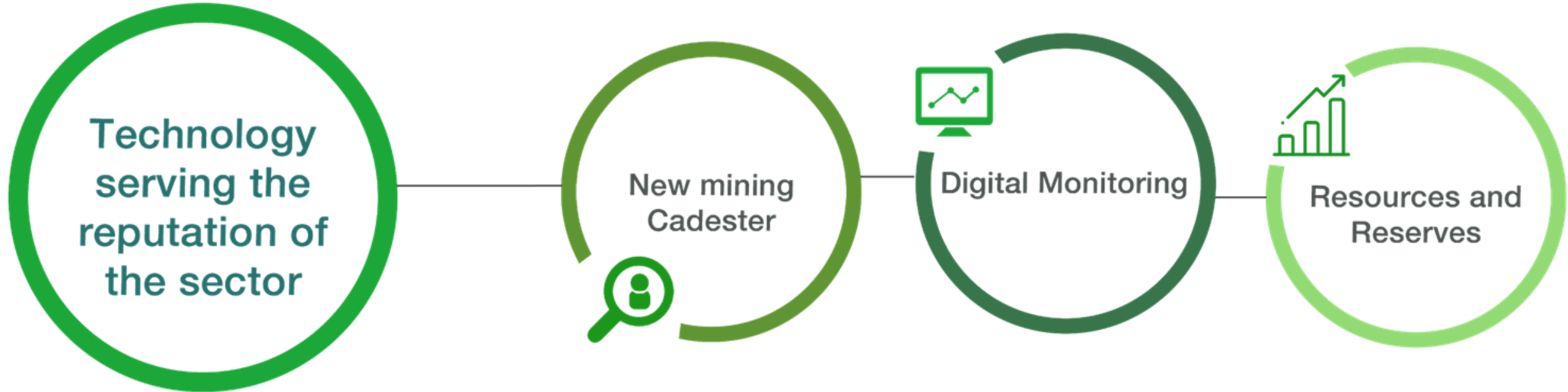
■ Municipalities that have said yes to mining

▲ Municipalities with public hearings

# Technology and information allies of the transformation of mining in Colombia.

---





# The impact of the New Mining Cadaster in 2019



Efficient, timely and online processes.



Quality and availability of information.



More secure transactions.



Real time land availability information

Technological  
solutions that  
stimulate the  
sector

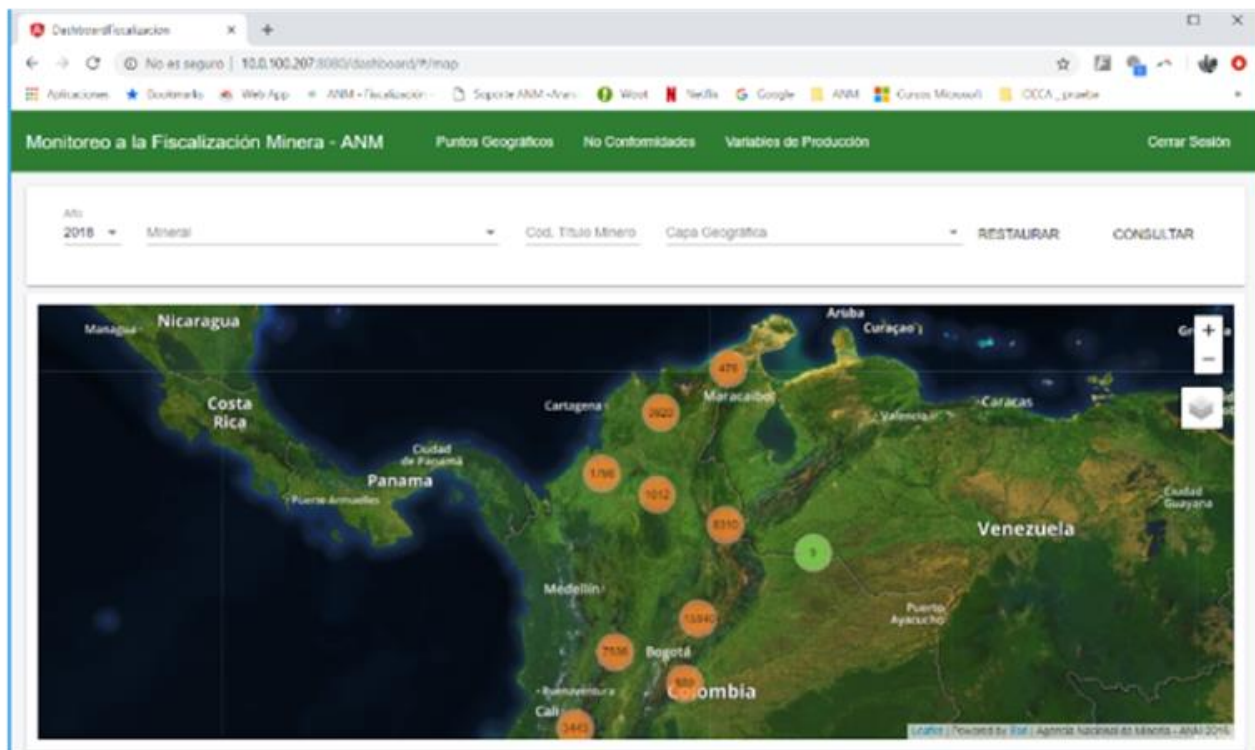






# Digital Monitoring

A source of information for decision-making

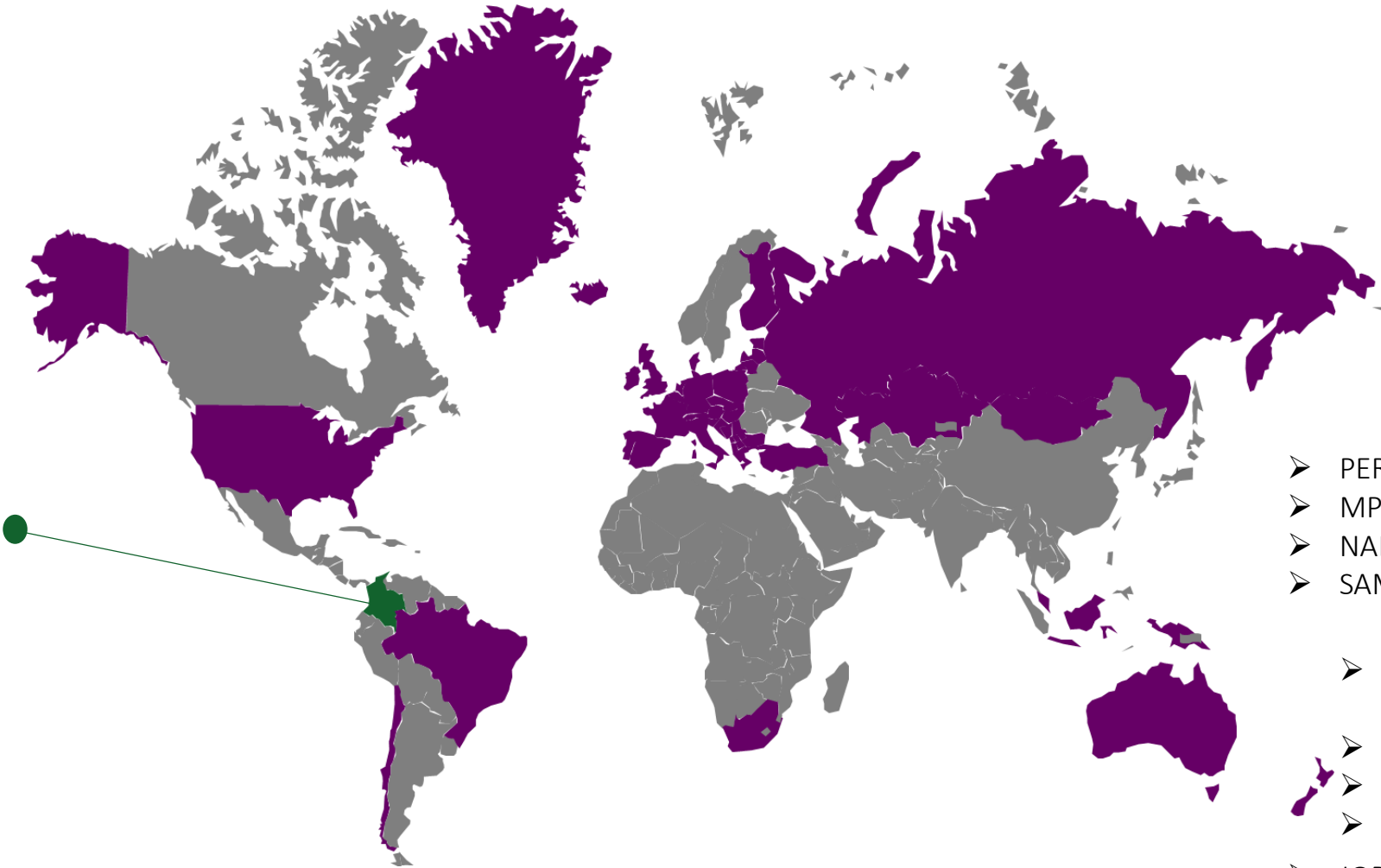
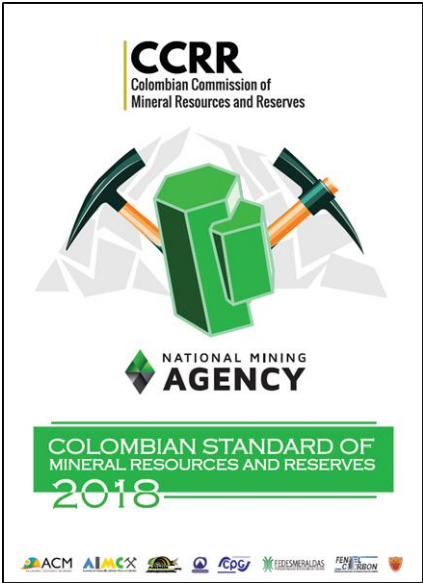


## Monitoring tools

For decision-making that generate benefits for the company and the country.

**Satellite Images**  
that support the  
identification  
and control of  
illicit mineral  
extraction.

# A Standard for Colombia and investors



- PERC (Europe)
- MPIGM (Mongolia)
- NAEN (Russia)
- SAMCODES (South Africa)
  
- SME (United States)
- Kazakstan (KAZRC)
- Indonesia (KCMII)
- **Colombia (CCRR)**
  
- JORC (Australasia)
- CBRR (Brazil)
- CIM (Canada)
- Comisión Minera (Chile)

The National Mining Agency has laid the foundations for the development of mining projects at all stages.

---



## Our goals: Technology at the service of users



97% of the time in mining procedures under modification by 2022. Today, we have achieved a decrease of 20%.



To increase information and standards in monitoring and control to produce inputs to support other entities in the benefit of the State and investors.



To conclude ANM - ANLA Interoperability in their information systems.

To create direct tools for information flow between ANM and local authorities and Armed Forces.



To support companies in the promotion of their projects in mining territories to prevent and/or mitigate conflicts.

\*ANN National Mining Authority, ANLA Environmental Licensing Authority

---

Mining is and will continue to be a protagonist in the growth of Colombia's economy, as long as it is developed through responsible and sustainable investments.

---