

How to promote responsible mine closure in the Andean countries?

Experiences of the MinSus-Project

Workshop BGR/GIZ: Implementing Responsible Mining for the Just Transition

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Gabriela Mistral copper mine, Chile

31.05.2023

Agenda

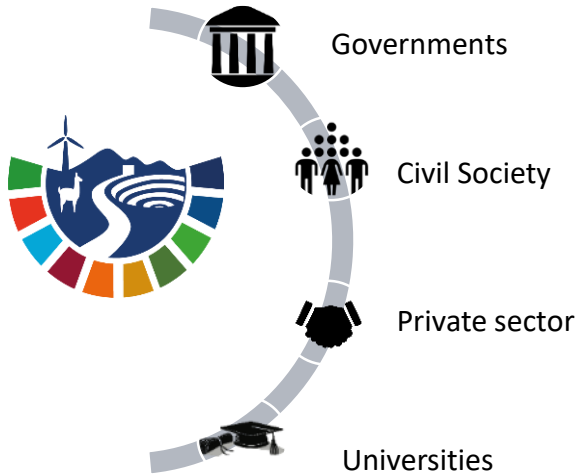


1. Introduction to the TC project MinSus
2. Mining in the Andean countries
 - a) Mineral raw materials
 - b) Legislation mine closure
3. Examples from the project work

MinSus: Regional Cooperation for Sustainable Mining in the Andean Countries III



On behalf of the



MinSus fields of work (BGR and GIZ)



HUMAN RIGHTS



EFFICIENT USE OF WATER, ENERGY AND DECARBONIZATION



ENVIRONMENTAL MINING LEGACIES



GENDER EQUALITY



GOVERNANCE AND INSTITUTIONAL FRAMEWORKS



INNOVATION AND TECHNOLOGY TRANSFER



MINE CLOSURE



FISCAL SYSTEMS AND REVENUE MANAGEMENT



SUSTAINABLE MINERAL SUPPLY CHAINS

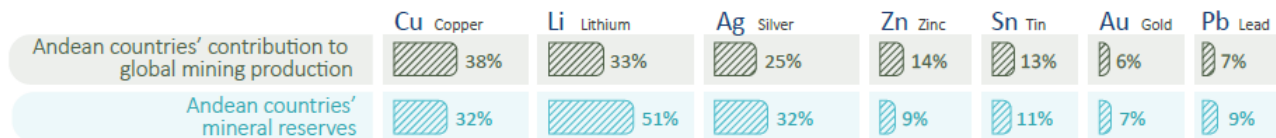


TRANSPARENCIA Y EITI

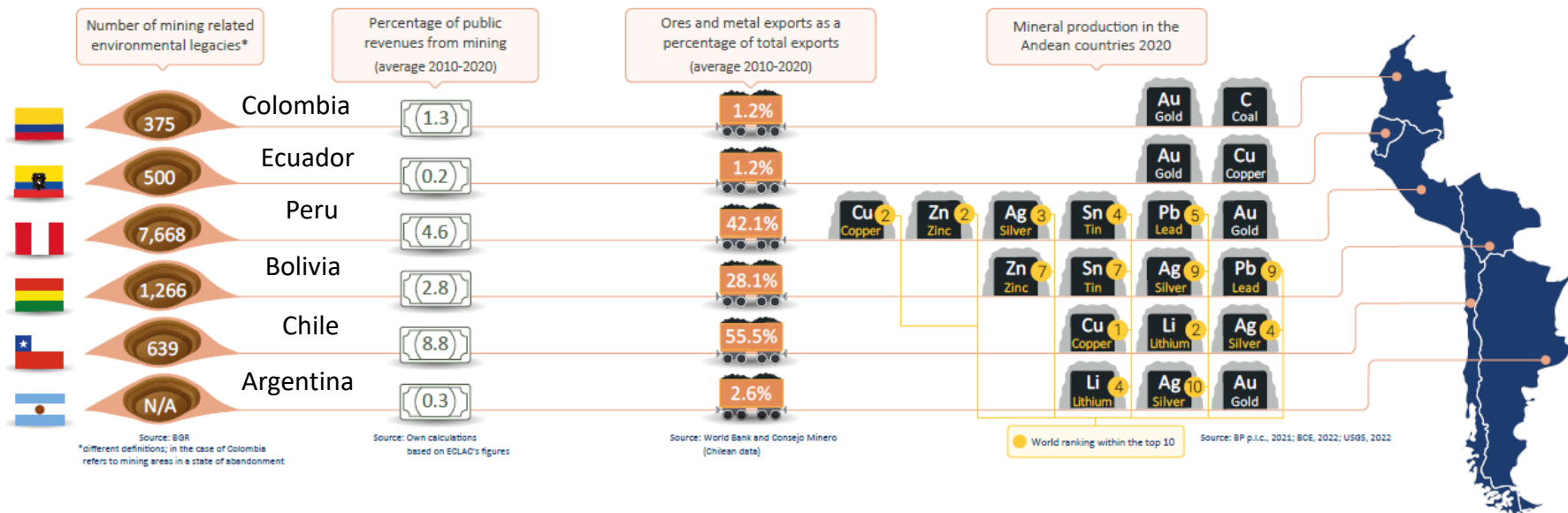
★ Main topics BGR

More information on [minsus.net](https://www.minsus.net)

Mineral raw materials in the Andes



Source: Own calculations based on USGS figures, 2022



Legislation on mine closure and post-closure care in the Andean countries

Chile:

- [Mine Closure Act](#) since 2004, since 2011 extension to include financial guarantees
- Regulation and technical guides
- Responsibilities: MinMinas u. SERNAGEOMIN
- State fund for aftercare

Peru:

- [Law and regulation](#) since 2004/2005 incl. financial guarantees (only for final closure)
- Guides exist (2006), but not up to date
- No regulations on long-term aftercare

Ecuador / Colombia / Bolivia:

- No specific laws or guidance documents, but general regulations within the EIA framework.
- No financial guarantees as in Chile/Peru



Covered tailings pile, Mina Lo Aguirre, SMP, Chile (BGR, 2022).

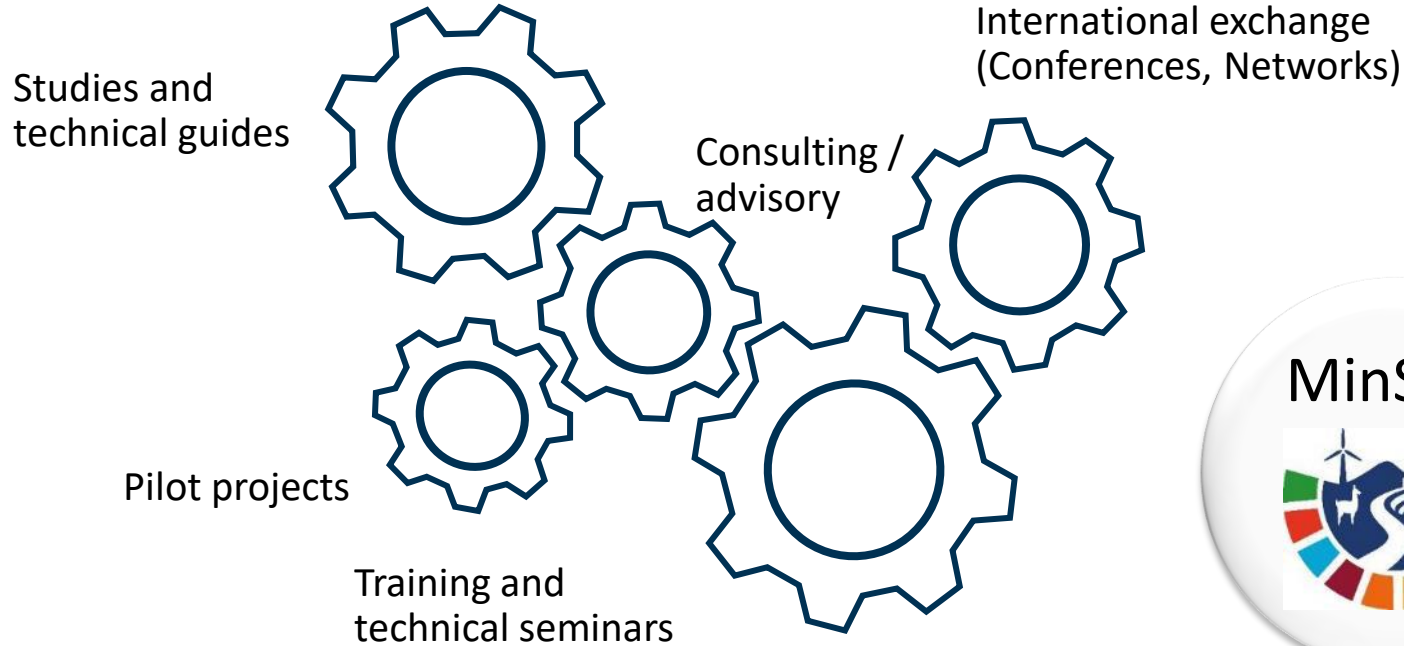
Legislation on mine closure and post-closure care in the Andean countries

Conclusion:

- All countries have regulations on mine closure within the EIA framework
- Only Chile and Peru have a corresponding law including requirements for financial guarantees.
- Long-term post-closure and relinquishment of mines is regulated only in Chile (incl. state fund for post-closure).
- Little practical experience with the application of the legislation in force today
- Many mines will close in the next few years and new ones will start operations => avoidance of new mining legacies possible?

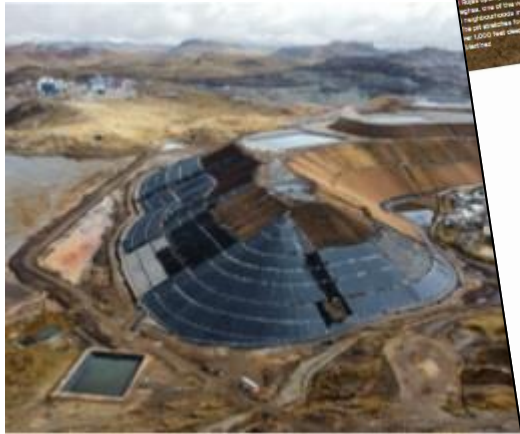


Mix of measures to foster responsible mine closure in Andean countries



Regional project with different framework conditions

Peru: long mining history

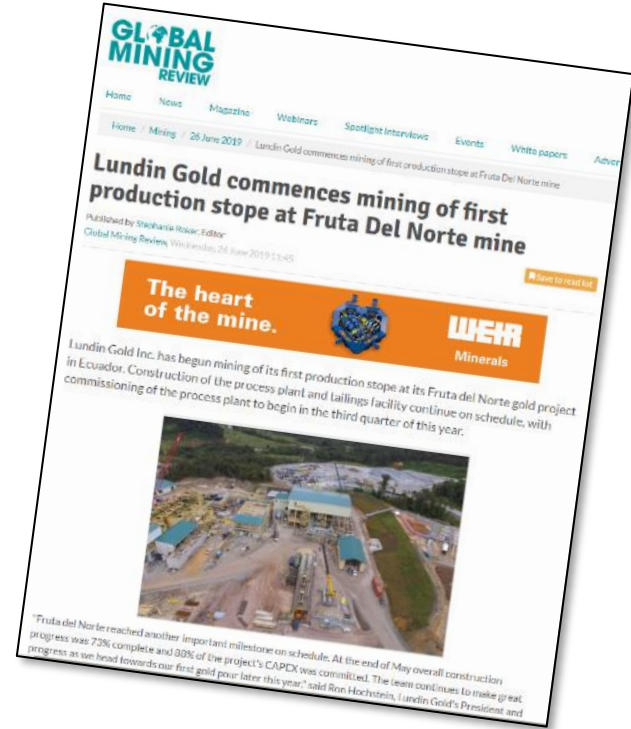


Cerro de Pasco, Peru



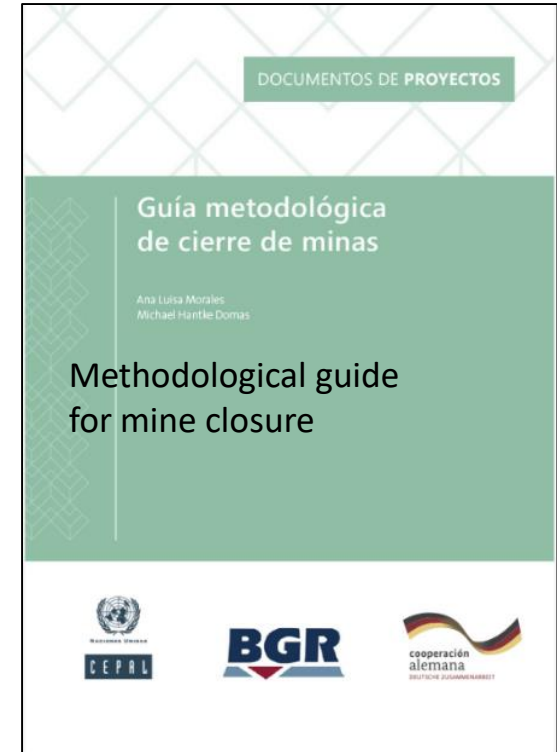
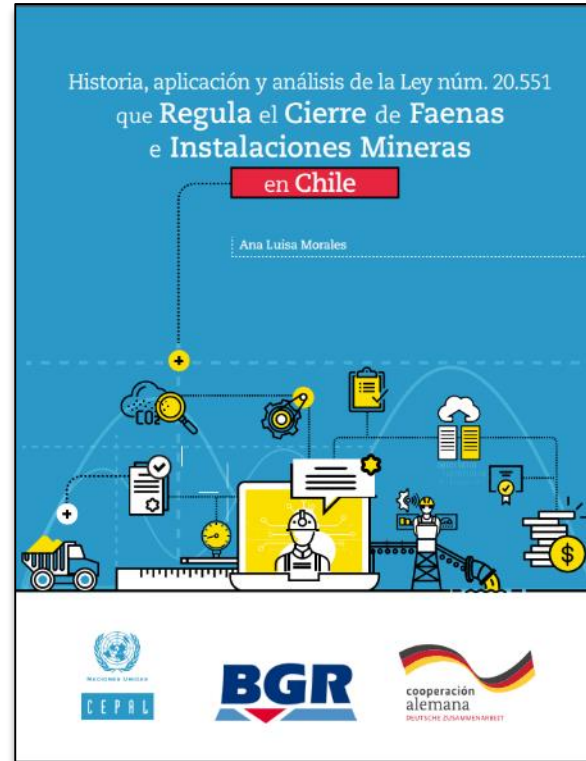
Source: [Greenpeace](#), 2018

Ecuador: industrial mining started



Source: [Global Mining Review](#), 2019

Country-by-country analysis of mine closure laws and their implementation, guidelines



Promotion of regional exchange/ inter-institutional networking



Regional Conference with CEPAL



Participants from 8 mines ministries in Latin America at training on mine closure in Panama (IGF/BGR)



Excursion in Peru, AMSAC entrusted with the remediation of mining legacies



Joint course by control institutions from Peru and Chile on best practices for mine closure planning and monitoring.

Technical advice: mine closure in the Colombian *PÁRAMOS*



- Páramos: Ecosystems of the Andean alpine tundra
- Colombia's most important natural water reservoir
- Drinking water supply for 70% of the population
- Act of 2018 prohibits exploration and exploitation of new mines, **closure and rehabilitation of mines**
- Memorandum of Understanding with BGR, independent technical advice to Colombian authorities.

Mine closure in the second attempt - Reprocessing of waste rock piles



from

to

the reprocessing

Los Rosales, Puno, Peru

- Several thousand mining waste sites in Peru
- Stockpiles: potential resources
- Reprocessing with simultaneous adequate mine closure
- Method development for the exploration of contaminated sites - Training and procurement of equipment for the geolog. Service

Thanks a lot

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For more information on Minsus, visit: <http://minsus.net/>

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