

What is Fairmined Ecological Gold?

Fairmined Ecological Gold is produced under the same strict standard for responsible mining as Fairmined Gold in terms of social, organizational and economic criteria. But there is one difference. Where regular Fairmined Gold is produced with responsible management and reduction of toxic chemicals like mercury and cyanide, miners producing *Fairmined Ecological Gold* do not use any toxic chemicals at all in their extraction processes.



FAIRMINED GOLD



- Environmentally friendly
- Responsible use of toxic chemicals
- Gradual reduction in the use of toxic chemicals
- Premium: 4000 USD per kg

FAIRMINED ECOLOGICAL GOLD



- Ecological
- No use of toxic chemicals
- Rehabilitation of native ecosystems. For example restoration of forests in highly biodiverse areas
- Additional requirements for minimization of ecological disruption
- Ecological Premium: 6000 USD (regular premium + 2000 USD per kg)

Frequently asked questions

1. Are there two separate Fairmined Standards?

No. There is only one Fairmined Standard. The Standard includes a special section with extra requirements for Fairmined Ecological Gold and Silver (see Section 2.3 of the Fairmined Standard).

2. Why is the premium higher for Fairmined Ecological Gold?

The Premium is an economic incentive for the miners and is higher for ecological gold as the processing of the gold is more demanding in terms of time and money. The premium is meant to compensate for investments made to eliminate mercury and cyanide in gold processing, for a possible decrease in gold recovery due to the new methods implemented and other costs related to minimizing environmental impacts.

3. Do all the certified mines offer Fairmined Ecological Gold?

No. Not all miners have the possibility to eliminate their use of toxic chemicals due to lack of access to appropriate technologies or to geological circumstances. All Fairmined Gold is responsible gold extracted and processed under strict environmental requirements aiming to minimize the negative impact on the environment and the people.

At the moment XAMODX in Mongolia and Oro Puno in Peru, offer Fairmined Ecological Gold.

4. What are toxic chemicals and how are they used in the gold processing in artisanal and small-scale mining?

The most common toxic chemicals used in mining are mercury and cyanide. Mercury is mixed with gold-containing materials, forming a mercury-gold amalgam which is then heated, vaporizing the mercury to obtain the gold.

Cyanide leaching is when miners use a cyanide solution to dissolve and separate gold from the ore. When done properly, it is considered a safer alternative as the toxicity of the substance can be deactivated.

If managed irresponsibly cyanide can cause immediate damage. In contrast, mercury poses a more gradual long-term threat to health and the environment. Mercury is a chemical element that comes from both human-made and natural sources. It is not degradable and accumulates in the environment or in the body. Responsible use of these chemicals is allowed under regular Fairmined Certification (not Ecological Certification). Responsible use includes using mercury recovery methods throughout the process, avoiding emissions into the air, soil and water, proper disposal of waste and the use of trained personnel, protective equipment and suitable places for chemical manipulation.

5. How is the Fairmined Standard promoting responsible use and reduction of toxic chemicals?

The Fairmined Standard incentivizes the miners to reduce and eliminate the use of toxic chemicals facilitating access to fair markets and offering a premium on the top of the gold price. The premium can be used for investments in cleaner technologies and other improvements to the processing techniques. The Alliance for Responsible Mining supports miners through training and advisory on how to implement more efficient and responsible technologies.

An example of how the certification process has encouraged significant mercury reduction is in the Íquira Cooperative of Colombia where they have reduced their mercury use 80% since 2014 thanks to the mercury reduction plan elaborated with ARM. The Bolivian Cooperative 15 de Agosto has reduced mercury use in approximately 50% since 2014.

6. How do you extract Fairmined Ecological Gold?

As miners may not use any toxic chemicals, only gravimetric methods are allowed in the processing of the gold. Gravimetric methods are methods using only the weight and gravity of the materials to separate the gold from the rock or soil such as gold panning, sluices and shaking tables. Some miners may combine these methods with the use of chemicals but this is not allowed under the Fairmined Ecological requirements.

7. What happens with the mineral tailings which may still contain gold and still have value for sale?

The mineral tailings that are left over from the Ecological gold processing in most cases will still contain gold. The volumes of gold in the tailings depends on how efficient their extraction processes are. The Standard does not currently restrict the sale of these tailings to third parties. How these third parties process the tailings is beyond the scope of the Standard and would be outside the Fairmined System of Production, meaning once the tailings are sold the mineral can no longer qualify as Fairmined material. We do recognize that there does exist a risk that these tailing which might be sold to third parties are not held to any ecological processing standards. It should also be considered that miners have very limited access to resources and restricting the sale of their mineral tailings could be detrimental to the miners. This issue will be reviewed in the next Fairmined Standard consultation.