

CLEANGOLD

More gold **without toxins**

B2C



Cleangold is a mercury-free, affordable, and safe mining system that can **capture finer gold particles better than mercury**. It increases miners' yields up to 50% while helping them avoid the use of toxic chemicals.

This **B2C** (*Business to Consumer*) or **B2M** (*Business to Miner*) system is made of a sluice box with magnetic plates that captures fine-gold and may also be used at former mining sites to remove mercury from the environment.

CLEANER MINING TOOL

-  Oregon, US
-  Cleangold LLC
-  2015 <
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-  Kristina Shafer

www.cleangold.com

Problem

Artisanal and small-scale gold miners can **release up to 6 metric tons of mercury per day to the environment**. This toxic chemical bio-accumulates in fish, water, and communities. Gold mining activities leave sites contaminated after operations. Because many operations can't capture fine gold, they can miss up to 50% of the potential gold capture. Without alternatives to capture fine gold, many miners use mercury.

Solution

- A sluice box with magnetic plates that captures fine-gold as small as 5 microns.
- Can be used to adapt or completely replace a miner's current sluice box.
- Potential to recover mercury and can aid in remediation.
- Increase miner's yield up to 50% without the use of mercury.

Market

ASGM miners who want to eliminate mercury from their operations, and/or who want to remediate tailings with mercury while capturing gold with an affordable solution.

Other potential markets include conservation organizations and public institutions who want to reduce mercury usage.



Cleangold was tested and validated by the **CITE Minería y Medio Ambiente** at the **"Rosemary I"** formalized mining site in Madre de Dios, Peru, through their participation in the **Amazon CoLab** in 2022.



Key Facts

- **Seeking \$400,000 in funding**
- **Price per unit: \$40-200**
- **ROI for miners after 3 weeks**
- **Potential to increase gold yields by 50% without the use of mercury**

Competitive Landscape

Compared to other alternatives, such as shaking tables, centrifuges, flotation cells, and other technologies, **Cleangold is affordable for most artisanal miners** and doesn't require technical expertise, electricity (non-motorized) or significant amounts of clean water.

Funding Needs

Seeking **\$400,000 in funding** to:

- Stage demos and training with miners for increasing yield without toxins;
- Field testing mercury remediation.
- Establish local sales, marketing efforts, and distribution channels.



The Artisanal Mining Grand Challenge is a global competition first launched in 2019 by Conservation X Labs. This Challenge seeks to advance innovative solutions that transform artisanal and small-scale gold mining into a more environmentally responsible and socially equitable practice. Cleangold is field-testing its solution in the **Amazon CoLab**, the Challenge acceleration program.

www.artisanalminingchallenge.com