



MERCURY: IMPORTANT BY-PRODUCT FROM PERU'S LARGE SCALE GOLD MINES

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- The productive activities that provide greater income to the country are manufacturing, followed by agriculture and mining.
- Peru ranks first in gold production in Latin America and sixth in world gold production. It is also a world leader in silver, zinc, copper, and tin production.

PERU'S MERCURY IMPORTS



- Peru imports mercury for **artisanal mining**, chlor-alkali production, and dental amalgam. Mercury is also imported as a component of batteries, electronics, fluorescent lamps, medical equipment, and thermometers.
- Peru imported mercury: 180 t (2009), 119 t (2008) y 86 t. (2007)*

Source: *TRANSACTION



- Thanks to the environmental awareness and mercury stewardship in Peru's major international mining companies, Peru has become a leader in reduction of mercury emissions and by-product mercury recovery from their open-pit large scale mines.



- By-product mercury and calomel, which is recovered from precious metals processing in Peru , are exported to the United States for processing. The mercury might then re-sold into the world market, where it may be used for a variety of uses.

PERU'S MERCURY EXPORTS



- Peru is also the greatest exporter of mercury in the region LAC:
107 t (2009), 86 t (2008), 60 t (2007)*, 22 t (2006), 128 t (2005), 0 t (2004), 19 t (2003), 0 t (2002), 29 t (2001), and 11 t (2000)**.
- The by-product recovery operations are done on the major gold mining companies. The main exporter is Minera Yanacocha SRL, with 63 % of the volume yearly (roughly); ranking second is Minera Barrick Misquichilca, with 36 %.



- Currently, the cost of mercury export is very cheap (< \$1,00/Kg). However, the export is expected to become more expensive, since companies will be charged higher fees for the treatment and disposal services provided at storage facilities.



- The increasing amount of mercury exported by Peru reflects a big capacity of producing elemental mercury from gold and other metal mines.
- Peruvian gold has a 7,7% contribution to the worldwide international markets: Switzerland (57%), Canada (25%) and USA (14%).



- In the year 2009, it was registered an annual gold production of over 182 ton. However, this production will increase because Peru has much to offer. Only 0.67% of Peruvian territory has been explored, which places us as the world's tenth largest gold reserve.



- The large identified mining projects portfolio. Their costing of a projected total investment is for over USD\$ 35,000 million nationwide.



USD\$ 4,500 million are investments in gold mining projects, which the most important are:

- Minas Conga (USD\$ 1,090 million),
 - Chaquicocha (USD\$ 400 million),
 - La Zanja (USD\$ 60 million)
 - Tantauatay (USD\$ 56 million)
 - and Shahuindo (USD\$ 90 million)
- Cajamarca
- La Arena (USD\$ 360 million) in La Libertad;
 - Ollachea (USD\$ 150 million),
 - Pucamarca (USD\$ 65 million)
- Tacna

These projects are reaffirming our gold abundance. But with it, it also increases our concern for the production of mercury as a by-product.



- This fact could be critical at the moment that ban exports in USA and EU start to be applied. Peru does not have facilities for the storage of mercury.



- In Peru there are hazardous waste landfills; however, they are not considered as an option for elemental mercury, because it is a liquid and it is difficult to stabilize.
- Support is needed for governments, like Peru, to initiate pre-feasibility studies on the accessible and useful areas to implement over-ground storage facilities or other viable options.



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Vilma Morales Q.
vmorales@digesa.minsa.gob.pe