

# Gold: From Mine to Shine

Gold is one of the oldest, most precious and strategic metals in human history. From the first deposits exploited several millennia ago to the international reserves of central banks, it occupies a central place in economies, financial markets and asset portfolios. Even today, gold plays a key role as an industrial raw material, a cultural jewel, and a safe haven asset for investors.

## 1. A Rare and Sought-After Raw Material

Gold is found primarily as auriferous oxides and sulphides in host rocks. It is extracted on a large scale in several countries around the world, including China, Russia, Australia, Canada, the United States, Ghana, Mexico, Peru, and Uzbekistan, which collectively accounted for a significant share of global production in 2025.

Gold extraction is a capital-intensive industrial process: it requires prospecting, open-pit or underground mining, crushing of ores, separation of auriferous particles by gravity, flotation or chemical treatments, followed by melting and purification of the metal.

## 2. From Mine to Shine: Value Chain

The transformation of extracted gold into its commercial form follows several major steps:

01	02	03
<b>Ore Extraction</b>	<b>Crushing and Grinding</b>	<b>Concentration and Separation</b>
from open-pit or underground mining operations.	reduction of rock into fine particles.	physical or chemical separation of auriferous particles.
04	05	
<b>Refining</b>	<b>Final Transformation</b>	
melting and purification to achieve very high purity levels (often $\geq 99.99\%$ ).	production of bullion, coins, bars, jewellery, or industrial components.	

A significant portion of extracted gold is then recycled from old jewellery, electronic waste, or melted bullion, contributing to the global supply.

## 3. Global Production & Market Geography

The global gold market is structured around mining production, recycling, and institutional purchases:

- Global mining production continued to increase and is expected to reach a new record close to 3,694 tonnes in 2025, slightly higher than 2024 figures.
- Gold recycling also reached historical levels, contributing significantly to the overall supply.
- The price of gold has seen strong growth, driven by macroeconomic uncertainty, geopolitical tensions, and institutional purchases, with annual averages well exceeding recent historical levels.

Major producing countries account for a significant portion of the global supply, notably China ( $\approx 380$  t), followed by Russia, Australia, and Canada.

## 4. Diversified Uses

Gold is not only a financial asset: it also finds diverse industrial and cultural applications:

<b>Investment and Official Reserves</b> bullion, coins, and ETFs, and accumulation by central banks.	<b>Jewellery</b> historically remains the primary physical consumer of the metal.	<b>Industry</b> in electronics, medicine, aerospace, and electrical contacts due to its conductivity and corrosion resistance.
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Gold's safe haven value is accentuated when financial markets become volatile or in environments of low real interest rates, reinforcing its demand as a store of wealth.

## 5. Market Dynamics & Volatility Factors

Several elements influence the price and flows of the gold market:

- **Central Bank Purchases:** States continue to increase their gold reserves, reflecting a diversification strategy in the face of macroeconomic uncertainty.
- **Investment Demand:** Global demand for metal for investment purposes reached record levels in some quarters of 2025.
- **Industrial and Jewellery Demand:** These segments remain important, although jewellery dynamics are sometimes inversely correlated with high prices.
- **Geopolitics and Inflation:** The perception of gold as a safe haven asset increases during periods of geopolitical tension or economic uncertainty.

In December 2025, the price of gold stood around 110.80 CHF/gram, according to the spot market (LBMA). The balance between supply (mining production + recycling) and demand (investment, jewellery, industry, reserves) remains a key factor in understanding price volatility.

## 6. Outlook & Challenges for 2025–2030

In the medium term, several structural trends are emerging:

<b>Continued Investment Demand</b> supported by increased purchases from central banks and institutional investors.	<b>Production Outlook</b> production could continue to increase slightly if new mining projects come online, but the existence of exploitable reserves remains a challenge.
<b>Recycling and Sustainability</b> recycled volumes could play a major role in balancing supply and demand, especially at high prices.	<b>Innovation and Transparency</b> improvements in extraction technologies, traceability, and certification can reduce ESG risks associated with gold mining.

These trends outline an environment where gold remains both a strategic financial asset and a central element of the material economy, despite challenges related to production and environmental regulation.

## Sources

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