

Primary gold potential in Poland

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The gold mining history of Poland can be traced back at least as early as the Piast Dynasty (X-XIV century). In the present mineral industry gold is recovered mainly as a by-product from Kupferschiefer polymetallic ores.

With some exceptions primary gold deposits and occurrences can be grouped in 5 provinces which broadly follow the tectono - stratigraphic subdivision. The Kaczawskie Mountains epimetamorphic volcanic-sedimentary formation contains the majority of polish gold deposits and occurrences (Klecza-Radomice and Radzimowice quartz-sulphides veins and stockworks). The metamorphic eastern cover of the Karkonosze variscan granitoids massif contains metasomatic replacement ore bodies (Czarnow and Miedzianka arsenopyrite-magnetite lodes). The Zloty Stok-Skrzynka tectonic zone contain the bulk of the gold-arsenic replacement ore bodies (Zloty Stok magnesian skarns with loellingite and arsenopyrite). The North-Sudetic Depresion and Sudetic Monocline contains Rote Fäule-related gold mineralization in the clays and sandstones of a Rotliegend to Zechstein copper sequence (Polkowice and Nowy Kosciol prospects). The epithermal gold-silver veins are associated with propylitized Tertiary andesites on the Pieniny Klippen Belt.

At present, approximately 90 % of Poland gold reserves are located in Sudetes Mountains and Sudetic Monocline. The Polkowice prospect has an inferred resource of about 150 tonnes of gold at an average grade of 0.5 ppm. Ore resources of the Nowy Kosciol area include about 30 tonnes gold at an average grade of 0.4 ppm.

Further investigations are needed for a better understanding of the formation conditions of gold mineralization.