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Outline of the mining history in the Polish Lands

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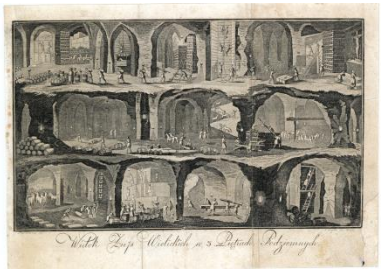

Exploitation of mineral resources in the Polish lands dates back to the Neolithic era, when in the years around 3900 – 1600 BC striped flint was mined in the Holy Cross Mountains. This emplacement was discovered in 1922 by the eminent geologist Jan Samsonowicz (1). It covers approximately 2700 pits with a depth of 5-6 m with a network of exploitation galleries up to 1.2 m in height. Another valuable resource valued in ancient times, originating from the area around southern coasts of Baltic Sea was amber, called also "electron" . From the 5th century BC, the so called "Amber Trail" started from Aquileia on the Adriatic through the Moravian Gate to the Baltic Sea. There were several cities on the trail, such as: Vienna, Brno (Bruna), Kłodzko (Glacium), Wrocław (Budorigum), Kalisz (Calisia), Bydgoszcz (Askaukalis) and Pruszcz Gdański (Praust). The amber trade was mostly controlled by the Celts. Mining metals on the Polish territories also has a long history. The oldest mining and processing of the iron ores took place in the Holy Cross Mountains about 2000 years ago. Siderite ores were exploited and then smelted in the simple furnaces. In the twelfth century in the area between Cracow and Silesia extraction of zinc and lead ores started. At this time, the first regulation concerning exploitation of natural resources in the Polish Kingdom appeared (2). Recent archeological research shows that Celts led exploitation of the silver – bearing galena in this area in the eight century BC. From the twelfth century the first reference to polymetallic ore mining in the Sudetes Mountains (NE part of the Bohemian Massif) occurred. Copper, lead, silver, arsenic and gold were mainly mined. These ores were described by C. Schwenckfeld (3). Since the 14th century, quartz veins for glass production and other ornamental stones were exploited also in the Sudetes. In addition the Polish lands were famous throughout Europe for their rock-salt deposits. The salt mining in the area of Wieliczka and Bochnia near Cracow began most probably in the 11th century. During the Tartar invasion of Poland in 1241 nearly the entire population of Wieliczka was exterminated. This explains the resulting rediscovery of the salt deposits in this area in 1252. Unique in the world is the "Regis" shaft first constructed in these times and still in use today (4). Exploitation of salt provided a good income at this time. Taxes from this exploitation constituted approximately 30% of the revenues of state and were the basis for the dynamic development of the Polish Kingdom under the last ruler of the Piast dynasty – Casimir the Great (1333 – 1370). The fame of the Wieliczka salt mine was known throughout Europe at this time. The site started being a tourist attraction as early as the 17th century. From that time we have the first drawings illustrating its beauty. Crude oil is a natural resource which became globally significant and it is now hard to imagine life today without it. Its exploitation and production on an industrial scale began in the mid –19th century in the area of SE Poland in the flysch Carpathian deposits (5). Today, in the Polish – Ukrainian border zone, old installations, dating back to late 19th century, still extract small quantities of oil.

Today, many former mines and extraction sites of raw materials attract thousands of tourists. The Wieliczka Salt Mine, which has a leading role, has been placed on the UNESCO World Heritage list. Objects which are also known on an international scale include a gold mine in Złoty Stok and the lead and zinc mine, "Black Trout", in Tarnowskie Góry. The famous, Neolithic striped flint excavating emplacement in Krzemionki Opatowskie is also open to the public. In contrast, long time salt mines in

Bochnia acts as a sanatorium for children with lung diseases. Annually it treats tens of thousands of patients.

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