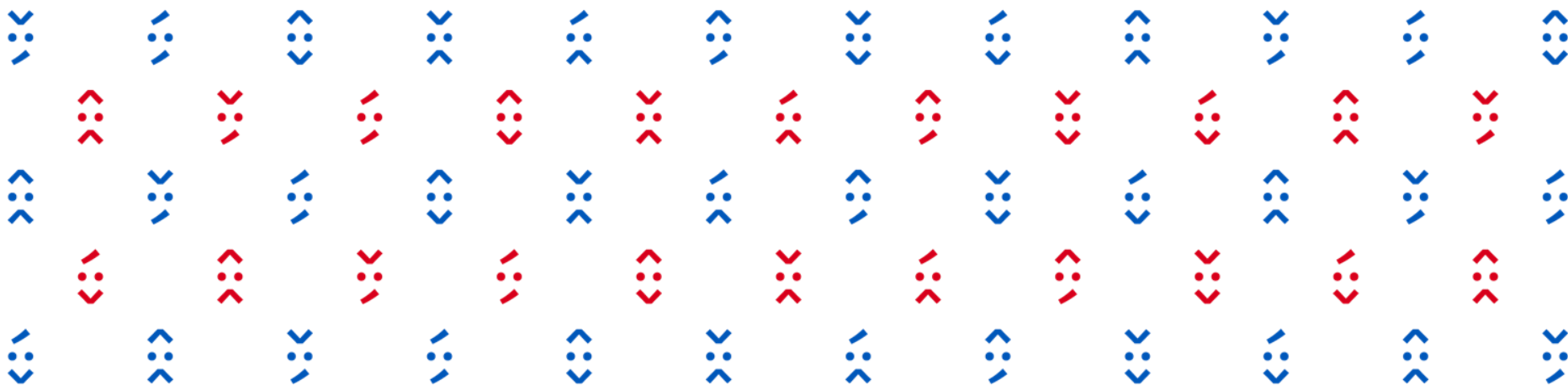




Slovak Presidency of the Council
of the European Union



MINERAL RESOURCES OF SLOVAKIA – IMPORTANCE OF MINERAL RESOURCES FOR THE SLOVAK ECONOMY

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SUSTAINABILITY OF MINERAL RESOURCES AND THE ENVIRONMENT

Bratislava, 21 – 22 November 2016

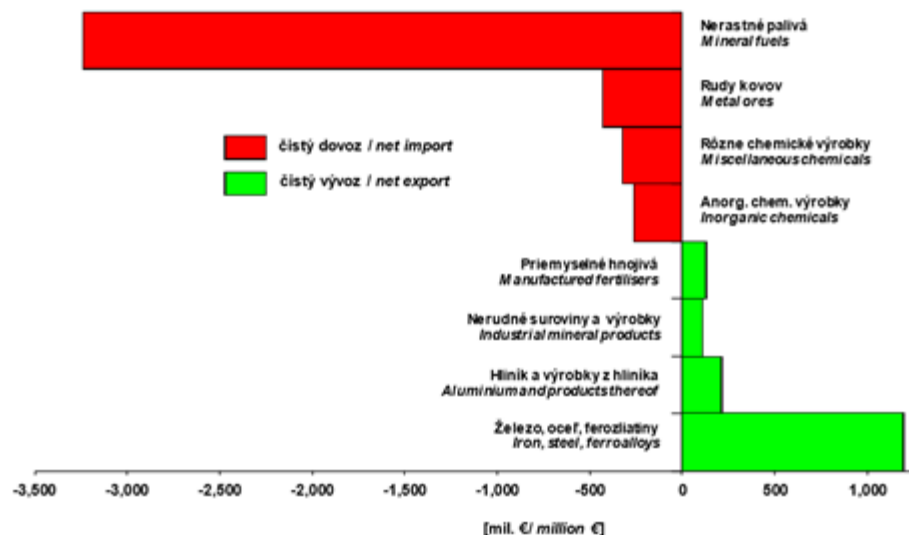
Introduction

Minerals and mineral-based products are the basis of production for metallurgical, electricity, chemical, brick, ceramics, tile, glass and other industries in Slovakia. According to Slovak Minerals Yearbook, 2015 mining and quarrying of minerals (including extraction of crude oil and natural gas) contributed **319,8 million €, or 0.42 %**, to Gross Domestic Product (GDP) at current prices in 2014.



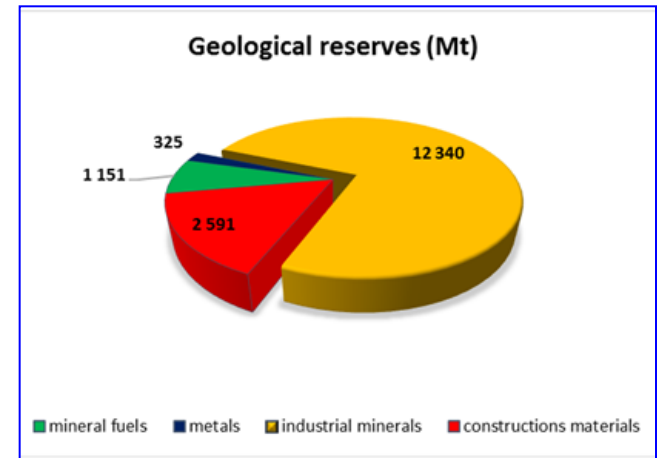
Foreign Trade

Minerals and mineral-based products represent an important item of foreign trade of the Slovak Republic. Because of a large import volume of **mineral fuels** (crude oil, natural gas, hard coal) and **metals** (iron ore, zinc, materials for aluminium metallurgy) foreign trade balance has been permanently passive. Domestic consumption of these minerals is covered mainly by import. Production of **industrial minerals** (magnesite, limestone, dolomite, gypsum, bentonite and barite) covers in substantial volume domestic consumption.

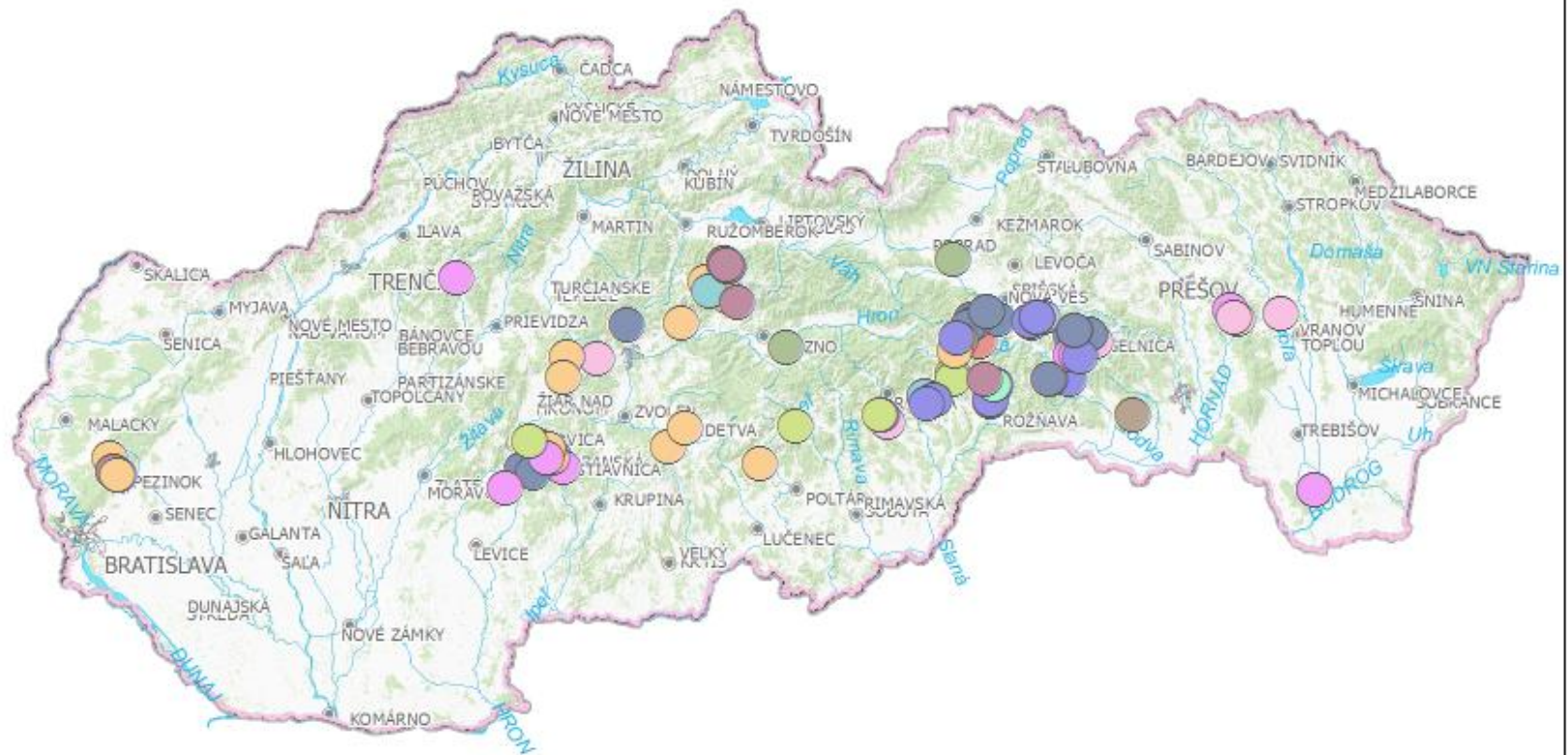


MINERAL DEPOSITS IN SLOVAKIA

- **1 128** mineral deposits
 - **639** reserved mineral deposits
 - **489** deposits of non-reserved minerals
- Total geological reserves reached **19 611 Mt** (up to 1 January 2015)
thence **12 547 Mt** were industrial minerals reserves
- The most important reserved mineral deposits **are protected**
by mining law to prevent restraint of future exploitation
- Protection is ensured by identifying of **protected deposit area**
- There were **314** protected deposit areas registered in 2014



MINERAL DEPOSITS IN SLOVAKIA - METALS





EXPOZÍCIA LOŽÍSK NERASTNÝCH SUROVÍN SLOVENSKA



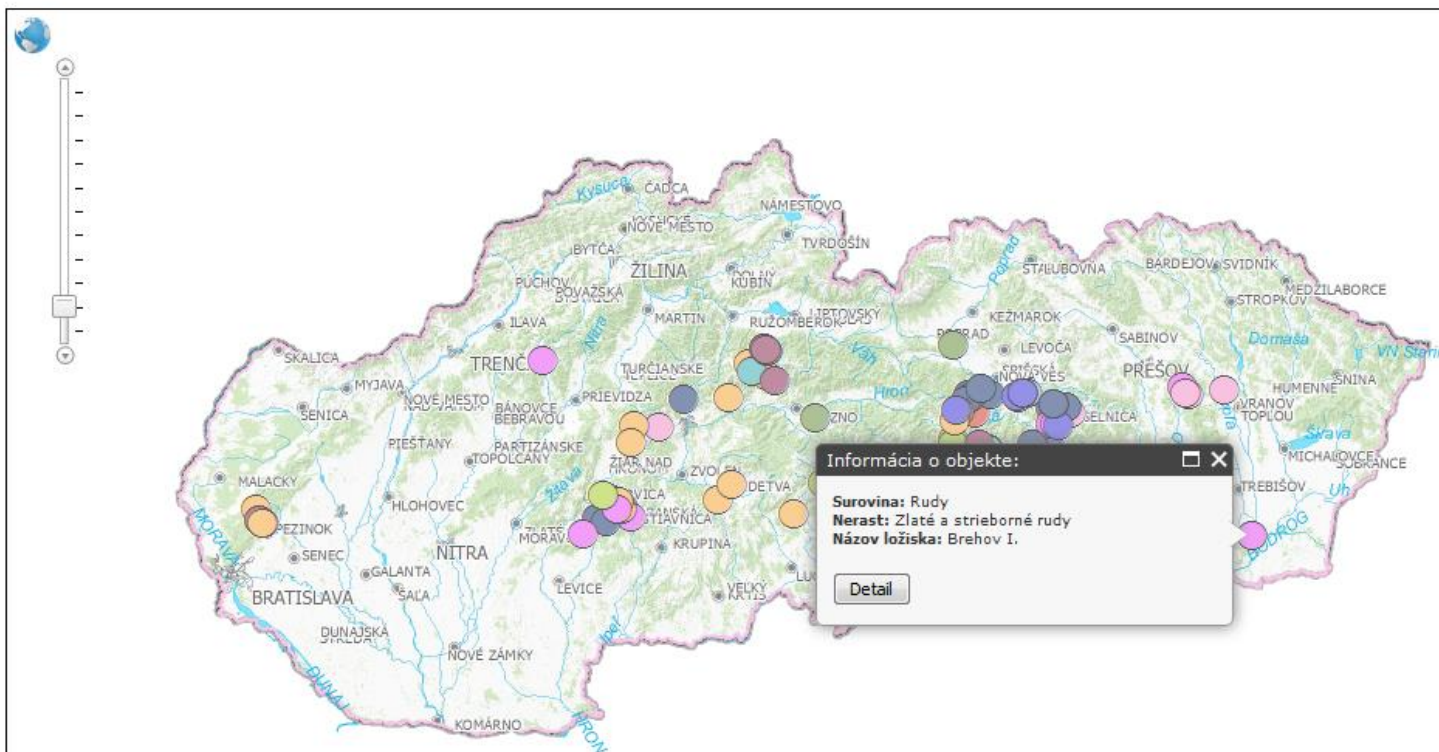
Úvod | Vyhľadávanie

20. november 2016

17:16:57

Oznac	Surovina	Nerast	Názov ložiska	Info
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<input type="radio"/>	Rudy	Zlaté a strieborné rudy	Medzibrod	Detail
<input type="radio"/>	Rudy	Medené rudy	Špania dolina - Glezúr - Piesky - Mária šachta	Detail
<input type="radio"/>	Rudy	Ortuťové rudy	Malachov	Detail
<input type="radio"/>	Rudy	Komplexné Fe rudy	Medzev	Detail

1 až 5 z 95 riadkov 5



ENERGETIC MINERAL DEPOSITS IN SLOVAKIA



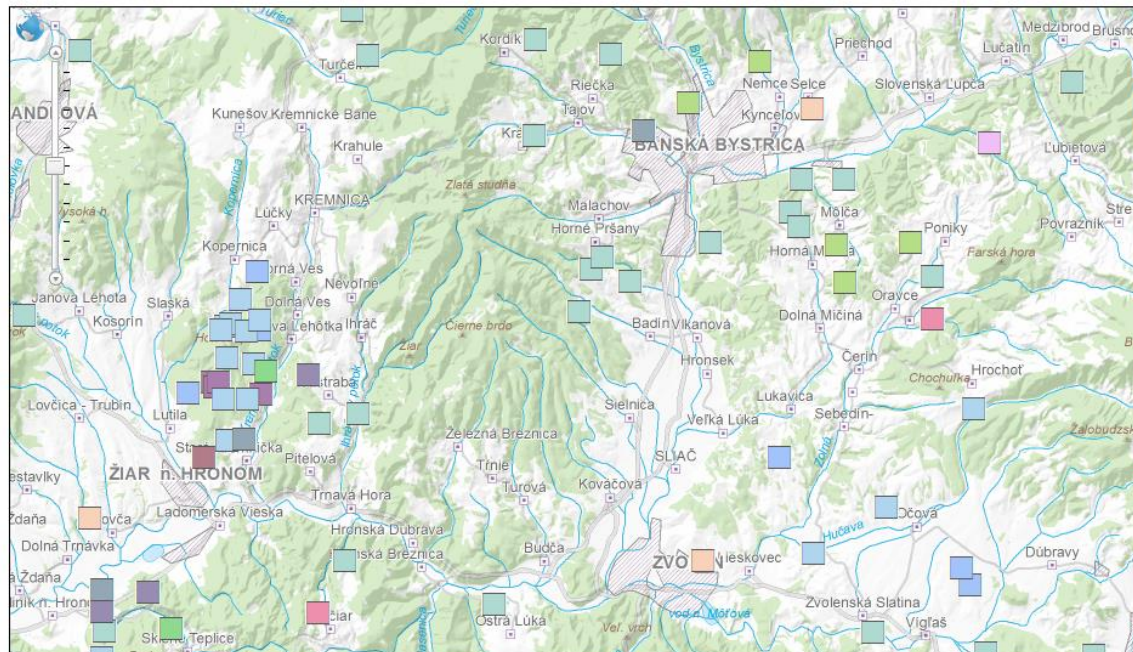
INDUSTRIAL MINERAL DEPOSITS IN SLOVAKIA

Úvod | Vyhľadávanie

20. november 17:21

Označ	Surovina	Nerast	Názov ložiska	Info
	Nerudy	Štrkopiesky a piesky	Dunajský Klátov	Detail
	Nerudy	Štrkopiesky a piesky	Eliášovce - Rybáreň Sv. Petra	Detail
	Nerudy	Štrkopiesky a piesky	Dolný Štál - Karáb	Detail
	Nerudy	Štrkopiesky a piesky	Kostolné Kračany	Detail
	Nerudy	Štrkopiesky a piesky	Rastice	Detail

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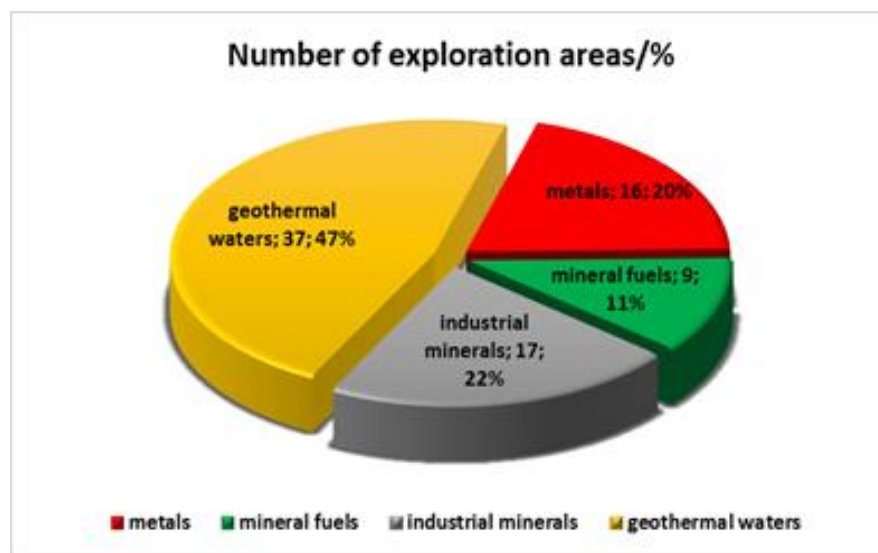
Mineral Resources of Slovakia – Importance of Mineral Resources for the Slovak Economy, Bratislava, 21./22. 11. 2016

Geological License

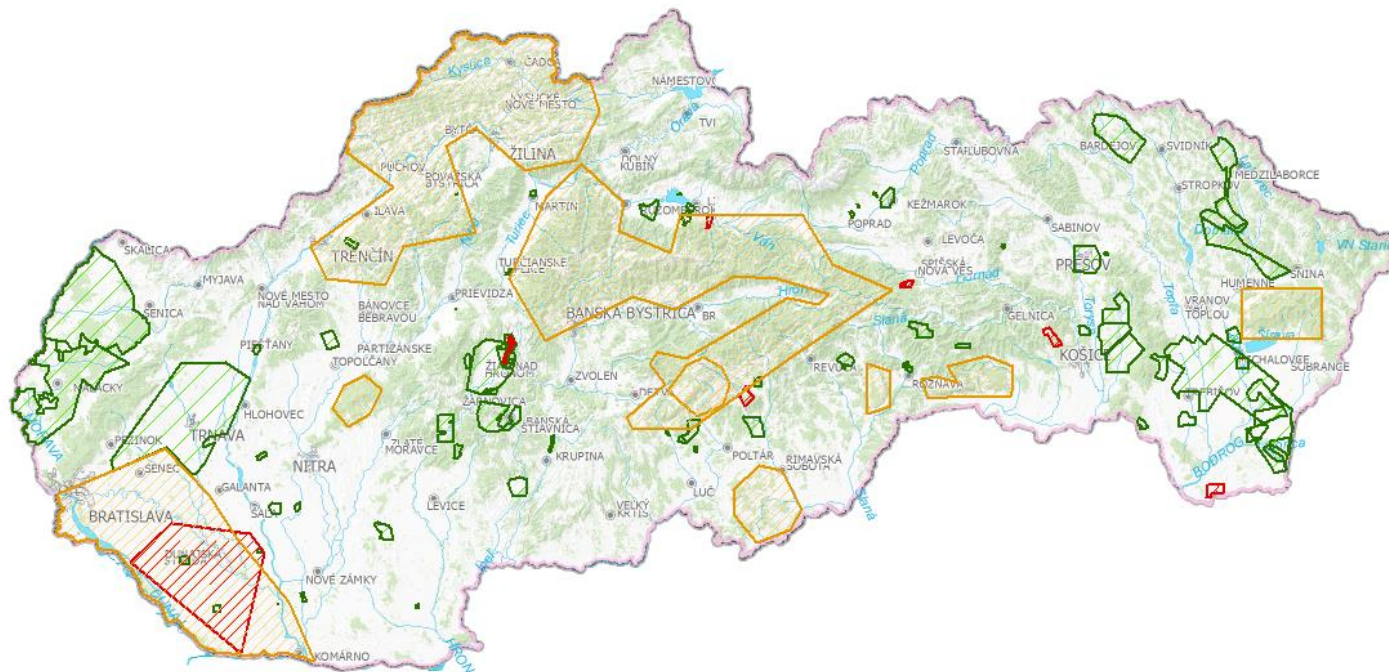
- Geological licensing is regulated by Geological Act
- Application for geological licence has to include list of persons with valid expert's qualification
- Mineral prospecting or exploration could be executed on **exploration area** only
- It is granted by Ministry for **4 years** (period could be extended) (4+4+2+ x years)
- Yearly remittance for exploration area is **99, 58 € per every open km²** for the first 4 years
- It rises to 199, 16 € after next 4 years and to 331, 93 € after next 2 years. During next years it is 663, 87 € per km²
- Payments are incomes of the **Environmental Fund**, 50 % of them directs to municipality on the cadaster of which exploration area lies
- Geological license is not required for surface prospecting of non-reserved minerals performed by land owners

Exploration areas

- New geological surveys of mineral resources are carried out in **79** exploration areas
- **20 %** of them is focused on metal exploration, **21, 5 %** on industrial minerals and **11, 3 %** on mineral fuels



Map of actual exploration areas

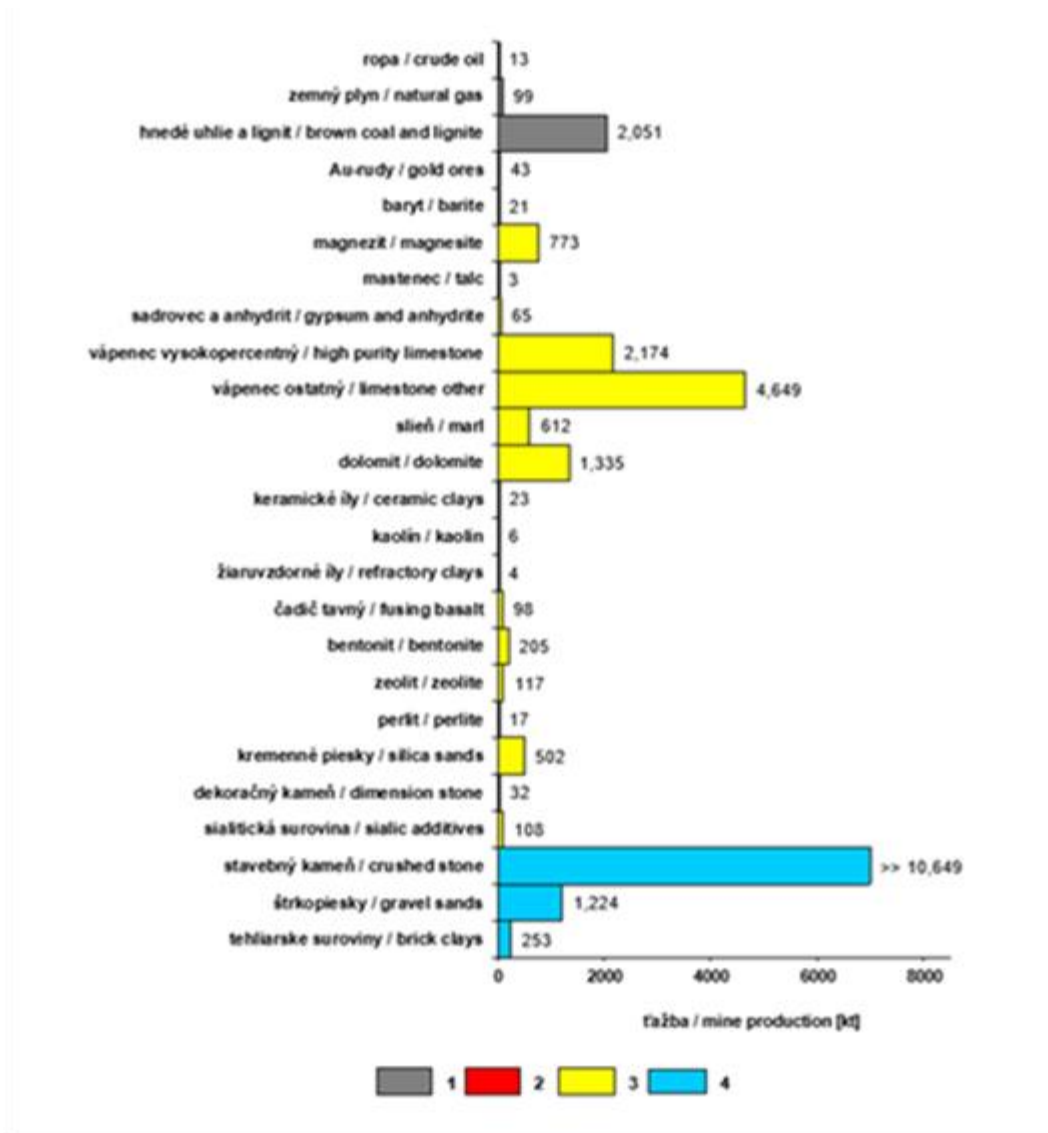


EXTRACTION OF MINERALS

- Extraction of minerals is regulated by the **mining acts**
- The right to mine exclusive deposits has the organization which has got mining license and which a mining area has been determined to
- Preferential right for mining area determination has the company, that exploration area was determined to and the research was carried out at their own expense
- Yearly remittance for mining area depends on area size (km²)
- The height of payment is **663, 87 €** per every open km²
- 20 % of payments are incomes of state's budget, 80 % of them directs to municipality on the cadaster of which mining license overlies
- Every mining subject exploiting minerals upon mining license has obligation to pay remittance for mined minerals (royalties)
- Royalties are incomes of the **Environmental Fund** (state's budget)

Mining Production

- **432** mining areas were registered in Slovakia in 2015
- Exploitation was performed on **201** reserved deposits
- Mining production on reserved deposits was **25, 1 Mt**



Mineral Fuels

- There are 98 mineral fuels reserved deposits registered in Slovakia⁴³² mining areas were registered in Slovakia in 2015
- Lignite, brown coal, mineral oil, natural gas and uranium ore
- Total geological reserves of them reached 1 145 Mt,
- About 465 Mt (41 %) are considered as economic reserves
- Domestic **brown coal** production has covered 80 % of demand in the Slovak Republic
- Value of imported commodities reached 37.3 million € in 2014; export was negligible
- Domestic demand for **crude oil** (5.4 – 5.9 Mt) is almost completely satisfied by import from Russia (97% in 2014). Domestic production covers only about **0.2 %** of demand
- Value of imported commodities reached 2.926 billion €
- Demand for **natural gas** was satisfied mostly by import, mainly from Russia (79 %). Value of imported commodities reached 1.773 billion €.

Metals

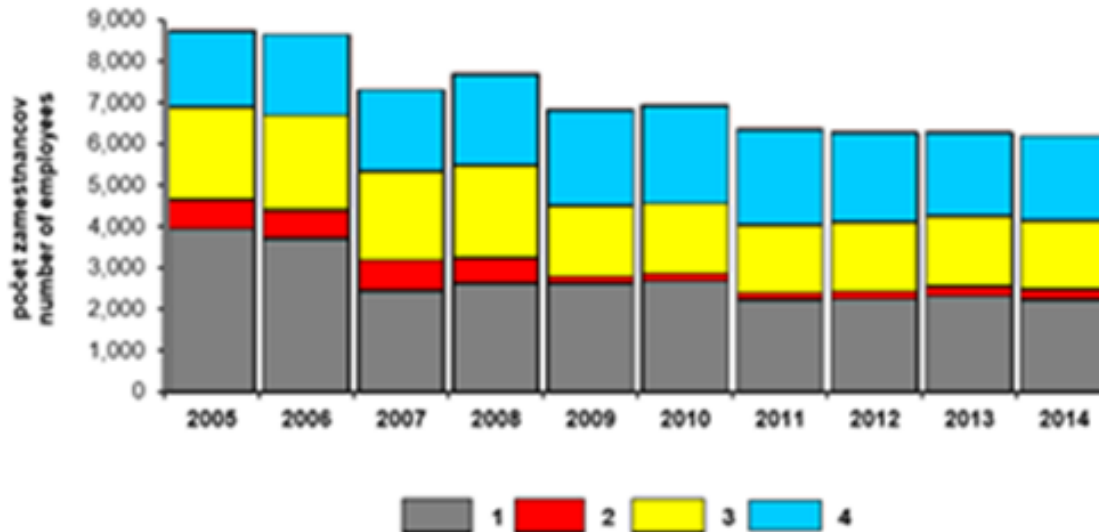
- Following the Register of Reserves of Mineral Deposits, state to 1 January 2015, **46 reserved deposits** of metals were registered in Slovakia
- Total geological reserves reached **326 Mt**, from which only about **26 %** are stated as economic reserves at present
- **Gold** was mined and processed only on Banska Hodrusa deposit in 2015. New reserves were estimated. Majority of gold concentrate production was exported (Belgium)
- There was no **iron ore production** in Slovakia in 2014, production stopped in 2008. Domestic consumption is satisfied by imports at present, mostly from Ukraine (55 %) and Russia (25 %). Value of imported ores and concentrates was 437 million €.

Industrial minerals

- Overall 302 reserved deposits of **industrial minerals** were registered in Slovakia
- Geological reserves reached 12 547 Mt (76 % of total geological reserves), from which about 89 % are classified as economic reserves at present
- Industrial minerals share on total mining production reached **43 %** (10, 8 Mt)
- Demand for **magnesite** is completely satisfied by domestic production in Slovakia. Most of production is exported (Ukraine 41 %, Czech Republic 12 %, Russia 9 %)
- Exported commodities value accounted for almost **73 million €** in 2014.

Employment in the mining industry

- Employment in the mining industry of Slovakia reached **6 184** employees in 2014,
- **33 %** of which worked in underground operations
- Employment had permanently decreasing tendency during last years



- 1 mineral fuels
- 2 metals
- 3 industrial minerals
- 4 construction materials



EU2016



MINING AND ENVIRONMENT

- In total (active and abandoned) **90** waste rocks stockpiles or heaps, from this amount **61** waste rocks stockpiles are situated in mining areas and **29** out of them, covering area of **2 556 km²**, volume **37 422,91 thousand m³**
- The number of **active** waste rock stockpiles is **49**, abandoned waste rocks stockpiles reach number **12**
- In total **28 tailings ponds** (storing tailings from ore processing) from which **13** are situated in extraction areas and **15** out of them, covering area of **2 976 km²**
- There are more than **17,000** objects registered in the Register of old mining works
- **338** closed and abandoned mining waste storage sites (**314** heaps and **24** tailings ponds registered in the Information System of the Waste from Extractive Industry

Information System of the Waste from Extractive Industry

The screenshot displays the 'enviroportál' web application interface. The main content area is titled 'Register of waste from extractive industry - Closed and abandoned, classified'. It features a search bar and several filter options on the left, including 'Name of waste', 'Production of waste from the region of the DSO', 'Production of waste from the sub-region of the DSO', 'DSO region - Country', 'DSO region - District', 'DSO region - Municipality', 'Type of waste', and 'Status of waste'. Below these filters, there are checkboxes for 'Include only waste from the DSO', 'Include only waste from the sub-region of the DSO', and 'Include only waste from the DSO sub-region'. The main table displays a list of waste entries with columns for 'ID', 'Name of waste', 'Status', 'Type of waste', 'DSO region', 'Production of waste from the region of the DSO', 'Production of waste from the sub-region of the DSO', and 'DSO region - Municipality'. The table shows four entries, each with a small icon and a status indicator.

ID	Name of waste	Status	Type of waste	DSO region	Production of waste from the region of the DSO	Production of waste from the sub-region of the DSO	DSO region - Municipality
331	Badin - Haldy Kopylová	10	Other	Region DSO: Hlohovec Subregion DSO: Bez DSO-subregion	1. neznámy /		Obec: Badin Okres: Banská Bystrica
9	Badin - Pod jazerom	7,8	Other	Region DSO: Hlohovec Subregion DSO: Bez DSO-subregion	1. neznámy /		Obec: Badin Okres: Banská Bystrica
263	Banská Belá - Haldy k Mikulášovej	40	Other	Region DSO: Banská Štiavnica Subregion DSO: Bez DSO-subregion	1. neznámy /		Obec: Banská Belá Okres: Banská Štiavnica
21	Banská Štiavnica - Banky - haldy nad kôstolom	21	Other	Region DSO: Banská Štiavnica Subregion DSO: Bez DSO-subregion	1. neznámy /		Obec: Banská Štiavnica Okres: Banská Štiavnica

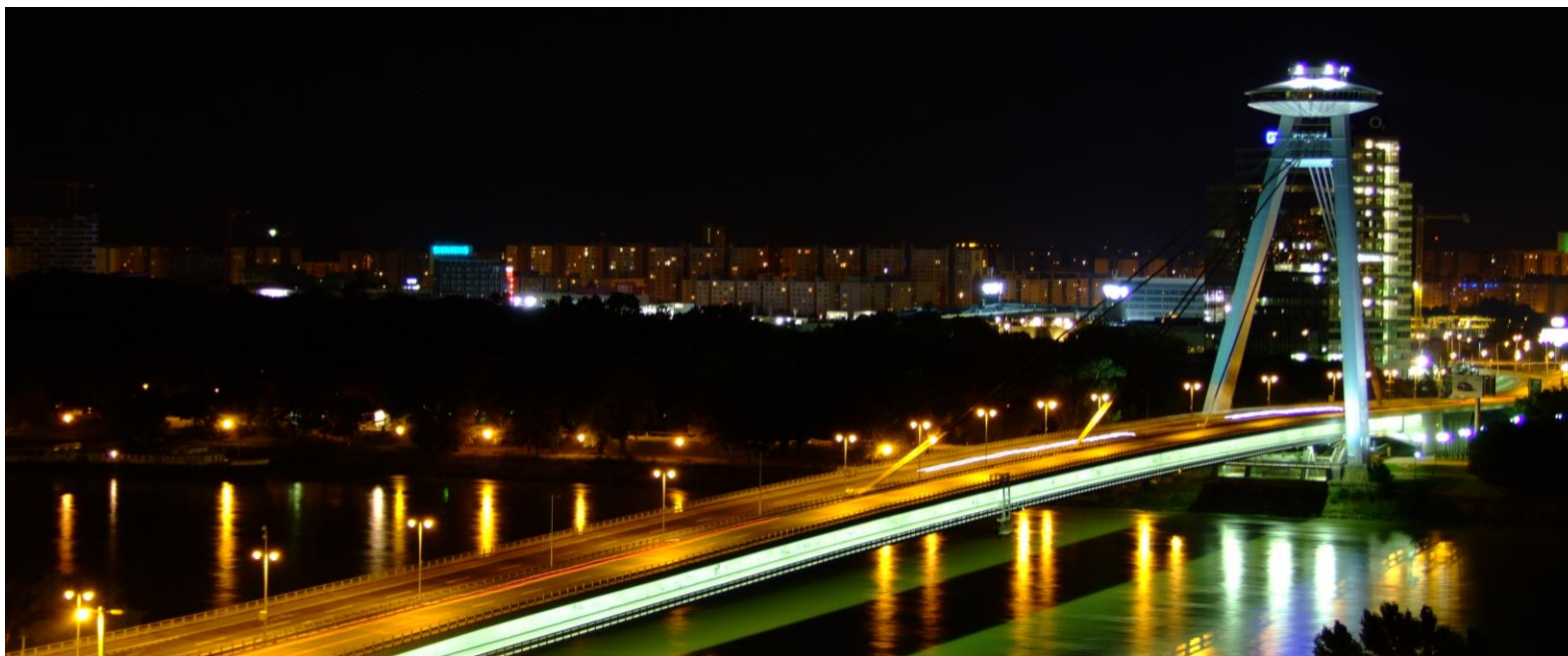
Payments

- Companies which carry out mining activities, paid in the period under review all payment in a total of **3 923 434.93 €**, which is **307 334.82 €** more than in the previous year (**3 616 100.11 €**)
- The payments for mining areas were **489 946.87 €**, payments for mined minerals (royalties) **2 415 732.90 €** and payments for the storage of gases and liquids **1 017 775.16 €**. Fines on identified infringements of mining regulations were issued in the amount of **117 984 €**.
- Companies which carry out exploration work, paid in 2015 for exploration areas **1 113 402 €** and fines for violations of the geological act were granted in the amount of **2 850 €**.

OPERATIONAL PROGRAMME QUALITY OF THE ENVIRONMENT (2014 - 2020)

The main objective of the Operational Programme Quality of the Environment is to promote the sustainable and efficient use of natural resources, ensuring environmental protection, active adaptation to climate change and promote energy efficiency and low carbon economy. In order to achieve this overall objective the investment strategy of the operational program including three basic thematic objectives has been proposed to:

- 1. Support the transition to a low-carbon economy in all sectors,**
- 2. Support for climate change adaptation, risk prevention and risk management,**
- 3. Protect environment and promote resource efficiency.**



Thank you for your attention

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