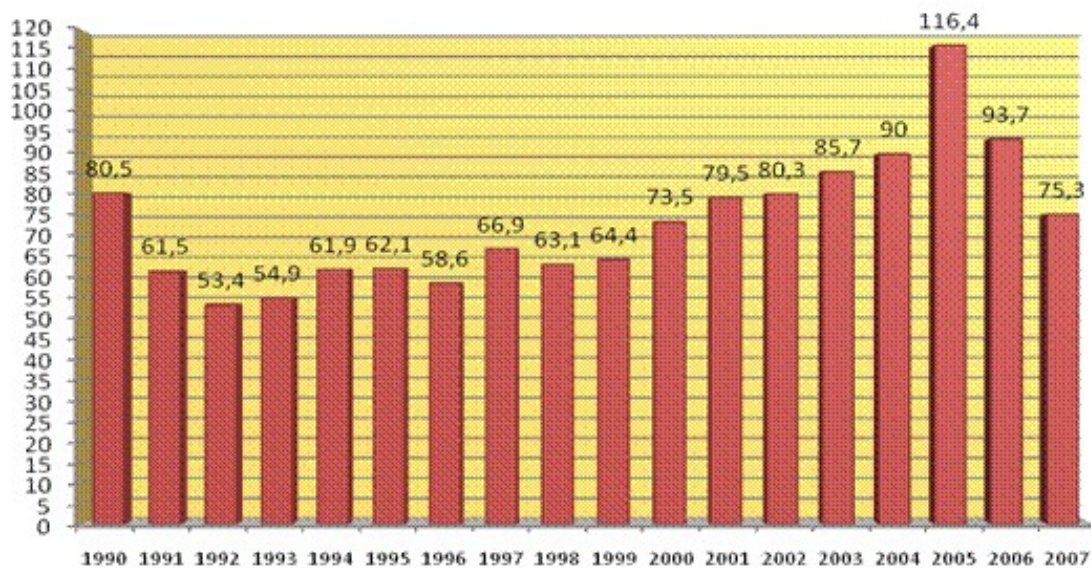


MINING

In the last twenty years the mining industry experienced dramatic changes. In the fossil fuel and metallic ores sector the big state-owned mining companies collapsed and/or transformed into private companies, many mines were closed, especially the sub-economic underground coal mines, tens of thousands of mine workers lost their job, left to early retirement or got training into other professions. The state spent tens of billions of HUF for mine closure, remediation and decontamination activities at mining sites.

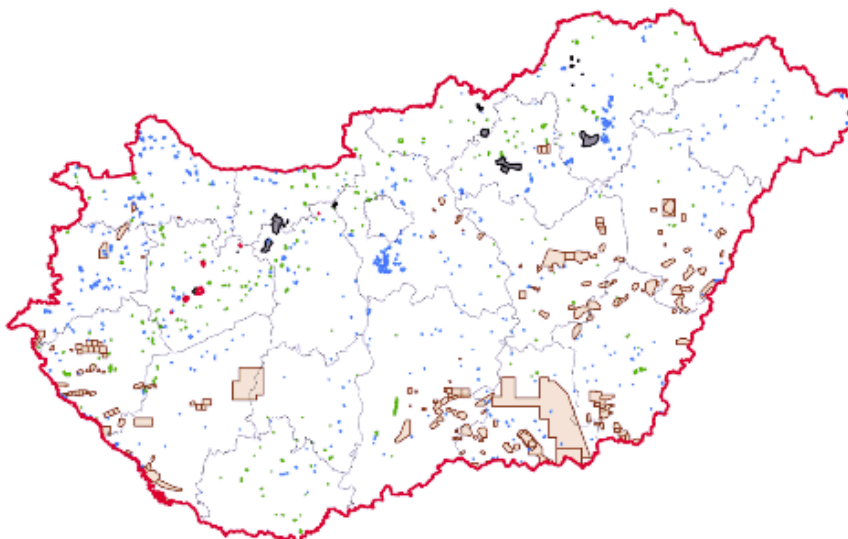
The aggregates segment of the mining industry (construction sand, gravel, crushed rocks, and decoration stones) and the industrial minerals companies being typically SMEs adapted more easily to the changes. This is reflected in the record of the bulk mineral production of Hungary. The annual production volumes are influenced a lot by the aggregates production which is a direct function of the infrastructure development supported by national state budget or EU funding and associated incentives.



Minerals production in Hungary 1990-2006 (Mtons) - source: Hungarian Office for Mining and Geology

In 2008, according to the register of the Hungarian Office for Mining and Geology (HOMG) 879 mining companies carried out active minerals and geothermal energy production on 1858 mining sites. The mining royalty provided by the extractive industry

(ca. EUR 400 million equivalent) is a significant contribution to the central state budget income.



*Mining plots (licenced exploitation areas)
in Hungary, June 2009*

Legend:

brown: oil and gas,

black: coal,

red: ore,

blue: aggregates,

green: other)

Policy and regulations

○ *Features of national mining codes or mineral industry code*

The Act No. 48 of 1993 on Mining came into force in 1993, later it was amended several times. Among the numerous implementing pieces of legislation (mainly decrees of the Ministry of Economy and Transport), the most important one is the Government Decree No. 203 of 1998 which gives detailed implementing provisions to the articles of the Mining Act.

The scope of the Mining Act covers the complete mining-related activity chain, as: geological survey, mining exploration, exploitation, break in operation, mineral processing, closure, remediation. It extends to all mineral commodities (including oil and gas); establishment, utilization and termination of waste rock heaps; maintenance, utilization and closure of open spaces of closed underground mines; underground activities of non mineral exploitation purposes using mining methods (as shafts, deep drillings, tunnels and galleries); establishment and operation of pipelines conveying hydrocarbons; the utilization of geothermal energy with the exception of ground waters; all facilities and equipments necessary for the above activities (as mining railways, cableways, string ways, electric cables, explosives). Water, even groundwater holding geothermal energy, works of water management in general, and manual gold-washing are out of the scope.

In practice, the major legal tool of minerals management is the concession procedure. The state – the original owner of mineral resources – can plan and control minerals exploitation on a longer-term by deciding whether to open certain areas for the exploitation of certain minerals in the form of announcing these for open concession tenders.

Another tool for controlling minerals management is the obligation of paying extra mining royalty in case when the mining operator produces more cut-off than licenced in the technical operation plan or makes unreasonable damage to the mineral reserve itself.

The National Mineral and Geothermal Energy Resource Inventory (and Balance) of Hungary is managed by HOMG and its predecessors since the 1950's. It is updated each year. The Inventory includes more than 2700 deposits and mines. The Inventory contains quantitative data (resource, reserve, production, status of mine, etc.) and some qualitative data (type of mineral, main constituents, etc.). HOMG operates the National Archive for all geological data. Data are to be submitted on a yearly basis, including primary (field) data, and processed and interpreted data as well as reports, maps etc.

Data provided by the concession holder/licensee are confidential - business secret - for the whole duration of the concession contract/mining licence. After the termination of the concession contract/mining licence all data become public.

According to the Government Decree No. 203 of 1998 an environmental impact assessment based environmental licence is required before the technical operation plan is submitted to the mining authority.

Mining companies have to pay mining royalty after exploited minerals and geothermal energy. The basis of the calculation of the mining royalty is the market value of the unprocessed minerals leaving the mining works.

- ***Fiscal policies for investments and counteracting market fluctuations***

No specific financial incentives were established in order to support investments nor to counteracting market fluctuations in the mining sector. However, the mining legislation and the practice of the mining supervision authority provide a relatively high degree of freedom for investors in planning and accomplishing mining projects. For example, the time span available for mining companies carrying out exploration activities is remarkably long (10 years maximum), and the exclusive access to their acreage is ensured. The licensee is entitled to sell its mining right, as well as to trade with its geological data during the duration of the whole licenced mining period.

- ***Regulations and mechanisms for compliance and monitoring***

HOMG is the prime authority to supervise the mining industry. It is:

- the prime supervisor and licensing body of all geological and mining activities, and
- the monopolistic host and supplier of geo-information, including mineral resources,
- its regulatory competence extends beyond the classic spheres of authority, such as mineral exploration and exploitation, mining waste management, technical safety of mines and workers health, geotechnics and specific constructions, national inventory of mineral resources - over to fields such as gas pipelines and pressure equipments, explosives management, occupational issues, market surveillance, professional experts titles, geothermal energy, etc.

Moreover, the agency is involved in numerous other licensing action as a co-authority, e.g. environmental protection, water management, land use planning, nuclear affairs, constructions.

- ***Guidelines for artisanal, small and medium scale mining***

There are no specific guidelines for artisanal, small and medium scale mining in Hungary. There are a very few manual gold washer persons along the Danube river, and some illegal gravel pit diggers in the vicinity of certain villages, but the magnitude of this problem is negligible. Therefore the mining authority does not apply specific surveillance actions against these activities beyond the routine monitoring and sanctioning practices.

- ***Public/Stakeholder consultation and participation in decision-making related to mining and public governance and transparency in the mining sector***

According the law on the public administration procedures and to the Mining Act, the interested public and the stakeholders can have access to licensing activities, geological data, and information on mining areas and activities. The ways they may perform these rights are diverse:

- direct notification by the authorities,
- announcements on web homepages,
- analogue announcements on local municipalities news,
- free of charge data service by the authorities on request,
- public hearings,
- court jurisdiction intervention, etc.

- **Mining best practices**

- ***Environmental Impact Assessment (EIA) and monitoring of all phases of mining operation (exploration, project development, mine operation, and mine closure)***

The mining legislation contains general provisions concerning the accomplishment of environmental protection criteria. Necessary measures of environmental protection are required by the relevant authorities during the licensing procedures. The legal basis of the detailed requirements is set in environmental, water and other specific legislation. In the Mining Act, besides the participation of relevant co-authorities, there is a special legal institution of "exempted location" where prospecting shall be licenced with the preliminary approval of the relevant authorities or interested parties. Exempted location includes the built environment, bed of water course, water works, potable water, mineral water, medicinal water, any spring and the designated protective area thereof, protective forest, protective zone around resorts, protected natural area, real estate under the protection of monument of art or archaeological protection, and soil in relation to open-pits.

During licensing phases as approving concession contract and granting exploration, environmental liability guarantees as bank deposits, liability insurance, indemnity are required.

The mining authority may impose a fine on, and may prohibit the mining activity performed without a licence. If the company deviates from the rules prescribed in the regulations or in the licence, the authority may impose a fine, may suspend the activities, withdraw the licence, or may initiate termination of the concession contract and may order remediation of the site.

- ***Private Public Partnership PPP for sustainable mining***

PPP is not in practice in the mining sector in Hungary. The mining industry is completely private-owned. However, the 100 % state-owned Mining Property Utilization Company in the Public Interest is managing mine remediation activities in the sphere of state liability mining sites.

- ***Emergency Response Plans and Preparedness at the local level***

Emergency response plans and public preparedness of the locals are out focus, since mining facilities with high risk of accidents do not exist in Hungary, i.e. no installations known belonging to the scope of the Seveso II Directive. Directive 2006/21/EC on mining waste management also prescribes external and internal emergency planning for category "A" waste management facilities, but there are no such facilities known in the country.

- ***Risk assessment of mines and mining activities***

Risk assessment in the mining sector is a common practice with respect to environmental impact assessment and mining waste management affairs. However, it is usually performed for the purposes of supporting an environmental licence application. Voluntary environmental risk assessments are rare. When business management

feasibility risk assessments are concerned, leading companies apply those on routine basis.

- ***Rehabilitation of affected communities and life-supporting ecosystems, including mine site decommissioning***

The Hungarian State spent significant amount of financial funds in the last twenty years on former state-owned mining sites decontamination and remediation, including the rehabilitation of affected built environment, the education of affected local public and manpower, and the revitalization of the local biodiversity.

The stringent new requirements of the Mining Act on the financial guarantee ensure that the mining companies are duly liable for any environmental impacts their activity may pose.

- ***Technological, institutional and social initiatives for protecting the health of mining workers***

The regulations and institutions of work safety are fundamentally defined in the Constitution along with the Act on work safety and health¹. Also of special importance are the Act on healthcare², the Act on the National Public Health and Medical Officer Service³, and Act on the mining industry⁴.

The mining entrepreneurs are required to ensure the proper conditions of the work, to eliminate and to minimize the harmful environmental effects furthermore to grant financial base to cover the costs of rehabilitation.

The Act on Mining and the concrete rules of its Methodological Norm⁵ contain requirements concerning the protection of human life, human health, the environment, agricultural lands and properties.

These requirements are ensured through the supervision of work safety and health carried out by the National Labor Inspectorate, the National Public Health and Medical Officer Service and the Mine Supervision or their district organs.

The Hungarian Mining Authority is intent on keeping its traditional positions – by exercising its jurisdiction – despite the significant changes taking place in the country. It has encouraged introducing and operating management control systems in the field under its supervision.

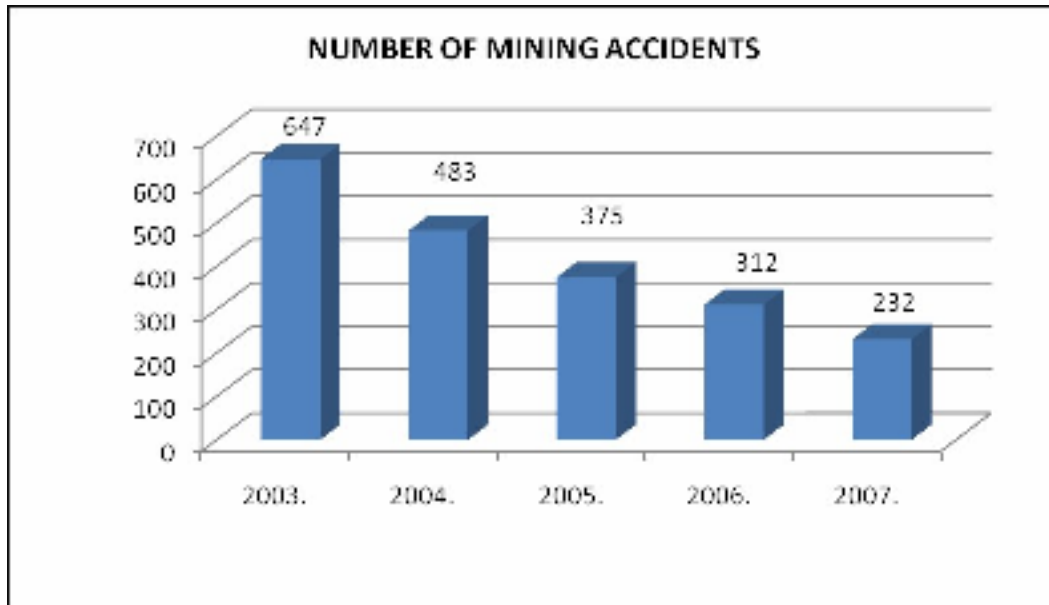
¹ Act No. 93 of 1993

² Act No. 154 of 1997

³ Act No. 11 of 1991

⁴ Act No. 48 of 1993

⁵ Government Decree No. 203 of 1998



Number of mining accidents in Hungary (2003-2007) - Source: Hungarian Office for Mining and Geology

- ***Mine Closure Planning (Land use plans & site rehabilitation, site safety, decommissioning, waste dumps & tailings, site water management, off-site infrastructure, community socio-economic programs and employees)***

The closure of the mine is regulated by the Mining Act. The mining entrepreneur shall submit a technical operation plan for the closure. The mining authority and the involved co-authorities shall judge the possibility of the further use of mined spaces and facilities. The underground workings shall be abandoned in such a condition that it should not be a hazard to the environment or the surface.

According to the implementing Government Decree No. 203 of 1998 the technical operation plan of the closure shall contain:

- an environmental impact assessment,
- the technical measures for the protection of the surface, groundwater and natural values,
- the remediation measures and their timing,
- the presentation of facilities for further use or demolition,
- plans for the utilization or clean-up of waste rock heaps, etc.

The further utilization of underground mining spaces is acceptable in case when remediation is completed, the environmental damages are restored or compensated and the new financial proof for environmental liability was paid.

The mine closure regulatory process includes the granting of the remediation, as prescribed by the Mining Act and by the implementing Government Decree that give detailed provisions on remediation. The mining company shall continuously remediate the surface area, which can be no longer used, to achieve a state harmonizing with the natural environment or condition for further utilization in accordance with the technical operation plan. A separate remediation plan shall be submitted to the interested authorities after three years of the establishment of the mining plot at the latest. The

accomplishment of the remediation shall be reported to the authorities for final acceptance. However, these sections do not give provisions on the post-closure monitoring but the obligatory participation of the environmental, water and geological authorities in the licensing process make it sure that this is considered and required if needed.