

MINING

The challenges posed by the extractive industry bring to the forefront the need to have an efficient management in place as regards the current operations by deploying investment in new technologies in order to minimize the impacts that directly or indirectly affect the environment and human health. The use of non – polluting technologies should be regarded as an investment in the future meant to allow development for the future generations without paying the costs associated with a polluted environment. Romania is marked by the historical pollution generated by the industrialization process when emphasis was placed on growth by developing polluting industries.

The funds for new technological processes in order to find viable solutions to the problems of the extractive industry, as well as those for other mining activities such as care and maintenance, restoration and environmental rehabilitation are generally ensured by the State budget.

As regards mines closure, it is required to set up a specific financial instrument to cover the costs associated with not only closure, but also with safeguarding the former mining sites.

The mineral resources continue to play an important role in the country's economy and, therefore, the attention given to continually improve the legal and institutional framework and introduce the use of the best industry practices in line with the principles of sustainable development is justified.

The reforming and restructuring process initiated with the World Bank's support has brought about important changes in the Romanian mining sector, consisting in introducing a modern and transparent mineral resources concession framework by adopting the Mining Law and creating an appropriate institutional framework, on the one hand and, putting the sector on an economic basis by closing the non-viable mines and restructuring the profitable sub-sectors.

Romania's accession to the European Union in 2007 brought new requirements, but also new challenges for mining, such as clean energy production based on fossil fuel resources (particularly coal) in the context posed by the climate change and the stimulation of sustained production of the non-energy mineral resources. It also contributed to the improvement of the regulatory framework by transposing into the national legislation a number of acts in the field of environment.

At present, there are several on-going programs supported by the World Bank aimed at continuing the introduction of the best practices for mines closure and the environmental rehabilitation and the socio-economic regeneration of the former mining areas, as well as for emergency preparedness in respect of the risk posed by mining activities on the environment and human health.

The economic policies and regulations for the mining sector have in view the Implementation Plan adopted at the World Summit on Sustainable Development in September 2002, pursuing the Agenda 21 implementation in the context of replacing the old production and consumption patterns, natural resources protection and management and fostering sustainable development initiatives.

The adopted legislation recognizes that mining, minerals and metals are essential for modern life and the objective to achieve sustainable development in such a way that benefits generated today by mining should be distributed between the present and future generations, trying to maximize the social and economic benefits while minimizing the environmental and social impacts. The Government plays an important role in creating economic policies and a regulatory framework aimed at fostering mining contribution to the sustainable development.

The law governing mining activities in Romania is the Mining Law no. 85/2003, as subsequently supplemented and amended. This law in force replaces the law adopted in 1998. The sectoral legal framework has been subsequently supplemented by the adoption of application Norms by the Government, as well as by a series of regulations and instructions issued by the Competent Authority, the National Agency for Mineral Resources and the line ministry.

Of a particular importance for the mining sector is the environmental legislation represented by the Emergency Ordinance no. 195/2005 approved by the Law no. 265/2006, as subsequently supplemented and amended, as well as by a number of subsequent regulations particularly related to environmental assessment.

The Mining Law no. 85/2003, as subsequently supplemented and amended regulates carrying out mining activities in Romania, stimulating sustainable use of the mineral resources, public property of the State. The law provides for maximizing transparency for the mining activities and fair competition, without discriminating between the ownership types, origin of capital and the nationality of the operators.

The mineral resources under the Mining Law no. 85/2003, as subsequently supplemented and amended are: coal, ferrous, non-ferrous, aluminium ores, radioactive metals, rare and disperse earth, salts, non-metallic substances, aggregates, industrial minerals, precious stones and gems, peat, mud, therapeutical muds, bituminous rocks, non - combustion gas, geothermal waters, natural mineral waters (gaseous and non-gaseous), therapeutical mineral waters, as well as mining residues from waste dumps and tailings.

The mineral resources are turned into value by means of mining activities carried out by Romanian or foreign legal persons which poses the required technical and financial capacity to whom the competent authority, the National Agency for Mineral Resources grants mining concessions, in accordance with the provisions of the law.

The mining legislation covers the whole life – cycle: prospection, exploration, exploitation, processing, closure, environmental rehabilitation and post – closure.

Prospection is carried out based on a non-exclusive permit issued by the competent authority in accordance with the law upon receiving a written request for an area defined by topo-geodesical coordinates. The prospecting permit is issued for a period of maximum three years, without the right to be renewed and with the obligation to the payment of an activity tax prior to the beginning of each calendar year. Exploration is carried out based on an exclusive licence granted in respect of any mineral resource discovered within the area, upon the request of interested Romanian or foreign legal persons. The exploration licence is granted for a period of maximum 5 years with a renewal right of maximum 3 years. The mining exploitation is carried out based on an exclusive licence. The exploitation licence is granted for maximum 20 years with renewal rights for successive periods of 5 years.

The exploration/exploitation licences are granted to the winner of a public licensing round based on documentation submission. The documentation required for the exploitation licence, consists of submission of an environmental and social impact assessment in line with the principles of sustainable development, a feasibility study, a development plan, an initial mining activity cessation plan including an environmental rehabilitation program which is regularly updated.

The legal framework underwent improvements in the past ten years by integrating into the national legislation provisions of the European legislation in the fields of mining, environment, mining industry health and safety. For example the Council Directive of 27 June 1985 concerning the environmental assessment of the impact of certain public and private projects (Directive 85/337/EEC) and the Directive concerning the management of the extractive industries waste (Directive 2006/21/EEC).

Fiscal issues in the mining sector, as well as those relating to geology sector are important both for the Government of Romania and the investors. They are regulated by the Fiscal Code which provides for a profits tax of 16%, as well as by the Mining Law no. 85/2003, as subsequently supplemented and amended which foresees certain taxes specific to the mining sector. In accordance with the latter law, title holders of licences/permits are subject to the payment of a mineral resources prospecting, exploration and exploitation tax, as well as of a mining royalty.

The annual prospecting activity tax is 250 lei/kmp.

The annual exploration activity tax is 1,000 lei/kmp; the amount shall increase twice after 2 years and 5 times after 4 years.

The annual exploitation activity tax is 25,000 lei/kmp.

The amount is annually updated as a function of the inflation rate, at the proposal of the competent authority, by means of a Governmental Decision.

The obligation to pay a mining royalty to the State budget is established upon conclusion of a licence or when a permit is issued. It takes into account the mineral resource extracted, its quality and economic value.

At present, the mining royalties and the exploration/ exploitation taxes are set up at optimal values, making the mining activities attractive to the investors while rendering a fair income to the State, as owner of the mineral resources.

Regulations and mechanisms for compliance and monitoring

Mining activities relating to prospecting, exploration and exploitation are carried out based on a prospecting permit or an exploration/exploitation licence in accordance with the technical documentation prepared and submitted by the future title holder.

Such documentation includes the volume of the required mining works, including the associated costs. It also covers the physical volume and the associated costs for the environmental rehabilitation and the monitoring costs for the closure and post-closure phases.

The implementation of the measures contemplated under the technical documentation is endorsed by the competent authorities in the fields of mining, environment, water, historical and archaeological heritage, as well as other authorities, as the case may be (i.e. navigation or roads).

Controlling is carried out by the specialising compartments of the aforementioned authorities that take measures in accordance with the specific legislation.

Guidelines for artisanal, small and medium scale mining

All mining activities in Romania are governed by the provisions of the Mining Law no. 85/2003, which has non – discriminatory provisions. Consequently, mining, irrespective of the size of the operations is subject to this law.

Artisanal mining is not regulated by any other special legislation. In accordance with the Mining Law no. 85/2003, as subsequently supplemented and amended, alluvial gold recovery, outside mining concessions may be carried out by natural or legal persons based on a permit issued by the competent authority.

Public consultation is made during the whole life cycle of the mining project. According to the legislation in force, public consultation is mandatory as part of the environmental assessment carried out in order to grant a mining licence. Similarly, public consultations play an important role in procedures relating to mine closure and environmental rehabilitation taking into account the needs of the local communities.

The many activities associated with mine closure and environmental rehabilitation of a mining site is part of series of complex procedures and processes. The most important procedure is connected with the permanent review of the field conditions and the way to adapt the solutions set out in the technical documentation to such conditions, but also to

the requests and needs of the local communities. The permanent contact with the local communities and the local administration is made through the designer of the mine closure works and the staff hired by the line ministry.

In order to improve such contact and solve the problems that occur as quickly as possible, the staff of the engineering firm together with the designer and the entrepreneur show to the beneficiary all the modifications that occur during the execution of the works. They are also analysed in correlation with the economic impact on the project and the appropriateness to technical and social criteria and cost limitations and if the results of such analysis is positive, the modifications are approved by the line ministry and put into practice.

From the same reasons, starting with 2007, but in force since 2008, a new technical body has been set up within the ministry: *public facilitators for the relationships with local institutions, administration and communities*.

Public information, consultation and facilitation play a different role during the specific phases of mine closure and rehabilitation.

Public governance and transparency in the mining sector

Granting mining licences is a transparent process. The list of areas proposed for mining activities under concessions is published in the Official Monitor of Romania and on the site of the competent authority, the National Agency for Mineral Resources. There are several on – going projects and new draft regulations which are in connection with the granted concessions.

One of the main preoccupations of the line ministry, the Ministry of Economy, Trade and Business Environment relates to maximize transparency in all processes and activities connected to the implementation of mine closure works. Apart from observing all the requirements dealing with public announcements, the line ministry has adopted a policy of full transparency towards all stakeholders involved in the good conduct of the projects (The World Bank, contractors, authorities, local communities, general public, etc.).

In this regard, the main tool is the ministry's site which is continually updated with new information and documents concerning new policy proposals, draft regulations, progress in the implementation of the mine closure and socio – economic regeneration project.

The best practices resulted from the environmental impact assessment and monitoring of all mining activities (exploitation, project development, mining operations and mine closure)

The monitoring of works execution

During the execution of mine closure and environmental rehabilitation works, the monitoring in respect of putting into practice of the solutions set out in the technical design and required by the legal approval and endorsements is achieved by the

engineering firms. The coordinating engineers, the residents and the rest of the staff monitor, in accordance with the provisions of the FIDIC, on behalf of the beneficiary all aspects related to the work execution performance. The designer of the mine closure and environmental rehabilitation works is obliged to monitor from the technical point of view how the approved solutions are put into practice.

Technical independent audit

For the on-going works in order to monitor the behaviour of the receptioned works a technical independent audit is foreseen. Such audit is performed by firms specialising in technical and environmental audit. Their activities consist of:

- the review of the technical and economic documentation ever since the pre-bidding phase;
- the review of the technical and economic documentation that support the request for modifications in the works execution during mine closure and environmental rehabilitation;
- the review, at least quarterly, all work sites;
- interventions/recommendations, notifications with regard to the execution manner provided in the technical documentation (technical designs);
- the review of the contract execution in accordance with the FIDIC procedures; preparation of the audit results report, specifying the necessary measures to be taken and the responsibilities in order to solve the problems.

Post- closure monitoring in the warranty period

As a function of the mine closure and environmental rehabilitation works termination, as well as of the works of restoration, supplementation and remediation during the warranty period, the line ministry allocates funds for each mining site for post-closure monitoring of environmental factors and the behaviour of the works.

The main operations under monitoring and post /closure activities are:

- database development and integrated information system for monitoring the environmental impact of mining during post-closure;
- observing and monitoring the terrain deformations and landslides that affect or may affect the economic potential of the surfaces;
- monitoring the influence of the closed mines on the active mines located in the vicinity by regularly collecting underground water samples and gas samples from behind the dams that separate the mining fields;

- monitoring the rehabilitation of the soil quality by periodically carrying out agro – chemical studies to restore the land fertilisation status;
- monitoring of the waste dumps located in the vicinity of mining areas where activity has ceased;
- studying the impact of underground mining on the stability of the waste dumps located above the mining areas where activity has ceased;
- assessing the gas concentration in the soil of the drilling holes, in the areas at risk due to surface landslides due to underground mining;
- information systematization and development of framework applicable to all the activities following mine closure;

After a monitoring phase, a report containing the field observations and the allocation of responsibilities for the remediation of the deteriorations that have occurs is prepared.

The responsible institutions are informed in writing on the monitoring results, including the obligations they have for the remediation and removal of the aspects that do not conform.

Private Public Partnership (PPP) for sustainable mining

The way in which such a partnership is constructed consists in the fact that the public authority makes available to mining companies land, infrastructure, issues endorsements and approvals required for the conduct of mining activities. In turn, the mining companies provide jobs to the local people, pays direct and indirect taxes and fees to the local budget.

The PPP issue can also be regarded in the sense that local public authority can be a partner and a mediator in stimulating the development of the activities by private companies by facilitating access to information, existing infrastructure and offering incentives to the private companies that hire mining laid-off labour force and offer them an alternative. In this way, such social phenomena can be held under control.

Emergency preparedness and response plans at local level. The obligation to prepare internal and external emergency preparedness and response plans at local level is stipulated in the legislation in force.

As regards mining, model emergency preparedness and response plans have been prepared, as part of the project implemented with the support of the World Bank and GEF. Also, a number of training sessions for the staff of the mining companies and authorities having responsibilities at the local level have been organized.

Considering the institutions created, the allocation of the necessary funds, the economic and social programs and a proper monitoring of the mining activity since the beginning of the activity to final rehabilitation and rendering the rehabilitated surfaces to a land use, the local and national strategies, the State is able to immediately and efficiently intervene, in case of emergencies of economic, natural or social nature.

Risk assessment of mines and mining activities:

Any mining activity assumes certain risks:

- the risk to damage or even destroy the environment;
- the risk for the mining sites to become real ecological bombs after mining activity cessation;
- the risk for the laid – off personnel not to be re-included in the labour force because of their limited professional capacities;
- the risk that, in case of extraction activities downsizing or cessation, the economy in the monoindustrial areas be compressed resulting in decreasing the living standard.

The Government has assessed these risks and issued packages of legal acts and created institutions with clear responsibilities for the elimination of the aforementioned risks and allocated the resources in order to put into practice the risk reduction strategies. As an example, there are projects for mine closure and environmental rehabilitation of the former mining and quarrying areas.

Similarly, there are programs aimed at professional reorientation and reconversion for the jobless mining people. There are also programs of assistance dedicated to the local communities, the local public authorities and economic companies in the former monoindustrial mining areas, specially designed to lead in conjunction to offering an alternative for living in such areas.

Rehabilitation of the affected communities and life support ecosystems, including mine site decommissioning:

The programs under the Socio- Economic Regeneration (SER) Component of the Mine Closure, Environmental Rehabilitation and Socio- Economic Regeneration Project implemented by the Romanian Agency for the Sustainable Development of Industrial Areas

Support for job creation activities in mining regions and community capacity building in regard of local development activities

- Employment and Training Incentives Scheme (ETIS). Provision through the Agency of training and employment incentive payments to eligible employers in the mining

regions to hire new workers for a period of up to a year. The beneficiaries are the employers from the mining areas; the incentive amounts to USD 1,200 year/job;

- Micro-Credit Scheme. Establishment and operation by the Agency of a Micro - Credit Scheme consisting of provision by Microfinance Institutions of Micro - Credit to eligible Beneficiaries in the mining regions, legal or natural persons from the mining areas. The maximum Micro – Credit amount is EURO 25,000;
- Support for entrepreneurs/ Workspace Centres. Provide enterprise support services to mining communities and entrepreneurs in business planning and start-up. The beneficiaries are legal or natural persons from the mining areas.

Objective:

Strengthening local community capacity in local development activities:

- Municipal Infrastructure. Provision of support to communes and municipalities in the mining regions, on a grant basis, to upgrade municipal infrastructure identified through a process of community consultation and local development planning in mining localities. The maximum grant amount is USD 600,000;
- Community Capacity Building. Provision of technical assistance to facilitate a process of community mobilization and dialogue among local stakeholders, to strategically plan, identify and select priority infrastructure and social service Sub-projects and micro-projects to be financed under components above. The beneficiaries are the local public authorities from the mining regions.

Technological, institutional and social initiatives for the miners' health protection

The miners' work health and safety is a constant preoccupation in Romania where there is a general legal framework harmonized with the European framework. These legal provisions also include a list of activities and services of technical and scientific nature that are provided by specialized institutions, followed by inspections in order to certify that the minimum health and safety requirements are met.

Also, there is a set of institutional and social measures to complement the measures taken to protect the miners' lives and, in critical situations, even the lives of the members of their families. Here we can mention granting free of charge treatments in case of professional illnesses, emergency medical assistance for the miners that suffered from injuries, including aerial transportation if necessary, material help and financial compensation for the families of the miners should labour accidents occur.

Mine closure planning (land use plans and site rehabilitation plans, site safety, decommissioning, waste dumps and tailings, site water management, off – site infrastructure, community socio – economic programs and employees):

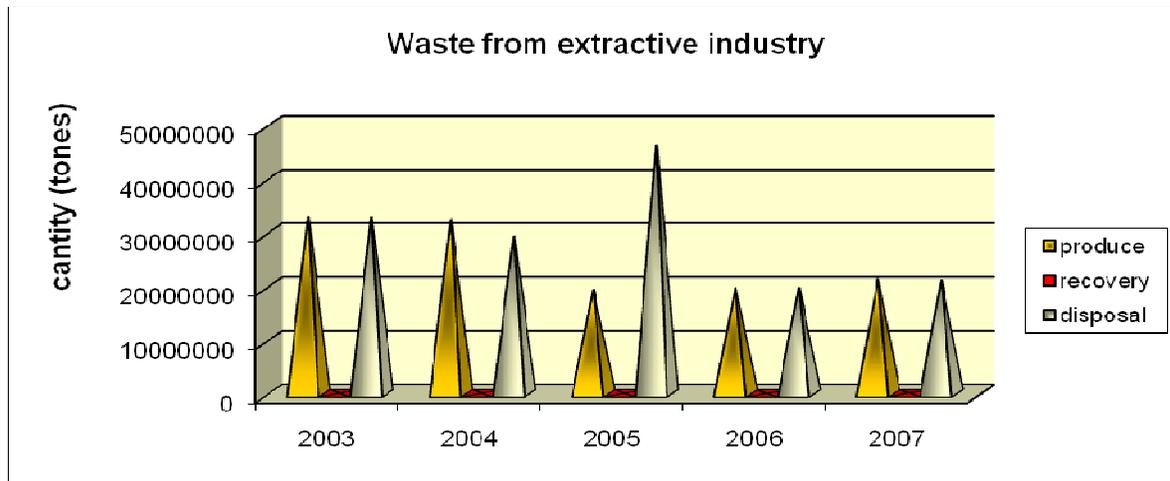
The exploitation of deposit ceases if the mineral resources have been exhausted or their extraction has become technically impossible or uneconomic. Under such circumstances the mining operators are obliged to prepare *the 'Mining activity cessation plan'*. The documentation consist of: The technical program for the mine decommissioning/ care and maintenance, the Environmental rehabilitation program and post-closure monitoring, the Social protection program in regard of the laid-off staff, the Procedure for decommissioning and rehabilitated land takeover.

In the case of mineral activities, in order to authorize a new extractive waste installation, the legislation provides for the development of a waste management plan, which covers mechanisms for compliance and monitoring of the mining waste installations. These include general information, but also legal compliance details for monitoring the tailings management facilities, the closure of waste disposal systems and records keeping. Also, it aims to fulfil the objectives of the technical Norms for the design, construction, operation and maintenance, closure and post-closure of the waste installation, to prevent accidents and limit their harmful effects on human health and/or environment.

When an operator starts any operation involving the accumulation or disposal of mining waste in a waste facility, the operator must prove financial provision guarantee that can be used any time for the rehabilitation of the site affected by the disposal operations.

Table 1. Quantity of waste from extractive industry, 2003-2007

Year	Total of produced waste in extractive industry	Total of recovery waste in extractive industry	Total of disposal waste in extractive industry
2003	331333961	726618	330610552
2004	326600800	668100	294551500
2005	195430438	535439	465291690
2006	199249301	105439	199156373
2007	215065670	1435088	213558683



Note: there are taken in consideration **the stocks** also, but they aren't separately mentioned.

The social initiatives consisted in providing support to increase local community capacity in local development activities:

Social Development Schemes for Mining Communities (SDSMC).

Provision of Grants to eligible community groups in the mining regions through the RSDF for eligible community-based infrastructure, income generation, and social services small projects, as well as provision of technical assistance and training to build capacity at the community level. The beneficiaries are disadvantaged groups of households or producing units (established in accordance with the Law no. 129/1998). The maximum grant amount is USD 100,000.

Small Grants Scheme (SGS). Provision of small grants to eligible Recipients by the Agency for eligible micro-projects to improve the welfare of women, youth and children in the mining regions, and induce the growth of social capital among mining communities (established in accordance with the Emergency Ordinance no. 94/2005). The maximum grant amount is USD 6,000.