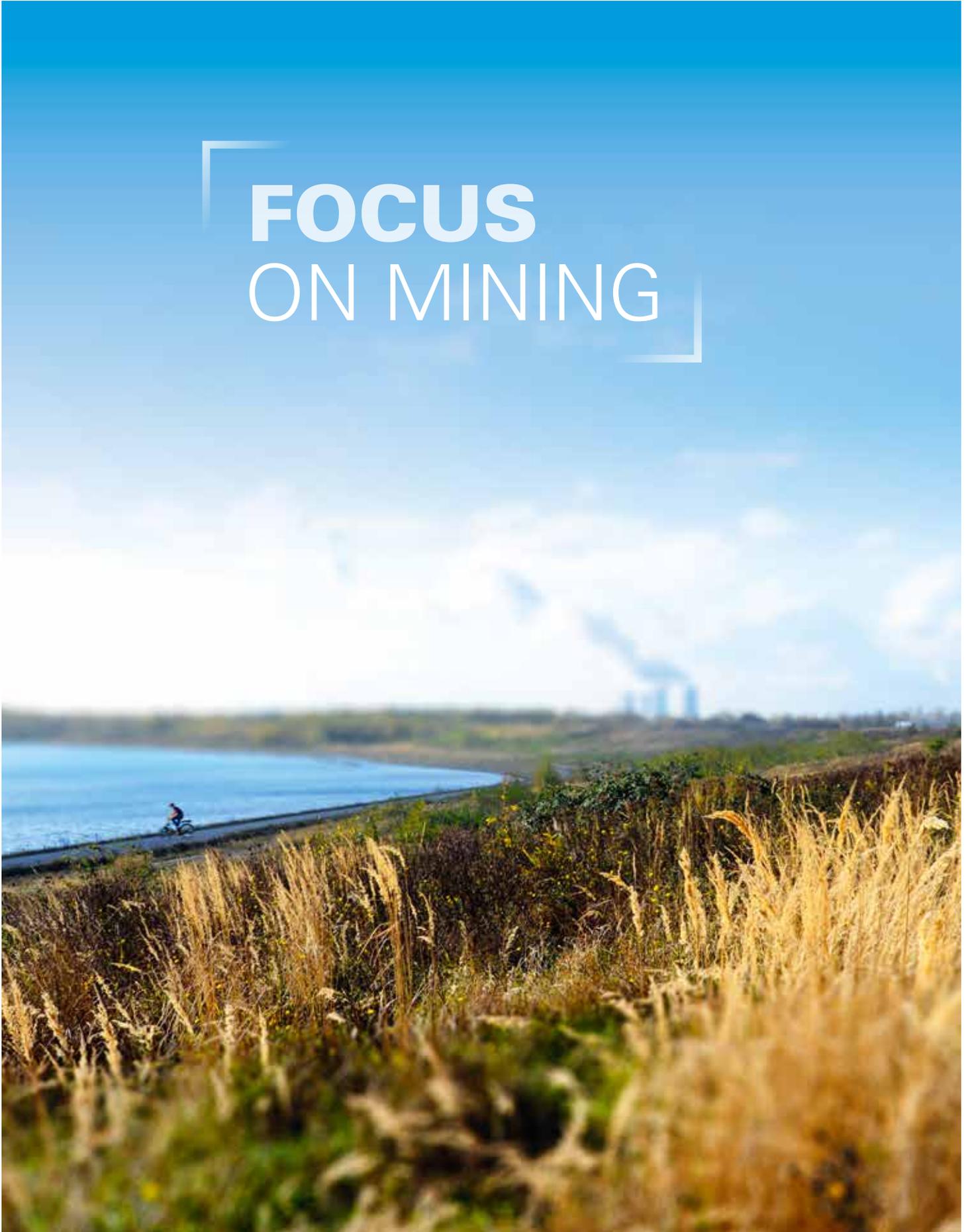


FOCUS ON MINING



For us, focus means:

Understanding the circumstances and the terms of reference, devising and discussing solutions, and working efficiently and effectively.

FOCUS KNOW-HOW

MIBRAG Consulting International GmbH is an independent firm of consultants operating throughout the world. We serve our clients by devising innovative strategies enabling them to successfully tackle the ever-growing challenges of the global mining industry. In many countries, the mining sector has been changed by high technical requirements as well as the political and

economic environment. As a result, mining companies have to revise their strategic and operational methods if they are to profitably harness the opportunities of the international commodities market. In this situation, German engineering expertise and MIBRAG Consulting International's reliable network are much in demand.

FOCUS COOPERATION

We support mining companies throughout the life cycle of a mining project with advice on matters all the way from initial prospecting to socially acceptable closure and land reclamation. We work closely together with executives and specialists in private and state-owned enterprises, banks, training institutions, and regional and national decision-makers in politics

and business to develop individual, practical and well-coordinated solutions. When providing international consulting services, our expertise is enhanced by the skills, knowledge and experience of our parent company along with its subsidiaries and affiliates. In addition, we have a network of international experts who can be actively involved in our project work.

FOCUS ON PERFORMANCE

MIBRAG Consulting International has many years' experience of solving difficult challenges. We work successfully on projects addressing the key elements of the value chain in mining and related areas. Our areas of specialization include the technical and economic assessment of mining companies, and

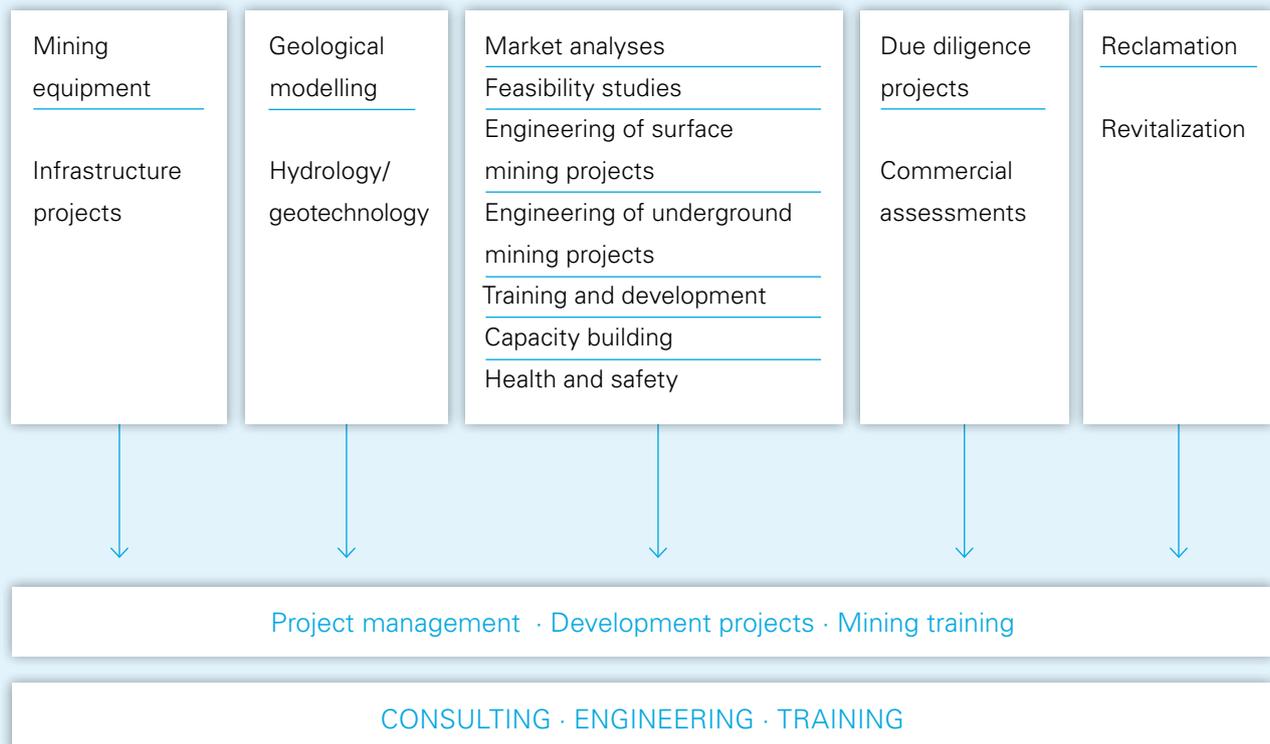
planning opencast mines and underground mining schemes, feasibility and market studies, mining-related infrastructure and environmental projects. Based on our experience in consulting and engineering, we also perform training and management assignments on behalf of mining companies.

FOCUS ON THE COMPANY

MIBRAG Consulting International was founded in 1999 as a wholly owned subsidiary of the MIBRAG mining corporation. The head offices of both companies are in the town of Zeitz in central Germany, about 50km south of Leipzig and 200km south of Berlin. MIBRAG Consulting International's extensive range of services encompasses mine operation as well as environmental matters and infrastructure in the mining sector. The main aspects dealt with include the technical, economic and administrative appraisal of mining companies and projects as well as planning services for opencast mines and civil engineering schemes – an area which also takes in preparatory work such as market studies, assessments of mineral deposits and general site surveys.

Other services include mining-related transport and handling projects as well as reclamation and revitalization strategies along with workplace safety, training and development for the mining industry, project management and operational management. MIBRAG Consulting International's interdisciplinary team is made up of experts from various mining-related fields. Numerous successful international projects on nearly every continent are testimony to the expertise, experience and dedication of the company's personnel. In addition to major projects for energy and commodities companies in the private sector, MIBRAG Consulting International's core business includes international development aid projects.

RANGE OF SERVICES



FOCUS ON SUSTAINABILITY

Meeting the rising demands of the world market calls for a competitive and sustainable approach to not just production and transport but also the preparation and processing of raw materials. The use of powerful, efficient machinery as well as modern technology which go easy on natural resources and

the environment is essential. Within our engineering activities, we apply a focused approach to solving problems – and come up with novel solutions. We strive to continually develop our core competencies in order to keep pace with technological progress and to adapt them to political and economic changes.





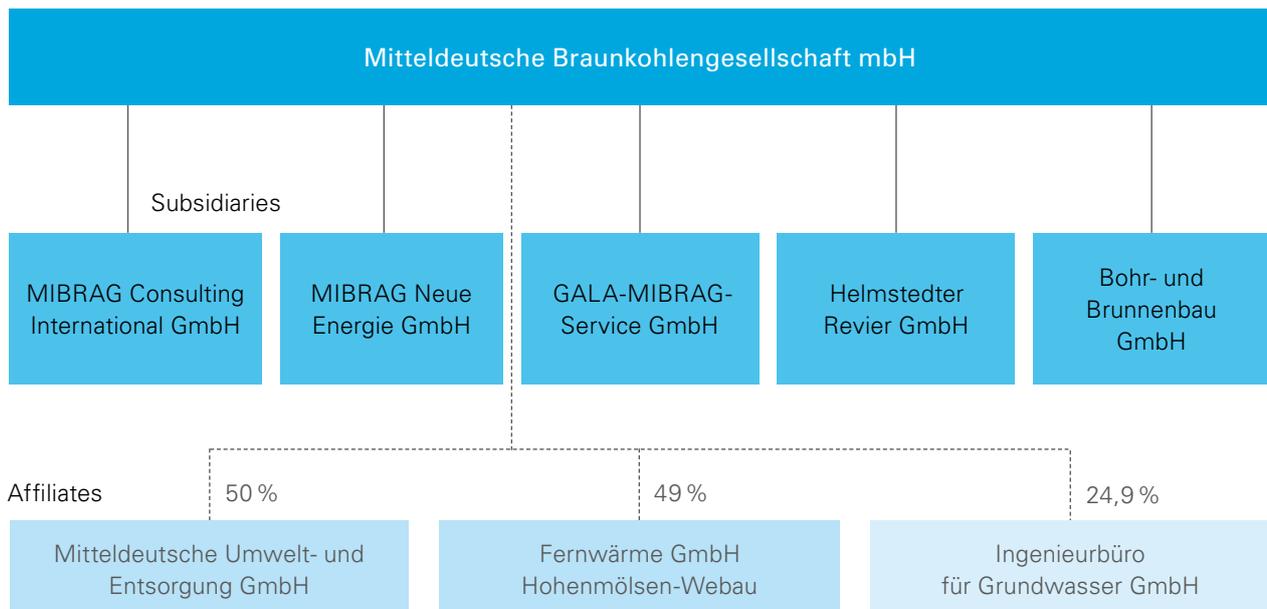
FOCUS ON THE PARENT COMPANY

MIBRAG is a modern, high-tech mining corporation based in central Germany. Its core business is the production and sale of raw lignite (also known as brown coal).

Thanks to continuous investment coupled with the use of state-of-the-art technology, MIBRAG is a key contributor to the economy, the community and the social structure. It employs around 3,000 people in secure jobs, provides vocational training, and is an important factor in lasting regional economic development. At its Profen and United Schleenhain

mines in the regions of Saxony-Anhalt and Saxony, MIBRAG accounts for over a tenth of Germany's total lignite production. It mines about 20 million tonnes annually, the majority of which is delivered to the power stations in Schkopau (Saxony-Anhalt) and Lippendorf (Saxony). Other major customers include the Südzucker AG sugar mill in Zeitz and the municipal utilities in Dessau and Chemnitz. In addition to its mines, MIBRAG also operates a refinery and two power plants. It is joined in the MIBRAG Group by its subsidiaries and affiliates.

OVERVIEW OF THE MIBRAG GROUP





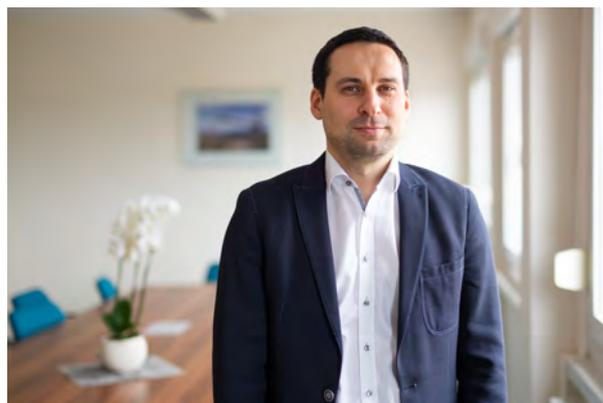
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CEO

Hendrik Lamert got his diploma at Freiberg University for Mining and Technology. In 2013, he earned his PhD at Helmholtz Center for Environmental Research in Leipzig. Since 2012, he has worked for MIBRAG Consulting International GmbH. After 5 years employment as Project Manager being responsible for hydrogeological, geological and mining related tasks, he took over the operational management of the company as Director of Mining and Reclamation in 2017. Due to his international and national experience in consulting mining companies, he was appointed Managing Director of MIBRAG Consulting International GmbH in 2020.

DIRECTOR OF MINING

Maxim Vorona is supporting the CEO in the operational management from April 1, 2020. He studied Mining Engineering at St. Petersburg Mining University and received his PhD at Freiberg University for Mining and Technology. Since 2012 Maxim Vorona is working for MIBRAG Consulting International GmbH. In mining and processing projects worldwide he gained his expertise and got a strong background. As Director of Mining and Reclamation, he is responsible for acquisition of new projects and coordinating activities of our engineers and experts.



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EXPERT TEAM

Apart from the CEO and the Director of Mining, our core team consists of experienced experts and specialists in a variety of areas including:

- Mining engineering
- Mine surveying and geodesy
- Geology and hydrogeology
- Mechanical and electrical engineering
- Business management
- Training and development
- Project management

In particular, the company's seasoned employees have many years of practical and international experience in the planning and management of opencast mines and underground mining projects as well as mining plant, mining, training and development. This wealth of experience is enhanced by the enthusiasm and dedication of their younger colleagues. In addition, projects are carried out with the close involvement of experts from the MIBRAG Group and our international network.

TEAMWORK



FOCUS

ON THE DEVELOPMENT AND EVALUATION OF MINING PROJECTS

GEOLOGY, HYDROLOGY AND DEPOSIT ASSESSMENT

The successful development and exploitation of mineral deposits depend on a precise survey and evaluation of each site's complex geological and hydrogeological conditions. We prepare suitable prospecting activities and evaluate the findings in detail. For this purpose, we use modern software to produce 3-D models presenting detailed, realistic pictures of the deposits.

Mining projects are considerably affected by groundwater and surface water flowing in and out. Special hydrogeological and geotechnical surveys, water and soil analyses, groundwater modelling

and geotechnical calculations are essential in order to increase certainty when assessing site conditions and the project. Since physical and chemical analyses of water, solid fuels and residue are required, MIBRAG's reliable accredited laboratories are invaluable for the all-round assessment of deposits.

The detailed analyses and appraisals of geological, hydrogeological and geotechnical conditions are used to prepare greenfield projects as well as for regular monitoring during ongoing mining and in order to better assess geotechnical events such as earth slides, the collapse of mine workings and water breakthroughs.



MINING PLANNING



The planning of mining entails coordinating and integrating the essential elements of a mining project. As well as being familiar with the site's geological, hydrogeological and geotechnical conditions, planners need to assess the mining infrastructure in place and what equipment can be used. Overall mining planning also has to take into consideration environmental aspects, post-mining restoration, and the necessary monitoring.

Using modern modelling software, we design the layout of open pits, underground mine workings as well

as spoil bank and stockpiling systems. Stipulations concerning drainage, stable slope and mine works must be coordinated and suitable monitoring measures planned. The types and sizes of mining equipment and transport systems required are worked out for the duration of each project on the basis of mass balances. Based on years of experience in diverse mining projects, we are able to draw up and evaluate various scenarios ranging from simple mechanized solutions to complex plant systems and automation. In addition, we develop and monitor quality control systems to optimize the extraction of raw coal.

MINING EQUIPMENT

Our services in this area include the planning and assessment of surface mines exploited with continuous equipment (bucket wheel and bucket chain excavators, conveyor systems and spreaders) and/or intermittent equipment (hydraulic excavators, walking excavators, surface miners, trucks). As far as underground mining is concerned, we plan and evaluate various technology solutions for tunneling and longwall mining.

In addition, we analyse the maintenance and repair

requirements for machinery, electrical equipment and process control systems. If necessary, we compile appropriate tender documents and examine the bids submitted. Our consulting and planning services also include the development of central materials management and procurement systems. We can provide advice on operational management for various extraction technologies and systems and also perform training and management tasks whenever new types of equipment and technology are used.



HEALTH AND SAFETY

Due to the nature of the mining industry and the hazards involved, extensive precautions are required to protect both mining personnel and the general public. Although national rules and regulations normally apply, based on German safety

standards we offer clients detailed studies of the safety systems and equipment needed for mining operations. We also assist companies with regular training sessions and can provide safety instructors for their employees.

RESTORATION AND REVITALIZATION

Hardly any part of the German countryside has changed as much in recent years as the lignite mining region in central Germany.

Many of the restored landscapes have become habitats for flora and fauna and places for human recreation, or are used for farming or forestry. Our clients benefit from our expertise in the planning of surface mine reclamation, the development of

strategies for continued use, revitalization strategies for post-mining locations, as well as waste and wastewater treatment in mining operations.

Since the reuse of post-mining landscapes is a crucial part of the life cycle of a mining project, the planning and evaluation of suitable land reclamation measures is part of our range of services when preparing feasibility studies and planning mines.

ECONOMIC ASSESSMENT

Given global competition in the commodity markets, realistic economic appraisals of mining projects are becoming increasingly important.

Our interdisciplinary team prepares feasibility studies and due diligences which meet banks' requirements, and are essential to attract investment in private-sector mining projects and ensure their economic management. Even when it comes to initial project studies and preliminary studies in

which conceptual approaches and scenarios for the development and implementation of mining activities are worked out, we examine their economic viability, conduct a risk assessment, and then give appropriate recommendations on how to proceed.

We also develop computer-based cost accounting models for specific projects in order to assess their commercial prospects and plan operational processes.



FOCUS ON THE RESTRUCTURING OF MINING COMPANIES

Usually, the transformation of political and economic systems also affects the structure of the mining industry in the countries concerned. Mining companies face unique challenges to harmonize new political and economic goals with employees' personal interests in a socially acceptable manner. Owing to the developments in the lignite mining sector in

central Germany over the past twenty-five years, both MIBRAG and MIBRAG Consulting International have gathered plenty of valuable experience in this respect. Consequently, the appraisal of mining companies and individual business units during the transition from a planned economy to the free market is another important part of our work.



FOCUS ON CAPACITY BUILDING

The development of profound knowledge, skills and sustainable organizational structures in the various mining regions of the world calls for a fundamental knowledge of the mining sector as well as its economic, political and social requirements and legal bases. In developing countries in particular, we support mining institutions in dealing with technical, financial and economic matters.

We offer specific consulting services on mining legislation in line with international mining practice (mining acts, exploration and exploitation rights, etc.).

We provide support for executives in mining companies which are due to undergo restructuring in order to heighten their economic efficiency and pave the way for possible privatization.

TRAINING AND DEVELOPMENT

In this sphere, our work comprises training and development designed to hone employees' skills. Our services for the international market are geared towards strengthening the professional competencies of personnel and executives in mining and mining-related businesses and institutions.

Employing experience of our own corporate practices, we offer mining-specific expertise reflecting the very highest technical and business standards. Content is taught in a contemporary manner with maximum practical relevance.

Training takes into account cultural peculiarities including industry-relevant factors as well as our basic view of training.

Regardless of their professional qualifications, training course participants are also 'experts of themselves'. Accordingly, they are given a say in the selection and presentation of teaching content. Courses encourage skills development and promote active self-learning as well as the sharing of knowledge and experience. Teaching takes place in close coordination with the participants' employers. Different learning styles, learning types and learning habits are all taken into account. Our range of services in training and development includes the entire

value chain of a mining company – from exploration and planning to mining, refining and waste recycling as well as land reclamation and restoration. It also deals with key aspects of health and safety, environmental protection, corporate governance, and the social responsibility of a mining company.

Successful forms of teaching include:

- Seminars
- Workshops
- Information events
- Consulting
- Coaching/training on the job
- Tours and work experience

In addition, we offer consulting services in the field of training. They include advice on methods used to measure competences, the assessment of training requirements, the planning, implementation, controlling and evaluation of training and development, the establishment of long-term training strategies, and analysing the effects of training. Consulting can also be limited to selected parts of this process and include, say, advice on the implementation of mentoring models. In response to current international developments in the mining industry, we have also expanded our range of services to include human resources development.



DISSEMINATION OF
MINING EXPERTISE



FOCUS

ON MINE MANAGEMENT/ PROJECT MANAGEMENT

Our staff have many years of professional experience in the mining industry. They are able to help mining companies set up efficient organizational structures reflecting the mining technologies they use and their equipment. They can also boost their efficiency and effectiveness.

The direct integration of our experts into clients' management structures enables us to support modernization projects and restructuring on their premises. Related activities include the preparation of investment decisions, the execution of investments,

operational coordination, and the organization of quality management systems. Our experts can take on the project management of individual projects. They coordinate the project in close consultation with all the partners involved, monitor its progress, and perform the inspection and acceptance of contractors' work.

In addition to actual mining operations, we also analyse and optimize related health and safety processes as well as measures in environmental protection, infrastructure, and the reclamation of post-mining landscapes.



REFERENCE COMPANIES, PARTNERS AND INSTITUTIONS



REFERENCE PROJECTS

Russia

A modernization plan was devised by MIBRAG Consulting International to update the plant used by Mordovtsement at its East Vankinsky chalk pit. Consulting mainly concentrated on developing a technology strategy for the phased start-up and regular operation of powerful hydraulic excavators, mobile crushers, belt wagons, a spreader and belt conveyors. Work began by analysing the circumstances of the chalk pit and the method of extraction originally in place, which involved shovel and dragline excavators followed by rail transport. A geological model and a model of the open pit were developed by our experts in order to evaluate the accessible chalk deposits. The technological parameters for the new operating system were then worked out along with a basic mining regime. In addition, the route of the belt conveyor from the open pit to the storage yards at the cement factory was plotted. The transition phase during plant upgrade (assembly areas, transport routes, phased start-up of equipment) was planned separately.



Turkey

Extensive site assessments were carried out to prepare the opening of a new opencast lignite mine in Turkey. Work included the planning, implementation and evaluation of pumping trials, taking core samples, and commissioning soil mechanics laboratory tests. Subsequently, a detailed geological deposit model was developed. Apart from assessing the geologically accessible and recoverable coal reserves, the geological model formed the basis for a groundwater flow model and drainage planning as well as geotechnical surveys of site stability and mine planning.



Serbia: Tamnava

At the West Tamnava opencast mine, a new overburden conveying system consisting of a bucket wheel excavator, belt conveyors and a spreader was set up between 2006 and 2009. A second line is to be built by 2016. In both projects, a separate project management consulting contract was concluded. One of our experts has been placed in charge of electrical engineering within this project management team. He is closely coordinating the execution of the project with all the partners involved and also monitoring progress in the planning of the mine, the set-up of assembly and installation areas, and the associated project interfaces.

Serbia: Coal quality management

We started work at Tamnava lignite mine in Serbia by weighing up different options for the introduction of a coal quality management system in a feasibility study. The mine's operator then selected a solution, which is currently being implemented. Our experts are in charge of project management and supervising the technical work required in the run-up to commissioning. We are also conducting extensive training courses and workshops on coal quality management for the Serbian company's employees.

Poland

MIBRAG Consulting International had already been involved in the privatization of the Silesia hard coal mine, including due diligence and medium-term planning. After privatization, we dispatched an interim manager to head operations as technical director. He oversaw the planned modernization process, prepared investment decisions, and carried them out together with his team.

His mission ended as planned with the handover of the mine's operational management to PG Silesia's new technical director.



REVITAMIN/ReRegions

In the two EU-funded projects REVITAMIN and ReRegions, we worked together with project partners from local politics, science and industry in countries such as the Czech Republic, Slovakia, Slovenia, Austria, Poland, Spain, Greece and Scotland to intensively support debate over land reclamation schemes and sustainable post-mining land use strategies in former mining regions. Workshops and study tours were organized, and databases and manuals created.

Ghana



Technical advice was provided to the Ministry of Lands and Natural Resources and the Mines Department as well as the Minerals Commission in Ghana by three of our long-term experts under two projects initiated under the EU's Mining Sector Support Programme (MSSP). Attention was mainly paid to helping the three institutions exercise their new functions enshrined in the Minerals and Mining Act of 2006 and coordinating the flow of

information. Furthermore, the staff structure was evaluated and proposals were drafted concerning training and additional manpower requirements.

Ukraine

Under the EU's Coal Sector Policy Support Programme, two projects have been implemented in Ukraine with the involvement of our experts. Firstly, a project was executed to help Ukrainian coal mining executives restructure the industry. Having analysed the sector's training needs, an extensive training programme was compiled. At the same time, the 140 or so state-owned coal mines in the regions of Donetsk, Lugansk and Lvov were assessed in terms of their cost-effectiveness and possible privatization. The findings were then used to draw up a master plan for the restructuring of the Ukrainian coal industry.

Vietnam

The aim of the project train@mine funded by the BMBF German Ministry of Education and Research is to bring about the commercially viable internationalization of training and development using the example of Vietnam's mining sector. Following an extensive analysis of the economic, social and training environment, MIBRAG Consulting International teamed up with Vietnamese partner VINACOMIN/VBS to systematically develop and implement modern training courses and consulting services geared to the partner's needs in the field of training. The involvement of a range of project partners has enabled the expertise of engineers and executives throughout the value chain of mining from raw materials quality, planning, production, refining and recycling to decommissioning, reclamation, energy and water management, environmental protection and occupational safety to be passed on to local personnel.



FOCUS ON MARKETS



AFRICA

On the mining continent of Africa, we act as technical consultants to politicians and mining companies. We focus on the mining of hard coal, iron ore and other mineral resources.



SOUTH AMERICA

Our teams of experts view South America as an important target market, and projects there are currently being initiated.





EUROPE

We have always maintained a strong presence in Southern and Eastern Europe. Our experts provide advice on the development of new coal mines, improving environmental management, the introduction of coal quality management and the implementation of modernization processes in locations from Poland all the way to eastern Russia.



AUSTRALIA

Coal mining plays a prominent role in Australia. We showcase our services at trade shows and industry conferences. Our experts are currently preparing specific projects.



ASIA

In the Asian market, MIBRAG Consulting International's activities range from appraisals of the feasibility and cost-effectiveness of new coalmines to ensuring sustainability in natural resource management.

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