Europe is remarkable in that its mining industry predates the Roman Empire, yet large portions of unexplored territories with highly prospective resources remain, says European metals and minerals mining representative body Euromines president Mark Rachovides.

Mattia Pellegrini, head of the raw materials, metals, minerals and forest-based industries unit of the European Commission’s Directorate-General for the Internal Market, Industry, Entrepreneurship and Small and Medium-sized Enterprises, tells Mining Weekly that the body recently commissioned a study to assess the competitiveness of the European mining industry. The results highlighted that the 28 member countries of the European Union (EU) have an active nonenergy extractive industry that produces a wide range of commodities.

He adds, however, that the results also showed the EU’s “modest” contribution to the global production of mineral resources.

“Nevertheless, when one considers investment in exploration in some of the EU member States during the past five years, there is an encouragingly increasing trend,” states Pellegrini.

He points out that research and educational organisation the Fraser Institute’s Annual Survey of Mining and Exploration Companies: 2014 report states that several EU member States, such as Ireland, Finland, Sweden, Poland, Portugal and Spain, score well on the perceived influence of taxation regimes on exploration investment.

Euromines director Dr Corina Hebestreit also highlights that at least one new mine has opened in Europe every year since 2008.

“Therefore, I believe that the European mining industry is in a good, solid position,” she asserts.

However, independent mining consultant at GatesBridge Andrew Fulton believes that the mining industry in Europe is “a ghost of its former self”.

He argues that “Europe in the early 1900s was a mining powerhouse and provided coal supplies for power generation and iron-ore to its global steel industry, but now the sector is about one-tenth of what it once was”.

Fulton does, however, believe there has been something of a renaissance in the European mining industry over the past ten years, owing to investors’ search for politically and economically stable environments.

Rachovides adds that there are significant mining opportunities in Spain and Portugal, as well as throughout Scandinavia.

He also points out that Wolf Mineral’s Drakelands tungsten and tin mine, in Devon, in the UK, is set to become operational later this year.

Wolf Minerals operations manager Jeff Harrison tells Mining Weekly that the project has a large tungsten and tin resource and, when the £123-million Drakelands mine enters production in the third quarter of this year, “it will produce about 3.5% of the forecast global tungsten supply, thereby making it a significant global producer”.

He adds that the project will provide a secure supply of tungsten, valuable export revenue for the UK, about 200 jobs and significant economic benefits for the local community.

Harrison further points out that Drakelands will be the first new British metal mine in 45 years and his hope is that it could be a catalyst for a wider re-entry into exploration and metaliferous mining in the UK.

Additionally, Rachovides says Swedish copper miner Boliden and Polish copper and silver miner KGHM Polska Miedź are examples of European mining companies that are highly regarded by the international mining industry.

He also highlights that Swedish iron-ore producer Luossavaara-Kiirunavaara Aktiebolag (LKAB) sets the standard in the industry and is the largest iron-ore producer in Europe by some margin. LKAB produced 26.3-million tons of iron-ore in 2014 and aims to reach 37-million tons by the end of this year.

These successes are not primarily driven...
by the value of the euro, but rather by the companies’ command of their own operations and their ability to achieve optimal operational and financial efficiency.

“The EU provides an enabling environment for mining companies and one with significant emphasis on ethical behaviour, which . . . modern investors take into account . . . ,” says Rachovides.

**Challenges**

Pellegrini says the innovation required along the value chain is the biggest challenge that the European mining sector faces, as new and/or improved technologies are required to discover deeper deposits.

The industry's other challenges include finding ways to economically mine deep deposits and small and low-grade deposits, efficiently processing complex ores, and substantially decreasing the amount of mining waste that mines produce, he adds.

Pellegrini also emphasises that legislation impacting on the mining sector needs to be simplified, and that social acceptance and awareness regarding the relevance of the mining sector to European society have to be increased.

Fulton concurs with Pellegrini in that receiving permission to develop new mines, particularly in Central and Western Europe, is a significant challenge that mining companies face.

Moreover, he notes that the coal industry in the UK is coming to an end – despite coal being used to produce about 40% of the UK’s electricity – and that more than 90% of coal is imported to the UK for use at coal-fired power stations.

There are three thermal deep-level coal mines left in the UK – two of them will close by the end of this year, with the third scheduled to close by the end of 2016,” states Fulton.

He explains that, unlike South Africa, where coal mines are between 40 m and 120 m deep, many of Europe’s mines can reach depths of between 400 m and 1 000 m, or more.

“The increasingly complex geotechnical conditions and operating logistics of mining at depth must drive engineering innovation and efficiency; if these are missed then operations will fail to maintain performance and competitiveness,”

Hebestreit says the development of mines worldwide depends heavily on the economic situation – and Europe is no exception.

“We need to have economic growth and that, in return, will create demand and will ensure a vibrant mining industry in Europe,” she states.

Although the global mining sector currently faces the challenge of accessing finance to develop new projects, the European Commission expects positive developments, adds Pellegrini. These developments include new mines opening in the EU in the coming years that will increase its share in global resources production, decreasing EU import dependence on raw materials and establishing a more sustainable mining sector.

To make this a reality, the European Commission has been working on developing a policy and implementing a strategy that can reinforce the sustainability of the mining sector economically, environmentally and socially, Pellegrini states.

To support technology and nontechnology innovation in the sector, including international cooperation, the commission has spent £81-million during 2014/15 on the EU Framework Programme for Research and Innovation – Horizon 2020, he says.

The European Commission is also cofunding a number of projects, such as the Real-Time Optimisation of Extraction and the Logistic Process in Highly Complex Geological and Selective Mining Settings, the New Mining Concepts for Extracting Metals from Deep Ore Deposits Using Biotechnology, and the Viable and Alternative Mine Operating System projects.

**Promoting Europe**

Hebestreit says conferences, such as the European Innovation Partnership on Raw Materials conference and the Raw Materials High Level conference, play an important role in promoting Europe’s mining sector.

Rachovides adds that there are valuable regular events, such as the European Mineral Resources Confederation, or EU-MICON, conference, to name but one.

“ . . . These events are relevant to promote Europe as a mining destination for EU member States that are more supportive of the development of this sector and for the companies operating in the EU. Other major mining countries have successfully used this model, such as the Prospects & Developers Association of Canada convention, and the Investing in African Mining Indaba, in South Africa,” notes Pellegrini.

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