

Workers check levels in coal bunkers



Photo: Bloomberg News

Golden hope

Romania has the potential to become the largest gold producer in Europe if the deposits in Transylvania get approval for exploitation

BY CECILIA SZENTESY

FAST FACTS

Capital:	Bucharest
Population:	22.1 million
Currency:	Romanian lei
Government:	Republic
GDP real growth rate:	-7.2% (2009 est)

ROMANIA'S ability to develop its mineral resources will be a key measure of its economic strength in the coming century. The country continues to mine coal, lignite, copper, iron, lead, zinc and silver, but it is Romania's gold deposits that hold the most potential for future growth.

Sweden and Finland currently lead European gold production, with a wide range of international companies actively exploring new deposits, and a number of mines nearing the commissioning stage.

However, Romania could become the region's top gold producer if the government approves development of some of the gold deposits located in Transylvania. For example, Gabriel Resources Ltd's Rosia Montana gold project alone could produce around 500,000oz/y of gold once in operation.

Prior to 1989, Romanian government policy was designed to promote the domestic mining industry to reduce the country's dependence on imported metals and minerals. The result was an over development of the mining sector, compared with the available mineral resources, absorbing over 350,000 people as direct labour and another 700,000 as indirect labour.

Political changes after this have required the state to support the mining sector through a huge budgetary efforts, and between 1990 and 2002 the state expenditure to sustain the mining sector was of US\$5.2 billion, including subsidies, capital allocations and budgetary allocations.

In order to reduce its financial commitments, the government has introduced its 'Strategy of the Mining Industry', which includes operating the sector under free-market conditions and privatisation of viable mines and projects with economic potential.

This new mining strategy also calls for the development of state-private partnerships, the closure of unprofitable or exhausted operations in an environmentally sound manner (assisted by a US\$120 million World Bank loan) and the development of an environment protection manual to ensure mines operate to a European standard.

GOLDEN OPPORTUNITY

Romania's current gold production is in the region of 12,000oz/y, but a number of foreign companies are investing in exploration projects, which, if developed, could make it Europe's largest gold producer.

Gabriel Resources' Rosia Montana project could become Romania's largest gold operation, producing an average 500,000oz/y over the life of the mine and 626,000oz/y in the first five years of production.

Development of the project has been stalled since 2007, however, when the Environmental Impact Assessment was suspended as a result of a decision taken by the former Minister of Environment and Forestry.

Gabriel says that throughout 2009 and 2010, management has been focused on initiating and maintaining dialogue with the various ministries in the Romanian government with respect to the EIA review.

The company says it has maintained an active dialogue with senior members of the new government, elected in December last year, and key officials to move the Rosia Montana project forward.

Romania has also been cautious about sanctioning the use of cyanide in gold production, following the Baia Mare tailings disaster ten years ago. Gabriel says that Rosia Montana will be the first mine permitted under the EU's new, more stringent, environmental laws.

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The company is also a signatory to the International Cyanide Management Code, and will comply with the EU Mine Waste Directive, as well as having adopted the more stringent requirements of World Bank guidelines.

In May this year, European Goldfields Ltd received the last remaining approval for the Zonal Urbanisation Plan at its Certej gold-silver project. The company is in the process of completing the final Environmental Impact Assessment for the project, which it says will be submitted to the authorities shortly.

A 2008 feasibility study outlined a US\$190 million project with average annual production of 155,000oz of gold and 820,000oz of silver over 16 years, exploiting 32.8Mt of ore at an average grade of 2.0g/t Au and 11.4g/t Ag. The historical mine was formally operated by state-owned entity Minvest.

Carpathian Gold Inc is developing the Rovina Valley gold-copper project, and following the completion of a preliminary economic assessment at the project earlier this year, has been conducting a drilling programme.

The Rovina project is anticipated to produce almost 200,000oz/y of gold and 50Mlb/y of copper over the 19-year mine life at a total capital cost of US\$786 million.

Valhalla Resources Ltd has entered into a joint venture with Barrick Gold Corp on the Bratosin Hill property in Romania. Under the terms of the agreement, Barrick Gold holds a 75% interest in the project and Valhalla a 25% interest. The property is in its fourth year of exploration, and Valhalla is carried to feasibility completion assuming positive results.

Barrick and Valhalla have drilled around 7,000m at the project, defining copper, gold and silver mineralisation. Valhalla is currently in the initial public offering process to list on the TSX Venture Exchange.

ROMANIA'S RICH MINING HISTORY

Romania is rich in mineral potential, especially gold and silver ores and non-ferrous metals.

Historically, Romania has frequently been at the forefront of European mining development, often leading the way to the identification and evaluation of deposit types that have subsequently proved to be of major importance elsewhere.

In Romania, varied ore deposits have been exploited from the earliest times. Gold, copper, lead, zinc, manganese, iron and salt have been worked extensively. Archaeological evidence suggests that there has been mining in Romania for thousands of years, with artefacts from various ages having been made from locally produced metals and minerals.

During the Bronze and early Iron Ages, gold and copper were produced in Transylvania, and in the Banat, Oltenia and Dobrudja districts. Gold production was also centred on the Metaliferi Mountains, in the Brad district and probably at Rosia Montana. Salt was produced through evaporation, and bronze, gold and iron production was widespread. Between 450 BC and 106 AD in the Geto-Dacic period, underground mining commenced for gold, other metals and for salt.

Between the 13th and 17th Centuries, new mining technologies were introduced, and water-powered stamps came into use for ore crushing. New deposits of copper, lead, zinc, iron and manganese were also found in the East Carpathians during this time, and towards the end of the period the first records of the country's mining heritage were produced.

The second half of the 17th century marked the appearance of the first institutions whose main goals were to supervise mining activity.

The first mining law came into force in 1854, being replaced in 1924 by a new law on the constitution of the unitary Romanian state. The industrialisation of the mining industry since the mid-19th Century included the introduction of modern explosives, mechanised drilling, and the use of electrical power underground. Between 1890 and 1896, California stamps, roll mills and ball mills were introduced for ore reduction, and in 1917 Romania's first cyanidation gold plant opened.

Numerous deposits have been evaluated in the past, and have been either exhausted or abandoned on criteria that no longer apply. As yet, there has been little opportunity to re-evaluate such occurrences, although the country's agencies responsible for exploration and development retain a massive amount of information on all aspects of deposit geology and resource estimations, obtained from past drilling programmes and thorough geological investigation.

Even in recent years, exploration by the state agencies has been hampered by a lack of resources, and there is thus excellent potential for overseas investment in both grassroots exploration and the re-appraisal of properties about which substantial amounts of data already exist.

Recent geological and geophysical work has shown that there are, in fact, many mineral prospects, both near-surface and at depth, that have considerable potential for further investigation.



Rosia Montana could become Romania's largest mine

ENERGY STRATEGY

Romania has a long history of coal mining from the Jiu Valley, with around 40% of the country's energy needs currently being met by coal mining and 70% by domestic energy resources (coal, lignite, oil and gas).

Coal reserves in the Jiu Valley are estimated at 801Mt of coal equivalent, according to statistics from the European Association for Coal and Lignite (Euracoal), and production in 2007 (the latest figures available) was 2.5Mt. The main consumers are the thermal power plants at Paroseni and Mintia.

Romania's lignite reserves are estimated at 1,364Mt, according to Euracoal, and are mined by two companies: the National Lignite Society of Oltenia, and the National Coal Society. In 2007, lignite production reached 35.1Mt, approximately 90% of which was extracted from the open-pit mines of Rovinari, Rosia, Pesteana, Pinoasa, Motru, Berbesti and Mehedinti.

Compliant with European Union policy, Romania will continue to receive subsidies for its coal mines until the end of this year (lignite mines do not qualify for subsidies).

As announced by the European Commission this month, these subsidies for operating mines will be replaced with an aid package to facilitate the closure of loss-making operations until the end of 2014. The proposal will allow aid to coal mines with a definitive closure plan, the implementation of which will be strictly monitored.

The aid will be digressive over time, with a reduction of at least 33% per fifteen-month period.

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