Powerhouse lies dormant

Traditionally a coal producer, Hungary has the potential to mine other commodities

BY ÁKOS ZOLTAY

FAST FACTS

Capital:	Budapest
Population:	9.9 millions
Government:	Democracy
Currency:	Forints
GDP Growth:	-6.7% (2009 est)

LOCATED in the heart of Eastern Europe, Hungary was once an energy powerhouse, but privatisation of the mining industry and efforts to meet European Union environmental and emissions targets have all but shut down the country's coal industry.

Hungary began opening its borders and liberalising its economy in 1989, holding the first multiparty elections in 1990 and introducing a free market economy. At the time, Hungary's mining industry was predominantly state-owned and contributed 3.4% to the country's GDP.

Within years of the change of regime, however, the government began to privatise the mining sector, leading to significant restructuring and mine closures.

As a consequence of previous governmental measures, old national mining companies, especially those showing a certain deficit, have been liquidated. Others, which were viable, have been annexed to power stations.

By 2003, Hungary had closed its last hard (black) coal mine, an open-pit operation in the south of the country, although the Márkushegy, Visonta and Bükkábrány lignite (brown coal) mines are still in operation.

COAL DECLINE

According to the latest BP statistical review of world energy (2009), Hungary had coal reserves of 3,302Mt in 2008, accounting for 0.4% of the world total. The country produced 1.9Mt (oil equivalent) of coal in 2008, the review says, accounting for 0.1% of global production and down almost 5% from its production in 2007.

The country currently has two integrated coal producers, the state-owned Vértes Co and German company RWE AG.

Vértes owns the only operating underground coal mine in Hungary – the Márkushegy mine, which supplies coal to the company's 240MW Oroszlány power plant.

Vértes said it extracts 0.75Mt/y of coal from the mine, and has installed an underground coal separation plant that produces the correct quality and quantity of product for the power plant.

RWE's lignite-based electricity-generating plants are managed by its subsidiary Mátra. According to figures from 2008 (the latest available), the group processed 8.31Mt of lignite for use in its energy-producing facilities.

FINANCIAL AUSTERITY

Government measures, imposed since late 2006, have reduced Hungary's budget deficit from over 9% of GDP in 2006 to 3.3% in 2008, according to the CIA World Factbook.

Hungary's impending inability to service its short-term debt, however, brought on by the global financial crisis in late 2008, led the government to seek and receive an IMF-arranged financial assistance package worth over US$25 billion.

The gravity of the global financial crisis was reflected by the fact that GDP for the March quarter last year was 2.5% less than the same period in 2008.

HUNGARY MINERAL PRODUCTION

Mineral (Mt)	1995	2000	2005	2008
Black coal	0.90	0.75	0	0
Brown coal	6.80	5.70	2.44	1.49
Bauxite	1.00	1.05	0.50	0.47
Uranium	0.20	n/a	n/a	n/a

DOMESTIC BAUXITE PRODUCER

Hungary is also a bauxite producer, although it has never been a significant world producer.

Bauxite output from the country's sole producer, Magyar Aluminium Ltd (MAL), was 546,000t in 2007 (the latest figures available from the USGS minerals yearbook).

The company provides bauxite to its alumina plant in Ajka, partly from domestic supplies and partly from mines it owns in Bosnia, as well as from other suppliers.

In 2008, however, the firm said it had singed an agreement to explore for resources in Montenegro, owing to the limited remaining domestic supplies of bauxite.

The company says 350,000t of bauxite reserves have already been identified in Montenegro, with up to a further 4Mt of potential resources.

At the time, the company said that it aimed to begin mining at the Niksic project in Montenegro in 2010, which would ensure MAL was the sole supplier of bauxite to the Ajka alumina plant.

EXPLORATION OPPORTUNITIES

Hungary also has resources of uranium and gold among other minerals (including some minor metals), development of which could allow the country to broaden its mining industry.

Australian-listed Wildhorse Energy Ltd plans to develop the Pécs uranium project in the Mecsek region of Hungary, adjacent to the former Mecsek uranium mine, which closed in 1997 (having produced 46Mlb of uranium over a 40-year period).

The company says the project, for which it has already completed a scoping study, is one of the largest undeveloped uranium projects in the region, and has the potential to be a strategic contributor to Europe's future uranium supply. The scoping study suggests the project was capable of supporting a 2Mlb/y operation at a capital cost of up to US$430 million.

Wildhorse plans to spend Ft2.5 billion (US$14 million) furthering exploration activities and establishing a new exploration target for the combined Mecsek-Pécs area.

The company has a further three early-stage exploration projects in Hungary (Bátaszék, Dinnyeberki and Máriakéménd), where it intends to conduct drilling to establish resource estimates.

Meanwhile, Canadian-based Carpathian Gold Inc holds two exploration projects, Füzérradvány and Kanászvár, which were being developed in a joint venture with Caracal Gold LLC.

Caracal had the option to earn up to an 80% interest in the two projects, and completed drilling programmes in the Füzérradvány project in 2008 and 2009.

Caracal's option to earn-in on a joint venture basis was terminated in April last year, however, and Carpathian says it is reviewing the holdings and will decide on any further work programmes in 2010.

REGULATION REGULARLY REVISED

In 1993, the Hungarian parliament created the country's mining act, to coincide with a series of EU directives for the extractives industry and European-wide environmental protection. According to the mining act, minerals are the property of the state, independent of surface rights.

The government set a royalty, varying between 5% for solid mineral mining and 30% for hydrocarbons, and based on the value of extracted raw material – regularly supervised by the government.

Since its creation, the mining act has been revised almost every year in accordance with various changes both domestically and in the EU.

CYANIDE BAN

One area of regulation where the Hungarian authorities have been particularly forthright, following the example of the Czech Republic, has been the implementation of a country-wide ban on the use of cyanide. This was enforced in December last year and could disrupt any potential gold mining industry.

> "Hungary has resources of uranium and gold which could allow the country to broaden its mining industry"

The move follows a general ban on cyanide technologies in Czech in 2000 and a decree prohibiting cyanide-leach mining in Germany in 2002. The Hungarian ban could be followed by neighbouring Romania and Bulgaria, both of which claim the EU position on the use of cyanide is insufficient.

Hungary had been calling for a ban on cyanide since 2000, when cyanide-tainted water spilt into a reservoir in Baia Mare in Romania, affecting much of the region's water, killing fish and poisoning drinking water in Romania, Hungary, Serbia and Bulgaria.

In April, the EU parliament raised a motion for a resolution on the use of cyanide in mining activates across Europe. The motion calls for the European Commission to initiate a complete ban on cyanide in mining in the EU before the end of 2011 in order to protect water resources against cyanide pollution as well as for the development of safer, cyanide-free mining technologies.

The parliament also called for EU member states not to support any mining projects that involve cyanide use until the general ban is applicable, and not to support the use of cyanide at mines in developing countries.

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