

## MONGOLIA

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The new Government of Mongolia, formed in July, 2000, has introduced a number of measures aimed at speeding up transition to a free-market economy, creating more favourable business conditions, development of national enterprises and promoting the export-oriented industries of mining and agriculture.

The reserves of seven iron, seven base metals, four copper-molybdenum, ten tungsten, fifty tin, four uranium, forty fluor spar, over fifty coal, four rare metals and about one hundred primary and placer gold deposits have been identified, and detailed geological exploration work carried out on them. Mongolian and foreign exploration and mining companies have been actively exploring for metals and minerals for the past three decades. By 2000, 94.6% of Mongolian territory had been covered by geological mapping at a scale of 1:200,000 and 15% at a scale of 1:50,000.

July, 2001, marked the fourth anniversary of Mongolia's new Mineral Law. The Mineral Law has assisted in speeding up the further development of the mining sector and improving its international competitive position among the prime mining nations. In recent years, exploration and mining activity for precious and base metals and oil, by both local and foreign investors, has increased greatly.

Over 2,200 licences have been granted for exploration and development, mainly to investors in the private sector, including major and junior international companies during 1997-2001. However, nearly 75% of Mongolia's territory is still available for licences for exploration and mining activities.

During the past four years, geological mapping at a scale of 1:20,000 has been

completed over an area of 106,400 km<sup>2</sup>, at a scale of 1:50,000 over 852,119 km<sup>2</sup> and hydro-geological mapping at scale of 1:200,000 over 76,000 km<sup>2</sup>.

The mining and mineral industries are extremely important to the national economy of Mongolia, providing over 50% of export earnings and one-sixth of the state budget income. Mongolia is a significant copper and molybdenum producer and a major world supplier of fluor spar. Coal is produced for both domestic consumption and export, and recently there have been several discoveries of oil.

Mongolia's leading mining enterprise, Erdenet, a Mongolian-Russian joint-venture open-pit copper mine, produced 22.5 Mt of ore last year, equivalent to 450,000 t of copper concentrates and 3,000 t of molybdenum concentrates.

On a global scale, Mongolia accounts for 4% of world annual copper concentrate supply, and copper accounts for 40% of Mongolia's total exports by value. Erdenet is one of the largest copper mines in the world and possesses identified reserves of 1,500 Mt of ore. The mine is expected to have a life of 50 years at the current production capacity. Mongolia holds approximately 4% of the world's identified copper resources, mostly at surface, offering long-term opportunities for growth in demand for copper concentrates, blister and refined metal in the Asian region.

In 2000, Erdenet exported 380,000 t of copper concentrates to China, which accounted for about 25% of Chinese import needs. The remainder went to the Russian Federation. Erdenet also produces silver as a by-product.

There is no smelting and refining facility at the mine. The small-scale 3,000 t/y capacity

SX-EW plant built in 1997 treats low-grade oxidised ores and produces copper cathode for export to Japan. The copper industry is fully export-orientated and its principle focus is on improving mining efficiency and its performance.

It is vital for Erdenet mine to maintain current copper and molybdenum concentrate production and mill recovery levels by increasing its annual copper ore output and implementing a medium to long-term programme of innovation and expansion. This includes introducing advanced mining equipment and milling technology. Erdenet is expected to expand its copper mining capacity to 24.0 Mt by 2004.

Erdmin, a Mongolian-US joint venture, has a plan to expand the existing SX-EW plant capacity to 20,000 t/y. The plan is to be implemented in stages depending on the availability of funds. Erdenet is keen to consider a further possibility to establish a medium-scale copper smelter at a capacity of 40,000-50,000 t/y of blister in the near future.

In 1991, the government adopted a 'Gold Programme' aimed at developing new gold resources, evaluating and establishing mineable reserves and raising the country's gold production. Output has increased in

recent years, rising from 800 kg in 1990 to 11.8 t in 2000. Over the period, the number of gold-mining enterprises has risen from three to more than 100.

State-owned Mongolrostsvetmet is the country's largest gold miner. Its Zaamar mine, and operations in the Tuul River area, involve the use of a bucket-line dredge that was previously working in Siberia and Tolgoit district. The unit was commissioned in 1995, and produced more than 1,000 kg of gold in its first year of operation. Its current target is 1.4 t/y.

Mongolrostsvetmet is keen to develop the large-scale Asgat silver deposit in northwest Mongolia. Exploration work has been carried out over the past few years, and a pre-feasibility study has been undertaken in order to develop the deposit.

Since 1994, companies from the US and France have been active in the uranium exploration sector, and a Mongolian - US joint venture has discovered two uranium deposits in Dundgovi province and identified reserves.

**For additional information on the Mongolian mineral sector, please visit our Website: [www.monminerals.com](http://www.monminerals.com)**