

PORTUGAL

By Rafael Alves Pereira

Portugal has now only two metallic mines in operation: Neves-Corvo (in the southern region of Alentejo) and Panasqueira (in the east central region of the country).

The Neves-Corvo copper and tin underground mine is owned and operated by Sociedade Mineira de Neves-Corvo, SA (Somincor), a joint venture between the Portuguese state-owned company Empresa de Desenvolvimento Mineiro (EDM) with 51%) and Rio Tinto plc (49%). Early this year, the Australian company Murchison United Ltd agreed to acquire Rio Tinto's 49% interest for US\$78 million. Neves-Corvo has more than 13 years of operating history and a proven position as one of the major base metal producers in Western Europe. At the end of 2001, geological reserves included: 32.5 Mt of copper ores at an average grade of 5.05% Cu; 1.6 Mt of tin and copper-tin ores at 9.95% Cu and 2.38% Sn; and 50.4 Mt of complex ore resources (zinc) at 5.99% Zn.

Production reached a peak of 2.3 Mt of ore in 1998. In 2001, the Neves-Corvo operation hoisted and treated 2.0 Mt of copper and tin ores and produced 344,300 t of copper concentrates (24.1% Cu) and 2,100 t of tin concentrates (57.4% Sn). The concentrates were railed to the port of Setúbal, 50 km south of Lisbon, for shipping to smelters around the world.

Despite the good level of performance it achieved in operational terms during 2001, Somincor was heavily penalised by deteriorating prices in the international copper market. The company closed the 2001 financial year with a loss of around €15 million, as opposed to a profit of €8.5 million in 2000.

In order to respond to the international crisis, Somincor intensified its efforts to

optimise the production process and rationalise costs, especially during the second half of the year. This led to a reduction in operating and commercial costs of around 8% against the first half of the year. The average annual net cash cost was below US\$0.60/lb (including US\$0.03/lb for mine capital development).

In the first half of 2002, the average net cash cost was reduced to below US\$0.55/lb and profit before taxation was €3 million.

Capital expenditure in 2001 amounted to €20.6 million including allocations for mine development (€5.5 million), a new water treatment facility (€4.3 million), information technologies (€3.8 million), equipment replacement (€2.4 million), etc.

In the light of Rio Tinto's intention to dispose of its 49% holding to Murchison United and the fact that EDM is open to finding suitable solutions that will ensure Somincor's balanced development, it is possible that there may be changes in the company's shareholder structure during the course of 2002.

The Panasqueira tungsten underground mine is owned and operated by Beralt Tin & Wolfram, a wholly-owned subsidiary of Avocet Mining plc of the UK. In 1999 the operation was threatened with closure by low tungsten prices but, at the end of that year, the company secured contracts for the period 2000-2002 with minimum sales prices. However, in January 2002, low tungsten prices led to a decision to postpone a 40% production increase at Panasqueira and in June, 2002, Avocet announced its intention to withdraw from the tungsten business and to refocus entirely on gold.

In the 12 months to March 31, 2002, Panasqueira produced 90,000 metric tonnes

units of tungsten ore concentrates. The tungsten content was 1,300 t. Average cash operating costs were US\$50/mtu and price levels were in the range of US\$64/mtu.

Mineral exploration activity carried out in Portugal during 2001 was largely focused on precious and base metals, mainly gold, copper and zinc.

Several geological environments with epithermal gold vein mineralisation within the Iberian Central Area were explored by junior companies. The most relevant results were obtained in Valongo/Gondomar (Connary Minerals), in Jales/Gralheira (Kernow Resources) and in Penedono (Rio Narcea Gold Mines).

For base metals, mineral exploration is being carried out in the Iberian Pyrite Belt by companies such as Rio Tinto (in Caveira, Alcacer do Sal, Alvalade, Ourique, Porto de Rei and Ervidel), Phelps Dodge (in Lousal/Alvalade), Eurozinc (in Aljustrel) and Somincor (in Neves-Corvo).

Exploration licences have also been sought for materials less well known in Portugal, such as platinum group metals (in the mafic and ultramafic rocks of Bragança, Morais and Beja) and tantalum (pegmatitic occurrences in Serra d' Arga and Barroso).

Production (t except where stated)

	1999	2000	2001 ^e
Uranium (U ₃ O ₈)	12	16	5
Iron and manganese	11,733	11,800	-
Copper concentrate	413,417	319,358	344,517
Tin concentrate	4,526	2,325	2,117
Tungsten concentrate	750	1,269	1,193
Marble and other carbonated stones (Mt)	1.21	1.22	n.a
Granite ornamental and similar stones	458,409	464,368	n.a
Paving stone	235,057	236,467	n.a
Slates	46,359	46,637	n.a
Limestone, gypsum, etc (Mt)	11.38	11.47	n.a
Gravel, sand & crushed stone (Mt)	76.66	77.58	n.a
Clay and kaolin (Mt)	3.78	3.80	n.a
Barites	120	48	25
Lithium Pegmatites	14,862	9,352	11,571
Salt	558,807	584,516	625,785
Quartz	14,905	37,842	20,436
Feldspar	114,685	136,730	112,923
Feldspathic sands	518,147	573,947	590,384
Pegmatites	3,600	3,600	5,800
Diatomite	772	686	387
Talc	9,554	9,895	8,362

Source: IGM - Instituto Geológico e Mineiro.
e: Estimated. na: Not available.