

## PORTUGAL

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Portugal has now only two metallic mines in operation: Neves-Corvo (in the southern region of the country) 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%).

The deposits at Neves-Corvo were discovered in 1977 by a joint venture of Portuguese (State) and French (private) interests. Further exploration and evaluation continued until the end of 1983, at which stage Rio Tinto was invited to participate in the project. Following a period of evaluation, Rio Tinto purchased the French 49% interest in 1985. Commercial production started in 1989 at the initial rate of 1 Mt/y of ore.

A recent prospective sale of part of Somincor's share capital was not concluded but, at the end of 2002, a new sale process was announced. Presently it is the Portuguese State's intention to enter into an agreement for the joint sale of either all, or the majority of, EDM's 51% holding and the whole of Rio Tinto's 49%. It is therefore possible that there may be alterations in Somincor's shareholder structure in 2003.

Neves-Corvo has now more than 14 years of operating history and a proven position as one of the major base metal producers in Western Europe. At the end of 2002, geological reserves included: 30.6 Mt of copper ores at an average grade of 5.21% Cu; 1.6 Mt of tin and copper-tin ores at 9.73% Cu and 2.31% 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 2002, the Neves-Corvo operation hoisted and treated 1.75 Mt of copper and tin ores and produced 319,400 dmt (dry metric tonnes) of copper concentrates (24.2% Cu) and 550 dmt of tin concentrates (62.4% Sn). The concentrates are railed to the port of Setúbal, 50 km south of Lisbon and 170 km northwest of the mine, for shipping to smelters around the world.

In 2001 and 2002, Somincor was heavily penalised by deteriorating prices in the international copper market and by the weakening of the dollar. However, due to the good level of operating performance, the company closed the 2002 financial year with a small loss of €0.9 million, against a loss of €15 million in 2001.

In 2002, the company intensified its efforts to optimise the production process and rationalise costs, leading to a reduction in operating and commercial costs. In the first quarter of 2003, profit before taxation was €2.4 million.

Capital expenditure in 2002 amounted to €13.8 million, including allocations for mine development (€5.3 million), equipment replacement (€1.9 million), information systems and technologies (€1.6 million), etc.

Since 1970 until 1994, the now 110 years old Panasqueira tungsten underground mine was owned and operated by Beralt Tin & Wolfram Portugal, a subsidiary of Anglo American Corp. From 1994 until March 2003, the mine was owned and operated by 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 2000-02 with minimum sales prices. However, in January 2002, low tungsten prices led to a decision to postpone a 40% production increase at Panasqueira.

Further to the announcement of its intention to refocus entirely on gold, Avocet announced, in March 2003, the completion of the sale of the company's tungsten assets to Salish Ventures Inc. (subsequently renamed Primary Metals Inc). During 2002, Panasqueira produced 95,000 mtu (metric tonne units) of tungsten.

Mineral exploration activity carried out in Portugal during 2002 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 (especially in the Caveira area), Eurozinc (in Aljustrel) and Somincor (in Neves-Corvo).

Exploration licences have also been granted for materials less well known in Portugal, such as nickel and platinum group metals (in the mafic and ultramafic rocks of Ossa Morena Zone, at Elvas and Beja areas) to Rio Narcea Gold Mines.

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**Production (t except where stated)**

	2000 <sup>r</sup>	2001 <sup>p</sup>	2002 <sup>e</sup>
Uranium (U <sub>3</sub> O <sub>8</sub> )	16	5	-
Iron and manganese	11,800	-	-
Copper concentrate	319,358	344,517	319,415
Tin concentrate	2,325	2,117	574
Tungsten concentrate	1,269	1,193	1,179
Marble and other carbonated stones	922,927	832,857	853,678
Granite ornamental and similar stones	700,661	871,572	877,673
Paving stone (10 <sup>3</sup> t)	1,037	1,045	1,019
Slates	43,373	33,521	33,890
Limestone, gypsum, etc (10 <sup>3</sup> t)	14,248	13,325	13,952
Gravel, sand and crushed stone (10 <sup>3</sup> t)	71,442	89,317	90,389
Clay and kaolin (10 <sup>3</sup> t)	4,428	2,728	2,755
Barites	48	25	24
Pegmatites with lithium	9,352	11,571	16,325
Salt	584,516	625,785	604,969
Quartz	37,842	20,436	16,290
Feldspar	136,730	112,923	124,117
Feldspathic sands	573,947	590,384	603,959
Pegmatites	3,600	8,300	7,800
Diatomite	686	387	-
Talc	9,895	8,362	8,916

Source: IGM – Instituto Geológico e Mineiro.

r: revised figures for ornamental and industrial stones.

p: preliminary figures for ornamental and industrial stones.

e: estimated for ornamental and industrial stones and preliminary for ores and minerals.

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