

UZBEKISTAN

By Interfax-M&CN

Uzbekistan's economy grew rapidly last year, with GDP growing by 4% and industrial production by 6.4%. However, the country faces problems expanding its exports and entering world markets. Programmes to reduce the reliance on imports have been progressing slowly.

The biggest increases in production were reported in ferrous metallurgy (18.7%), engineering (70%), silk (36.5%), cosmetics (120%) and pharmaceuticals (50%). Export of ferrous and non-ferrous metals grew by 56% to US\$ 216.7 million in 2000, accounting for 6.6% of the total exports.

The Uzbek Government has given its approval to a list of businesses up for sale to foreign investors in 2001-2002. The shares of 38 major national enterprises are to be sold to foreign businessmen in individual projects by tender. Among the shares are those of companies already put up for sale - the Almaylk iron and steel complex (46.5%) and the Akhangarantsement cement plant (25%). Enterprises of the Uzbek oil and gas industry are up for sale in 2002, with 39% to 44% of the shares of the subsidiaries belonging to the national holding company Uzbekneftegaz and 49% of the main holding company's stock to be sold to foreign investors. The French bank BNP Paribas is co-ordinating preparation for the sale of Uzbekistan's oil and gas sector.

The government approved the 2001 national investment programme, which targets US\$833.1 million of foreign investment towards 75 projects. US\$700.9 million of this amount would be foreign credits under sovereign guarantee, and US\$132.2 million foreign direct investments. The bulk of the foreign investment, US\$190.8 million, will go into the fuel and energy sector, US\$145.7 million of it into the Uzbekneftegaz oil and gas holding company.

Gold

Uzbekistan holds 4.3% of the world's gold reserves (being the seventh largest in terms of proven reserves and sixth in terms of probable reserves). Proven gold reserves amount to nearly 2,100 t, and total reserves (as of 1998) are some 3,350 t. Uzbekistan has 41 gold fields, including 33 gold lode fields. Just nine are currently being developed and produce nearly 80 t of gold. In 2000, Uzbekistan produced about 87 t of gold.

Despite its solid potential, Uzbekistan lags behind other leading gold-mining countries in average gold content in ore (2.3 g/t). Moreover, of the countries that have placer deposits, Uzbekistan surpasses only Bulgaria and Mozambique in terms of gold content. The average gold content of placer ores in Uzbekistan is 0.25 g/m³ of gold. About 65% of the country's gold is found in lode fields that are more profitable to develop, especially if they are mined by open pit and leaching is used. This method is used in most cases in Uzbekistan. Nearly 85% of the country's gold is produced from low-grade ores in lodes.

Muruntau is the country's main field, producing nearly 60% of Uzbekistan's gold (about 50 t/y. The field has produced 1,400 t of gold since production began in 1967, with an average content of 3.5 g/t Au. The field still has proven reserves of about 2,000 t and analysts estimate that the deeper structures (to 1.5 km) could hold another 1,830 t. The state-owned Kyzylkumredmetzoloto, which owns the Navoi Integrated Mining and Metallurgical Plant, is developing the field. Navoi produces 70% of Uzbekistan's gold, processing ores from Kokpatas and Uchkuduk mines.

In September 2000, Navoi announced that it was acquiring a licence to the Biox leaching technology from South Africa's Biomin to

process sulphide ores mined at the Kokpatas and Daugistau gold lodes in the Central Kyzyl Kum. Navoi intends to start this year building a complex, costing in excess of US\$200 million, to process sulphide ores from the two lodes. The complex will include a gold recovery plant in Uhkuduk costing US\$50-70 million which uses the Biox leaching method. A feasibility study for the project has now been completed, and it is thought the complex will be able to process up to 5 Mt/y of ore and, when it achieves projected capacity in 2005, produce up to 20 t/y of gold. Sulphide ores, which account for about 70% of the combined resource of the Kokpatas and Daugistau deposits, have not so far been processed because the Navoi combine has not possessed the right technology.

The Zarafshan-Newmont joint venture project is still the only one of several gold projects with a foreign investor to have actually started production in Uzbekistan. Zaravshan-Newmont produced 15.4 t of gold in 2000. Towards the end of last year, the European Bank for Reconstruction and Development approved a credit of US\$30 million for the joint venture. In 1992, Newmont Mining set up the Zaravshan-Newmont joint venture with the geology committee and Uzbekistan's Navoi Mining and Metals Combine (Kyzylkumredmetzoloto), which in 1995 launched a facility to recover gold from tailings at the giant Muruntau open pit.

In September 2000, Australia's Multiplex Mining, a subsidiary of Multiplex Construction, signed a preliminary agreement on the joint development of the Zarmitan group of gold lodes with the Uzbek State Committee for Geology and Mineral Resources and the Uzalmazzoloto association. The agreement called for the creation of two joint ventures, one to mine the Zarmitan lode and the Gudzhumsay lode, and one to run the Mardzhanbulak gold recovery plant, which is part of Uzalmazzoloto and is 80 km from the Zarmitan lode. According to adjusted data from the geology committee,

Zarmitan and Gudzhumsay contain 30 Mt of ore at an average grade of 10 g/t Au.

In February 2001, Newmont Mining resumed talks with Uzbekistan's state geology committee and Uzalmazzoloto association in respect of the Angren gold mining project. The parties intend shortly to agree the terms for a new founding document for the Angren Gold joint venture. A detailed appraisal of gold reserves at the Kyzylalmasay and Kochbulak gold deposits in the Tashkent region, to which the joint venture holds the licence, will continue. The Angren project has been slow to get started because of the drop in gold prices. Newmont Mining had formed the joint venture back in October 1996 with the Uzbek State Committee for Geology and Mineral Resources and Japan's Mitsui to mine the Kyzylalmasay and Kochbulak gold lodes, which are in the in Tashkent region. However the charter capital has not yet been paid in and the joint venture has not started to operate.

Oxus Resources intends to offer its shares on the London Stock Exchange's Alternative Investment Market (AIM) to raise investments of up to US\$30 million for the Amantaytau Goldfields joint venture. Roger Turner, the head of Oxus Resources, said that the proceeds would go towards financing the first stage of development of the Amantaytau gold deposit in the Kyzyl Kum Desert, with costs of US\$46 million. The company, which intends borrowing about US\$20 million from commercial banks, owns 50% of the equity in Amantaytau Goldfields. The Uzbek State Committee for Geology and Mineral Resources owns 40% and the Kyzylkumredmetzoloto concern (Navoi Mining and Metals Combine) 10%. The joint venture holds the licence to develop the deposit, which contains a mineable 3.2 Moz of gold, and total resources of 16 Moz of gold. The joint venture's charter capital is US\$11.63 million.

The mineable reserves on the Amantaytau field will be developed in two stages. First,

the oxidised ores would be mined, using heap-leaching, then the sulphide ores. Construction of a gold recovery plant for oxidised ores is to begin in 2001. The plant will be able to recover 650,000 oz of gold with a planned production of 150,000 oz of gold in 2002 following a 12-month construction period. The British company proposes to process the sulphide ores using bulk flotation and a biological leaching method. A pre-feasibility study for the second stage of the development, which was completed in September 2000, estimated capital costs at US\$118 million. This stage would see the recovery of up to 250,000 oz/y of gold from 500,000 t/y of ore. Both phases of the project will produce 300,000 oz/y of gold by 2005.

Copper, Lead, Zinc, Silver

Almalyk Mining and Metallurgical Combine is one of the largest copper producers in Central Asia. Almalyk mines and processes some 25 Mt/y of ore and produces about 80,000 t of refined copper, 55 t of silver and 13 t of gold per year. Copper accounts for around 90% of Almalyk's metals output. The plant also produces zinc, lead concentrate, primary molybdenum, cadmium, selenium and tellurium. Total exports of non-ferrous metals reached US\$100 million in 2000.

Copper concentrate with 16% copper content from the plant's Kalmakyr and Sari Cheku mines cover around 90% of the requirements. The rest is imported, mainly from Russia and Mongolia. The Almalyk plant also possesses the Utch-Kulatch (Dzhizak region) lead and zinc deposit, but commercial development at the field has not yet started. Currently, Almalyk is processing ore from there only in small amounts.

In March 2001, Almalyk Mining and Metals Combine received credit of US\$16 million from an Israeli bank to start a project to process molybdenum concentrate. The credit is insured by IFTRIC, an Israeli export credit agency, and guaranteed by the Uzbekistan Government. The project will be delivered by Uzmetall Technology, a joint venture formed

at the beginning of 2000 by Israel's Metek Metals Technology, Almalyk and the Uzbek Refractory and Heat Resistant Metals Plant in Chirchik. The joint venture's equity is US\$1 million. Metek Metals Technology owns 50%, the Chirchik plant 30% and the Almalyk plant 20%. Project costs are US\$19.39 million, of which US\$17.49 million will be spent on equipment. The costs should be recouped in five years. The venture will produce up to 600 t of molybdenum trioxide per year. The molybdenum trioxide and its derivatives will be mostly exported, but any byproducts will stay at the Almalyk plant to produce rare earth metals. The first equipment should arrive in the summer of 2001, and the first product obtained at the end of 2002.

The main shareholders of Almalyk Mining and Metals Combine are the state with 51% and the work force with 2.5%. In 1999 an attempt to sell a 46.5% stake in Almalyk Combine failed. Talks are currently in progress on an international consortium headed by Thyssen-Krupp participating in pre-sale preparations. The consortium includes Gerald Metals and Boliden Contech.

Oxus Resources intends to start drafting a bankable feasibility study for the development of the Khandiza nonferrous metals deposit in the Surkhandarya region. The company is rounding off exploration and will use fresh results early next year to reappraise the deposit's reserves. It is thought at this stage that the feasibility study will be ready during early 2002.

Oxus and the Uzbek Government in February 2000 signed a preliminary concession deal on the deposit. The Khandiza deposit is located in southern Uzbekistan, 50 km from the village of Sariasia. According to Oxus, the deposit contains 10 Mt of ore, with average zinc content of 9%, plus 161 g/t Ag, 3.6% Pb and 1% Cu (at a cut-off grade of 6% Zn). The resource is 22 Mt at a cut-off grade of 2% Zn. According to the framework concession agreement, Oxus would make an initial investment of US\$15 million over three years.

Once the Khandiza deposit comes on stream, the British company will pay an annual US\$1 million plus 5% of net profits, although the percentage is subject to review if the price of nonferrous metals goes up.

Oxus is also looking into the possibility of building a 1 Mt/y processing plant at the deposit to produce zinc, copper and lead concentrate. The plant will have an annual capacity in metal equivalent of 45,000 t Zn, 20,000 t Pb, 6,000 t Cu and 40 t Ag. According to preliminary information, capital expenditure may amount to US\$140-170 million before production begins.

Coal

Uzbekistan's total commercial reserves are about 3,000 Mt of coal, 1,000 Mt of it hard coal. Uzbekistan has an estimated requirement for 4 Mt/y of coal, and produced 2.5 Mt of coal in 2000, 15.4% or 455,000 t less than in 1999. All of the coal was produced by Ugol, the national coal company. Ugol mined 2.41 Mt of brown coal, 15.9% less than in 1999, and 91,500 t of hard coal, 2.7% more. It produced 2.1 Mt (82.4%) from surface mines and the rest from underground.

Ugol mines the Angren lignite field in the Tashkent region and the Shargun hard coal deposit in the Surkhandarya region and is exploring the Baisun hard coal field, also in the Surkhandarya region. The Angren deposit holds a proven 1,9000 Mt of coal. It is produced by an open-pit and underground mine, and the Podzemgaz station, which mines coal seams by the underground gasification method to obtain fuel gas. The station's capacity is 600 million m³ of gas per year. Ugol mines more than 90% of its coal at the Angren field.

Germany's Krupp Fordertechnik GmbH has won a tender to upgrade the Angren strip mine. Project costs of about DM360 million will be financed with German bank credits under sovereign guarantees. The project will take ten years to deliver in six stages. The first stage, to be completed by the end of

2001, will cost DM40 million. Coal production at Angren will rise from 2.5 Mt to 5 Mt/y, and the annual cost of mining coal will fall from US\$22.9 million to US\$12 million.

Natural Gas and Oil

Uzbekistan is the second largest producer of natural gas in the CIS and a major oil producer. Uzbek national holding company Uzbekneftegaz produced 56.4 billion m³ of natural gas in 2000, which was 1.5% more than in 1999. Production of oil, including gas condensate fell 7.5% year-on-year to 7.5 Mt in 2000.

A consortium of foreign banks will lend a total of US\$195.21 million for the construction of a booster compressor station in the Kashkadarya region's Shurtan gas field, the country's largest. Uzbekneftegaz national holding company and the banks involved signed an agreement on the opening of three credit lines. The Uzbek Government is guaranteeing the loans. Uzbekistan will borrow US\$49.5 million on commercial terms from the Dutch ABN Amro Bank and the Israeli Hapoalim bank, so as to make the advance payment for the delivery of equipment to the Shurtan gas field. The US-based ExImBank will provide loans totalling US\$102.94 million, and the Israeli IFTRIC agency loans totalling US\$42.77 million.

The field, under development since 1980, yields nearly 15 billion m³ of gas a year, and the booster station is expected to push the annual output to 20 billion m³. The construction of a US\$1 billion gas chemical plant in the field is nearing completion. The plant will include a gas purification installation, a 125,000 t/y polyethylene plant, which will also produce 137,000 t of liquefied gas (propane and butane) and 130,000 t/y of unstable condensate.

In February 2001, a consortium headed by France's BNP Paribas was appointed consultant on the privatisation of Uzbekneftegaz. The consortium includes Arthur Andersen (financial consultant),

Chadbourne & Park (legal consultant), and LLP BEICIP Franlab Petroleum Consultances (technical expert). The financial consultant has 18 months to value the holding's assets, prepare documentation for tenders to sell stakes in the holding itself and its structural divisions. The Uzbekistan Government originally planned to offer a strategic investor 49% of Uzbekneftegaz and 44% each of subsidiary companies Uztransgaz, Uzgeoneftegazdobycha and 39% of Uzburneftegaz and Uzneftepererabotka.

Uranium

According to the State Committee for Geology and Mineral Resources, the country has 27 uranium deposits, most of them in the Kyzyl Kum. They contain proven reserves of 55,000 t of uranium.

The Navoi Integrated Mining and Metallurgical Combine, Uzbekistan's uranium monopoly, intends to cap uranium production until world prices increase. It will sustain annual production of approximately 2,000 t of uranium. Navoi produced 2,200 t in 2000 and will produce a forecast 2,300 t in 2001, well below its design capacity of over 3,000 t/y.

During the next two or three years, Navoi plans not only to preserve existing capacity but also to create standby capacity to mine uranium.

At present, Navoi has three enterprises mining uranium by the *in-situ* leach (ISL) method. The ore is processed at the No. 1 hydrometallurgical plant in Navoi. Navoi has invested more than US\$10 million in its uranium mining capacity in recent years, buying new drilling rigs and submersible pumps, among other equipment.

In 2000, Navoi started to develop the Sugraly uranium deposit, one of the biggest in Central Asia, in the Central Kyzyl Kum Desert of Uzbekistan. The field contains a proven 38,000 t of uranium, enough for a mine life of 10-15 years if Navoi's production rate is sustained. Navoi originally intended to mine the deposit as a joint venture with Cogema of France. Talks between the two companies broke down due to differences over the allocation of geological reserves. However, efforts to build the necessary infrastructure are in full swing, and the deposit should yield its first 100 t of uranium in 2001.