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**RESTRUCTURING OF THE COAL INDUSTRY IN SELECTED ECONOMIES IN TRANSITION
– AN UPDATE ¹**

(A consolidated paper, prepared by the secretariat, on the basis of information
submitted by the Governments of Bulgaria, Czech Republic and Slovenia)

Introduction

1. Economies in transition have generally made considerable progress in transforming their coal industries into a more efficient and environmentally friendly sector. Recorded increases in productivity, reduction in coal production and the closure of uneconomic mines have normally been coupled with an appropriate state coal policy often including substantial state support. But the coal restructuring case of every individual country reviewed has been rather specific with particular insights and lessons for the others involved in this extremely complex process. In parallel, major changes are taking place in the electricity sectors of countries with economies in transition with a major impact on the coal industry in the region as a whole. The sector has been reorganized, in many cases the regulators were instated and sweeping liberalisation and privatisation are either under way or being planned. In this framework, the updates on the coal industry restructuring in Bulgaria, Czech Republic and Slovenia are considered to be of particular interest.

¹ This update is not meant to be comprehensive but rather to provide an overview of selected major issues in the coal industry. The background documents to this update are ENERGY/1999/6 and ENERGY/1998/16.

Bulgaria

2. The process of coal industry restructuring in Bulgaria, which began in the 1990s, appears to be gaining momentum (Table 1). It is taking place within the dynamic energy sector picture with the new Law on Energy and Energy Efficiency to be passed by the new Parliament. The Law is supposed to lead to a wide liberalization and further emphasis on the increased efficiency of the sector.
3. The following facilities will be closed soon: the Mlamolovo and Minyor coal mines of the Bobov Dol Company, the underground coal mines of the Pernik company, Pirin coal mine, Aheloy coal mine, Minyor and Smirnenski coal mines of the Marbas company, Tvardica and Sheshkingrad coal mines of the Balkanbas company and the Antracit coal mine. The closure of the Ivan Rusev coal mine is also envisaged. The process of closing down the unprofitable mines will then come to an end.
4. The underground production of coal is carried out in the Babino and Bobov Dol mines of the Bobov Dol company, coal mines Oranovo in Simitli, Cherno More 2 in Burgas, Zdravec in Dimitrovgrad and in a small private mine Bela voda in Pernik. The open cast mines Stanyanci, Beli breg, Chukurovo and Vitren are, at the same time, in the privatisation process. In addition, the Maritza Iztok mine is in advanced negotiations with Rheinbraun, a German Coal Company, on the establishment of a joint company. The Government of Bulgaria has also set aside 45 million and 5 million leva for underground mine closure and subsidies, respectively.
5. Coal prices in Bulgaria were at the year 2000 level which means \$50 per tonne of equivalent coal (TEC) for imported coal, \$23 / TEC for the local lignite and around \$47.5-53.7/TEC for other local coals.
6. Interesting developments are taking place in the related thermal power sector that might have far reaching consequences for the future of the coal industry in Bulgaria. The restructuring of the thermal power sector has continued. First, the National Electricity Company (NEK) has been reduced to transmission activities only while all distribution companies were established as separate commercial entities. The privatisation set up for the distribution sector will be completed soon. Second, the power generation units are still in state hands but are now organised as separate companies: Kozloduy nuclear power plant, Varna thermal power plant, Ruse thermal power plant, Bobov Dol and Maritza Iztok 2 thermal power plants. The power station Maritza 1 is part of a company that also own a briquette factory. While the status of the Maritza 3 power plant is still undecided, it appears that it will be a party to a joint company with Entergy, an American electricity company, which will refurbish and operate this power station. Another American company, AES, will refurbish Maritza Iztok 1 thermal power plant. The total investments in these two power plants will amount to \$ 1.4 billion and will include the construction of the coal sulphur treating facilities. Such a facility has recently been built for Maritza Iztok 2 power plant.

Table 1: Dynamics of the major indicators of restructuring, Bulgaria, 1990-2000

Indicator	Year						
	1990	1993	1995	1997	1998	1999	2000
Coal Production, Mt	-	30.2	31.9	30.6	33.33	26.0	27.0
Number of mines / pits	-	33	33	29	29	30	20
Employees	-	37,612	37,006	34,477	33,104	27,733	20,313
State subsidies, 1993=100	-	100	62.45	4.99	17.85	8.2	12.1
Productivity growth, 1993=100	-	100	107.41	110.48	125.46	139.8	220.1
Investment in \$ million	-	n.a	n.a	n.a	n.a	n.a	n.a

Czech Republic

7., Czech coal production fell from 102 to 65 million tonnes or 36% between 1990 and 2000 (Table 2). In this framework, the forecast (or estimate) for the production of 65 million tonnes (50 Mt brown coal and 15 Mt hard coal) in 2000 appears to be optimistic when compared to the levels in 1999: 44 Mt of brown coal and 14 Mt of hard coal. The expected increase was based on an anticipated favourable economic growth and increasing opportunities for the Czech Power Company CEZ in the European electricity markets.

8. The Government of the Czech Republic made the decision on further downsizing of the coal industry in December 1998. The industry has five major players that have operated since 1994: two companies in hard coal mining (OKD Ostrava and CMD Kladno) and three companies in brown coal mining (SD Chomutov, MUS Most and SU Sokolov). To date, only CMD Kladno and MUS Most are privatised. Recently, CMD Kladno, a small company, and OKD Ostrava, a large outfit, were merged and placed within Karbon Invest, a contractual joint stock holding company. In addition, OKD Ostrava is developing an organisational model that would allow the separation of the profitable activities from a non-profitable segment, which could in turn qualify for the use of the state subsidies earmarked for mine closure. The whole process should be completed by the year 2002.

9. In July 1999, the Czech Government sold a 46.29% stake in MUS Most, one of the biggest brown coal producers in the country, to Investenergy S.A. from Switzerland which belongs to the US Appian Group. In 1999 MUS produced 13.2 million tonnes of coal from three open cast mines and one underground mine. Privatisation of the remaining two brown coal companies is supposed to be completed in 2002 once the privatisation of CEZ is finalised. The terms and conditions of that privatisation are currently being defined. The ownership structure of these two companies is similar: the state owns 54% and 48.7% of SD Chomutov and SU Sokolov respectively while CEZ possesses 38.03% of SD Chomutov and Metalimex has 36.1% of SU Sokolov. The rest of the shares in both companies are held by various small investors.

10. Based on the September 1999 Government decision on the state long-term commitment to facilitate mine closure and to meet various needs of redundant mine workers, substantial funds were allocated for these purposes. Most of these funds, amounting in total to 2.23 billion CZK in 2000, went into the hard coal industry – 79.1%, while the rest was directed to the brown coal segment. Looking at those expenditures differently, 56.6% was incurred for various social and health obligations and 43.4% was related to diverse mine closure and rationalisation activities.

11. The coal future in the Czech Republic might be affected by the national energy strategy (officially entitled State Energy Policy) adopted by the Government in January 2000. The strategy defined a global coal consumption structure for the electricity and heat generation in the country allocating an appropriate role to hard and brown coal. It is expected that coal will account for minimum of 45% of the primary energy consumption and for 60% in power generation. In that framework, the use of locally produced coal would continue within acceptable environmental limits.

Table 2 : Dynamics of the major indicators of restructuring, Czech Republic, 1990-2000

Indicator	Year						
	1990	1993	1995	1997	1998	1999	2000
Coal Production, Mt	101	85	75	73	67	58	65
Number of mines / pits	47	35	26	19	18	16	16
Employees in thousand	110	88.6	80.5	69.7	65.5	44	41
State subsidies, 1990=100	100	none	none	none	none	none	none
Productivity growth	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Investment in \$ million	n.a	n.a	n.a	n.a	n.a	n.a	n.a

Slovenia

12. The National Assembly of the Republic of Slovenia adopted the Resolution on the Strategy of Energy Use and Supply at its session of 11 January 1996. The Resolution is set to achieve three major goals: (a) energy efficiency, long-term reliability and adequacy of energy supply; (b) acceptability to public health, environment and space and minimization of related risks; and (c) economic efficiency and social acceptability. The achievement of these goals is conducive to a GDP growth exceeding the growth of the final energy consumption, a minimal growth of the primary energy consumption and minimal achievable energy dependency. The implementation of the Resolution is heavily influenced by the Pre-Accession Agreement made between European Union and Slovenia. In addition two EU Commission Decisions, No. 3632/93ECSC establishing the Community rules for state aid to the coal industry and No. 96/92/EC of the European

Parliament and of the Council concerning common rules for the internal electricity market, set clear limits on how much the Government may do in the field of energy, coal included.

13. Domestic coal is one of the national strategic reserves and therefore enjoys priority over imported fossil fuels. Because of various environmental constraints its use will be directed to electricity generation. Domestic coal is valued not only because of the level of reserves but also because it is, besides hydropower, the only domestic energy source. In turn, it is seen as contributing to the reliability of energy supply and the decrease of the country's energy dependency. Future coal production is set accordingly to the long-term contracts with the power and heat generation facilities. Based on these contracts, the Velenje mine would supply Sostanj thermo power plant (TPP) with up to four millions tonnes of lignite per year while the Trbovlje and Hrastnik mines would provide Trbovlje TPP and possibly Ljubljana CHPP with approximately up to one million tonnes of brown coal per year.

14. The state project of closing three brown coal mines in Kanizarnica, Senovo and Zagorje and the landscape restoration was based on a relevant act on funding such and similar operations. Although originally scheduled to be completed by the end of 2000 it seems that due to insufficient funding the landscape restoration part of the project may be delayed.

15. The ongoing changes in the electricity sector in Slovenia have also contributed to the dynamics of the coal industry. First, desulphurisation equipment with the power of 335 MW was installed at Block V of the Sostanj TPP that makes all the electricity production based on Velenje lignite environmentally acceptable. Second, due to environmental and price competitiveness considerations, the Trbovlje TPP will be closed which opens a number of related issues including the fate of the related mine and the power plant replacement. Thus in July 2000, the national Parliament adopted the Act on the Gradual Closure of Trbovlje-Hrastnik Mine and Developmental Restructuring of the Region. The mine is supposed to be definitely closed by the end of 2012 with the end of the coal production for electricity generation by October 2007 and subsequent environmental project supervision after that date. The Law also contains provisions on compensation of agricultural claimants who suffered direct damage because of the continued operations of the Trbovlje II TPP from 1991 on. The compensation will be paid beginning as of 2000 until the TPP is closed and related regional restructuring is achieved i.e. by the end of the year 2008.

16. It is already clear that Slovenia might not burn up to one million tonnes of brown coal for its electricity production as anticipated. While the unfurnished Trbovlje TPP will need not more than 0.6 Mt of brown coal annually, the Ljubljana CHPP will effectively cease to use domestic brown coal. The ecologically more friendly coal from Indonesia was selected as its substitute last year. The competitive position of coal for electricity generation might be further undermined by the beginning of construction of two gas-fired power stations with an installed power of 114 MW. The power plants are deemed necessary to provide also a reserve capacity for power generation in the framework of a new regulatory system.

Table 3: Dynamics of the major indicators of restructuring, Slovenia, 1990-2000

Indicator	Year						
	1990	1993	1995	1997	1998	1999	2000
Coal Production, Mt	5.1	4.9	4.7	4.9	4.9	4.6	4.6
Number of mines / pits	3	3	3	3	3	3	3
Employees in thousand	7.6	6.3	5.5	5.4	5.2	5.1	4.2
State subsidies, 1990=100	100	100	92	n.a	152	120	-
Productivity growth, 1990=100	100	117	126	135	140	134	164
Investment in \$ million	28.7	16.3	21	25	25.3	23.7	19.3