



EURACOAL Market Report 2/2012

January 2013

WORLD COAL MARKET DEVELOPMENTS

Last year's (2011) global hard coal production reached 6.960 Mt of which 6.050 Mt was steam coal and 910 Mt coking coal. Global seaborne hard coal trade reached 978 Mt, of which 739 Mt was steam coal and 239 Mt coking coal. In the first half of 2012, total seaborne hard coal trade amounted to 515 Mt, of which 380 Mt was steam coal and 135 Mt coking coal. These six-month figures are of course preliminary. Last year's preliminary figures were particularly inexact, due mainly to non-valid data from Indonesia and other parts of the world. Some tonnages were counted twice, and illegally mined coal was partly counted under legally mined and sold coal.

Looking at the supply side for the first half of 2012, Australia increased exports by 13 Mt and South Africa by 8 Mt. Australia did not really produce more steam coal compared to last year but sold more coal to China, its coal being cheaper than Chinese coal, even when including freight rates. One has to know that in China there is no regulation to control coal prices, even if prices for electricity are regulated. South Africa increased exports to India, which had important environmental and technical problems, with a huge impact on indigenous coal output. On the Atlantic side, the USA increased exports by 8 Mt. The shale gas boom had an enormous impact on electricity generation in the US and coal mining companies have to stock unsold coal, export at distressed prices, or even close the mines as coal totally lost its competitiveness on the power market.

On the coking coal market, Australia increased exports by some 20 Mt, which does not represent an absolute increase but shows that mines fully recovered after the floods in Queensland. Much coking coal is shipped to China which is decreasing its coking coal production. The Government's strategy is to buy foreign coking coal in order to keep indigenous reserves for the future. The total seaborne coking coal trade increase is estimated at 24 Mt.

FREIGHT RATES

The pressure on freight rates is still on-going, there is no big coal demand from Europe and the USA and also China were slightly decreasing their coal use due to economic stagnation. There were again situations where delivered coal at ARA ports was

cheaper than the price at Richards Bay. This situation is very unhealthy and many ship owners went bankrupt. This situation was not as dramatic as long as traders negotiated long-term contracts. The price for Chinese coke was going down as well and Metcoal prices are also expected to decrease after a slight increase in 2011.

CARBON PRICES

The carbon price does not show any real development, reflecting a market behaviour which does not satisfy the European Commission. The question now is, if it would be better for coal to keep the low EU ETS price or to replace EU ETS by a (higher) carbon tax. In the opinion of EURACOAL it would be illegal to change the working of the EUETS, as the EU ETS can only then be modified, when an international agreement is reached, which is not the case.

EUROPEAN COAL MARKET

	2012 (1-6)	2011 (1-6)
	Mt = t	Mt = t
Domestic hard coal production	65.5	64.3
Hard coal imports**	105.7	95.0
Lignite production	216.9	210.1
Total	388.1	369.4

** including coke

EU hard coal production in the first half of 2012 slightly increased, as well as lignite output. A big increase was recorded on the import side, which is due to decreasing international coal prices.

HARD COAL

	2012 (1-6)	2011 (1-6)
	Mt = t	Mt = t
Bulgaria	1.1	1.2
Czech Republic	6.0	5.9
Germany	6.8	6.3
Poland	38.7	37.5
Romania	1.0	1.1
Spain	3.1	2.8
United Kingdom	8.8	9.5
Total	65.5	64.3

In the **United Kingdom**, coal supply to power stations in the first half of 2012 increased by 36 % compared to the first half of 2011, whereas gas fell by 33 %. Due to the very high flexibility of the UK power system, low coal prices, high gas prices and also low carbon prices, the share of coal in power generation totalled 41 %. Nevertheless, coal input is very seasonal when looking at monthly statistics but in absolute terms, coal share increased against gas share. As indigenous coal production decreased by 9 %, imports rose by 51 % but here again, the supply structure underwent seasonal variations. Major suppliers were Russia (29 %), Colombia (18 %) and the USA (15 %).

The Energy Bill is passing through the Parliament and Government has announced a new CCS competition with four coal-based projects that applied, of which the Don Valley project was also on top of the list of preferred projects for NER300 funding. The renewables subsidies were updated, including new arrangements to support biomass conversion and co-firing, which may also allow some power stations to reduce their NO_x emissions. The Government further announced a heavily criticised gas strategy which would inevitably lead to a 'dash for gas' being a bad decision, looking at the market prices. In the opinion of the coal industry, the UK would rather need a coal strategy but politicians do not react to that.

Total **German** hard coal consumption in the first two quarters 2012 slightly increased to 29.4 Mtce. Power generation from hard coal increased by 8 % due to relatively low hard coal prices and low CO₂ prices but coking coal consumption fell by 6 % due to the declining steel industry. The coking coal plant Prosper was sold to Arcelor Mittal. Of the total hard coal consumption, the share of domestic coal represented 6.5 Mtce, almost 7 % less than in the previous year as indigenous coal production has to follow the closure plan decisions. Imports stayed at the same level as the previous year. The German hard coal sector employs currently some 19.300 persons, including part time workers and trainees.

In **Poland**, hard coal deposits are found in the lower and the upper Silesian basins and in the Lublin basin at 143 sites of which 48 are being exploited, accounting for 16.85 billion tonnes of coal reserves. Nevertheless coal production strongly declined during the last ten years, mainly due to a lack of investment in new mines. Today, the hard coal industry employs 114,200 people, Kompania Węglowa being the biggest company with 15 mines.

In February 2012 the **Spanish** conservative Government of Prime Minister Rajoy submitted a mine closure plan to the Commission, as requested by the Competition Commissioner, Mr. Almunia. This plan showed subsidies reduced by 10% in 2012. However, in the Government's April budget, a reduction of 63% was announced, reducing coal subsidies to €111 million for 2012, from the €301 paid in 2011. In response, miners began an indefinite strike. On 18 June, there was a general strike and protests in the nine provinces where coal is mined. Carbuni3n and politicians from the ruling party are seeking for temporary solutions to avoid even higher unemployment rates in these regions.

LIGNITE

	2012 (1-6)	2011 (1-6)
	Mt = t	Mt = t
Bulgaria	14.7	16.2
Czech Republic	23.0	23.2
Germany	92.6	87.0
Greece	30.6	27.9
Hungary (est.)	4.2	4.7
Poland	32.7	30.2
Romania	14.9	15.9
Slovak Republic	2.0	2.5
Slovenia	2.2	2.5
Total	216.9	210.1

Germany's primary energy consumption for the first half of 2012 showed an important increase in the renewables share (+ 9.4 %) and an even more important decrease in the share of nuclear (- 18.3 %). The share of lignite increased by 6.7 %. In general it can be said that lignite will maintain an important role in future power generation, having a positive impact on electricity prices and economic growth. It is nevertheless problematic for lignite-fired power plants to run on ½-load which is more and more the case when conditions for renewables generation are favourable.

In **Poland**, some 150 lignite deposits have been identified representing 14 billion tonnes of mineable reserves. Lignite production is stable, the biggest share was mined by PGE in the Bełchatów region, representing almost 62% of total lignite output. Manpower in the lignite industry decreased from 27,500 in 1991 to 15,900 in 2011, whilst production stayed at the same level. Poland has some 9,898 MW of installed lignite-fired capacity, of which PGE owns the two biggest power plants at Bełchatów and Turów totalling 7,500 MW. PAK owns three power plants at Adamów, Pątnów and Konin, generating 2,500 MW. In 2011, 32.4% of electricity production was generated from lignite and electricity generation from hard coal and lignite together totalled almost 87%. Electricity generation from hard coal and lignite accounted for almost 92% of total generation.

The lignite-fired power plants are amongst the most modern power plants in Poland and, in autumn 2011, PGE started the construction of a new 850 MW unit at Bełchatów with a net efficiency of 42%, making it the most modern power plant in Poland. Since 2007, PGE has pursued a CCS project, which will later be integrated with this new unit. Comprising a CO₂ capture installation, a pipeline and an underground CO₂ storage site which was chosen recently, PGE is gradually progressing this project. In order to maintain lignite output, reserves in other parts of Poland have to be exploited – the deposits at Legnica and Gubin are the most promising ones. Further exploitation in the Bełchatów basin will also be possible.

In the **Czech Republic**, coal and lignite production has stayed stable over the last years. In the power sector, there are some important news: the modernisation of Tušimice power plant which will go into operation in 2016 with an efficiency of 43% and OKD's modernisation programme to develop new mining technologies in the

hard coal sector. The national energy plan will be presented later in 2012; although it is known that the planned share of nuclear will exceed 50% with 15% renewables by 2030. Indigenous energy sources such as hard coal and lignite will still be exploited as they contribute to security of supply.

In **Greece** the Government's 2010 energy policy remains in place: no nuclear, no CCS and 40% renewable electricity by 2020. Power generation from the interconnected system fell by about 10% between 2007 and 2010, but rose in 2011 by 4% to 5%. With the use of gas for power generation almost halving and output from lignite plants virtually unchanged, the increased demand was met by hydro. Electricity supply costs have risen by 25% since 2007 because of high gas prices and renewable feed-in tariffs (FITs). However, it was not possible to pass these costs through to the regulated retail market. For the year ending 31 December 2012, the electricity sector was facing combined losses of €500 million and electricity consumers owed €1,100 million in unpaid bills. It will be impossible to add the cost of ETS allowances from 2013.

The **Bulgarian** energy strategy for 2020 aims to guarantee security of supply, to attain the country's renewables targets, to increase energy efficiency and to develop a competitive energy market whilst protecting consumers. Being in Southeast Europe, Bulgaria is well positioned to participate in the Nabucco project, which has been voted on by the Parliament. Bulgaria will now have the opportunity to invest in the construction, operation and utilisation of new pipelines, offering an alternative gas supply to Bulgaria and the rest of Europe. Furthermore, the Government has had to abandon the construction of the new nuclear power plant at Belene, due to a lack of investment funding. Lignite will therefore remain the country's main energy source and lignite-fired power plants will benefit from financial support in order to fulfil all future environmental requirements.

Mini Maritsa Iztok remains the leading lignite producer and the new 670 MW AES Galabovo power plant which went into operation on 3 June 2011 increased the total installed capacity in the region to 3,200 MW. Mini Maritsa Iztok has a 40% share of total power generation with a 70% average load factor at the power plants and a peak load of 3,000 MW. The company recently started to modernise and rehabilitate its plant and equipment in order to meet new standards.

Hungary is still facing a difficult economic situation and the economy contracted in the first quarter of 2012 which had an impact on power consumption, this being still lower than before the crisis. Hungary has many old power plants with low efficiencies, some of which are being decommissioned rather than modernised. The Hungarian energy strategy aims at extending nuclear power consumption and at improving the interconnection of its power and gas grids with European-wide infrastructure. Paks reactor unit 1 is in the permitting process to obtain a life extension of 20 years. Future use of domestic hard coal and lignite will be possible for security of supply, but only with clean coal technologies. Renewable energies shall be further developed.

Lignite output in Hungary is some 9.5 Mt of which more than 95% are used for heat and power generation. The remaining coal is supplied to municipalities, households

and other consumers. As electricity prices are relatively high, a significant increase in the use of coal for private heat generation has been recorded in Hungary.

In **Slovenia**, lignite plays and will continue to play an important role for power generation: almost one third of electricity is produced from lignite, another third from hydro and the final third from nuclear. Imported hard coal and gas play a minor role. Even though Slovenia depends for 48% of its energy on imports, the country's energy policy is based on the preservation of a flexible market and a diversified energy mix.

Premogovnik Velenje currently produces some 4.5 Mt of lignite, and thanks to the construction of the very modern and highly efficient block 6 at Šoštanj power plant, lignite production will go on for at least another 40 years.

Slovakia reports a high unemployment rate which continues to rise due to the economic crisis. GDP trends are nevertheless quite positive (+ 4.72%) due to strong economic activity. Slovakia has a new social democratic Government and, for the first time in more than 20 years, the Government now comprises a single party. The new Regulatory Policy 2012-2016 was adopted in 2011 and includes the energy sector. Discussions on the transposition of the IED and the ETS directives are still in progress and there is a new discussion on the regulation of EU ETS revenues.

ENEL continues with the construction of two 440 MW nuclear blocks at EMO and has signed an agreement with HBP on the modernisation of ENO blocks 1 and 2, and may also modernise block 4 (each 110 MW). The new 430 MW E.ON Malženice CCGT plant restarted operations after a temporary shut-down following serious failures.

World Market Price evolution (Coal, Coke, Freight, Crude Oil)													
MCIS Steam Coal Marker Price (7000kcal/kg)													
		Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
cif-NW Europe													
Steam Coal	2011	150.28	142.50	140.78	147.96	148.00	142.30	142.45	147.21	146.34	138.51	137.17	130.19
(US\$ / tce)	2012	128.28	118.65	113.47	114.56	102.87	102.87						
Steam Coal	2011	112.48	104.41	100.56	102.45	103.14	98.90	99.87	102.63	106.27	101.06	99.28	98.79
(EUR / tce)	2012	99.40	89.72	85.95	87.04	80.43	82.12						
Source: VDKI, Mc Closkey													
fob-China													
Freight Rates (USD /t)													
R Bay/Rotterdam	2011	9.25	8.71	9.38	9.61	9.79	10.79	10.03	10.04	13.10	13.13	12.43	12.78
(Capesize)	2012	10.18	8.86	8.65	8.95	8.52	6.35						
Newcastle/Rotterdam	2011	16.56	15.95	17.98	17.49	17.18	17.84	18.05	18.58	22.39	23.57	23.69	24.55
(Capesize)	2012	18.31	14.95	14.88	15.48	15.08	12.60						
Bolivar/Rotterdam	2011	9.19	8.54	10.13	10.17	9.60	10.91	11.10	11.72	15.05	16.17	15.37	15.48
(Capesize)	2012	10.85	10.01	9.05	9.65	9.70	8.38						
Source: VDKI, Frachtcontor Junge & Co.													
Currency Rates													
EUR/USD	2011	0.75	0.73	0.71	0.69	0.70	0.70	0.70	0.70	0.73	0.73	0.74	0.76
	2012	0.76	0.76	0.76	0.76	0.78	0.80	0.81	0.81	0.78	0.77		
ZAR/USD	2011	6.93	7.19	6.92	6.73	6.86	6.80	6.80	7.08	7.56	7.97	8.16	8.18
	2012	8.01	7.64	7.60	7.83	8.16	8.40	8.25	8.26	8.27	8.67		
AUD/USD	2011	1.01	0.99	0.99	0.95	0.94	0.94	0.93	0.95	0.98	0.99	1.00	0.99
	2012	1.04	1.07	1.05	1.04	1.00	1.00	1.03	1.05	1.04	1.03		
Source: Exchange rates download center													
Crude Oil (USD/Barrel)													
Crude Oil	2011	92.83	100.29	109.84	118.09	109.94	109.04	111.62	106.32	107.61	106.29	110.08	107.34
	2012	111.76	117.48	122.97	118.18	108.07	93.98	99.55	109.52	110.67	108.36		
Source: OPEC Basket Prices													

WORLD SEABORNE COAL TRADE - STEAM COAL			
Exporting Countries	2012 (1-6) Mt	2011 (1-6) Mt	Diff. 2011/12 Mt
PACIFIC			
Australia	78	67	11
China	5	6	-1
Indonesia	132	132	0
Vietnam	7	9	-2
SUB-TOTAL	222	214	8
ATLANTIC			
Colombia	41	36	5
Russia	51	47	4
South Africa	37	29	8
Venezuela	1	2	-1
USA	23	15	8
Others	3	4	-1
SUB-TOTAL	156	133	23
TOTAL	378	347	31
incl. Anthracite and PCI-Coal			
Source: VDKI, preliminary figures			

WORLD SEABORNE COAL TRADE - COKING COAL			(inc. PCI-Coal)
Exporting Countries	2012 (1-6) Mt	2011 (1-6) Mt	Diff. 2011/12 Mt
Australia	71	60	11
Canada	15	15	0
China	1	3	-2
Russia	6	3	3
USA	32	30	2
TOTAL	125	111	14
Source: VDKI provis. Figures			

EU CRUDE STEEL PRODUCTION		
COUNTRY	2012 (1-6) Mt	2011 (1-6) Mt
Austria	3.8	3.9
Belgium	3.8	4.6
Bulgaria	0.4	0.5
Czech Republic	2.7	2.9
Finland	2.1	2.3
France	8.4	8.1
Germany	21.9	23.2
Greece	0.7	1.1
Hungary	0.8	0.9
Italy	14.9	14.8
Luxembourg	1.1	1.4
Netherlands	3.4	3.5
Poland	4.5	4.4
Romania	2.0	1.8
Slovakia	2.3	2.2
Slovenia	0.4	0.4
Spain	7.4	8.8
Sweden	2.5	2.4
United Kingdom	4.7	5.0
Others	1.3	1.0
EU-27	89.1	93.2
Source: IISI		

TABLE 5

EU Hard coal and lignite production and consumption

	EU Hard coal production		Consumption of indig. hard coal for power generation	
COUNTRY	1-6 2012 Mt	1-6 2011 Mt	1-6 2012 Mt	1-6 2011 Mt
Bulgaria *	1.1	1.2	1.0	1.2
Czech Republic	6.0	5.9	6.0	5.7
Germany	6.8	6.3	4.2	6.4
Poland	38.7	37.5	28.9	32.4
Romania	1.0	1.1	1.0	1.0
Spain	3.1	2.8	3.4	3.4
United Kingdom	8.8	9.5	7.5	9.5
EU-27	65.5	64.3	52.0	59.6

* brown and black coal

** only hard coal producing countries

	Lignite production		Lignite consumption for power generation	
COUNTRY	1-6 2012 Mt	1-6 2011 Mt	1-6 2012 Mt	1-6 2011 Mt
Bulgaria	14.7	16.2	13.9	15.4
Czech Republic	23.0	23.2	19.6	19.6
Germany	92.6	87.0	83.7	77.9
Greece	30.6	27.9	30.0	28.3
Hungary (estim.)	4.2	4.7	4.1	4.7
Poland	32.7	30.2	32.3	29.8
Romania	14.9	15.9	14.7	16.4
Slovakia	2.0	2.5	2.0	2.5
Slovenia	2.2	2.5	2.1	2.3
EU-27	216.9	210.1	202.4	196.9

TABLE 6

EU Hard coal imports

	EU Coking coal imports		EU Steam coal imports		EU Total coal imports	
COUNTRY	1-6 2012 Mt	1-6 2011 Mt	1-6 2012 Mt	1-6 2011 Mt	1-6 2012 Mt	1-6 2011 Mt
Austria					1.6	1.4
Belgium					3.0	3.0
Bulgaria	0	0	1.0	1.9	1.0	1.9
Czech Republic	0.5	0.5	0.6	0.7	1.1	1.2
Denmark					2.0	2.0
Finland	0.4	0.5	1.4	2.9	1.8	3.4
France					7.8	7.0
Germany	4.8	5.2	16.0	15.7	20.8	20.9
Greece					0.4	0.2
Hungary (estim.)	0.8	0.7	0.1	0.1	0.8	0.9
Ireland					1.5	1.5
Italy	3.0	3.5	9.5	8.5	12.5	12.0
Netherlands	1.8	1.7	4.4	4.3	6.2	6.0
Poland	0.7	1.2	3.9	6.3	4.6	7.5
Portugal					2.5	1.4
Romania	0	0	0.6	0.4	0.6	0.4
Slovakia					2.6	1.5
Slovenia					0.2	0.2
Spain	1.1	1.2	9.2	5.3	10.3	6.5
Sweden	0.7		0.4		1.1	1.3
United Kingdom	2.4	2.5	19.9	12.3	23.3	14.8
EU-27					105.7	95.0

* preliminary figures

EUETS Carbon Permit Forward Prices

