

EURACOAL Market Report 1/2009

April 2009

WORLD MARKET

Some figures for 2008 are preliminary. Nevertheless, the general tendencies described are correct.

Global hard coal production in 2008 increased by some 200 million tonnes (Mt) or even more; China alone increased its production by 160 – 170 Mt. This will once more result in an increased share of coal in global electricity generation. Coal reserves are abundant and, due to the higher energy prices and modernized production technologies, resources also become more abundant. USA, China and Russia have the biggest coal resources in the World, so their participation in post-Kyoto commitments is essential for the world to have any chance of mitigating the effects of climate change; any unilateral CO₂ abatement efforts by other countries will be useless.

World Coal Trade

	1 – 12 2008	1 - 12 2007	Difference
Mt=t			
Steam coal	631	619	+ 12
Coking coal	211	202	+ 9
Total	842	821	+ 21

1. Steam Coal (see table 2)

a) Pacific Market supply

Seaborne steam coal trade increased by 12 Mt and reached 631 Mt in total. In the Pacific area Australia increased exports by 17 Mt, Indonesia by 12 Mt (although Indonesian figures are not confirmed), whilst China decreased exports by 9 Mt, which is less than expected, and Vietnam by 13 Mt. In total, the Pacific increased exports by 10 Mt.

	1 - 12 2008	1 - 12 2007	Difference
Exporting countries	Mt=t		
Australia	126	109	+ 17
China ¹	42	51	- 9
Indonesia	201	189	+ 12
Russia	18	15	+ 3
Vietnam	20	33	- 13
Canada	4	4	0
Total	411	401	+ 10

1 incl. Anthracite

b) Atlantic Market supply

The Atlantic area also increased exports by 2 Mt in total. The USA increased exports by 7 Mt and Columbia by 4 Mt. Russia decreased exports by 4 Mt, South Africa by 3 Mt and Poland by 2 Mt. Reviewing the export figures, we observe that Indonesia on the Pacific side exported the huge amount of 200 Mt of coal, whilst also Russia and South Africa, who deliver to both markets, exported considerable amounts of steam coal. South Africa has many new mine projects; the licences were all issued but there is neither technology nor financing available to exploit the mines.

	1 - 12 2008	1 - 12 2007	Difference
Exporting countries	Mt=t		
Colombia	69	65	+ 4
Poland	2	4	- 2
Russia	57	59	- 2
South Africa	64	67	- 3
Venezuela	6	8	- 2
USA	17	10	+ 7
Norway	5	5	0
Total	220	218	+ 2

2. Coking coal supply (see Table 3)

Seaborne coking coal trade increased by 5 Mt reaching 207 Mt in total. The USA, being very flexible, increased its exports by 9 Mt whilst Australia decreased exports by 3 Mt after having managed major problems in Queensland. Exports from Canada stayed stable and several new projects will increase exports further. China needs its coal for domestic use, but nevertheless exported 1 Mt more than in 2007, taking advantage of the high prices. Russia had to decrease exports due to a high domestic demand.

	1 - 12 2008	1 - 12 2007	Difference
Exporting countries	Mt=t		
Australia	135	138	- 3
Canada	25	25	0
China	4	3	+ 1
Russia	3	5	- 2
USA	35	26	+ 9
Others	5	5	0
Total	207	202	+ 5

3. Chinese Coke

Chinese coke price also reached historic peaks in summer 2008 (almost 800 US\$/t) and then dropped to 300 US\$/t in January 2009. For the time being there is almost no coke demand, there's an average of 1 Mt being exported per month and in December the exports only represented 80,000 tonnes.

4. Price evolution (see Table 1)

a) Steam Coal Prices

Looking at the steam coal prices fob South Africa, an unprecedented price increase was observed in July/August 2008, when prices reached 175 US\$/t whilst they again dropped back to 65-72 US\$/t at the beginning of 2009. They could potentially drop further.

	December 2007	March 2008	August 2008	December 2008
US\$/tce	149.00	170.00	219.00	90.00
€/tce	102.00	110.00	146.00	67.00

b) Coking Coal and Coke Prices

Coking coal prices also increased dramatically in the period 2008/2009 (hard coking coal):

2005 / 2006	125 US\$/t fob
2006 / 2007	115 US\$/t fob
2007 / 2008	95 US\$/t fob
2008 / 2009	300 US\$/t fob

Semi-soft coking coal and PCI-coal prices have risen at the same rate and will of course be priced at a premium to steam coal.

Coke prices (12.5% ash content) are falling steeply against the background of production cuts in the steel industry. Fob prices are still high, but fell from almost 800 US\$/t to 450 US\$/t in November.

5. Freight rates

Freight rates Richards Bay – ARA reached peak levels of 52 US\$/t and plummeted in December to 5 US\$/t. Freight rates Newcastle – ARA even reached 85US\$/t and dropped to 11 US\$/t in December. This is certainly due to the big extension of the bulk carriers worldwide coupled with the dramatic downturn in demand; there are now some considerable new tonnages on the market.

6. Outlook

It is difficult to give an outlook for 2009, with the World economy suffering a major recession. This will have an impact on steel mills and the steam coal market, but the exact nature of the impacts are difficult to predict. In the next meeting there will certainly be more clarification about the coal markets in 2009.

EUROPEAN MARKET (EU-27)

1. European Coal industry

	2008 (1-12)	2007 (1-12)
	Mt (t = t)	
Domestic hard coal	148.3	158.1
Hard coal imports**	216.8	223.1
Lignite	422.3	433.4
Total	787.4	814.6

** including coke

2. Hard coal

Poland

Polish hard coal resources amounted to approx 15 billion tonnes at the end of 2006; with an annual production capacity of 90 Mt, this corresponds to supplies for 37 years. The Ministry of the Economy had published a strategy for restructuring the hard coal mining sector from 2007 to 2015. Improving safety at work, introducing CCS technologies and privatisation of mines were also major issues. "Bogdanka" was the first mine that had gone on the stock exchange last year. Another priority of the strategy was to maintain the share of coal in indigenous power generation and the development of installations for coal liquefaction and gasification.

In 2008, hard coal production totalled 83.4 Mt, produced by 31 mines of which 27 mines had been brought together in three companies. Furthermore, there were two restructuring companies, dealing with the actual closure of mines. At the end of 2008, 120 360 people in total were employed in the hard coal sector.

Germany

According to the Arbeitsgemeinschaft für Energiebilanzen, primary energy consumption in 2008 rose by 1.1% reaching 478 Mtce (14 000 PJ). Looking at the individual energy sources, hard coal consumption decreased by 7% (62.5 Mtce) due essentially to a decreasing use in power stations (-9%) and by the steel industry (-4%). Additionally, there were further mine closures. Due to the economic crisis, the German steel industry is declining; pig iron

production fell from 31.2 Mt in 2007 to 29.3 Mt in 2008 (-5.9%) Electricity production from hard coal dropped from 142 TWh to 128.5 TWh (-9.5%) and hard coal input in power stations dropped from 47.7 Mtce to 43.6 Mtce.

Hard coal imports reached 41.8 Mt (-1.3%) and indigenous hard coal production amounted to 19.1 Mt Manpower in the German hard coal industry, (incl. short-time workers and trainees) decreased by 7.4% and represented some 30,384 people.

United Kingdom

Hard coal production increased for the first time in several years, by 450 000 t. Production in opencast mines continued to drop. The Daw Mill mine achieved a record production for the UK with 3.2 Mt from a single coal face. Maintaining opencast production levels was more difficult than in underground mines because the mines typically have a life of around three years and planning permission remains difficult to obtain. However, opencast production is expected to increase in 2009.

Five years after stopping production at Hatfield Colliery, 0.5 Mt coal was mined. In South Wales, Tower Colliery had to be closed due to exhaustion; new investors however are pursuing other deep mining opportunities in the principality. A total production of 17.5 Mt was expected for 2009. UK Coal was one of the rare large British enterprises during the economic crisis to increase production and staff.

Coal consumption dropped by 4 %, reaching 50 Mt, of which a large share was delivered to power plants. A switch from coal to gas also occurred in 2008, with both indigenous coal production and imports decreasing. Furthermore, it was also expected that demand for coking coal would drop because of the steel crisis.

Czech Republic

In 2008 the Czech Republic produced approx 60 Mt coal, of which 12.6 Mt hard coal (- 2 %) and 47.5 Mt lignite (+ 3,5 %).

Italy

Italy has no indigenous coal production; imports are nevertheless still growing and will grow even more in future, due to several new coal-fired power plant projects using highly modern technologies. In 2008 coal imports represented 26.7 Mt. Steam coal consumption reached 16.7 Mt (compared to 16.5 Mt in 2007). Italy's energy giant Enel started to operate the first block of the new coal-fired power plant Torrevaglia North in summer 2008; the entire capacity of some 1980 MW will be operational mid-2009. Torrevaglia shall become the most efficient coal-fired power plant in Europe.

Other projects were announced: the power plant in Vado Ligure with a capacity of 2 x 330 MW, which is operated by Tirreno Power who obtained the authorisation for the construction of supplementary 460 MW coal-fired capacity; in Fiume Santo (owned by E.ON) the current 2 x 320 MW installed capacities, using additionally the conversion from oil to coal, obtained the authorisation for 410 MW supplementary capacities; and the Porto Tolle power plant owned

by Enel just received the authorization from the Minister of Environment for the conversion from oil to coal (capacity 3 x 660 MW)

ENEA, in collaboration with Ansaldo and Sotacarbo, is taking forward a study about the gasification of coal at Sulcis Power plant with the separation of CO₂ allowing hydrogen production. ENEL has further launched a project on hydrogen production from coal for the future Hydrogen Park in Venice.

The most innovative project is a joint project by ENEL together with ENEA and ITEA, to build a CCS demonstration plant in Brindisi. The plant with a capacity of 50 MW and zero CO₂ emissions will cost 100 million Euros and will go into operation in 2009.

Belgium

There are no final figures for 2008 yet. The significant production halts at Arcelor Mittal had an impact on coking coal imports. Electrabel also decreased its demand, but no figures could be obtained to date.

Surprising information was that Belgian household consumption is considerably rising. Even if there are no official figures known, coal and anthracite consumption for domestic heating doubled since last year. This is partly due to a lack of gas installations in the countryside, where people choose rather to burn coal in their ovens than buying expensive heating oil. A considerable amount of this domestic coal is being imported from the UK.

Netherlands

Steam coal consumption stayed comparable to last year; due to the lower production in the steel industry the consumption of PCI-coal and coking coal dropped slightly and is expected to drop further in 2009.

There are several new projects (partly replacing old capacities) of note: Essent and Shell plan to develop a 1000 MW power plant using coal and biomass gasification (Shell process) combined with CCS in the South West Netherlands. A feasibility study will be completed in the second half of 2009.

Secondly, C.Gen Power of Antwerp recently announced its intention to prepare a permit for a 400 MW Clean Coal power plant in the Port of Rotterdam. The power plant will gasify solid fuels, essentially coal, but also biomass and pet coke. The CO₂ will be captured and probably transported by ships to the offshore storage site. Special ships could be constructed for this purpose.

Sweden

Sweden has not yet published final figures for 2008 but coal imports will total some 2.4 Mt, maybe a little less due to the declining steel production. As already observed in the last 4 years, total electricity consumption again decreased by 1.5%; Sweden nevertheless remains the biggest electricity consumer per capita in Europe.

In early February the Government could reach a compromise on the Swedish Climate Change targets: Sweden will follow the EU's 20-20-20 target, but the share of renewables by 2020 has to reach 50% (currently 43%) which will be very difficult to achieve. By 2030 there shall be no more fossil fuels used for transport and the biggest challenge will be the proposed massive increase of wind capacities. It was further observed that the Government is no longer hostile to nuclear; old capacities will have the permits to be replaced, nevertheless no new capacities will be authorised. The Government further announced its intention to discuss a CCS project, without giving any indications yet.

	2008 (1-12)	2007 (1-12)
	Mt = t	
Bulgaria	2.7	3.0
Czech Republic	12.6	12.9
Germany	19.1	24.2
Poland	83.4	87.4
Romania	2.7	2.6
Spain	10.3	11.0
United Kingdom	17.5	17.0
Total	148.3	158.1

3. Lignite production

Germany

Lignite production reached 175.3 Mt (- 2.9 %) of which 96 Mt were extracted in the Rhineland (- 4 %), 58 Mt in Lusatia (- 2.6%), 19.5 Mt in Central Germany (+ 1 %) and slightly more than 2 Mt in Helmstedt (+ 0,7 %). The developments of the individual mining regions could be explained by the fluctuating demands of the lignite-fired power plants. Trends in the field of coal transformation were favourable: lignite briquettes and dust sold well, sales of coal for circulating fluidized beds remained more or less stable.

Plans for RWE and Vattenfall's demonstration projects had continued as foreseen; Vattenfall had started operating its pilot project at Schwarze Pumpe.

Czech Republic

The Ministry for Trade and Industry recently put forward a draft for a new national energy policy. The mining limits for lignite, established in 1991, will only be partly maintained. The mining limits in the Bilina opencast mine belonging to the mining company Severoceske doly Chomutov should now make it possible to continue extraction until 2037.

The mining company Mostecka uhelna MUS had been divided into three companies; two of them -Vrsanska uhelna a.s. and Litvinovska uhelna a.s.- continue lignite extraction and the third one is a service company. The name MUS had therefore disappeared.

Poland

Polish lignite production increased by 3.3 % compared with the previous year, amounting to 59.4 Mt. The workforce decreased slightly to 17,420. Lignite reserves were concentrated in three basins, i.e. the region around Belchatow, where approx 33 Mt of lignite were produced in 2008 and where mid 2009, a new opencast mine with an annual capacity of approx 36 Mt would begin operation. In Konin, it had been planned to build a 300 MW power plant. The mine in Adamow would also continue operating.

At the EU Summit in December, the Polish government had been able to reach an exemption that foresees that the Polish electricity sector will receive up to 70 % of the necessary CO₂ certificates free of charge till 2019. As from 2020, Poland will have to auction 100 % of its certificates like all other Member States. As a result, Poland plans to build its first nuclear power plant to become operational in 2020.

Bulgaria

During the first three quarters of 2008, indigenous coal had the biggest share in electricity generation (40%). The production of black coal and brown coal decreased by 9% and reached 2.7 Mt. Lignite production increased by 2.9% and reached 26.1 Mt. There was a slight increase in the production of lignite briquettes and a slight decrease of lignite sales to power plants. Also the sales of lignite for household heating increased.

The current economic crisis and the delayed economic growth have a negative impact on electricity consumption, which will result in a drop of coal and lignite sales.

Hungary

The share of coal for power generation had remained at 15 % as in 2007. With more demand for electricity, dependence on imports was also increasing. Lignite was therefore gaining in importance. It could therefore be expected that lignite production in the next years would remain at its level of 9 – 10 Mt.

In order to improve its productivity, MATRA had started assembling a new compact excavator end of 2008. It was a prototype of the largest compact excavator in the world. It would become operational mid 2009 in the Bükkabrány opencast mine. The state-owned electricity trader MVM was planning, together with Matra G.AG, the construction of a 400 MW lignite bloc at Visonta.

Slovakia

The gas crisis and resulting halt of gas deliveries from Ukraine had very much animated the discussion concerning security of energy supply in Slovakia because the country depends 100% on gas imports. However, a discussion about whether gas could be replaced by another source of energy, for example coal, was lacking. Only alternative transport routes were being sought.

Lignite production in Slovakia increased by 12.3 %, amounting to 2.4 Mt. Production was stable at the end of 2006, despite the mining accident.

	2008 (1-12)	2007 (1-12)
	Mt=t	
Bulgaria	26.1	25.4
Czech Republic	47.5	49.3
Germany	175.3	180.4
Greece	65.6	65.8
Hungary	9.4	9.8
Poland	59.4	57.5
Romania	32.6	32.4
Slovak Republic	2.4	2.1
Slovenia	4.0	4.5
Spain	0	6.2
Total	422.3	433.4

Steel production (see Table 4)

World steel production in the first quarter of 2009 was 264 Mt, a decrease of -22.8% compared to the first quarter of 2008.

In the first three months of 2009 Asia produced 173 Mt of crude steel, a decrease of -8.9% over the first quarter of 2008. The EU produced 30 Mt of steel in the first quarter of 2009, down by -43.8% compared to the same quarter of 2008. North America showed a -52.1% decline, producing 16.6 Mt during the first three months of 2009. China showed a slight increase of 1.4% while all the other major steel producing countries showed a decrease in the first quarter of 2009.

In the EU, Germany's crude steel was 2.1 Mt in March 2009, a decrease of -49.8% from March 2008. Italy's crude steel production was 1.7 Mt, down -42.7% compared to the same month last year. France showed a decrease of -36.7% from March 2008, producing 1.1 Mt in March 2009. Spain's crude steel production for March 2009 was 1.1 Mt, - 41.2% less than the same month last year.

EURACOAL		World Market Price evolution (Coal, Coke, Freight, Crude Oil)										TABLE 1	
MCIS Steam Coal Marker Price (7000kcal/kg)													
		Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
cif-NW Europe													
Steam Coal	2008	150.38	160.77	170.57	150.56	170.98	201.83	255.92	218.75	222.95	176.28	127.75	90.13
(US\$ / tce)	2009	98.47	89.48	67.61									
Steam Coal	2008	102.17	109.00	109.85	95.58	109.91	129.78	162.29	146.08	155.15	132.32	99.65	66.70
(EUR / tce)	2009	74.37	68.79	51.80									
Source: VDKI, Mc Closkey													
fob-China		Coke (12.5%)											
USD / t	2008	445	490	526	569	572	641	694	747	620	480	440	350
	2009												
Source: China Coal Report													
Freight Rates (USD / t)													
R Bay/Rotterdam	2008	29.49	30.70	34.80	38.40	52.19	50.45	41.70	36.75	25.55	11.93	6.45	5.85
(Capesize)	2009	7.39	10.78	7.81									
Newcastle/Rotterdam	2008	49.04	51.50	56.60	62.79	59.31	84.45	68.70	61.54	43.54	22.47	12.16	11.63
(Capesize)	2009	12.85	17.73	13.74									
Bolivar/Rotterdam	2008	28.76	29.80	33.70	40.70	59.31	53.35	49.75	39.25	24.34	11.38	5.06	5.12
(Capesize)	2009	7.76	11.56	9.60									
Source: VDKI													
Currency Rates													
EUR/USD	2008	0.68	0.68	0.64	0.63	0.64	0.64	0.63	0.67	0.70	0.75	0.78	0.74
	2009	0.76	0.78	0.77	0.76								
ZAR/USD	2008	6.99	7.66	7.99	7.76	7.61	7.94	7.62	7.67	8.05	9.77	10.10	9.91
	2009	9.92	10.01	9.96	9.11								
AUD/USD	2008	1.13	1.10	1.08	1.07	1.05	1.05	1.04	1.13	1.22	1.46	1.52	1.49
	2009	1.48	1.54	1.50	1.40								
Source: Exchange rates download center													
Crude Oil (USD/Barrel)													
Crude Oil	2008	88.35	90.64	99.03	105.16	119.39	128.33	131.22	112.41	96.85	69.16	49.76	38.60
	2009	41.54	41.41	44.78	50.64								
Source: OPEC Basket Prices													

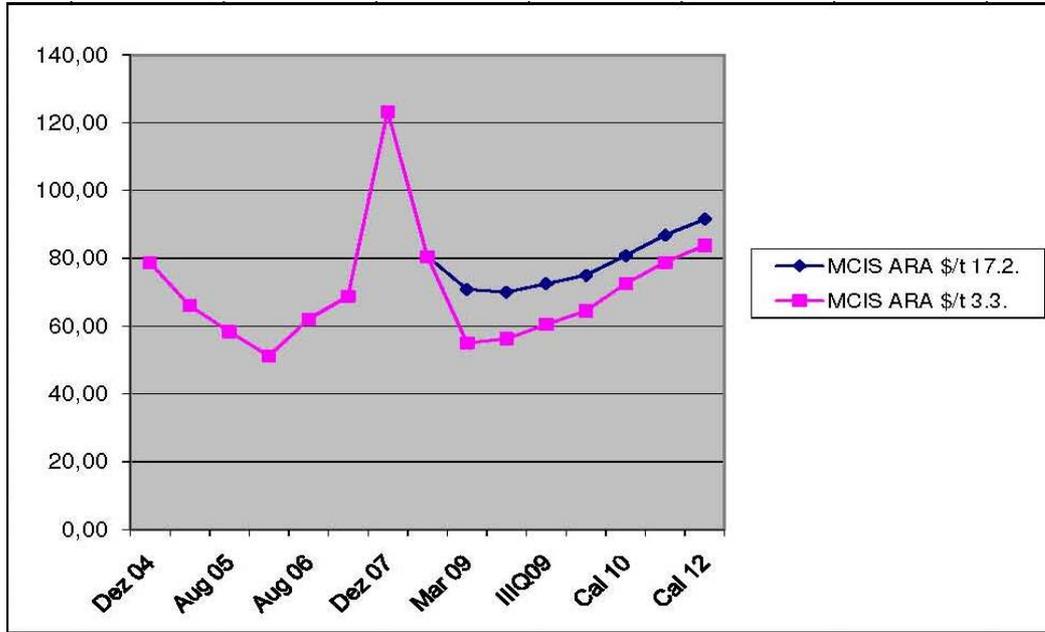
EURACOAL	WORLD SEABORNE COAL TRADE - STEAM COAL			TABLE 2
Exporting Countries	Period in 2008 (1-12) mill t	Period in 2007 (1-12) mill t	Diff. 2007/08 mill t	
PACIFIC				
Australia	126	109	17	
China	42	51	- 9	
Indonesia	201	189	12	
Russia	18	15	3	
Vietnam	20	33	- 13	
Canada	4	4	0	
SUB-TOTAL	411	401	10	
ATLANTIC				
Colombia	69	65	4	
Poland	2	4	- 2	
Russia exc. CIS	57	59	- 2	
South Africa	64	67	- 3	
Venezuela	6	8	- 2	
USA	17	10	7	
Others	5	5	0	
SUB-TOTAL	220	218	2	
TOTAL	631	619	12	
incl. Anthracite and PCI-Coal				
Source: VDKI				

EURACOAL	WORLD SEABORNE COAL TRADE - COKING COAL (inc. PCI-Coal)			TABLE 3
	Exporting Countries	Period in 2008 (1-12) mill t	Period in 2007 (1-12) mill t	Diff. 2007/08 mill t
	Australia	135	138	- 3
	Canada	25	25	0
	China	4	3	1
	Russia excl. CIS	3	5	- 2
	USA	35	26	9
	Others	5	5	0
	TOTAL	207	202	5
	Source: VDKI provis. Figures			
	COKE EXPORTS			
	China	n.a.	15.4	
	Coke World Market	n.a.	35	
	* preliminary figures Source: VDKI			

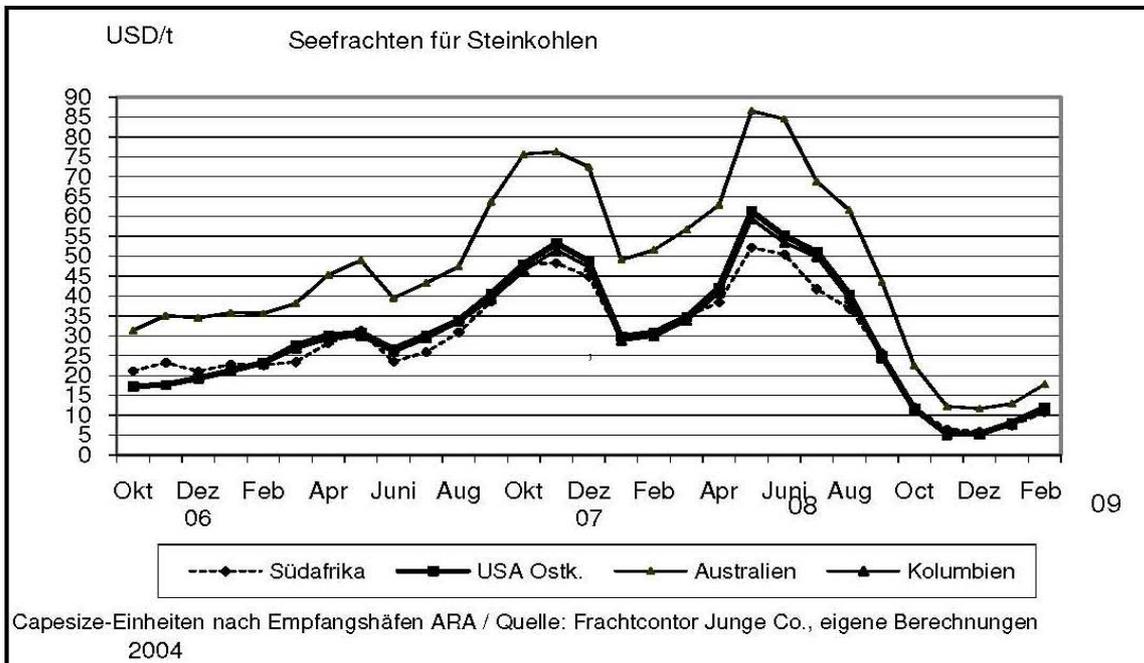
EURACOAL	CRUDE STEEL PRODUCTION IN EU-27 (in mill.t)		TABLE 4
	COUNTRY	2008 (1-12)	2007 (1-12)
	Austria	7.6	7.6
	Belgium	10.9	10.7
	Bulgaria	1.3	2.0
	Czech Republic	6.4	7.1
	Finland	4.4	4.4
	France	17.9	19.3
	Germany	45.8	48.6
	Greece	2.5	2.6
	Hungary	2.1	2.2
	Italy	30.5	32.0
	Luxembourg	2.6	2.9
	Netherlands	6.9	7.4
	Poland	9.7	10.6
	Romania	5.1	6.3
	Slovakia	4.5	5.1
	Slovenia	0.7	0.6
	Spain	19.1	19.0
	Sweden	5.2	5.7
	United Kingdom	13.5	14.3
	Others	2.0	0.6
	EU-27	198.7	209.0
	Turkey	26.4	25.8
	TOTAL	225.1	234.8
	Source: IISI		

EURACOAL	MARKET FIGURES EU-27			TABLE 4A
		2008 (1-12)	2007 (1-12)	
	Crude Steel Production (Mt)	198.7	209.0	
	Hard Coal Production (Mt)	148.3	158.1	
	Hard Coal and Coke Imports (Mt)	216.8	223.1	
	Lignite Production (Mt)	422.3	433.4	
	Sources: World Steel Org., CEMBureau, EURACOAL Members,			

EURACOAL	COAL BALANCE EU-27 (mill. t)						TABLE 5
COUNTRY	2008 (1-12)			2007 (1 - 12)			
	H. C. Prod.	Lign. Prod.	H.C. Imports	H. C. Prod.	Lign. Prod.	H.C. Imports	
Austria	–	–	4.2	–	–	4.0	
Belgium	–	–	6.0	–	–	8.0	
Bulgaria	2.7	26.1	1.3	3.0	25.4	1.4	
Czech Republic	12.6	47.5	2.1	12.9	49.3	2.5	
Denmark	–	–	7.7	–	–	8.0	
Finland	–	–	4.6	–	–	7.0	
France	–	–	21.4	–	–	19.2	
Germany	19.2	175.3	41.8	24.2	180.4	42.3	
Greece	–	65.6	0.8	–	65.8	0.8	
Hungary	–	9.4	1.9	–	9.8	2.0	
Ireland	–	–	2.3	–	–	3.0	
Italy	–	–	26.7	–	–	24.6	
Netherlands	–	–	12.8	–	–	13.0	
Poland	83.4	59.4	9.4	87.4	57.5	5.8	
Portugal	–	–	3.8	–	–	5.5	
Romania	2.7	32.6	3.2	2.6	32.4	3.3	
Slovakia	–	2.4	4.9	–	2.1	5.3	
Slovenia	–	4.0	–	–	4.5	–	
Spain	10.3	–	16.5	11.0	6.2	20.8	
Sweden	–	–	2.4	–	–	3.2	
United Kingdom	17.5	–	43.0	17.0	–	43.4	
Others	–	–	–	–	–	–	
EU-27	148.3	422.3	216.8	158.1	433.4	223.1	
Source: EURACOAL Members, VDKI							

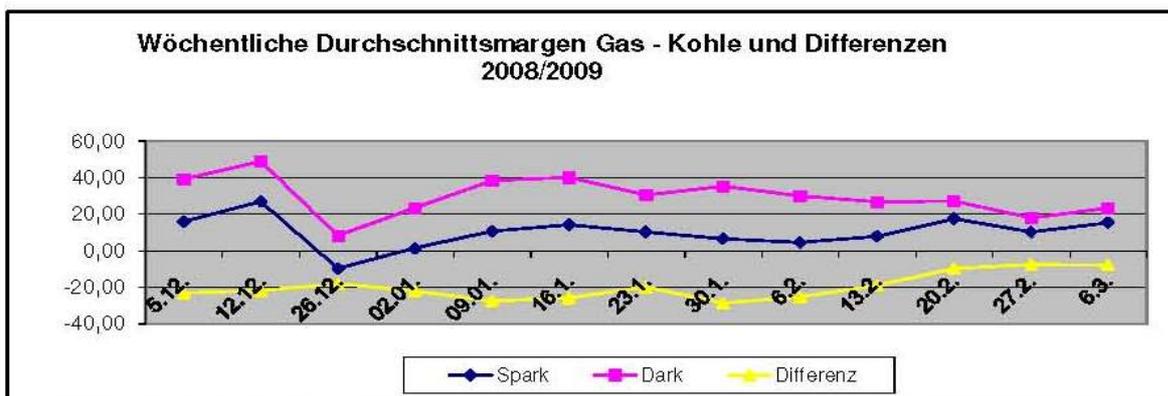
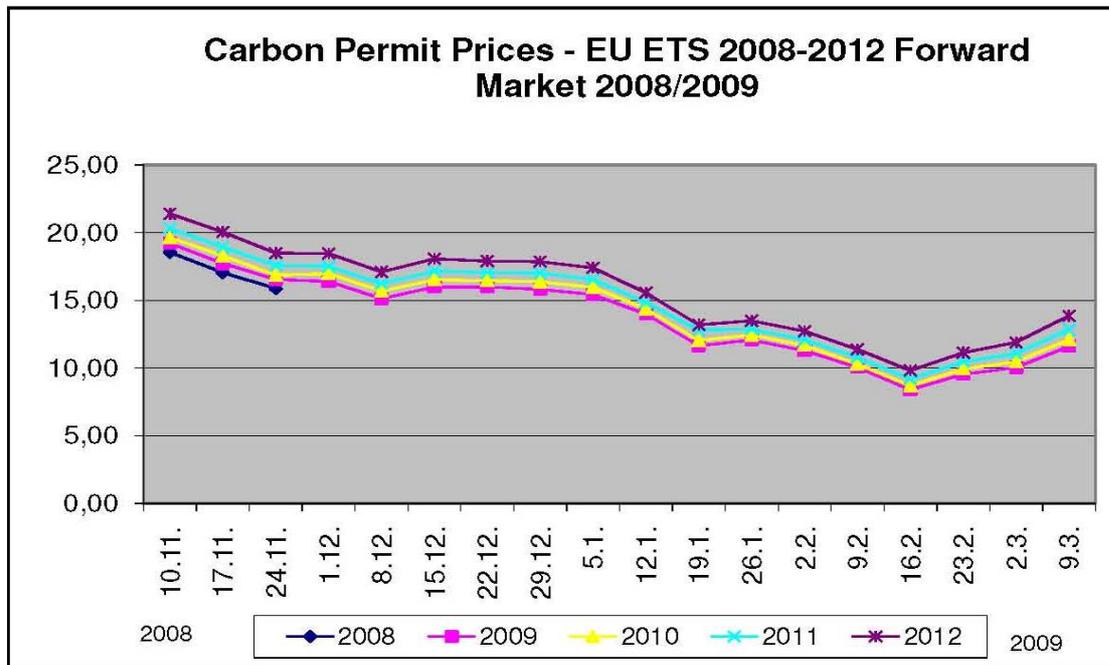


source: VDKI



Capesize-Einheiten nach Empfangshäfen ARA / Quelle: Frachtcontor Junge Co., eigene Berechnungen 2004

source: VDKI



Difference: Spark - Dark; plus difference: advantage for gas/minus difference advantage for coal

