



**K**EREIN DER  
**K**OHLENIMPORTEURE

ANNUAL REPORT

**2005**

## Imported Coal Market at a Glance

		2003	2004	2005
<b>World<sup>1</sup></b>				
Hard coal output	Mill. t	4,200	4,700	5,000
Hard coal world trade	Mill. t	670	758	804
thereof hard coal seaborne	Mill. t	639	685	722
Hard coal trade by rail	Mill. t	30	73 <sup>2</sup>	82
Coke production	Mill. t	458	485	465
Coke world trade	Mill. t	32	37	28
<b>European Union (25) as of 2004</b>				
Hard coal output	Mill. t	72	180	171
Hard coal imports <sup>3</sup>	Mill. t	184	211	209
Coke imports	Mill. t	13	10	9
<b>Germany</b>				
Hard coal consumption	Mill. tce	68.7	65.8	62.8
Hard coal output	Mill. t usable output	25.7	25.7	24.7
Hard coal imports	Mill. t	35.4	39.1	36.3
Coke imports	Mill. t	5.8	5.2	3.6
Import coal sales	Mill. t	41.2	44.3	39.9
thereof power plants	Mill. t	27.9	30.9	28.6
Iron and steel industry	Mill. t	11.3	11.6	9.9
Heating market	Mill. t	2.0	1.8	1.4
<b>Prices</b>				
Steam Coal Marker Price CIF NWE	USD/tce	50	84	71
Border-crossing price steam coal	EUR/tce	40	55	65
CO <sub>2</sub> certificate price (average value)	EUR/t CO <sub>2</sub>	-	-	19
Exchange rate	EUR/USD	0.88	0.80	0.80
<sup>1</sup> Rounded-off figures, <sup>2</sup> New statistic for trade by rail, <sup>3</sup> incl. EU-internal trade				

---

## Summary

*In 2005, a major part of the German energy consumption was covered by the import of some 40 million tonnes of steam coal, coking coal and coke. Imports fell slightly in comparison with the previous year. However, in 2004 the somewhat higher level of imports was characterized by an increase in inventories of about 2 million t.*

*The hard coal world market continued to grow and reached a level over 800 million t. Seaborne hard coal trade crossed the 700-million-t threshold, rising to 722 million t, an increase of 37 million t. The logistic bottlenecks in 2004 were reduced in 2005. Above all, the bulk carrier fleet was, and continues to be, expanded rapidly, leading to a fall in freight rates.*

*The border-crossing price for steam coal rose from EUR 55/tce to EUR 65/tce in 2005. Since the other fossil energy sources oil and gas underwent substantially greater price increases, the competitive position for coal improved nevertheless. Coking coal import prices rose significantly from the middle of the year on as new contracts went into effect, increasing from EUR 62/t to EUR 95/t.*

*Import coal remained a solid part of the Germany energy mix in 2005. Considering that natural gas will, in the long term, become more scarce and more expensive, energy consumers have become even more aware of the advantages of import coal:*

- Well-structured geo-political supply*
- Steady expansion of the supply sources in recent years*
- Prices which continue to be attractive*
- Non-hazardous transport and storage in comparison with oil/gas/LNG*

*2005 was the first year in which emissions rights were traded. The certificate prices increased rapidly, above all as a consequence of high demand from England. Realization of the trade in the EU 25 region dragged, and as of the first quarter of 2006 a number of the countries had still not been integrated into the trade. At the beginning of the 2nd quarter of 2006, the price for CO<sub>2</sub> certificates fell strongly.*

*Germany continues to suffer from overregulation aimed at protection of the climate (EEG (Renewable Energy Act), power-heat coupling, energy tax, emissions trade) which increases prices for power and reduces Germany's appeal as a commercial location while failing to realize major positive effects on the climate.*

*The subsidies for renewable energy sources are getting out of hand. Germany spends a total of more than EUR 4.0 billion in subsidies borne by consumers and government subsidies on energy production which, in the long term, will not become competitive (above all wind energy and domestic coal), and the tendency is rising for the renewable energy sources.*

*We expect a stable development on the world hard coal market for 2006 and a continuing rise in quantities. Germany's imports should rise for both steam coal and coking coal.*

---

## Contents

### Global Economy

Economic Growth .....	5
Energy Consumption .....	5
Hard Coal Output .....	6
Hard Coal World Market .....	7
Energy Policies .....	16

### European Union

Economic Growth .....	18
Energy Consumption .....	18
Hard Coal Market .....	19
Energy Policies .....	21

### Germany

Economic Growth .....	21
Hard Coal Market .....	24
Transport Routes for Import Coal .....	25
Development of Energy Prices .....	26
Energy Policies .....	27

### Prospects for the World Coal Market

Development of Supplies .....	29
Steam Coal Market .....	30
Coking Coal Market .....	31
Infrastructure of the Hard Coal World Trade .....	31
Market Concentration .....	31

### Country Reports

Poland .....	33
Czech Republic .....	34
Russia/Ukraine/Kazakhstan .....	35
USA .....	37
Canada .....	38
Colombia .....	39
Venezuela .....	40
South Africa .....	42
Australia .....	43
China .....	46
Indonesia .....	47
Vietnam .....	48

Overview in Tables .....	50 - 78
--------------------------	---------

Glossary .....	79
----------------	----

Members of VDKI .....	80 - 82
-----------------------	---------

Board of Directors VDKI .....	83
-------------------------------	----

## GLOBAL ECONOMY

### Economic Growth

Global economic development lost something of its momentum in 2005, but nevertheless achieved a growth rate of 4.3 % (previous year 5.1 %). World trade grew at a respectable rate of 7 % (previous year 10 %), remaining within the range of the average of many years.

World production increased by a good 4 % (previous year 5 %) and was also able to gain.

High prices for oil led to a substantial loss in purchasing power in the import countries, but did not, as was the case in earlier periods, have a massive effect on inflation.

The expansion of the global economy was based on healthy economic development in North America, China and India and on weaker, but still positive, expansion of economic performance in Japan and Europe. The oil-producing countries profited from the high oil prices and utilized the additional

revenues for investments.

The US trade balance deficit increased as a consequence of the rise in oil prices; there is an inherent risk in this deficit of a strong devaluation of the dollar in the event that the capital flow reverses.

A robust development of the global economy is expected for 2006. The European region will presumably experience a greater economic upswing than in the year before.

### Energy Consumption

World energy consumption continued to rise in 2005, but the growth rate of 3.2 % was somewhat weaker than in the previous year (+4.3 %).

World energy consumption crossed the 15-billion-tce threshold and reached a level of 15.3 billion tce.

The strongest growth was once again found in the Pacific region, which buys about one-third of the supply of energy worldwide.

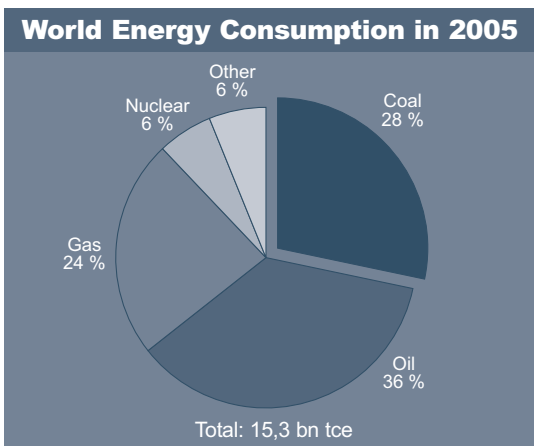
Between 2000 and 2005 alone, the global energy requirements rose by a good 2 billion tce or approximately 17 %.

<b>Primary Energy Consumption in Billion t and tce</b>			
	<b>2000</b>	<b>2005</b>	<b>Growth</b>
Coal	3,120	4,290	+1,170
Natural gas	3,180	3,640	+460
Petroleum	5,110	5,520	+410
Nuclear energy	840	910	+70
Hydroelectric power	882	940	+58
<b>Total</b>	<b>13,132</b>	<b>15,300</b>	<b>+2,168</b>

Source: BP

The strong increase in coal consumption came primarily from China which expanded its power and steel production enormously and increased its raw coal production in this period from 1.2 billion t to 2.1 billion t for this purpose.

Coal production rose worldwide by 300 million tce or 7.4 % from 2004 to 2005 and recorded once again the greatest growth of all energy sources. The market share of coal (incl. lignite) in the global energy mix increased to 28 %.



Sources: BP Statistical Review of World Energy, own calculations

### Hard Coal Output

Worldwide hard coal output grew again in 2005 and increased by 270 million t (= 220 million tce) to 5 billion t. This figure breaks down into about 0.6 billion t coking coal and 4.4 billion t steam coal. The Pacific region continued to be the growth region with the greatest dynamics.

### Output of Important Countries in the Pacific Region in Million t

Producing Countries	2004	2005	Growth
China	1,956	2,113	157
India	340	370	30
Australia	297	325	28
Indonesia	135	153	18
Vietnam	28	34	6
<b>Total</b>	<b>2,756</b>	<b>2,995</b>	<b>239</b>

In addition to the above-mentioned countries, coal was also mined in Mongolia, North Korea, New Zealand and others. These countries are playing a growing role in world coal trade with exports by land and overseas.

In China, about 40 % (= 800 million t) of the output comes from the smallest mines. The reserves and the capital endowments of these operations are limited; time will tell how long this volume can be maintained and whether it can be compensated by the large Chinese mining operations. India also increased its output, but it is increasingly dependent on imports due to its rapidly rising power requirements.

In North America, hard coal output in both the USA and Canada grew only slightly. But Canada is quickly expanding its coking coal and PCI capacities for export.

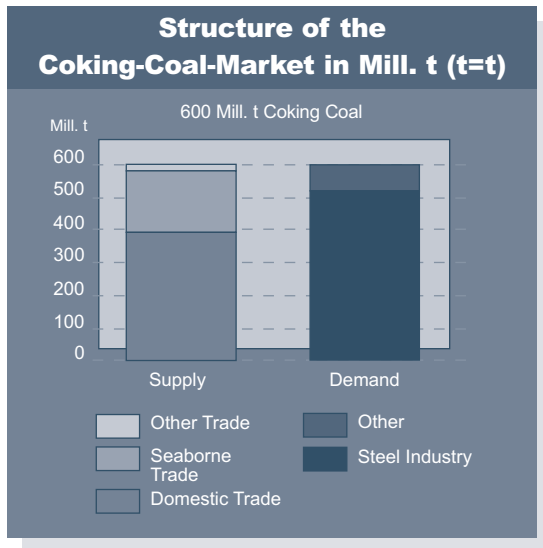
In South America, Colombia was able to increase its production, but Venezuela dropped back somewhat. Colombia should conti-

nue to expand, but Venezuela's expansion potential will remain restricted to a few million tonnes as long as it does not have an efficient port and rail connection to the mines.

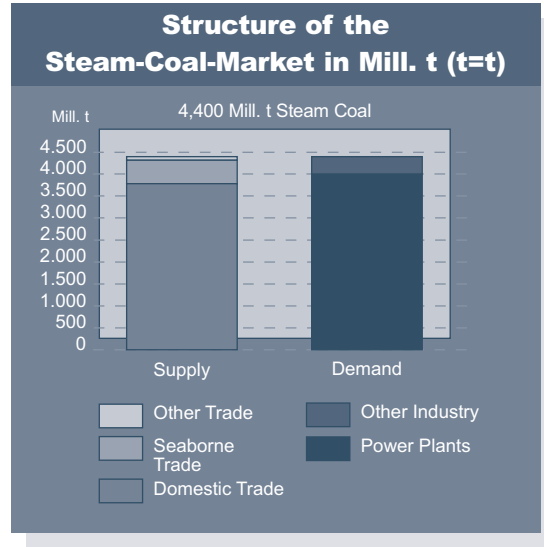
Russia expanded its output further, above all in the opencast pit share in the Kuznetsk Basin coalfield, and thus increased its export potential.

Poland, the Czech Republic, Kazakhstan and the Ukraine remained stable for the most part.

The hard coal production continued to fall in the Western Europe region. Unprofitable mines were closed in Germany and England.



Sources: several evaluation databases, estimate (China)



Sources: several evaluation databases, estimate (China)

## Hard Coal World Market

### General Market Tendencies

The world market for hard coal rose again strongly in 2005; however, due to the somewhat more moderate global economic development, no supply bottlenecks occurred.

World trade rose again and reached a level of about 800 million t, thereof 82 million t for trade by rail and 722 million t for seaborne trade, which exceeded the 700-million t threshold.

The share of all world trade in production comes to 16 %, the share of seaborne trade to 14 %.

Trade by rail increased in volume in 2005 compared to 2004 by 9 million t.

<b>Trade by Rail - World Market in Million t</b>		
	<b>2004</b>	<b>2005</b>
USA - Canada	16.0	17.6
USA - Mexico	0.9	0.9
Canada - USA	2.5	2.9
Mongolia - China	1.5	2.5
North Korea - China	1.5	2.8
Poland - EU countries	7.5	8.2
CR - EU countries	4.0	4.0
Russia - CIS countries (Ukraine)	10.0	10.5
Russia - By land outside of the CIS	4.5	5.0
Kazakhstan - Russia	22.0	24.0
Other (within the EU)	2.3	3.5
<b>Total</b>	<b>72.7</b>	<b>81.9</b>

Seaborne trade volume breaks down into 188 million t coking coal and 534 million t steam coal. The steam coal market comprises Pacific and Atlantic partial markets, which are characterized by differing supplier structures. The exchange volume between the partial markets amounts to about 7 % or 33 million t of the steam coal market. 12 % of the global steam coal production goes to the consumers via seaborne trade.

The coking coal market, in contrast, is a uniform world market due to the low number of supplier countries on the one hand and, on the other hand, the worldwide distribution of demand. About 30 % of worldwide pro-

duction, a significantly greater share than for steam coal, goes to seaborne trade. Differences in development were observed on the partial markets of coal world trade. The following comments refer only to the seaborne hard coal trade.

<b>The 10 Largest Hard Coal Import Countries in Million t</b>		
	<b>2004</b>	<b>2005</b>
Japan	179	181
South Korea	79	75
Taiwan	61	61
Germany	39	36
Great Britain	36	44
India	31	40
USA	25	27
China	19	26
Spain	24	25
Italy	26	25
<b>Total</b>	<b>519</b>	<b>540</b>
Share of world market	76 %	75 %
<b>EU 25</b>	<b>211</b>	<b>209</b>
Share of world market	31 %	29 %





Source: Several databases

## Steam Coal Market

### Volume Development

#### Atlantic Region

In the Atlantic region, demand rose by 11 million t from 209 million t in 2004 to 220 million t in 2005. The Atlantic region thus grew more strongly than in previous years. The USA continued to increase its procurements from the

world market, but Central and South American power plants also developed a greater demand.

In Europe, the increase in gas prices and the declines in domestic output were responsible for a spectacular increase. In Great Britain in particular, imports rose of almost 8 million t, while in the other EU countries the increases and decreases mostly balanced each other out. Coal consumption increased steadily as power demand rose in the Mediterranean region (Turkey and Israel). In Italy, a number of oil-fired power plants have been, and are being, converted to coal in an effort to lower Italian prices for electrical power.

All of the major Atlantic producing countries profited from the strong demand. Russia, South Africa and Colombia were able to increase exports. Poland maintained its export position in 2005. The Norwegian production in Spitzbergen was impaired by a mine fire and fell from 3 million t to 2 million t. A return to full capacity is not expected before 2007.

#### Pacific Region

The Pacific region continues to record increasing demand. The growing population in many of the countries and the striving for an improved standard of living are the driving forces behind the steadily rising demand for power. Demand grew by 17 million t from 297 million t in 2004 to 314 million t in 2005. China has established a position as a major buyer of steam coal and is purchasing increasing amounts from its neighbours Vietnam, Mongolia and North Korea. In the long term, Russian exports by rail to North Chinese power plants could also be possible.

India has ambitious plans for expansion of its electric power generation and increased its imports of South

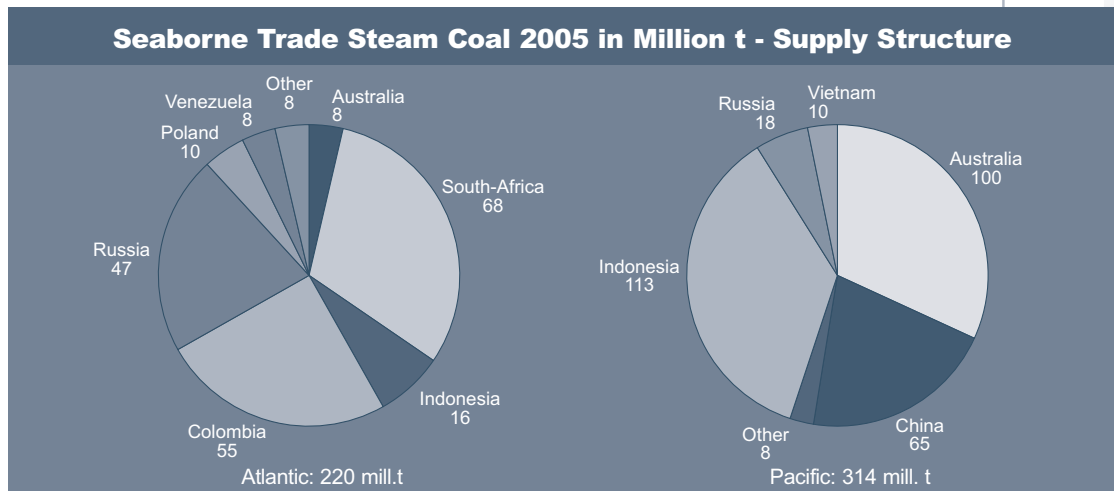
African coal and others.

Indonesia (+24 million t), Vietnam (+7 million t) and Australia (+1 million t) increased their exports, while China reduced its exports by 14 million t. Overall, the Pacific producers - especially Indonesia - sold substantial quantities to the Atlantic market in addition to their supplies to the Pacific market.

#### Quantity Exchange Between Pacific and Atlantic Markets

Indonesia and Australia supplied 24 million t to the Atlantic market, a share of 11 % of the supplies to this region.

South Africa and Colombia (Pacific side of South America) were the only Atlantic suppliers who were able to place smaller quantities in the Pacific region. In total, the exchange quantity came to 33 million t and was at the same level as the previous year, whereby Indonesian coal was able to establish a firmer foothold on the Atlantic market.



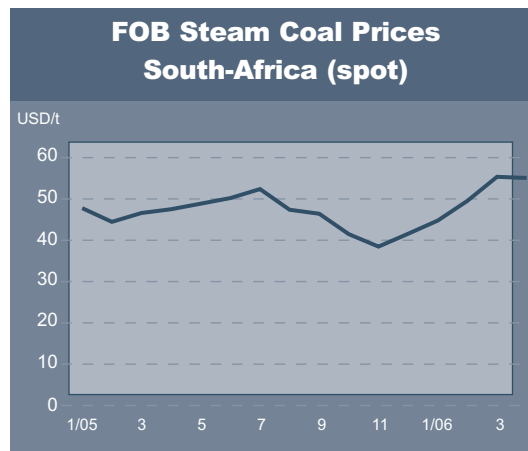
## Quantity Exchange Between Pacific and Atlantic Steam Coal Market

Steam coal	Market in total		Pacific supplies to the partial markets		Atlantic supplies to the partial markets	
	Mill. t	%	Mill. t	%	Mill. t	%
Pacific market	314	100	309	98	5	2
Atlantic market	220	100	28	13	192	87
<b>Total</b>	<b>534</b>	<b>100</b>	<b>337</b>	<b>63</b>	<b>197</b>	<b>37</b>

### Prices

The steam coal price “cif” ARA (6,000 kcal/kg NAR) for South African spot quantities in 2005 came to an average of US\$ 71/tce (previous year US\$ 84/tce) (basis 7,000 kcal/kg) falling by 16 %. This is remarkable in view of the rising oil and gas prices. But it also shows that in the short term there is only a slight increase in the demand for coal as a consequence of higher prices for the competing energy sources and that the use of coal is affected more by long-term investment decisions. Besides the falling “fob” prices, a downward trend for the freight rates was also noted.

The Atlantic and Pacific steam coal prices followed a similar trend, although there was a certain time delay.



Source: McCloskey

### Steam Coal Quotations

The steam coal quotations became more firmly established in 2005 and are frequently taken as benchmarks during contract negotiations. Nevertheless, contracts which deviate from these figures in quite substantial amounts are known to be concluded. The factors influencing the prices are at times inexplicable in terms of events on the market. Price quotations are now available for Australian and Indonesian coal as well. Various European exchanges have introduced quotations along with the commencement of trading in emissions certificates. The EEX Leipzig also began handling coal transactions at the beginning of May 2006.

### Coking Coal Market

#### Quantities

Crude steel production worldwide rose to 1,129 million t (according to IISI) in 2005, while pig iron production rose to 785 million t. The steel industry required 365 million t of coke and sintering breeze, e.g., a worldwide average of 464 kg/t of pig iron.

<b>The 10 Largest Steel Producers</b>		
<b>Country</b>	<b>2004</b>	<b>2005</b>
	Mill. t	Mill. t
China	272.5	349.4
Japan	112.7	112.5
USA	98.9	93.9
Russia	65.6	66.1
South Korea	47.5	47.7
Germany	46.4	44.5
Ukraine	38.7	38.7
India	32.6	38.1
Brasil	32.9	31.6
Italy	28.4	29.1

Source: IISI

There is additional need for coke for foundries and industrial uses (ceramic industry, sugar refineries) and domestic fuel.

World coke production in 2005 came to about 470 million t, about 50 % of this produced in China. If one assumes globally a requirement of 1.35 t of coal for each tonne of coke, this comes to about 635 million t. If one deducts pet coke, coke breeze and other admixtures, the total requirements amount to about 600 million t of coking coal. The largest coke producer, China, imports only about 7 million t = 2.3 % of its requirements of about 300 million t and therefore has little influence on the world market; this is in contrast to iron ore, for which Chinese imports dominate the world market. Currently total crude steel production breaks down into 65 % from blast furnaces, 32 % from electric furnaces and 3 % from other processes. China has a share of 87 % in blast furnace processes and will therefore continue to have high coke requirements in the future. The coking coal world market grew by 8 million t to 188 million t in 2005.

<b>Market Shares of Coking Coal</b>				
	<b>2004</b>		<b>2005</b>	
	Mill. t	%-Share	Mill. t	%-Share
Australia	117	65	125	66
China	6	3	5	3
USA	20	11	22	12
Canada	22	12	25	13
Russia	10	6	8	4
Other	5	3	3	2
<b>Total</b>	<b>180</b>	<b>100</b>	<b>188</b>	<b>100</b>

The supplier structure did not change significantly, but Australia was able to increase its market share to 66 % (+1 %). Canada increased its exports, while China and Russia recorded falling export quantities.

Overall, no supply bottlenecks occurred in 2005, while prices doubled. As a consequence of the weak development of worldwide steel production (with the exception of China), the demand for coke on the world market fell substantially in 2005. The USA and Germany alone imported some 5 million t less in 2005; but other countries also required lower quantities of coke. This is also due to the fact that many consumers entered the year 2005 with excess inventories as a consequence of the extreme cutback situation in 2004, and these inventories first had to be reduced to normal dimensions in the course of 2005.

<b>Coke World Market in Million t</b>			
<b>Country</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Total market	32	37	28
% of world coke production	8 %	9 %	6 %
Thereof by land	6	7	6
Thereof by sea	26	30	22

Source: Own estimates

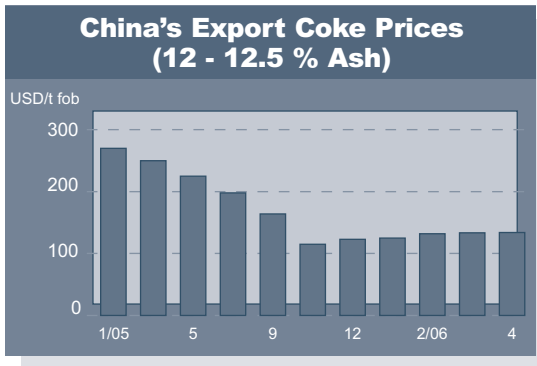
Currently there is an overcapacity in coke production, above all in China, which is forcing cutbacks in coke production there.

### Prices

Coking coal prices rose significantly in 2005 as new contracts entered into effect starting in May/June. "FOB" prices for hard coking coal rose from US\$ 55-60/t to US\$ 125/t; the prices for PCI coal and semi-soft coking coal also increased. In the meantime, the price situation has eased. But prices for hard coking coal remain high because the coke strength is very important in modern blast furnaces with optimized use of coke and this quality is still highly sought.

<b>Price Trends Coking Coal (US-\$/t "FOB")</b>		
<b>Negotiations</b>	<b>2004/2005</b>	<b>2005/2006</b>
	US\$/t	US\$/t
Hard coking coal	125	114-116
Semi-soft coking coal	95-105	70-75
PCI	80	55-65

The world market coke prices fell significantly in view of the lower world market demand and the overcapacities in China.

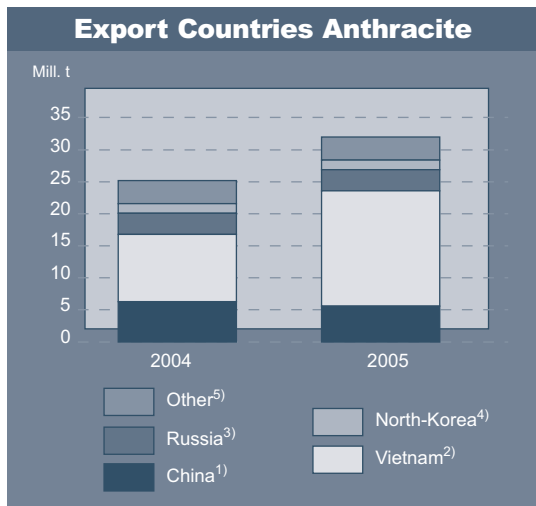


Source: China Coal Report

## Special Markets

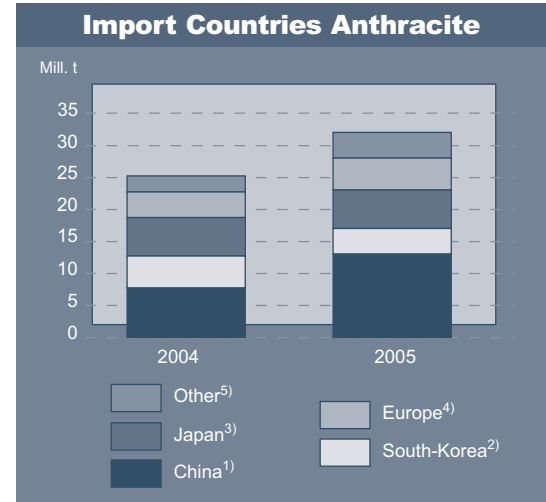
### Anthracite Coal World Market

The anthracite quantities are included in the global overviews for steam coal. In 2005, the anthracite coal world market grew essentially only because of the higher Vietnamese volume for the sector steam coal in China. The demand from the steel industry rose slightly for PCI coal. Vietnam exported 6.6 million t more in 2005.



Source: Several databases

Besides anthracite, a respectable volume of semi-anthracites with 10 % - 15 % volatile components was used, above all for PCI applications (e.g., in Japan). Semi-anthracites are exported above all from Australia.



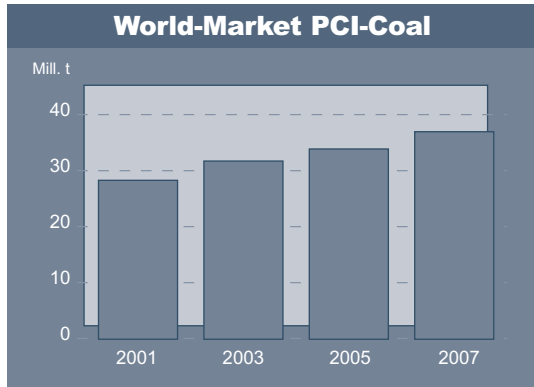
Source: Several databases

### PCI Coal World Market

The high volatile PCI quantities are included only in part in the coking coal category and primarily in the steam coal category. The PCI coal market also displayed a dynamic development and has risen in recent years. Due to the high prices for coking coal and coke, even greater efforts are being made to reduce the coke rate by using PCI-coal for blast furnace operations. In view of world coke consumption averaging at least 430 - 440 kg/t of pig iron (excluding coke breeze for sintering), there is still substantial potential for PCI

coal which will be activated with the modernization and consolidation of the steel industry (above all in China). Top values for coke consumption are about 325 kg/t of pig iron.

The PCI coal market has steadily developed in an upward direction in recent years.



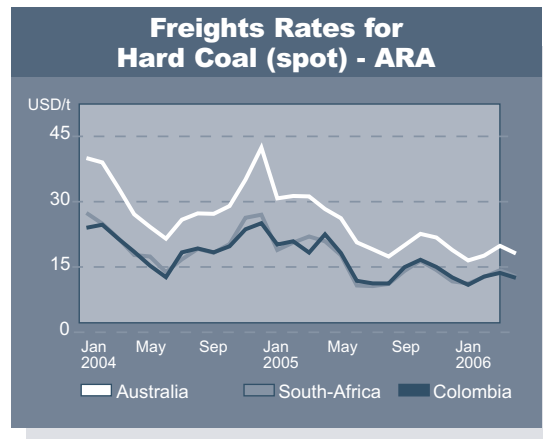
Source: McCloskey

#### Freight Rates

Freight rates returned to normal in 2005 and displayed a falling tendency over the year. However, significant fluctuations continued to occur along this downward path. The freight rate for the route Richards Bay (South Africa) - ARA for capesize ships fell from US\$ 27/t at the beginning of 2005 to US\$ 12/t at the end of 2005.

During the first quarter of 2006, the freight rates on the above-mentioned route oscillated within a range of US\$ 10 - US\$ 15/t. They are therefore still substantially higher than the level of a number of years (1997 - 2002) of US\$ 6 - US\$ 12/t before the boom years 2003/2004.

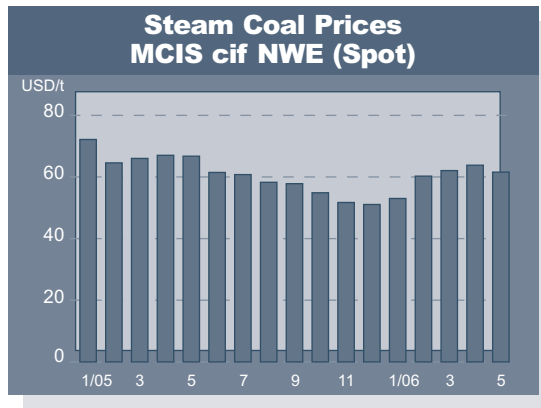
Important factors for the decline were the elimination of bottlenecks in loading and discharging pots, the optimization of the freight space scheduling, the expansion of the bulk carrier fleet and a somewhat weaker growth worldwide in bulk volume in comparison with the previous year. Growth in bulk quantities is predicted to be somewhat weaker once again in 2006. The scrapping volume continues to be low. The volume of time charter contracts being concluded is falling parallel to the normalization of the freight rates.



Source: Frachtcontor Junge

### US Dollar Exchange Rate

The US dollar, the main currency for the raw material and energy markets, remained relatively stable in comparison with the euro in its value development in 2005. Nor were there any major changes in value in comparison with the Australian dollar and the South African rand. However, the danger of a weakening of the dollar remains a threat owing to the high US deficits in the budget and in the balance of trade.



Source: McCloskey

### Energy Policies

The discussion of international energy policies is dominated by these topics:

- Long-term availability of resources
- Price developments
- Climate protection

With respect to the long-term availability of resources, the high prices for oil and gas indicate that the relationship of demand and supply for these energy sources is becoming tighter.

The Asian region with its steadily rising energy requirements are the growth driver. The planned connection of China and Japan to Russian natural gas fields makes it plain that Russia is developing other sales markets in addition to Europe and that the Russian gas - while West European gas sources will be exhausted in the middle term - will no longer be available only to the EU 25 and Europe.

Since long-term availability is becoming an increasingly important factor, more and more bilateral treaties at state level are being concluded for oil and natural gas resources and will restrict world trade in the future. Japan, China and India in particular are very active in this area, while Europe and Germany are watching from the sidelines and not taking any action.

Since natural gas will no longer be freely available, thoughts are returning to the energy source coal which is well distributed geo-politically and exists in known - and in comparison with gas and oil easily reachable - deposits. Coal prices have indeed risen, but in comparison with oil and gas prices at a lower level and not to the same degree.



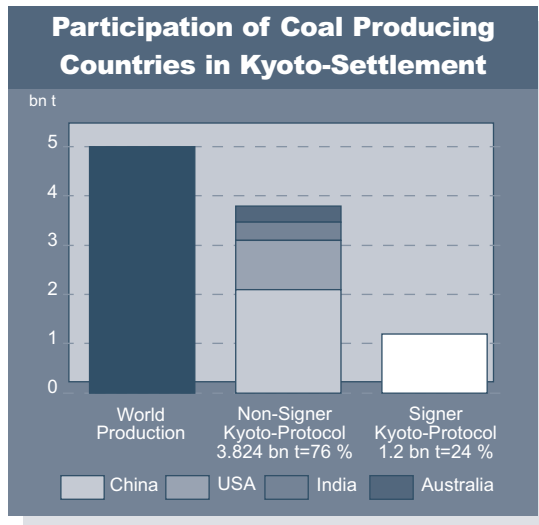
Various groups have formed with respect to climate protection:

- Signers/Non-signers of the Kyoto Protocol

And among the signers of the Protocol in turn:

- Participants/Non-participants in emissions trade

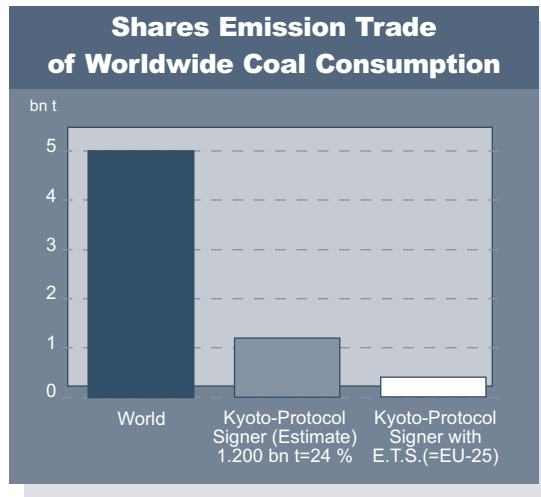
Of the worldwide hard coal production of 5 billion t, countries with a volume of 1.2 billion t or 24 % have signed the Kyoto Protocol, i.e., the greater part of the world has not committed to concrete reduction targets for a global problem because they fear competitive and economic disadvantages, are not convinced of the effectiveness or do not wish to endanger growth and the accompanying improvement in the standard of living.



Of the signers of the Kyoto Protocol, only countries with about 400 million t of coal consumption made use of the instrument of emissions trade in the attempt to solve a global problem; in relation to world hard coal production, this was only 8 %.

But this does not mean that the countries which did not sign the Kyoto Protocol are neglecting climate protection. They would simply like to take another path in the form of a technological drive. The USA, Australia, China, India, Japan and South Korea, for example, have founded a Pacific partnership (AP6) for the development of clean energy technologies as a way to protect the climate. This group causes over 50 % of the global emissions (petroleum, natural gas, coal).

The realization of the Kyoto Protocol and emissions trade makes sense only if the two blocks find a way to cooperate which does not lead to any competitive disadvantages in global competition owing to unilateral climate protection measures by Europe.



ETS=Emission Trading System

## EUROPEAN UNION

### Economic Growth

In comparison with the previous year, economic developments in the Euro territory darkened. The growth of the gross domestic product fell from 2.1 % to 1.3 %. Denmark, Sweden and the UK recorded somewhat stronger growth, but were unable to avoid the suction of the downward trend. The EU 15 growth amounted to a mere 1.4 %. The 10 new member countries did significantly better, realizing average growth of 4.2 %. The EU 25 thus achieved only a weak increase in gross domestic product of 1.6 % (previous year 2.4 %).

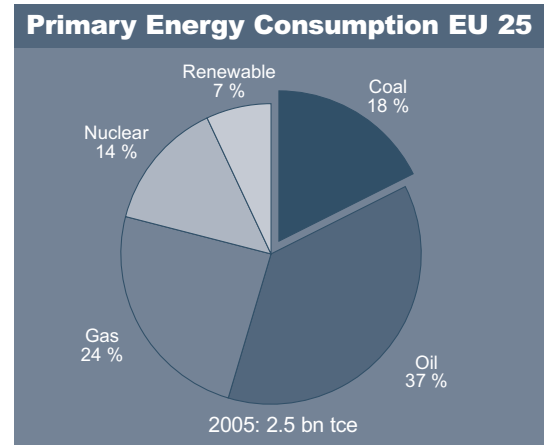
Once again, Europe was unable to maintain the pace of the Asian and American growth zones. The exchange rate of the euro to the US dollar was on the average stable at the level of the previous year.

### Energy Consumption

The reserved economic development, above all in the West European countries, led to energy consumption of the EU 25 which was practically stagnant. Energy consumption for 2005 is estimated as shown below according to the provisional information available:

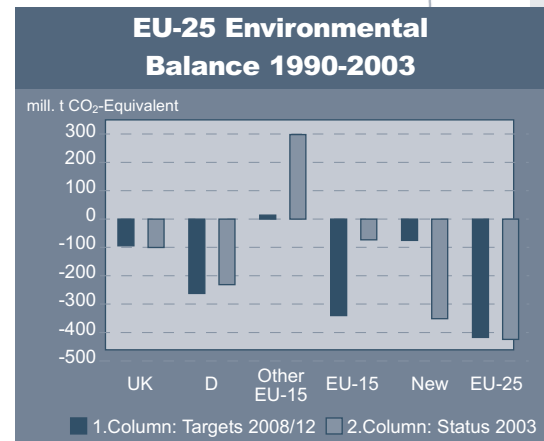
EU-15	2.200 Mill. tce
EU-10	320 Mill. tce
<hr/>	
EU-25	2.520 Mill. tce

The structure of the energy consumption EU 25 is shown in approximate form below:



Sources: Several databases, own calculations

The realization of the emission targets has been successful to varying degrees. The chart below depicts developments from 1990 to 2003, including the new member countries.



Source: World Energy Council

As this chart shows, the new member countries have already achieved a reduction of 32 %, far beyond their targets.

## Hard Coal Market (EU 25)

There were further reductions in the output of European hard coal production in 2005. Output was reduced in

- Germany - by 1 million t
- Poland - by 2 million t
- Great Britain - by 5 million t

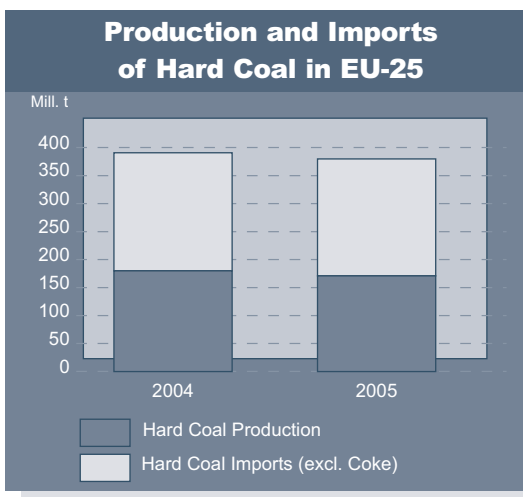
a total of 8 million t, due to the lack of profitability. Further reductions in output are to be expected in Germany and, in the middle term, in Poland. The imports remained approximately at the level of the previous year. Overall, hard coal consumption in the EU 25 was stable:

Hard Coal Consumption EU		
	2004 million t (t=t)	2005 million t (t=t)
EU 25 Output	180	171
EU 25 Coal Imports	211	209
EU 25 Coke Imports	10	9
<b>Total</b>	<b>401</b>	<b>389</b>

In addition to hard coal consumption, about 380 million t of lignite (approx. 120 million tce) were produced in the EU 25. Hard coal consumption in the EU was distributed among the following sectors as shown in the estimates below:

Hard Coal Consumption EU		
	2004	2005
Power plants	65 %	67 %
Steel mills/Coking plants	20 %	20 %
Heating market	13 %	15 %

The import of coke fell by an estimated 1 million t owing to the weakening of the European steel economy, expansions of coking plants and increased use of PCI coal.

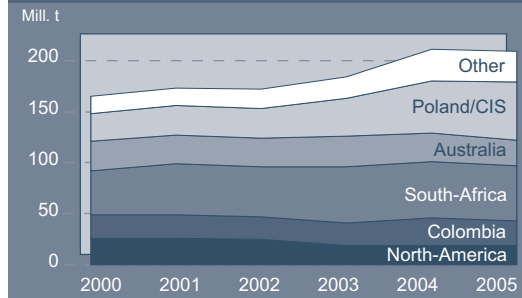


Source: Own calculations

### Hard Coal Output in the EU

	2004		2005	
	Mill. t (t=t)	% Share	Mill. t (t=t)	% Share
Germany	29	16	28	16
Spain	14	8	12	7
France	-	-	-	-
Great Britain	25	14	21	12
Poland	99	55	97	57
Czech Republic	13	7	13	8
<b>Total</b>	<b>180</b>	<b>100</b>	<b>171</b>	<b>100</b>

### Hard Coal Imports EU from Third Countries and EU-internal Trade



Sources: EUROSTAT, databases of Coal Producing Countries

### Infrastructure

The infrastructure for increased imports is steadily being expanded as volumes grow. Railway and connecting lines to the Northwest European ports are also being improved. Imports

to the Northwest European ports fell slightly.

### Coal Handling in Northwest European Ports in Million t

Ports	2004			2005			Difference	
	Incoming	Outgoing	Total	Incoming	Outgoing	Total	Tonnes	%
Hamburg	5,147	0	5,147	4,673	0	4,673	-474	-9.2
Bremen	1,553	15	1,568	1,348	0	1,348	-220	-14.0
Amsterdam	17,916	2,203	20,119	17,069	1,932	19,001	-1,118	-5.6
Rotterdam	24,767	560	25,327	25,806	562	26,368	1,041	4.1
Antwerp	9,556	149	9,705	9,088	263	9,351	-354	-3.6
Ghent	4,328	145	4,473	2,677	76	2,753	-1,720	-38.5
Zeebrugge	64	0	64	65	0	65	1	1.6
Dunkirk	7,188	1,354	8,542	7,294	1,546	8,840	298	3.5
Le Havre	1,998	198	2,196	2,537	345	2,882	686	31.2
<b>Total</b>	<b>72,517</b>	<b>4,624</b>	<b>77,141</b>	<b>70,557</b>	<b>4,724</b>	<b>75,281</b>	<b>-1,860</b>	<b>-2.4</b>

Source: Port of Rotterdam

## Energy Policies

Trade with emissions certificates began in 2005. As of the first quarter of 2006, a part of the EU 25 countries were still technically unable to participate in emissions trade. The certificates are allocated by the individual countries according to varying criteria/philosophies. Overall, the market is suffering from an inexplicable lack of certificates, driving up the prices for certificates.

Owing to the high gas prices, more coal was used for the generation of power especially in the UK, and English power plants were forced to purchase certificates. Trade in certificates takes place on various exchanges, including the EEX Leipzig. The following demands must be met for the new trade period (2008-2012):

- Allocation of an adequate number of certificates
- Simple application of the acceptance procedure for CDM measures/JI measures
- Consideration of Europe as a commercial location in its competitiveness in comparison with the global competition without ETS.

When all of the countries are involved in the trade and CDM/JI measures are accepted more quickly, the market should become more liquid, leading to a decline in certificate prices. Auctioning off of certificates would only cement power prices and trigger further jumps in the prices for electricity. Despite the emissions trade, it is questionable whether the EU will achieve its climate protection targets by 2012. In the long term, it is not acceptable in global competition, if the ETS causes prices for electrical power to rise, thus worsening Europe's position as a production location, but the global objectives for the protection of the climate are not realized.

## GERMANY

### Economic Growth

The economy in 2005 worsened yet again in comparison with 2004. Growth in gross domestic product fell from 1.6 % to 0.8 %. The primary reason for the weakness in growth is the lack of domestic demand; private expenditures for consumption were lower. The only hopeful sign was in exports, which rose by 5.5 %.

The continuing losses in real income, high unemployment and the further uncertainty regarding future economic developments - even after the change in government - were major factors in the reporting period and will continue to affect the year 2006 despite a slight improvement in economic factors.

### Primary Energy Consumption

As a consequence of the weak economic development, primary energy consumption fell by 1.3 % from 492 million tce to 486 million tce. However, the energy productivity of the national economy improved by 2.2 %. High energy prices will undoubtedly lead to renewed efforts to reduce energy consumption and, simultaneously, CO<sub>2</sub> emissions.

Petroleum consumption decreased by 1.7 % or 3.1 million tce. The greatest declines were for petrol and light fuel oil. Consumption of natural gas was at the same level as the previous year. Declining sales in the residential and commercial sector were set off by a growing share in the power plant sector. Generation of power using gas increased by 1 % to 11 % of the total gross electricity production.

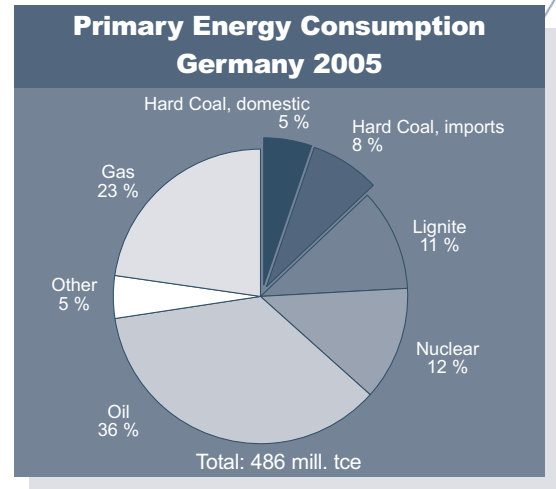
Nuclear energy displayed a falling tendency at 2.4 % or 1.5 million tce. Nuclear energy accounts for 26 % of the German power generation.

Lignite fell slightly, but remained the most important German domestic energy source and is also highly competitive, even at the current world market prices for primary energy. Lignite consumption fell by 3.2 % or 1.8 million tce. 92 % of the lignite was used for power generation.

Renewable energy sources contributed 22.2 million tce or 4.6 % of the coverage of primary energy requirements. The installed output of wind farms rose by about 1,800 MW to 18,400 MW. Power generation from wind power rose to 26.5 billion TWh (+4 %). This means that wind farms operated for only about 1,500 full-capacity

hours or 17 % of the installed capacity.

Hard coal consumption fell by 4.6 % or 3 million tce. The use of hard coal decreased in both of the main sectors. Use in power plants fell by about 2.0 million tce and by about 1.0 million t in the steel industry.



Source: *Arbeitsgemeinschaft Energiebilanzen*

### Power Generation and Steel Production

Gross power generation rose slightly to 619 TWh. The highly subsidized wind energy increased its contribution by 1 TWh to 26.5 tWh (+4 %) while adding performance capability of 1,800 MW (+10 %) in 2005.

## The Energy Mix of the Gross Power Generation

Energy source	2004 TWh	2005 TWh
Lignite	158	155
Hard coal	141	134
Nuclear energy	167	163
Natural gas	62	70
Miscellaneous	35	42
Hydroelectric/Wind	53	55
<b>Total</b>	<b>616</b>	<b>619</b>

Source: DIW

Crude steel production fell from 46.0 million t to 44.5 million t. Pig iron production came to 28.9 million t. Domestic shipment of cement reached 22.1 million t (-6 %).

### CO<sub>2</sub>-Emissions

CO<sub>2</sub> emissions caused by consumption of energy and processes declined by just under 2.1 % or 18 million t in comparison with the previous year. This is above all a consequence of the lower consumption of petroleum, lignite and hard coal. The reduction of the emissions was achieved in all sections: power generation, traffic

and residential/commercial sector. The weak economic development and cutbacks owing to the high energy prices in all consumption sectors were the primary causes. The trade with emissions rights did not have any verifiable influence. The reduction of 18 million t achieved in Germany in 2005 meant only a marginal reduction in the global CO<sub>2</sub> emissions of about 25 billion t.

## CO<sub>2</sub> Emissions from Energy and Processes in Germany, Classified According to Energy Sources

Energy source	1990 Mill. t	2000 Mill. t	2004 Mill. t	2005 Mill. t
Solid fuels	508.5	325.9	334.9	321.9
Liquid fuels	313.1	310.2	288.0	283.0
Gas fuels	114.9	155.2	168.4	168.4
Other energy sources	9.8	11.9	13.1	12.8
Emissions from processes	82.9	81.5	79.5	80.0
<b>Total</b>	<b>1.029.2</b>	<b>884.7</b>	<b>884.0</b>	<b>866.1</b>

Source: DIW Wochenbericht

The achievement of the 2005 level means that Germany has reduced its emissions by 19 % - 20 % in comparison with 1990. However, the DIW estimates that there must be further reductions of 14 - 18 million t CO<sub>2</sub> if the target of 21 % in the time period 2008 - 2012 is to be met. So far, the sectors traffic and residences have made relatively modest contributions to the reduction of emissions. But the continued high price level for vehicle fuels and domestic fuels (fuel oil/gas) will undoubtedly lead to further reductions.

## Hard Coal Market (Germany)

The primary energy consumption of hard coal came to 62.8 million tce in 2005, falling by 3.0 million tce in comparison with the previous year. Hard coal consumption in million tce was covered as shown below:

Hard coal consumption in Germany		
	2004 million tce	2005 million tce
Imports	40.3	37.2
Domestic production	26.6	25.6
Stock increase/decrease	-1.1	-
<b>Total</b>	<b>65.8</b>	<b>62.8</b>

The somewhat lower imports in comparison to 2004 is in part a consequence of the rebuilding of inventories in 2004 after the decrease in coal stocks caused by the long-lasting low water in 2003.

Hard coal sales in t=t (incl. inventory changes) developed as shown below:

Hard Coal Sales in Germany		
Utilization	2004 million t (t=t)	2005 million t (t=t)
Power plants	55.3	53.1
Steel industry	14.8	13.5
Heating market	1.9	1.6
<b>Total</b>	<b>72.0</b>	<b>68.2</b>

Imports provided about 60 % of the supplies of hard coal to the German market.

Hard coal imports played a role in covering coal needs of the German industry as shown below:

Utilization of Import Coal				
Utilization in	2004		2005	
	Quantity in mill. t	Share in total sales %	Quantity in mill. t	Share in total sales %
Power plants	30.9	56 %	28.6	54 %
Steel industry	11.6	78 %	9.9	73 %
Heating market	1.8	95 %	1.4	88 %
<b>Total</b>	<b>44.3</b>	<b>62 %</b>	<b>39.9</b>	<b>59 %</b>

The share of the imports remained practically unchanged in all sectors. The imports break down into products as shown below:

Products of Imports		
Products	2004 in mill. t	2005 in mill. t
Steam coal	31.5	28.8
Anthracite	0.3	0.4
Coking coal	7.3	7.1
Coke	5.2	3.6
<b>Total</b>	<b>44.3</b>	<b>39.9</b>

The steam coal was dominated by:

- South Africa            8.2 million t
- Poland                    7.0 million t
- Russia                    5.9 million t
- Colombia                4.8 million t



The most important suppliers for coking coal were:

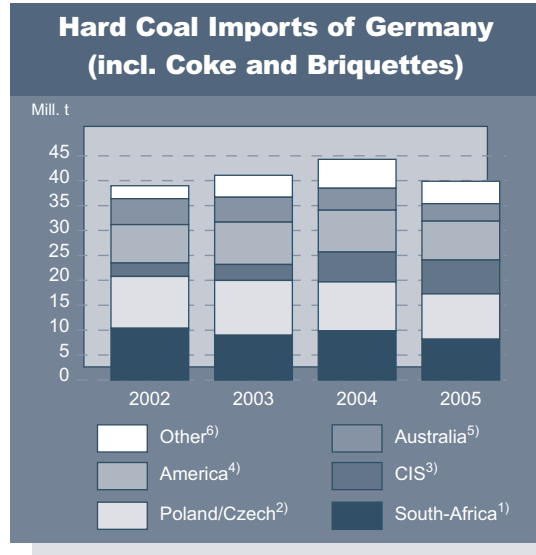
- Australia 3.1 million t
- Canada 1.6 million t
- USA 1.3 million t

and for coke:

- China 1.0 million t
- Polen 1.2 million t

Domestic production still covered 40 % of the supply to the German market. The coking plant expansion Prosper has not yet started as none of the customers were prepared to secure the investments by concluding long-term procurement contracts. On the other hand, the coking plant Huckingen located on the Rhine Line was expanded.

RAG/DSK are planning the opening of a new coking coal mine - Project Donar - in East Westphalia. According to information from RAG, it will be possible to mine the deposits at production costs below EUR 100/t and the project will be financed by private enterprise. The mine could begin producing coking coal as of 2013 - 2015.



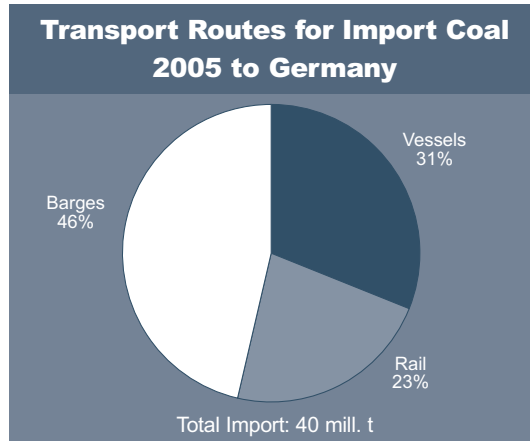
Sources: Statistisches Bundesamt, own calculations

### Transport Routes for Import Coal

The some 40 million t of import coal were imported as shown below:

Transport Routes for Import Coal in Germany		
	2004 million t	2005 million t
German ports	13.7	12.3
Rail	10.6	9.1
Barges (from ARA ports)	19.7	18.6
<b>Total</b>	<b>44.0</b>	<b>40.0</b>

About 4 million t were transported further from German ports/inland ports by rail, 4.7 million t were imported from the ARA territory and 4.4 million t from Poland/Czech Republic.



Sources: Statistisches Bundesamt, DB, own calculations

## Development of Energy Prices

The HS price averaged about EUR 166/tce in 2004 and was thus almost EUR 50/tce higher than the average of EUR 117/tce in 2004. Natural gas for power plants also continued to rise and amounted to EUR 188/tce (previous year EUR 176/tce). In January 2006, the price for natural gas rose further to EUR 212/tce. There are price advantages for the world market coal in comparison with both of these energy sources:

Energy Price Development				
	2004	2005	1 <sup>st</sup> Quarter 2006	2004/ 1 <sup>st</sup> Quarter 2006 Price Difference
	€/tce	€/tce	€/tce	
Heavy fuel oil	117	166	209	+92
Natural gas/ Power plants*	176	188	214	+38
Border-crossing price/ Import coal	55	65	63*	+8

\* provisional

The highly subsidized domestic energy production - above all wind energy and domestic coal - was far from being competitive. However, the subsidy requirements per "t" were reduced for steam coal and coking coal thanks to the rise in world market prices.

The subsidy requirement for coking coal, which is, however, only a smaller part of the German domestic production, was reduced to about EUR 30 - EUR 40/t. This presumes a "cif"/ARA price for coking coal of EUR 120/t (=US\$ 150/t) and production costs of DSK of EUR 160/t.

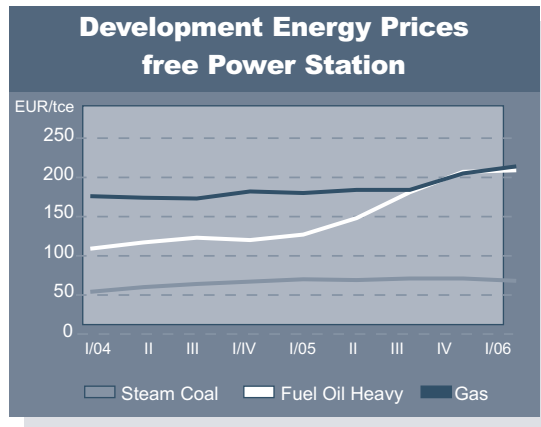
The subsidy requirement for steam coal is about EUR 85 - EUR 95/tce. This presumes a border-crossing price of

EUR 65/tce and the same production costs of the DSK as shown above.

Electricity from wind energy is currently being subsidized to a significantly greater extent than German domestic coal. Assuming a feed-in payment of about EUR 0.09/kWh and a wholesale price of EUR 0.040 to EUR 0.045/kWh, the subsidy comes to EUR 0.045 to EUR 0.050/kWh, corresponding to EUR 135 - EUR 150/tce.

The prices for import/steam coal rose further. However, the rise of 18 % from 2004 to 2005 was not as drastic. The border-crossing price for coking coal rose from EUR 62/t in 2004 to EUR 93/t in 2005. The high prices for coking coal (US\$ 125/t “fob”) are not yet reflected in the figures as the new contract prices did not become effective for imports until the middle of the year. For this reason, a further increase in the coking coal prices is to be expected for the first half of 2006 as the rise in the coking coal price level will make itself felt at that time. Coke import prices from other countries rose from 2004 to an

average of EUR 230/t in 2005. However, the spot market prices have fallen by almost half. This should lead to falling coke import prices for 2006 as well. The high coke prices are a result of the performance of contracts which were concluded in the boom year 2004.



Sources: Statistik der Kohlenwirtschaft: Gas preliminary, BAFA, own calculations

## Energy Policies

### Coal Policies

The planned closing schedule for German mining was continued at the turn of 2005/2006 with the closing of the mines Warndt/Luisenthal and Lohberg.

### Planned Closing Schedule

As of	Mine	Output 2004 Mill. t/a
Middle 2008	Mine Walsum	2.0
01/01/2010	Mine Lippe	1.7
01/01/2012	not named	2.0

Operations will continue at the following, although one more mine will be closed:

### Mines Operating until 2010

Mine	Output 2004 Mill. t/a
Ibbenbüren	1.9
Auguste Viktoria	3.2
Ensdorf	3.2
Ost	1.8
Prosper-Haniel	4.1
West	3.3

Output will presumably develop as shown below:

### Output Development

Year	Mill. t
2006	22
2007	22
2008	21 (Closing of Walsum)
2009	20 (Closing of Lippe)
2010	18
2011	18
2012	16 (not named TBA)
<b>Total Output</b>	<b>137</b>

The government of North Rhine-Westphalia (NRW) would ultimately like to discontinue the subsidizing of mining in the Ruhr Valley. However, subsidies are legal-

ly guaranteed until 2008. Renegotiations of the subject are supposed to take place in 2006.

### Renewable Energy Sources

Renewable energy sources developed as shown below:

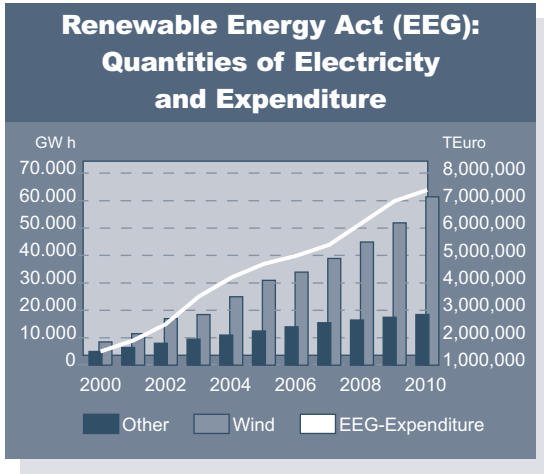
### Power Generation from Renewable Energy Sources (provisional figures)

Type	2004 billion kWh	2005 billion kWh
Wind power	25.5	26.5
Hydroelectric power	21.2	21.5
Biomass and rubbish (only estimated, renewable share)	7.3	12.2
Solar radiation energy	0.5	0.8
<b>Total</b>	<b>54.5</b>	<b>61.0</b>

Source: VDEW

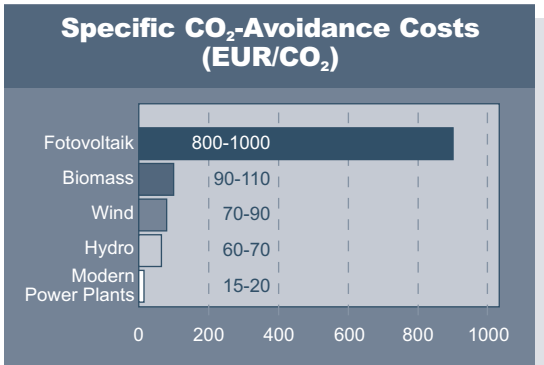
Power generation from renewable energy sources thus rose by 12 %.

The renewable energy sources are consuming increasingly large subsidies borne by the consumers without any indication of becoming profitable in the foreseeable future. The new Federal government has not put a cap on the subsidies, although this was one of the promises during the election campaign. The following overview shows the mid-term predictions of the VDN:



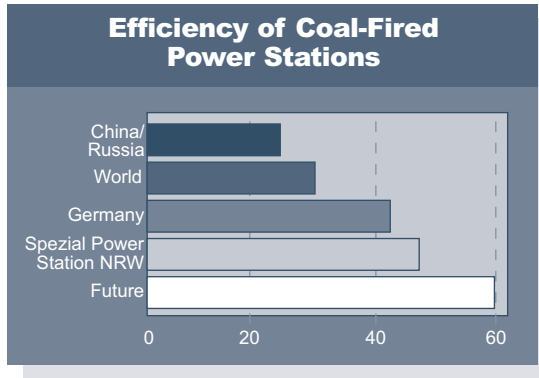
Source: VDN (EEG-Medium Term Forecast 2000-2010)

The chart below shows that CO<sub>2</sub> can be avoided most efficiently and most economically by the use of modern coal-fired power plant technology:



Source: VGB 2004

Great efforts are being made to realize this in the reference power plant NRW.



Source: GVST

The large utility companies have in the meantime announced the construction of large hard coal blocks with efficiencies of up to 45 %. At the same time, projects for a power plant without CO<sub>2</sub> emissions have been launched.

## PROSPECTS FOR THE WORLD COAL MARKET

### World Trade

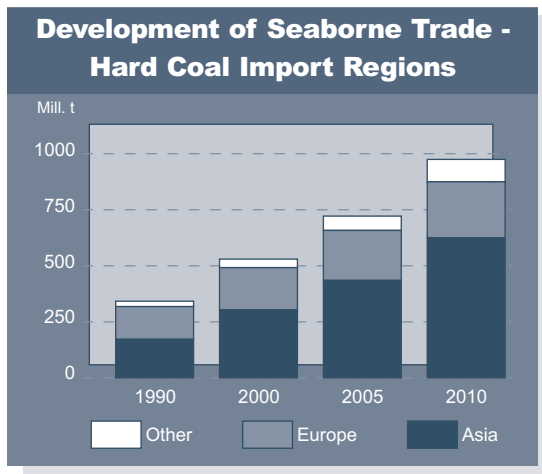
The development of the world economy in 2006 is expected to continue to be robust, supported above all by somewhat better development in Europe as well. World

trade should increase accordingly by 7 % to 8 %. The raw material markets will also continue to move forward in 2006, driven above all by the growth dynamics in the Pacific region. High rates of increase in the gross national products in China and India are also causing the bulk commodities to grow further. The estimates for the most important products are shown below:

- Iron ore +7 % to 695 - 700 million t
- Coal +4 % to 745 - 750 million t
- Grain +2 % to 275 - 280 million t

The bulk commodities market overall had estimated growth of 3 %, an increase of just under 100 million t to a good 2.6 billion t.

The expansion of the bulk carrier fleet continues at a good pace. In 2005, the fleet grew by 7.1 % or 17.3 million DWT. A further expansion of the fleet by just under 20 % is planned for 2006 and the following year. This means that an adequate freight supply can be expected for the coming years.



Sources: Several databases, own calculations

## Steam Coal Market

### Demand

In the Asian region, growing demand is to be expected above all from the smaller national economies (Taiwan, South Korea, Thailand, Malaysia). Japan will remain stable in its requirements. China, on the other hand, will most likely increase imports while decreasing exports.

In the Atlantic region, the USA and South and Central America will be the driving forces for growth. Europe will remain stable as a collective entity. The development of the gas price will surely be decisive for coal consumption. If the level remains high, imports can be expected to remain at a high level similar to that of 2005.

### Supply

The Pacific suppliers Australia, Indonesia, Russia (Far East) and Vietnam will be able to increase their exports, while China will reduce its exports slightly. In the Atlantic region, Colombia and Venezuela will expand their capacities even more. South Africa - despite a rough start to 2006 - should be able to increase as well. Russia will undoubtedly supply additional volume, too. Somewhat lower quantities are to be expected from Poland. Spitzbergen will not return to full output strength until the middle of 2006. As in the previous years, the Atlantic supply will be supplemented by Indonesian and Australian coal.

## Coking Coal Market

### Demand

In 2006, substantial growth in crude steel production is expected once again. While in 2005 essentially only China increased its production and the total from all other countries displayed a downward tendency, an increase in worldwide crude steel production as a whole is expected in 2006.

<b>Growth in Steel Production</b>				
	<b>2004</b>	<b>2005</b>		<b>2006</b>
	Mill. t	Mill. t		Mill. t
China	280	348	+24 %	395 +13 %
World except China	764	758	-1 %	774 +2 %
<b>Total</b>	<b>1,044</b>	<b>1,106</b>	<b>+6 %</b>	<b>1,169 +6 %</b>

Since China is largely self-sufficient in coking coal supply, there could be growth on the coking coal market, especially the hard coking coal sector, of 2 % - 3 % in comparison with 2005.

### Supply

On the supply side, Australia and Canada in particular will presumably increase their exports. Additional smaller quantities could be exported from Russia and the USA. Demand and supply for hard coking coal are very close to one another, while there is an abundant

supply of semi-soft coking coal and PCI coal.

## Infrastructure of the Hard Coal World Trade

Owing to the rapid growth in recent years of bulk quantities as a whole as well as of coal, bottlenecks have occurred in the infrastructure. Quantity problems have arisen in both the loading and discharging ports, the domestic railways and in seaborne transport. However, a worldwide expansion of the infrastructure at all links of the chain has begun so that the market opportunities provided by growing coal volume can be exploited. Expansion projects at all points of the coal chain have begun in almost all of the countries decisive for coal world trade. The infrastructure is thus growing along with the trade and should be adequate in size to handle trade for the coming years.

## Market Concentration

The tendencies of the market concentration continued in all of the producing countries. The Chinese, for example, are striving to create large hard coal companies with over 100 million t output for the long term. 5 - 6 companies are also handling the lion's share of production and export in Indonesia. However, the improvement in world market prices is also luring new companies into the coal export business, thereby expanding the range of suppliers.

In the case of coking coal - above all, hard coking coal - Australia has created a strongly dominant position with almost 66 % market share, which in turn is in the hands of just a few producers.

The competition in the area of steam coal continues to be broader, and in recent years Russia and Indonesia have strengthened their positions on markets alongside the traditional suppliers Australia, South Africa and Colombia.

## Country Reports 2005

Poland	33
Czech Republic	34
Russia/Ukraine/Kazakhstan	35
USA	37
Canada	38
Colombia	39
Venezuela	40
South Africa	42
Australia	43
China	46
Indonesia	47
Vietnam	48



## Country Reports

### POLAND

#### Production

Overall output in 2005 fell by 2 million t to 97 million t. The output is distributed among the individual companies as shown below:

The largest hard coal producers in Poland					
Company	Number of mines	Output		Exports	
		2004	2005	2004	2005
		Mio t		Mio t	
Kompania Weglowa SA	18	53.8	52.6	14.9	15.1
Katowicka Group Kapitalowa	7	18.4	17.7	3.3	1.6
Jastrzebska Spolka Weglowa SA	5	13.7	12.8	2.1	2.3
Independent mines	4	13.3	13.9	0.5	0.5
<b>Total</b>	<b>34</b>	<b>99.2</b>	<b>97.0</b>	<b>20.8</b>	<b>19.5</b>

The privatization of the Polish coal companies is obviously being postponed further due to the substantial political resistance. Furthermore, the government is of the opinion that the restructuring has been successful

and led to a stabilization - supported by high prices in 2004/2005 - of the commercial position of the hard coal mining industry. In 2005, personnel was reduced by 5,500 employees. The mining industry now employs a workforce of about 122,500 so that statistical productivity averages just under 800 t/man-year.

The high wage increases in Polish mining are a cause of concern. In 2005, wages rose by 13 % and reached a level of EUR 1,000 a month, significantly higher than the average wages in Poland of EUR 600 a month. At the same time, earnings fell from the high level of 2004 due to world market conditions. The strong zloty in comparison with the US dollar is reducing earnings further.

While the coking coal group Jastrzebska Spolka works efficiently, the other companies continue to require support in the form of subsidies, which amounted to about EUR 250 million in 2005. Excluding the coking coal mines, the disclosed subsidies amount to about EUR 3.00/t.

According to information from the Polish Minister of Finance, the restructuring will be continued: in 2010 the output is targeted to reach 77 - 78 million t and in 2020 about 70 million t.

#### Infrastructure

There were no changes in the transport infrastructure in 2005. The export logistics in Poland are well developed. Loading ports include Gdansk, Swinoujscie, Szczecin and Gdynia. While Gdansk is able to load capesize freighters, Swinoujscie and Gdynia are accessible only for panamax ships, and only handysize vessels can

access Szczecin. Rail transport has become increasingly important for coking coal and ballast coal exports, above all for Germany. Both Polish and German freight companies are active in this sector. Inland shipping (Oder) is of no major significance for export (about 1.5 million t = 8 % of total exports).

#### Export

At 19.5 million t, hard coal exports remained approximately at the same level as the previous year. Weglokoks exported 18.6 million t, 2.6 million t of coking coal and 16 million t of steam coal. Smaller exporters supplied an estimated 0.9 t, above all across the green border into neighbouring EU countries.

Weglokoks' seaborne trade came to 11.3 million t of steam coal and 1.1 million t of coking coal, a total of 12.4 million t. 1.1 million t were shipped to countries outside of Europe.

The most important buyer was Germany with over 7 million t of steam and coking coal. Imports of coke were an additional 1.2 million t. Great Britain bought 1.6 million t.

#### **Key Figures Poland**

	<b>2003</b>	<b>2004</b>	<b>2005</b>
	Mill. t	Mill. t	Mill. t
Hard coal output	100	99	97
Hard coal exports	20	21	19
• Steam coal	17	18	16
• Coking coal	3	3	3
Coke exports	5	5	4,5
	1,000 t	1,000 t	1,000 t
Imports Germany	9,801	8,954	8,211
• Steam coal	6,785	7,085	6,889
• Coking coal	130	40	147
• Coke	2,886	1,829	1,175
Export rate in % (Coke converted into coal terms)	27	28	25

## CZECH REPUBLIC

#### Production

Coal year 2005 was once again a stable one for the Czech Republic. Hard coal output rose slightly from 12.9 million to 13.1 million t/a. Lignite output was unchanged at 48 million t. Consequently, the significance of coal for the primary energy mix has not changed significantly.

Czech hard coal production comes from two companies:

#### **Hard Coal Producers Czech Republic**

<b>Company</b>	<b>2004</b>	<b>2005</b>
	Mill. t	Mill. t
OKD, Ostravasko-Karvinske-Doly	10.5	10.8
CMD Ceskomoravske Doly	2.4	2.3
<b>Total</b>	<b>12.9</b>	<b>13.1</b>

#### Infrastructure

Czech coal and coke exports are transported by land and on the Danube (Bratislava).

#### Export/Import

The overall export of coal products fell slightly from 4.8 million t to 4.6 million t. Austria was the largest buyer, taking some 2.3 million t, followed by Germany at 0.9 million t.

Imports amounted to 1.0 million t and fell by 0.1 million t (coking coal/coke from Poland). All of the exports remained within the territory of the EU market.

## Key Figures Czech Republic

	2003 Mill. t	2004 Mill. t	2005 Mill. t
Hard coal output	13	13	13
Hard coal exports	4	4	4
Coke exports	1	1	1
	1,000 t	1,000 t	1,000 t
Imports Germany	1.156	889	880
• Steam coal	708	469	522
• Coke	448	420	358
Export rate in % (Coke converted into coal terms)	41	41	41

## RUSSIA/UKRAINE/ KAZAKHSTAN

The states of the former Soviet Union which had major coal production in 2005 are:

- Russia 300 million t
- Ukraine 78 million t
- Kazakhstan 86 million t

Only Russia is of any significance for the world market. The Ukraine exported about 3 million t of steam coal and 3 million t of coke from its own production through Black Sea ports, while Kazakhstan sent 24 million t of steam coal overland to Russia. Very little information about Kazakhstan and the Ukraine is available.

## RUSSIA

### Production

Russia was able to further increase production and reached a figure of about 300 million t. Opencast pit output amounted to 194 million t (+12 million t), underground operations 106 million t. The production comprises the following segments:

	2004 Mill. t	2005 Mill. t
Coking coal	75	70
Steam coal	208	230
• High volatile coal	86	96
• Low volatile coal	47	50
Anthracite	8	9
Lignite	67	75
<b>Total</b>	<b>283</b>	<b>300</b>

The major centre of Russian hard coal production is the Kuznetsk Basin with more than 140 million t. Smaller production areas are the Pechora Basin with 15 million t and East Donets Basin with 6 - 7 million t.

### Infrastructure

Owing to the high transit fees and handling rates of the Baltic ports, Russia is increasingly directing its exports through Murmansk. The Baltic Sea port Ust Luga is to be expanded to a handling capacity of 8 million t.

### Export

Russia's coal exports rose overall to about 82 million t (incl. 2.8 million t of coke) (+ 0.8 % in comparison with the previous year). About 12 million t of this went to CIS countries, 70 million t to countries outside of the CIS.

64.7 million t of the latter went to seaborne export, which increased by a good 5 million t.

Russia was able to increase its market share in Northwest Europe. Above all the UK bought substantially more quantities because of the lower sulphur content of Russian coal; but Germany and other countries also increased their purchases.

Russia maintained its export volume in the Far East.

<b>Ports Russia</b>			
	<b>2003</b>	<b>2004</b>	<b>2005</b>
	Mill. t	Mill. t	Mill. t
<b>Baltic Sea Ports and North Russia</b>			
Murmansk	5.5	8.9	11.0
Vysotsk	2.1	3.1	3.5
Riga	5.2	9.4	10.7
Ventspils	1.7	3.9	4.6
Tallin	1.8	2.3	4.1
St. Petersburg	1.9	2.5	2.5
Miscellaneous	0.4	0.6	0.4
<b>Total</b>	<b>18.6</b>	<b>30.7</b>	<b>36.8</b>
<b>South Russia and Ukraine</b>			
Mariupol	2.7	2.6	2.0
Tuapse	2.8	3.1	3.1
Miscellaneous	5.5	7.8	8.3
<b>Total</b>	<b>11.0</b>	<b>13.5</b>	<b>13.4</b>
<b>Russia Far East</b>			
Vostochny	11.2	14.4	14.1
Vanino	0.6	0.8	0.4
<b>Total</b>	<b>11.8</b>	<b>15.2</b>	<b>14.5</b>
<b>Total</b>	<b>41.4</b>	<b>59.4</b>	<b>64.7</b>

### Key Figures Russia

	<b>2003</b>	<b>2004</b>	<b>2005</b>
	Mill. t	Mill. t	Mill. t
Coal output	279	283	296
Hard coal exports <sup>1)</sup>	49	66	70
• Steam coal	38	53	59
• Coking coal	11	13	11
	1,000 t	1,000 t	1,000 t
Imports Germany	3,070	5,935	6,670
• Steam coal	2,593	5,358	6,055
• Coking coal	7	125	480
• Coke	470	452	135
Export rate in % (only sea-bound)	18	23	24

<sup>1)</sup>only outside the CIS

### UKRAINE

Hard coal production of the Ukraine fell by 2.1 million t from about 80 million t in 2004 to 77.9 million t in 2005. Owing to the weaker demand, coke exports fell from 3.2 million t to 1.1 million t.

### Hard Coal Production Ukraine

	<b>2004</b>	<b>2005</b>	<b>Difference</b>
	Mill. t	Mill. t	Mill. t
Steam coal	43	45.2	+2.2
Coking coal	37	32.7	- 4.3
<b>Total</b>	<b>80</b>	<b>77.9</b>	<b>- 2.1</b>
Coke	22	18.3	- 3.7

## KAZAKHSTAN

Production in Kazakhstan came to about 86 million t in 2005, holding at the level of the previous year. The exports of steam coal came to about 24 million t and were sent to Russia.

## USA

### Production

Production in the USA in 2005 rose only slightly and reached 1,118 million st, corresponding to 1,014 million t (metric).

In addition, about 15 million t come from stockpile processing in the Appalachian coalfields and about 73 million t of lignite. The following table shows the output distribution (excluding lignite).

<b>Production USA by Regions</b>				
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
	Mill. mt	Mill. mt	Mill. mt	Mill. mt
Appalachia <sup>1)</sup>	370	353	366	367
Interior	133	132	132	132
West	499	498	522	530
East of Mississippi	457	436	451	454
West of Mississippi	545	547	569	575
<b>Total</b>	<b>1,002</b>	<b>983</b>	<b>1,020</b>	<b>1,029</b>

<sup>1)</sup>including coal from stockpile processing

In 2005, domestic demand reached 1,133 million short tons or 1,028 million mt. Use of coal for the generation of electric power came to 946 million mt. It has grown steadily in recent years. In 2004, power generation using coal came to 51.5 % and will undoubtedly have risen further in 2005.

### Infrastructure

The infrastructure of the USA is currently oriented to further increases in imports. Since the output of low sulphur coal in the Appalachian coalfield is falling, the growing coal requirements of the power plants in the East Coast centres must be covered by imports. On the other hand, the in part low-calorie and low-sulphur coal from the mining areas west of the Mississippi must be transported over increasingly greater distances.

Basically there are sufficient ports on the American East and Southeast Coasts, but they must in part be converted to handle imports. The railway freight costs within the country are rising due to the high demand for transport services as well as to the lack of competition among the railroad companies, who enjoy virtual monopolies in their transport areas.

### Export/Import

The exports of the USA rose slightly by just under 2 million t to 45 million, 26 million t thereof coking coal and 19 million t steam coal. Exports on land of 18 million t (4 million t coking coal, 14 million t steam coal) went to Canada and rose by 2 million t in comparison with the previous year. Mexico imported 0.9 million t. Seaborne exports came to 26.6 million t. Owing to the export prices, it can be assumed that a part of the

exports to the receiving countries declared as steam coal was used as coking coal.

Imports into the USA reached 27.2 million t in 2005, rising by 3 million t. Imports from Canada fell back to 1.7 million t so that procurement from the world market rose to 25.5 million t. Important import countries were Colombia with 19 million t, Venezuela with 3.2 million t and Indonesia with about 2.0 million t. Of the imports, 1.6 million t were coking coal and 25.6 million t steam coal.

<b>Key Figures USA</b>			
	<b>2003</b>	<b>2004</b>	<b>2005</b>
	Mill. t	Mill. t	Mill. t
Hard coal output excepting lignite	983	1,020	1,029
Hard coal exports	38	43	45
• Steam coal	12	19	19
• Coking coal	18	24	26
Hard coal imports	22	24	27
	1,000 t	1,000 t	1,000 t
Imports Germany	1,283	1,558	1,472
• Steam coal	383	406	198
• Coking coal	900	1,152	1,274
Export rate in %	4	5	4

## CANADA

### Production

Canada had an output of about 69 million t in 2005, 29 million t of it coking coal, most of which was exported, and 40 million t steam coal, most of which went to Canadian coal-fired power plants. The steam coal breaks down into about 2 million t of hard coal, 26 million t of hard lignite (sub-bituminous) and 12 million t of lignite.

Stimulated by the high prices for coking coal, a series of projects are now being developed which could lead to an increase in hard coal output by 5 million t in 2006.

Additional projects, which could add another 10 million t of export capacity by 2010, are currently under examination. The planned mines are supposed to produce primarily coking coal and PCI coal for the export markets.

Most recently, Xstrata, which is currently examining the high sulphur coal reserves of the Mine Donkin in Nova Scotia, has been considering reopening hard coal mining operations in eastern Canada.

### Infrastructure

Export coal is delivered to the Westshore Terminal by CP Rail, while CN transports the coal to the Neptune Terminal. The more northerly Ridley Terminal currently has a low utilization rate of its capacity, but could be revitalized by the new projects. Export capacities are shown below:

Neptune Bulk Terminal:

Capacity: 8 million t/a

Westshore Terminal:

Capacity: 26 million t/a

Ridley Terminal:

Capacity: 12 million t/a

The Thunder Bay Terminal is used for the inner-continental loading of Canadian coal on ships which navigate the Great Lakes. It

has a capacity of 11 million t. It also serves for the loading of US coal from the Powder River Basin.

### Exports

In comparison with 2004, exports increased by 2 million t to 28 million t in 2005. They break down into 26.3 million t in seaborne exports (previous year 23.4 million t) and 1.7 million t in exports by land to the USA (previous year 2.5 million t). Japan was the largest buyer with 7.5 million t, followed by South Korea with 5.0 million t.

### Key Figures Canada

	2003 Mill. t	2004 Mill. t	2005 Mill. t
Hard coal output <sup>1)</sup>	27	29	31
Hard coal exports	25	26	28
• Steam coal	1	2	2
• Coking coal	24	24	26
	1,000 t	1,000 t	1,000 t
Imports Germany	1,295	2,109	1,566
• Coking coal	1,295	1,036	1,566
Export rate in %	93	90	90

<sup>1)</sup>excl. sub-bituminous, lignite

## COLOMBIA

### Production

Hard coal output in Colombia rose by about 2 million t to 60 million t in 2005, 5 to 6 million t lower than the output planned by the com-

panies. Heavy rainfall and storms hindered production and loading; delays in the deliveries of mining equipment also prevented a greater increase.

Further increase in production is planned for 2006. Drummond above all is planning a massive expansion of its Colombian output for the coming years and wants to develop a second large opencast pit. But Glencore / Xstrata are also expanding their output.

### Production / Exports by Company

Exporter	2004 Mill. t	2005 Mill. t
Cerrejon	24.91	25.5
Drummond	20.92	22.4
Prodeco (Glencore) Carbones De la Jagua	4.21	5.42
Caribe	0.20	0.22
Miscellaneous	0.75	1.05
<b>Total</b>	<b>50.99</b>	<b>54.58</b>

### Infrastructure

The Colombian ports can load about 63 million t/a at this time. Estimated capacities are shown below:

### Port Capacities Colombia 2005

	2005 Mill. t
Puerto Bolivar	31.0
Cienaga (Drummond)	25.0
Prodeco Puerto	5.0
Carbosam	1.6
Barranquilla	0.3
<b>Total</b>	<b>62.9</b>

The two main Colombian ports are connected to the mines by railway lines. The route from El Cerrejon to Puerto Bolivar is 145 km, the route from Mina Pribbenow to Cienaga 210 km. 50 million t were handled by these lines in 2005. The smaller mines transport their coal to the ports by lorry. An expansion of the railway line is absolutely essential for further expansion of coal output, above all from the Cesar coalfield.

The Colombian government has appropriated USD 320 million for infrastructure measures in its budget. Presumably public and private efforts will be bundled to expand the railway lines and ports, enabling further expansion of the Colombian coal industry.

#### Export

Colombian coal is sold primarily in the Atlantic region. Only 1.2 million t went to the Pacific region (Chile / Peru). The USA is becoming an increasingly important buyer for Colombian coal. Drummond above all is banking strongly on the US market and is continuing to expand the import infrastructure to the USA.

<b>Export</b>		
	<b>2004</b>	<b>2005</b>
	Mill. t	Mill. t
North America (USA +Canada)	15.0	19.8
South and Central America	3.9	4.0
Europe	31.1	30.8
thereof Mediterranean region	9.0	10.4
thereof Northwest Europe	22.0	20.4
<b>Total</b>	<b>51.0</b>	<b>54.6</b>

The largest buyers in Northwest Europe were Germany, the Netherlands and Great Britain, and in the Mediterranean Israel and Turkey.

### **Key Figures Colombia**

	<b>2003</b>	<b>2004</b>	<b>2005</b>
	Mill. t	Mill. t	Mill. t
Hard coal output	49	58	60
Hard coal exports	44	51	55
Imports Germany	5.9	6.2	4.8
Export rate in %	90	88	92

A further increase in exports is expected for 2006. The expansion potential of the output and loading capacities is 10 - 13 million t/a. Cerrejon and Drummond could increase their exports to 28 million t each. Prodeco wants to raise production to 6.3 to 8.5 million t, and the other smaller mines could supply a total of an additional 2 million t.

## VENEZUELA

#### Production

It was not possible to increase production to 10 million t as planned in 2005. Just as in Colombia, rainfall was one of the hindrances to production. Output consequently fell below the tonnage of 2004. The outlook for 2006 was once again optimistic, and there are hopes of increasing output from 7.8 to 11 million t. The Venezuelan coal industry was unsettled by the President Chavez' announcement that the coal mining companies would be controlled and nationalized with a 51 %



interest. CVRD is negotiating the development of the Socuy project in the proximity of the mine Paso Diablo with Carbozulia.

<b>Production / Exports by Company</b>		
	<b>2004</b>	<b>2005</b>
	Mill. t	Mill. t
Carbones Del Guasare	6.46	5.72
Interamerican Coal	0.61	0.56
Carbones De La Guajira	0.85	0.82
Miscellaneous	0.48	0.71
<b>Total</b>	<b>8.40</b>	<b>7.81</b>

#### Infrastructure

Just as before, a further expansion of the Venezuelan output is dependent on the construction of a capesize port and an efficient railway connection between the mines and export terminals. As long as this infrastructure has not been created, any further expansion is limited to a maximum of 10 - 12 million t. CVRD's participation in the Socuy project is imaginable only in combination with the expansion of the infrastructure.

#### Export

Exports in 2005 came to 7.8 million t, a figure below the quantity of 8.6 million t in 2004. Both of these

figures include smaller quantities of Colombian coal (< 0.5 million t). The Venezuelan coal is used primarily as steam coal, in part as PCI coal as well. 5.7 million t of the exports went to North, Central and South America. The USA, which imported 4.3 million t, was the outstanding importer. Europe bought 2.1 million t. The largest quantities were purchased by the Netherlands, Italy and France.

<b>Exports Through Venezuelan Ports</b>			
<b>Port</b>	<b>User</b>	<b>2004</b>	<b>2005</b>
		Mill. t	Mill. t
Bulk Wayuu	Carbones Del Guasare	6.33	5.61
El Bajo	Carbones De La Guajira, Interamerican Coal	1.27	0.81
Guanta	Geoconsa	0.12	0.13
La Ceiba	Carbones Del Caribe, Interamerican, Millinton	0.38	0.78
Palmarejo	Xcoal. Caneveca, Millinton, Carbones Del Guasare	0.48	0.47
<b>Total</b>		<b>8.40</b>	<b>7.81</b>

<b>Key Figures Venezuela</b>			
	<b>2003</b>	<b>2004</b>	<b>2005</b>
	Mill. t	Mill. t	Mill. t
Hard coal output	8	8	8
Hard coal exports	8	8	8
• Steam coal	8	8	8
• Coking coal	-	-	-
	1,000 t	1,000 t	1,000 t
Imports Germany	131	16	1
• Steam coal	131	16	1
Export rate in %	100	100	100

## SOUTH AFRICA

### Production

Production in South Africa in 2005 fell slightly in comparison with 2004 (- 1.5 million t) and reached 241.5 million t. Domestic consumption fell by 6 million t from 178 million t in 2004 to 172 million t in 2005, while exports reached 75 million t. The domestic markets consumed the following quantities in 2005:

<b>Consumption Domestic Markets</b>	
	<b>2005</b> Mill. t
Power generation	106.0
Synthetic fuels (Sasol)	41.5
Industry / Domestic fuel	18.0
Metallurgical industry	6.5
<b>Total</b>	<b>172.0</b>

In view of the growing demand for power and the expansion plans for the export terminal Richards Bay, the output must be increased quite substantially in the coming years.

### Infrastructure

The South African infrastructure - especially the transport by rail - functioned somewhat better in 2005. The expansion of the export terminal Richards Bay which has been approved will also require the railway company (Spoornet) to expand capacity from its current 72 million t to 92 million t/a in the middle term (07/2008).

### **Producers' Shares at the Richards Bay Coal Terminal after Expansion**

<b>Richards Bay Coal Terminal (RBCT)</b>	Mio t/a	%
Ingwe	26.95	29.29
Anglo Coal	19.78	21.50
Xstrata	15.06	16.37
Total	4.09	4.45
Sasol	3.60	3.91
Kangra	1.65	1.79
Eyesizwe	0.87	0.95
<b>South Dunes Coal Terminal</b>	<b>6.00</b>	<b>6.52</b>
<b>Other exporters (incl. BEE)</b>	<b>10.00</b>	<b>10.87</b>
<b>Common Users (incl. BEE)</b>	<b>4.00</b>	<b>4.35</b>
<b>Total</b>	<b>92.00</b>	<b>100.00</b>

The export of 71 million t passed through the ports Richards Bay, Durban and Maputo.

### **Exports of South African Ports**

	<b>2003</b> Mio t	<b>2004</b> Mio t	<b>2005</b> Mio t
Richards Bay Coal Terminal (RBCT)	68.3	65.9	69.2
Durban	1.8	1.1	0.8
Maputo	1.4	0.9	1.1
<b>Total</b>	<b>71.5</b>	<b>67.9</b>	<b>71.1</b>

It was possible to improve utilization of capacity at the terminal Richards Bay in particular (+ 3.3 million t).

## Export

In 2005, South Africa was able to increase exports by 3.2 million t, but did not exploit its potential to the full.

### Structure of the Overseas Exports in 2005

	<b>Total</b>	<b>Europe*</b>	<b>Asia</b>	<b>Misc.</b>
	Mill. t	Mill. t	Mill. t	Mill. t
Steam coal	69.2	60.6	4.1	4.5
Anthracite	0.8	0.4	-	0.4
Coking coal	1.1	1.0	-	0.1
<b>Total</b>	<b>71.1</b>	<b>62.0</b>	<b>4.1</b>	<b>5.0</b>

\* incl. neighbouring Mediterranean countries

Europe and the Mediterranean region remained the principal markets for South Africa, accounting for 87 % of sales. In 2005, India increased its imports by 2.3 million t to 3.1 million t. The biggest buyers of South African coal were Great Britain with about 10 million t and Spain and Germany with 8 million t each. In addition to the overseas exports, South Africa sold about 4 million t to neighbouring countries (Mozambique).

The exchange rate of the South African rand to the dollar remained relatively stable in 2005.

## Key Figures Republic of South Africa

	<b>2003</b>	<b>2004</b>	<b>2005</b>
	Mill. t	Mill. t	Mill. t
Hard coal output	238	243	241
Hard coal exports <sup>1)</sup>	71	68	71
• Steam coal	70	66	70
• Coking coal	1	2	1
Imports Germany	9.0	9.9	8.2
• Steam coal	9.0	9.9	8.2
Export rate in %	30	28	29

<sup>1)</sup> only seaborne

## AUSTRALIA

### Production

Hard coal production in Australia continued to increase in 2005 and rose in comparison with 2004 by 28 million t to 325 million t. The two states which are the primary producers both increased their production.

### Production of Australian Main Federal States

	<b>2004</b>	<b>2005</b>
	Mill. t	Mill. t
New South Wales	116	143
Queensland	169	172
<b>Total</b>	<b>285</b>	<b>315</b>

Domestic consumption in the two states remained relatively stable at about 59 million t. About 25 % of Australian coal production comes from underground operations and 75 % from opencast pits. The high world market prices have stimulated a large number of steam

coal projects (80 million t/a) and coking coal projects (100 million t/a). Even if only a part of these projects is realized, Australia will effortlessly retain its world market share of 33 % over the coming decade and has the largest expansion potential which can be activated in the short and middle term.

BHP alone is planning to expand its coking coal production to 100 million t/a, but that figure includes projects in Indonesia and other countries.

#### Infrastructure

Utilization of capacities of the railway lines and ports in Australia remained high in 2005. Nevertheless, it was possible to export an additional 9 million t. A new allocation system in Dalrymple Bay was more of a hindrance than a help to exports. The table below shows the port handling performances in 2005.

<b>Coal Loading Ports</b>	
<b>Coal Loading Ports</b>	<b>Exports 2005</b> Mill. t
Abbot Point	12,915
Dalrymple Bay	50,659
Hay Point	33,517
Gladstone	42,824
Brisbane	4,305
<b>Total Queensland</b>	<b>144,220</b>
Newcastle	80,327
Port Kembla	10,087
<b>Total New South Wales</b>	<b>90,414</b>
<b>Total</b>	<b>234,634</b>

The ports of Newcastle and Dalrymple Bay in particular were heavily utilized and at times unable to cope with the export quantities. In view of the infrastructure problems, Australian authorities have announced massive expansion plans. The following expansion plans have been prepared (according to McCloskey):

<b>Expansion Plans Australian Ports</b>			
<b>Port</b>	<b>Current capacity</b> Mill. t	<b>Short-term increase</b> Mill. t	<b>Middle-term expansion</b> Mill. t
Newcastle	89.9	102.0	120.0
Port Kembla	14.0	14.0	14.0
Dalrymple Bay	55.5	60.0	85.0
Hay Point	35.0	39.5	60.0
Gladstone	43.0	70.0	130.0
Abbot Point	15.0	18.0	25.0
Brisbane	4.0	4.5	5.0
<b>Total</b>	<b>256.4</b>	<b>308.0</b>	<b>439.0</b>

The Australian railways are supporting the expansion of the coal chain. The state-owned Queensland Rail, which operates the coal railways in Queensland, has announced a massive expansion programme providing new connecting lines, doubling of the tracks in certain sections and the purchase of more powerful locomotives to increase transport efficiency and flexibility.

## Export

Export was once again increased by 4 % or 9 million t to 234 million t. Australia was thus able to maintain its leading world market role and holds 33 % of the seaborne coal trade. Export of hard coking coal was increased from 73 to 81 million t (+ 11 %).

Coal Exports by Qualities			
Coal quality	2004 Mill. t	2005 Mill. t	Change %
Coking coal	73	81	11
Steam coal	106	108	2
Semi-soft coking coal	44	43	- 2
Anthracite	2	2	0
<b>Total</b>	<b>225</b>	<b>234</b>	<b>4</b>

Major focus for deliveries of Australian coal according to the various qualities in 2005 is shown below:

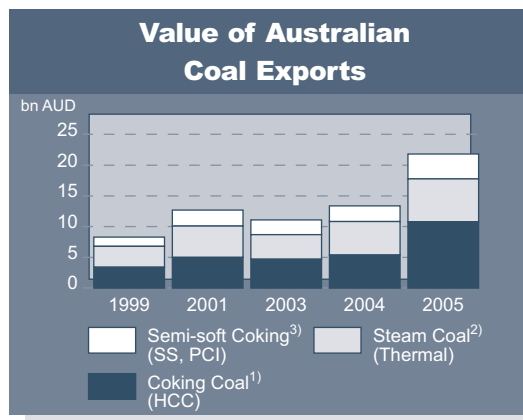
Qualities in 2005				
Quality	Exports Mill. t	thereof	Mill. t	%
Coking coal	81	Pacific	52	64
		Atlantic	29	36
Semi-soft coking coal	43	Pacific	33	77
		Atlantic	10	23
Steam coal/ anthracite	110	Pacific	106	96
		Atlantic	4	4

The hard coking coal was sold all around the world due to its good

quality because Australia is far and away the largest provider of this high-quality coal. The sales of the other qualities focus primarily on the Pacific region.

Key Figures Australia			
	2003 Mill. t	2004 Mill. t	2005 Mill. t
Hard coal output	257	297	325
Hard coal exports	215	225	234
• Steam coal	104	108	109
• Coking coal	111	117	125
	1,000 t	1,000 t	1,000 t
Imports Germany	5,022	4,509	3,549
• Steam coal	1,952	780	434
• Coking coal	3,070	3,729	3,115
Export ratio in %	84	76	72

Due to the high world market prices, especially for coking coal, Australia's export success in coal has leaped forward:



Source: Australian Coal Report

## CHINA

### Production

In 2005, China's hard coal production continued to rise and crossed the 2-billion-t threshold. The rise from 2004 to 2005 came to 157 million tons or 8 % and raised the Chinese output to 2,113 million t. The Chinese authorities wanted to close 5,000 smaller mines in 2005, but estimates indicate that only about 2,200 mines were actually shut down.

Chinese pig iron production rose by 72 million t to 330 million t, causing an increase in demand for coking coal for coke production of 35 - 40 million t, which was met by the country's own production. Purchases on the seaborne world market were reduced at Canada's expense by higher Mongolian imports of coking coal for China.

<b>Production China</b>			
	<b>2004</b>	<b>2005</b>	<b>Growth</b>
	Mill. t	Mill. t	%
State-owned mines	922	1,027	+ 11
Provincial mines	315	293	- 7
Small operators	719	793	+ 10
<b>Total</b>	<b>1,956</b>	<b>2,113</b>	<b>+ 8</b>

In view of the continuing growth in the demand for steel and power, the aim is to increase coal production as well. A critical factor is that 38 % or 800 million t of the production come from small operators which presumably do not have large reserves and have only modest funds for investments at their disposal.

<b>Electricity/Crude Steel/ Pig Iron/Coal Production</b>				
		<b>2004</b>	<b>2005</b>	<b>2006</b>
Power generation	TWh	2,187	2,347	2,700
Crude steel production	Mill. t	272	349	380
Pig iron production	Mill. t	258	330	360
Coal production	Mill. t	1,956	2,113	2,200

Coke production kept pace with the vigorous expansion of pig iron production. At this time there are overcapacities. Expectations for the coming years also foresee the expansion of steel production primarily on the basis of the melting of pig iron in blast furnaces.

### Infrastructure

The coal infrastructure in China is being further expanded. In 2005, 1,071 million t of coal were transported by rail. The ports handled a total of 371 million t and serve as handling centres for both export and domestic coast traffic. Total handling broke down into about 70 million t in exports and 300 million t in return loading from the ports for domestic Chinese requirements.

<b>Coal Loading Ports in China 2005</b>		
<b>(MTPA)</b>	<b>Total handling</b>	<b>thereof coal</b>
Quinhuangdao	169	145
Tianjin (Xingang)	241	69
Qingdao (Tsingtao)	187	8
Rizhao (Shijuso)	56	20
Lianyungang	61	12
Huanghua	68	67
Miscellaneous	138	50
<b>Total</b>	<b>920</b>	<b>371</b>

### Export/Import

Chinese exports in 2005 were about 15 million t lower than in 2004. The coking coal exports, however, fell only slightly. Obviously the Chinese are honouring their long-term contracts with Japan and South Korea.

The largest drop was for steam coal, amounting to almost 14.5 million t. The largest buyers, as before, were Japan with 19 million t, South Korea with 17 million t and Taiwan with 16 million t. Exports to Europe, which were previously no more than modest, almost completely stopped and came to just over 100 kt.

Coke exports at 12.8 million t fell. Due to the decreasing demand from abroad, coke prices continued to drop throughout the entire year.

China's imports rose further from about 18 million t to 26 million t, but a distinction in developments can be noted here. Coking coal imports rose from 6.7 to 7.2 million t. The largest growth was recorded for imports by land from Mongolia, rising from 1.6 to 2.3 million t.

Steam coal imports - above all for South Chinese power plants - increased by just under 8 million t. Vietnam increased its anthracite coal exports to China by 4 million t to a good 10 million t. North Korea and Indonesia also increased their exports to consumers near the coasts and borders.

The number of companies authorized to export coal remained essentially unchanged. Their exports developed as shown below:

<b>Authorized Export Companies</b>		
	<b>2004</b>	<b>2005</b>
	Mill. t	Mill. t
CNCIEC	42.2	34.0
Shenhua	27.6	25.6
Shanxi	12.4	7.6
Minmetals	3.8	3.9
<b>Total</b>	<b>86.0</b>	<b>71.1</b>

Almost 70 companies have export licences for coke.

<b>Key Figures China</b>			
	<b>2003</b>	<b>2004</b>	<b>2005</b>
	Mill. t	Mill. t	Mill. t
Hard coal output	1.610	1.956	2.113
Hard coal exports	94	86.6	71.7
• Steam coal	81	80.9	66.4
thereof anthracite	4.7	6.4	5.7
• Coking coal	13.1	5.7	5.3
Coke exports	14.7	15.0	12.8
Hard coal imports	10.8	18.5	26.2
• Steam coal	4.8	3.8	6.2
• Coking coal	2.6	6.8	7.2
• Anthracite	3.4	7.8	12.8
	1.000 t	1.000 t	1.000 t
Imports Germany	1.482	1.733	1.219
• Steam coal	257	347	179
• Coke	1.225	1.386	1.040
Export rate in %	6	4	3

## INDONESIA

### Production

Indonesian coal mining continued to expand in 2005. All of the large companies were able to increase their production

so that output rose from 135 to 153 million t (+18 million t / +13 %). In addition, there was output of an estimated 4 - 6 million t which was not officially recorded so that the total production came to 160 million t.

129 million t of the total production went to exports. 34 million t were sold to domestic consumers. A further production increase to presumably 170 million t is expected for 2006, but domestic demand will also rise. Despite this, Indonesia will undoubtedly be able to increase its exports even more. The 6 largest producers provided about 70 % of the output as well as of the exports.

### The Largest Hard Coal Producers in Indonesia

Company	Output 2005 Mill. t	Exports 2005 Mill. t
PT Adaro	26.6	17.6
PT Kaltim Prima	27.5	26.4
PT Kideco Jaya Agung	18.1	11.8
PT Arutmin	16.8	12.6
PT Berau Coal (KKS)	9.5	5.7
PT Indomico Mandiri	7.7	8.2
<b>Total</b>	<b>106.2</b>	<b>82.3</b>
<b>Indonesia total</b>	<b>153</b>	<b>118</b>
<b>in % of total</b>	<b>69 %</b>	<b>70 %</b>

### Infrastructure

Indonesia currently has six deep-water ports on East Kalimantan with an annual handling capacity of 75 million t, allowing the loading of 60,000 to 180,000 dwt freighters. In addition, there are ten more coal terminals nationwide (including Samarinda and Balikpapan) with an annual capacity totalling 50 million t and a depth which, as a rule, is adequate for panamax sizes.

### Export and Port Capacities in Indonesia 2004

	Mill. t
Adang Bay	12
Baujarmasin	10
Kotabaru	10
Pulau Laut	10
Tanjung Bara	20
Tarahan	14
<b>Total</b>	<b>76</b>
10 additional coal loading ports	50
<b>Capacity in total</b>	<b>126</b>

The expansion of the Indonesian infrastructure has progressed so far without any problems and developed along with the export volume.

### Export

Indonesia is the largest exporter of steam coal on the world market. The large increases in exports were able to compensate for the decline in the Chinese steam coal exports in the Pacific region. An estimated 2 million t of the output were exported as PCI coal. About 85 % of the export went to the Asian market, 10 % to Europe and 5 % to America and other countries.

### Largest Buyers of Indonesian Coal

	2004 Mio t	2005 Mio t
Asien	87.8	108.1
• Japan	22.7	27.3
• Südkorea	11.7	14.4
• Taiwan	17.8	17.9
Europa	12.4	15.2
USA / Sonstige	5.6	5.7
<b>Gesamt</b>	<b>105.8</b>	<b>129.0</b>



Indonesian coal is finding increasing acceptance in Europe. Sometimes it is mixed with European high-sulphur lignite to reduce the sulphur content of the coal (e.g., Spain).

<b>Key Figures Indonesia</b>			
	<b>2003</b>	<b>2004</b>	<b>2005</b>
	Mill. t	Mill. t	Mill. t
Hard coal output <sup>1)</sup> (sub-bituminous)	119	135	153
Steam coal exports	89	105	129
	1,000 t	1,000 t	1,000 t
Imports Germany	405	838	206
Export rate in %	75	78	84

<sup>1)</sup>official production

There are different data of the Indonesian export figures. The export figure of 129 million t considered in this report is based on information from McCloskey. Indonesian sources allude 117 million t.

## VIETNAM

### Production

Production has risen sharply in recent years and increased from about 11 million t in 2000 to a current level of almost 34 million t. Nearly all of the production (95 %) is anthracite and comes from the area around Hanoi in the northern part of the country. About 16 million t of the output are used for domestic

consumption and just under 18 million t go to exports. 5 million t of the domestic consumption are for power plants, while 2 million t are used in the cement industry. The sectors fertilizer production, paper products, other industries and households consume a total of 9 million t. Vietnam is continuing to expand its power plant production rapidly and is also expanding its capacities on a hard coal basis. Vietnam has very little opencast pit potential and must put more emphasis on the development of underground mines in the future. The productivity of 400 - 500 t/man-year is low.

### Infrastructure

The coasts on the eastern side of Vietnam are mostly shallow and have in the past allowed access only by ships of less than 10,000 dwt. As a result of dredging work in Campha, larger ships can now be loaded there. 65,000-dwt ships can also be handled with additional loading in the roads. Hongai Port can handle 10,000-dwt ships at the pier and 30,000-dwt ships in the roads.

### Export

Vietnam increased its exports from 11.3 million t in 2004 to 17.9 million t in 2005. Major buyers are the Chinese consumers in the southwest and near the coast, who bought almost 10 million t and who are accustomed to anthracite from China. In addition to China, Japan, Thailand and South Korea bought volumes. The Vietnamese anthracite coal is also used in part as PCI coal.

<b>Key Figures Vietnam</b>			
	<b>2003</b>	<b>2004</b>	<b>2005</b>
	Mill. t	Mill. t	Mill. t
Output	19.0	28.0	34.0
Export	6.6	11.3	17.9
thereof China	2.5	6.1	9.9
Export ratio in %	35	40	53

## Report in Figures

Table 1:	World Energy Consumption by Source of Energy and Regions	51
Table 2:	World Hard Coal Production / Foreign Trade	52
Table 3:	Seaborne Hard Coal Trade	54
Table 4:	Qualities of Coking Coal Traded on the World Market	56
Table 5:	Qualities of Steam Coal Traded on the World Market	58
Table 6:	Hard Coal Export of Poland	59
Table 7:	Hard Coal Export of USA	60
Table 8:	Hard Coal Export of Canada	61
Table 9:	Hard Coal Export of Colombia	62
Table 10:	Hard Coal Export of South Africa	63
Table 11:	Hard Coal Export of Australia	64
Table 12:	Hard Coal Export of Indonesia	65
Table 13:	Hard Coal Export of China	66
Table 14:	Hard Coal Export of Russia	67
Table 15:	Hard Coal Imports of EU-Countries - Imports and Domestic Trade	68
Table 16:	Energy Consumption in the EU-Countries	69
Table 17:	Primary Energy Consumption in Germany	70
Table 18:	Coal Handling in German Ports	71
Table 19:	Import of Hard Coal, Coke and Briquettes to Germany	72
Table 20:	Hard Coal Sales in Germany	74
Table 21:	Consumption, Import/Export and Power Generation	75
Table 22:	European/International Price Quotations	76
Table 23:	Germany: Energy Prices/Exchange Rates	77
Table 24:	Hard Coal Market in Germany: Quantities and Prices 1957 -2005	78

<b>World-Energy Consumption by Source of Energy and Regions</b>							
<b>Source of Energy</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Mineral Oil	4,976	5,110	5,130	5,160	5,280	5,460	5,520
Natural Gas	2,960	3,180	3,210	3,310	3,400	3,509	3,600
Nuclear Energy	817	840	870	880	867	905	910
Hydro Power	858	882	840	850	875	920	940
Hard Coal	2,770	2,800	2,900	3,160	3,460	3,700	4,000
Lignite	320	320	320	330	330	330	330
<b>Total</b>	<b>12,701</b>	<b>13,132</b>	<b>13,270</b>	<b>13,690</b>	<b>14,212</b>	<b>14,824</b>	<b>15,300</b>
<b>Region of Consumption</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
North America	30,0	30,1	29,1	28,7	27,9	27,2	26,7
Asia/Australia	26,7	26,9	27,5	28,9	30,0	31,3	32,0
EU-15/since 2004 EU-25	16,6	16,4	16,2	15,5	15,4	16,8	16,5
CIS	10,5	10,5	10,3	10,1	10,0	9,8	9,7
Remaining World	16,2	16,1	16,9	16,8	16,7	14,9	15,1
<b>Total</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>
<b>Coal Consumption</b> (Hard Coal and Lignite)	<b>3,090</b>	<b>3,120</b>	<b>3,220</b>	<b>3,490</b>	<b>3,790</b>	<b>4,030</b>	<b>4,330</b>
<b>Region of Consumption</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
North America	26,9	27,1	26,0	24,8	24,1	24,0	23,7
Asia/Australia	44,0	44,0	45,5	49,1	51,3	52,0	53,0
EU-15/since 2004 EU-25	9,4	9,6	9,6	8,9	8,7	11,1	10,7
CIS	7,9	7,9	7,8	6,9	7,0	6,3	6,1
Remaining World	11,8	11,4	11,1	10,3	8,9	6,6	6,5
<b>Total</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>

Considered were only commercial traded sources of energy.  
2004/2005 preliminary figures/partly estimated

Sources: BP Statistical Review of World Energy, own calculations

World Hard Coal Production/Foreign Trade <sup>3)</sup>									Mio t (t=)
	2000			2001			2002		
	Production	Export	Import	Production	Export	Import	Production	Export	Import
Germany	37	0	28	31	0	33	29	0	32
France	3	0	18	2	0	15	2	0	18
Great Britain	31	0	22	32	0	36	30	0	29
Spain <sup>1)</sup>	15	0	22	14	0	19	13	0	24
Poland	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
<b>EU-15/since 2004 EU-25</b>	86	0	165	79	0	175	74	0	172
Poland	102	24	2	103	23	2	102	23	2
Czech Republic	15	6	1	15	4	1	14	4	1
CIS	321	32	1	323	36	1	303	42	1
<b>Mentioned Countries</b>	438	62	4	441	63	4	419	69	4
Canada	34	32	19	34	30	18	30	25	18
USA	974	52	11	1,014	44	18	995	36	15
Colombia	37	35	0	43	37	0	41	36	0
Venezuela	8	9	0	8	8	0	8	8	0
<b>Mentioned Countries</b>	1,053	128	30	1,099	119	36	1,074	105	33
<b>South Africa</b>	245	187	0	265	194	0	274	204	0
<b>Australia</b>	238	172	0	245	187	0	265	194	0
India	310	0	24	312	0	24	310	0	26
China <sup>2)</sup>	1,231	59	2	1,294	90	3	1,348	84	11
Japan	4	0	145	3	0	155	3	0	158
Indonesia	77	58	0	95	67	0	107	76	0
<b>Mentioned Countries</b>	1,622	117	171	1,704	157	182	1,768	160	195
Remaining Countries	125	7	200	111	8	212	113	13	214
<b>World</b>	3,783	571	571	3,921	610	610	3,941	620	620

2004/2005 preliminary figures  
<sup>1)</sup> Production incl. "Lignito Negro"    <sup>2)</sup> Production incl. lignite (about 50 Mill. t estimated)    <sup>3)</sup> Foreign trade = seaborne trade and trade by rail

Sources: Statistik der Kohlenwirtschaft, ECE, IEA, statistics of import and export countries, Barlow Jonker, internal calculations



Mio t (t=t)

2003			2004			2005			
Production	Export	Import	Production	Export	Import	Production	Export	Import	
29	0	35	29	0	39	28	0	36	Germany
2	0	19	0	0	20	0	0	20	France
28	0	31	25	0	37	20	0	44	Great Britain
13	0	21	14	0	24	12	0	25	Spain <sup>1)</sup>
-	-	-	99	19	2	97	20	2	Poland
-	-	-	13	4	1	13	4	1	Czech Republic
72	0	180	180	24	211	171	24	209	<b>EU-15/since 2004 EU-25</b>
100	21	3	-	-	-	-	-	-	Poland
13	4	1	-	-	-	-	-	-	Czech Republic
320	52	1	360	98	32	380	102	44	CIS
433	77	5	360	98	32	380	102	44	<b>Mentioned Countries</b>
27	25	22	29	26	18	31	28	20	Canada
983	38	22	102	43	25	1,029	45	27	USA
45	44	0	52	51	0	60	55	0	Colombia
8	8	0	8	8	0	8	8	0	Venezuela
1,063	115	44	1,109	128	43	1,128	136	47	<b>Mentioned Countries</b>
238	71	3	243	68	0	241	75	0	<b>South Africa</b>
279	215	0	297	225	0	325	234	0	<b>Australia</b>
320	0	30	348	0	31	370	0	40	India
1,610	93	11	1,956	87	19	2,113	72	26	China <sup>2)</sup>
3	0	167	-	2	179	-	0	181	Japan
119	89	0	135	105	0	153	129	0	Indonesia
2,052	182	208	2,439	194	229	2,636	201	247	<b>Mentioned Countries</b>
117	10	230	130	21	243	136	32	257	Remaining Countries
4,254	670	670	4,758	758	758	5,017	804	804	<b>World</b>

Table 2

## Seaborne Hard Coal Trade in Million t

Exporting Countries	2000			2001			2002		
	Coking Coal	Steam Coal	Total	Coking Coal	Steam Coal	Total	Coking Coal	Steam Coal	Total
Australia	101	86	187	106	88	194	104	100	204
USA	26	9	35	19	9	28	15	5	20
South Africa	2	68	70	1	68	69	1	68	69
Canada	29	3	32	25	2	27	21	2	23
China	7	52	59	12	78	90	14	70	84
Colombia	0	35	35	0	37	37	0	35	35
Indonesia	0	58	58	0	67	67	0	76	76
Poland	2	12	14	2	13	15	2	19	21
Russia	6	18	24	6	27	33	9	33	42
Venezuela	2	7	9	0	8	8	0	8	8
Other	1	6	7	1	7	8	2	6	8
<b>Total</b>	<b>176</b>	<b>354</b>	<b>530</b>	<b>172</b>	<b>404</b>	<b>576</b>	<b>168</b>	<b>422</b>	<b>590</b>
Importing Countries/ Regions	2000			2001			2002		
	Coking Coal	Steam Coal	Total	Coking Coal	Steam Coal	Total	Coking Coal	Steam Coal	Total
Europe <sup>1)</sup>	50	139	189	52	148	200	49	148	197
- EU-15 / since 2004 EU-25	45	112	157	41	127	168	39	127	166
Asia	110	193	303	102	225	327	102	247	349
- Japan	71	74	145	63	92	155	59	99	158
- South Korea	19	45	64	18	49	67	19	51	70
- Taiwan	8	37	45	7	42	49	7	44	51
- Hongkong	0	6	6	0	8	8	0	8	8
- India	12	12	24	12	12	24	13	13	26
Latin America	15	8	23	17	8	25	16	9	25
Miscellaneous (incl. USA)	1	14	15	1	23	24	1	18	19
<b>Total</b>	<b>176</b>	<b>354</b>	<b>530</b>	<b>172</b>	<b>404</b>	<b>576</b>	<b>168</b>	<b>422</b>	<b>590</b>

2004/2005 preliminary figures; excl. land transport

<sup>1)</sup> incl. Mediterranean countries

Sources: Analysis of several sources

Mio t

2003			2004			2005			
Coking Coal	Steam Coal	Total	Coking Coal	Steam Coal	Total	Coking Coal	Steam Coal	Total	
111	104	215	118	107	225	126	108	234	Australia
16	3	19	20	6	26	22	5	27	USA
2	70	72	1	67	68	-	71	71	South Africa
20	1	21	22	1	23	25	1	26	Canada
13	81	94	6	81	87	5	67	72	China
0	44	44	0	51	51	-	55	55	Colombia
0	89	89	0	105	105	-	129	129	Indonesia
2	12	14	2	10	12	-	11	11	Poland
7	42	49	10	51	61	8	57	65	Russia
0	8	8	0	9	9	-	8	8	Venezuela
2	12	14	1	17	18	2	22	24	Other
<b>173</b>	<b>466</b>	<b>639</b>	<b>180</b>	<b>505</b>	<b>685</b>	<b>188</b>	<b>534</b>	<b>722</b>	<b>Total</b>
2003			2004			2005			
Coking Coal	Steam Coal	Total	Coking Coal	Steam Coal	Total	Coking Coal	Steam Coal	Total	
51	162	213	52	166	218	53	170	223	Europe <sup>1)</sup>
43	139	182	48	163	211	46	163	209	- EU-15 / since 2004 EU-25
105	274	379	110	304	414	116	319	435	Asia
54	112	166	56	124	180	55	126	181	- Japan
20	52	72	15	64	79	12	63	75	- South Korea
0	55	55	-	61	61	-	61	61	- Taiwan
0	10	10	0	12	12	0	15	15	- Hongkong
14	16	30	15	18	33	17	23	40	- India
16	10	26	16	11	27	16	17	33	Latin America
1	20	21	2	24	26	3	28	31	Miscellaneous (incl. USA)
<b>173</b>	<b>466</b>	<b>639</b>	<b>180</b>	<b>505</b>	<b>685</b>	<b>188</b>	<b>534</b>	<b>722</b>	<b>Total</b>

Table 3

## Qualities of Coking Coal Traded on the World Market

Exporting Countries/ Qualities	Volatile %	Ash %	Lat. Moisture %	Sulphur %	Phosphorus %	Swelling Index FSI
<b>Low Volatile</b>						
Australia/NSW	21 - 24	9.3 - 9.5	1.0	0.38 - 0.40	0.03 - 0.07	6 - 8
Australia/Qld.	17 - 25	7.0 - 9.8	1.0 - 1.5	0.52 - 0.70	0.007 - 0.06	7 - 9
Canada	21 - 24	9.5	0.6	0.30 - 0.60	0.04 - 0.06	6 - 8
USA	18 - 21	5.5 - 7.5	1.0	0.70 - 0.90	k.A.	8 - 9
<b>Middle Volatile</b>						
Australia/NSW	27 - 28	7.9 - 8.3	1.5 - 1.8	0.38 - 0.39	0.04 - 0.06	5 - 7
Australia/Qld.	26 - 29	7.0 - 9.0	1.2 - 2.0	0.38 - 0.90	0.03 - 0.055	6 - 9
Canada	25 - 28	8.0	0.9	0.30 - 0.55	0.03 - 0.07	6 - 8
USA	26 - 27	6.8 - 9.0	1.0	0.95 - 1.10	k.A.	7 - 9
Poland	23 - 28	7.0 - 8.9	0.7 - 1.5	0.60 - 0.80	k.A.	6 - 9
China	25 - 30	9.5 - 10.0	1.3 - 1.5	0.35 - 0.85	0.015	
<b>High Volatile</b>						
Australia/NSW	34 - 40	5.5 - 9.5	2.4 - 3.0	0.35 - 1.30	0.002 - 0.05	4 - 7
Australia/Qld.	30 - 34	6.5 - 8.2	2.0	0.50 - 0.70	0.02 - 0.04	8 - 9
Canada	29 - 35	3.5 - 6.5	1.0	0.55 - 1.20	0.006 - 0.04	6 - 8
USA	30 - 34	6.8 - 7.3	1.9 - 2.5	0.80 - 0.85	k.A.	8 - 9
Poland	29 - 33	6.9 - 8.9	0.8 - 1.5	0.60 - 1.00	k.A.	5 - 8

Figures in bandwidths

1) Utilization mixture for coking plant

2) CSR-value (Coke Strength under Reduction) describing the heating strength of coke after heating up to 1.100° C and following CO<sub>2</sub>-fumigation. The CSR-values classified to the coal are only standard values.

Sources: ACR, Coal, companies' information



Coke strength CSR-value <sup>2)</sup>	Fluidity max ddpm	Con traction max %	Dilatation max %	Reflection middle %	Macerals		Minerals %
					reactive %	inert %	
50 - 65 60 - 75 65 - 72 60 - 70	500 - 2000 34 - 1400 10 - 150 30 - 100	20 - 30 24 - 34 20 - 26 25 - 28	25 - 140 35 - 140 7 - 27 30 - 60	1.23 - 1.29 1.12 - 1.65 1.22 - 1.35 1.30 - 1.40	38 - 61 61 - 75 70 - 75 65 - 75	36 - 58 20 - 34 20 - 35 20 - 30	3 - 4 3 - 5 5 3
40 - 60 50 - 70 50 - 70 60 - 70 no figure	200 - 2000+ 150 - 7000 150 - 600 500 - 7000 no figure	25 - 35 19 - 33 21 - 28 22 - 18 26 - 32	0 - 65 (-)5 - 240 50 - 100 50 - 100 30 - 120	1.01 - 1.05 1.00 - 1.10 1.04 - 1.14 1.10 - 1.50 no figure	50 - 53 58 - 77 70 - 76 72 - 78 no figure	43 - 44 20 - 38 20 - 24 18 - 24 no figure	4 - 6 3 - 4 5 4 no figure
35 - 55 65 - 75 50 - 60 60 - 70 no figure	100 - 4000 950 - 1000+ 600 - 30000 18000 - 26847 no figure	27 - 45 23 - 24 22 - 31 26 - 33 no figure	(-)10 - 60 35 - 160 50 - 148 150 - 217 no figure	0.69 - 0.83 0.95 - 1.03 1.00 - 0.95 1.00 - 1.10 no figure	67 - 84 61 - 79 76 - 81 75 - 78 no figure	11 - 28 18 - 36 17 - 19 18 - 21 no figure	2 - 5 3 - 4 2 - 4 4 no figure

Table 4

### Qualities of Steam Coal Traded on the World Market

Exporting Countries	Volatile %	Ash %	Moisture %	Sulphur %	F. Carbon %	Grinding I. HGI	Calorific V. kcal/kg
<b>Atlantic Supplier</b>							
USA (east coast)	17 - 39	5 - 15	5 - 12	0,5 - 3,0	39 - 70	31 - 96	6000 - 7200
South Africa	16 - 31	8 - 15	6 - 10	0,5 - 1,7	51 - 61	43 - 65	5400 - 6700
Colombia	30 - 39	4 - 15	7 - 16	0,5 - 1,0	36 - 55	43 - 60	5000 - 6500
Venezuela	34 - 40	6 - 8	5 - 8	0,6	47 - 58	45 - 50	6500 - 7200
Poland	25 - 31	8 - 16	7 - 11	0,6 - 1,0	44 - 56	45 - 50	5700 - 6900
Czech Republic	25 - 27	6 - 8	7 - 9	0,4 - 0,5	58 - 60	60 - 70	6700 - 7100
Russia	27 - 34	11 - 15	8 - 12	0,3 - 0,6	47 - 58	55 - 67	6000 - 6200
<b>Pacific Supplier</b>							
Australia	25 - 30	8 - 15	7 - 8	0,3 - 1,0	47 - 60	45 - 79	5900 - 6900
Indonesia	37 - 47	1 - 16	9 - 22	0,1 - 0,9	30 - 50	44 - 53	3700 - 6500
China	27 - 31	7 - 13	8 - 13	0,3 - 0,9	50 - 60	50 - 54	5900 - 6300
Russia (east coast)	17 - 33	11 - 20	8 - 10	0,3 - 0,5	47 - 64	70 - 80	5500 - 6800
Vietnam/Anthracite	5 - 6	15 - 33	9 - 11	0,85 - 0,95	58 - 83	35	5100 - 6800
<b>Germany</b>	19 - 33	6 - 7	8 - 9	0,7 - 1,4	58 - 65	60 - 90	6600 - 7100
Indication in gross bandwidths							

Sources: see table 4

## Hard Coal Export of Poland

1,000 t

Importing Countries	1999	2000	2001	2002	2003	2004	2005
Germany	5,756	6,794	7,390	6,910	7,020	7,170	7,022
France	840	1,408	1,190	1,312	1,013	819	1,227
Belgium	444	375	580	455	2	500	649
The Netherlands	920	531	490	1	2	191	270
Italy	624	913	230	601	0	94	540
Great Britain	1,212	1,044	1,280	2,243	2,031	1,365	1,614
Ireland	271	196	250	253	263	276	287
Denmark	2,436	2,214	2,100	2,154	860	1,088	821
Spain	610	389	150	233	16	134	111
Portugal	3	5	-	345	0	0	221
Finland	1,674	1,892	2,010	1,698	2,081	1,626	653
Austria	1,521	1,812	2,100	1,573	1,346	1,328	1,155
Sweden	769	640	300	355	567	327	172
Czech Republic	-	-	-	-	-	1,227	1,146
Slovakia	-	-	-	-	-	1,147	802
Hungary	-	-	-	-	-	183	380
Other	-	-	-	-	-	53	50
<b>EU-15/since 2004 EU-25</b>	<b>17,080</b>	<b>18,213</b>	<b>18,070</b>	<b>18,133</b>	<b>15,201</b>	<b>17,528</b>	<b>17,120</b>
CIS	1,045	1,600	1,400	822	1,176	0	13
Czech Republic	1,015	1,077	1,200	1,181	1,174	-	-
Slovakia	1,248	955	800	482	588	-	-
Hungary	541	545	270	166	315	-	-
Bulgaria	230	300	190	-	0	0	0
Romania	511	62	0	-	0	0	0
Brazil	586	143	-	282	0	0	0
Other countries	1,844	824	1,370	1,733	2,300	3,062	2,350
<b>Export in total</b>	<b>24,100</b>	<b>23,719</b>	<b>23,300</b>	<b>22,799</b>	<b>20,754</b>	<b>20,590</b>	<b>19,483</b>

2004/5 preliminary figures

Sources: McCloskey, IEA, WEGLOKOKS, since 1998 Germany: Federal Statistical Office, own calculations

## Hard Coal Export of USA

1,000 t

Importing Countries	1999	2000	2001	2002	2003	2004	2005
Germany	520	885	828	868	1,283	1,540	606
France	2,287	2,761	2,087	1,184	975	787	1,146
Belgium/Luxembourg	1,880	2,622	2,579	2,147	1,637	1,545	1,881
The Netherlands	3,113	2,378	1,910	1,480	1,798	1,622	4,247
Italy	3,638	3,362	4,905	2,790	2,373	1,908	2,226
Great Britain	2,869	2,977	2,437	1,707	1,337	1,793	1,599
Ireland	787	456	344	632	216	0	0
Denmark	-	70	0	-	261	67	66
Spain	2,236	2,433	1,491	1,734	1,605	1,380	1,685
Portugal	676	541	601	115	406	405	143
Finland	211	288	140	147	449	426	259
Sweden	579	642	565	393	346	570	535
Other	-	-	-	-	-	-	239
<b>EU-15/since 2004 EU-25</b>	<b>18,796</b>	<b>19,415</b>	<b>17,887</b>	<b>13,197</b>	<b>12,686</b>	<b>12,043</b>	<b>14,632</b>
Israel	547	56	0	119	0	0	0
Turkey	720	1,640	803	524	991	1,179	1,708
Romania	292	443	0	-	0	256	1,391
Other Europe <sup>1)</sup>	1,122	2,905	1,416	1,129	1,423	225	1,495
<b>Europe</b>	<b>21,477</b>	<b>24,459</b>	<b>20,106</b>	<b>14,969</b>	<b>15,100</b>	<b>13,703</b>	<b>19,625</b>
Canada	17,380	16,110	15,995	14,443	18,212	15,722	17,577
Mexico	1,257	727	723	754	1,078	929	906
Argentina	3	185	168	172	218	265	218
Brazil	4,030	4,115	4,131	3,171	3,186	3,942	3,792
Japan	4,494	4,033	1,878	1,137	5	4,014	1,888
South Korea	2,080	1,578	691	211	176	112	1,304
Taiwan	1,102	350	135	0	2	449	0
Other countries	498	501	273	69	190	3,829	0
<b>Export in total</b>	<b>52,321</b>	<b>52,058</b>	<b>44,100</b>	<b>34,926</b>	<b>38,167</b>	<b>42,965</b>	<b>44,911</b>

1) incl. Mediterranean countries

2005 preliminary figures

Source: U.S. Department of Commerce

## Hard Coal Export of Canada

1,000 t

Importing Countries	1999	2000	2001	2002	2003	2004	2005
Germany	760	846	1,214	1,046	1,295	2,123	1,682
France	462	585	503	259	324	388	447
Belgium/Luxembourg	563	525	570	228	309	293	0
The Netherlands	676	408	265	1,037	1,250	1,139	807
Italy	1,029	1,184	1,096	705	994	892	1,355
Great Britain	1,400	1,174	2,016	1,138	1,078	1,064	1,563
Denmark	-	-	-	-	0	0	0
Spain	428	338	173	332	392	113	285
Portugal	230	231	-	0	0	0	0
Finland	-	-	302	147	197	200	516
Sweden	111	175	-	0	0	0	0
<b>EU-15/since 2004 EU-25</b>	<b>5,659</b>	<b>5,466</b>	<b>6,139</b>	<b>4,892</b>	<b>6,022</b>	<b>6,212</b>	<b>6,655</b>
Other Europe <sup>1)</sup>	1,343	1,302	1,233	1,280	685	1,707	1,469
<b>Europe</b>	<b>7,002</b>	<b>6,768</b>	<b>7,372</b>	<b>6,172</b>	<b>6,524</b>	<b>7,919</b>	<b>8,124</b>
Japan	14,697	13,330	10,718	9,388	7,753	5,384	7,700
South Korea	6,869	5,257	5,287	4,393	3,659	0	4,900
Taiwan	1,026	1,324	1,142	1,078	1,077	991	1,200
Brazil	1,239	1,474	1,807	1,173	1,642	1,483	1,519
USA	813	1,631	2,045	1,796	1,789	2,497	1,583
Chile	1,381	998	1,027	401	349	322	507
Mexico	331	385	490	257	467	1,395	406
Other countries	518	568	257	327	1,716	5,950	1,591
<b>Export in Total</b>	<b>33,876</b>	<b>31,735</b>	<b>30,145</b>	<b>24,985</b>	<b>24,976</b>	<b>25,941</b>	<b>27,530</b>

<sup>1)</sup> incl. Mediterranean countries                      2005 preliminary figures

Sources: McCloskey's Coal Information Services

## Hard Coal Export of Colombia

1,000 t

Importing Countries	1999	2000	2001	2002	2003	2004	2005
Germany	4,479	4,628	5,797	5,932	5,918	4,719	4,256
France	1,858	1,500	1,480	2,098	2,686	4,348	2,228
Belgium/Luxembourg	453	150	160	604	147	134	510
The Netherlands	2,716	3,372	2,503	2,158	1,435	3,765	4,597
Italy	1,410	1,700	1,300	2,205	2,074	2,441	2,589
Great Britain	4,048	5,700	6,000	2,189	2,344	2,853	2,133
Ireland	875	1,000	750	482	271	1,152	893
Denmark	825	820	280	1,071	2,715	1,388	1,252
Greece	70	-	120	0	0	0	0
Spain	920	910	680	1,410	1,662	1,290	1,988
Portugal	2,670	2,700	1,450	1,678	1,812	2,550	2,521
Finland	-	-	-	134	59	0	0
Sweden	115	165	170	83	41	184	0
Slovenia	-	-	-	-	-	782	426
<b>EU-15/since 2004 EU-25</b>	<b>20,439</b>	<b>22,645</b>	<b>20,690</b>	<b>20,044</b>	<b>21,164</b>	<b>25,606</b>	<b>23,393</b>
Israel	2,000	1,650	2,500	3,051	2,690	2,838	4,722
Other Europe <sup>1)</sup>	280	560	500	331	2,849	2,851	2,703
<b>Europe</b>	<b>22,719</b>	<b>24,855</b>	<b>23,690</b>	<b>23,426</b>	<b>26,703</b>	<b>31,295</b>	<b>30,818</b>
Japan	421	-	0	0	31	0	0
Hongkong	-	-	-	0	0	0	0
USA	4,130	6,930	9,500	6,781	11,989	13,342	17,641
Canada	1,490	1,590	2,400	1,998	1,514	1,671	2,132
Brazil	245	150	150	124	244	442	285
Other Countries	895	1,275	1,360	3,074	3,876	4,440	3,708
<b>Export in total</b>	<b>29,900</b>	<b>34,800</b>	<b>37,100</b>	<b>35,403</b>	<b>44,357</b>	<b>51,190</b>	<b>54,584</b>

1) incl. Mediterranean countries, Turkey

2005 preliminary figures

Sources: IEA, Intercor, The McCloskey Group, internal calculations

## Hard Coal Export of South Africa

1,000 t

Importing Countries	1999	2000	2001	2002	2003	2004	2005
Germany	4,527	6,345	4,581	4,980	8,962	9,876	9,453
France	5,449	6,054	4,204	4,624	4,140	8,760	5,473
Belgium/Luxembourg	3,052	2,227	1,992	1,733	2,159	2,456	1,677
The Netherlands <sup>1)</sup>	6,417	5,328	9,939	11,174	11,439	3,116	7,713
Italy	3,816	4,176	5,067	4,117	4,503	4,758	5,286
Great Britain	1,437	3,062	8,872	8,106	8,443	10,210	11,837
Ireland	393	588	526	389	566	510	788
Denmark	1,870	1,880	1,430	1,680	2,590	1,430	1,651
Greece	630	380	280	140	0	0	132
Spain	8,903	9,501	7,948	9,982	8,882	9,700	8,836
Portugal	1,430	3,290	1,920	2,240	2,340	1,750	1,561
Finland	301	60	-	60	300	0	0
Other	-	-	-	-	-	-	441
<b>EU-15/since 2004 EU-25</b>	<b>38,225</b>	<b>42,891</b>	<b>46,759</b>	<b>49,225</b>	<b>54,324</b>	<b>52,556</b>	<b>54,848</b>
Israel	5,360	5,590	6,048	5,396	5,220	6,910	5,123
Morocco	1,660	2,330	3,197	3,270	2,130	1,780	2,835
Turkey	812	1,226	1,074	994	1,647	1,550	1,302
Japan	2,723	1,952	1,288	863	320	0	140
South Korea	3,972	2,940	500	140	120	0	130
Taiwan	4,160	3,660	2,000	1,656	1,576	1,390	411
Hongkong	960	560	360	210	0	0	0
India	5,350	5,040	2,874	3,854	3,000	738	3,904
China	290	130	470	620	260	60	0
USA	-	44	645	330	130	40	126
Brazil	1,539	1,903	1,417	1,058	780	760	654
Other countries	1,383	1,643	2,578	1,584	1,475	2,136	5,089 <sup>2)</sup>
<b>Export in Total</b>	<b>66,434</b>	<b>69,909</b>	<b>69,210</b>	<b>69,200</b>	<b>70,982</b>	<b>67,920</b>	<b>74,562</b>

<sup>1)</sup> till 2003 incl. Sales for other countries<sup>2)</sup> incl. 3.5 million t railway transported export

2005 preliminary figures

Sources: IEA, South African Mineral Bureau, South African Coal Report, own calculations

## Hard Coal Export of Australia

1,000 t

Importing Countries	1999	2000	2001	2002	2003	2004	2005
Germany	1,978	2,691	2,672	1,394	5,022	4,357	4,445
France	3,729	4,174	4,471	4,989	4,736	4,639	4,033
Belgium/Luxembourg	2,947	2,261	2,611	1,814	1,182	1,790	1,906
The Netherlands	4,314	4,744	4,089	5,971	2,202	3,622	3,704
Italy	3,269	3,342	2,875	2,190	2,734	2,533	2,286
Great Britain	5,753	6,987	6,991	4,886	5,777	5,477	5,034
Denmark	347	142	160	317	909	156	130
Spain	2,673	3,212	3,903	3,888	3,688	3,321	3,508
Portugal	501	0	532	705	797	0	0
Sweden	979	1,075	1,164	1,048	1,193	1,323	1,261
Other							670
<b>EU-15<sup>1)</sup>/since 2004 EU-25</b>	<b>26,490</b>	<b>29,022</b>	<b>30,405</b>	<b>27,202</b>	<b>28,240</b>	<b>27,218</b>	<b>26,977</b>
Israel	1,072	2,623	1,971	1,806	2,130	987	849
Turkey	1,478	1,506	1,398	993	1,381	758	815
Romania	685	-	220	150	487	45	0
Other Europe <sup>2)</sup>	398	218	777	1,415	1,289	1,867	576
<b>Europe</b>	<b>30,123</b>	<b>33,369</b>	<b>34,771</b>	<b>31,566</b>	<b>33,527</b>	<b>30,875</b>	<b>29,217</b>
Japan	79,316	86,624	91,662	91,636	95,271	101,896	104,812
South Korea	22,954	21,810	24,964	21,385	22,488	30,061	30,158
Taiwan	14,124	16,308	15,557	14,815	13,968	18,828	21,868
Hongkong	1,275	419	217	585	619	1,038	0
India	9,798	13,057	13,067	14,069	12,829	16,556	18,985
China	1,226	1,183	879	4,691	5,222	6,271	5,468
Brazil	4,564	4,988	4,570	3,757	4,887	3,143	3,454
Chile	1,304	1,763	710	1,404	1,215	1,605	984
Other Countries	6,947	7,233	7,976	19,484	24,971	14,775	18,724
<b>Export in Total</b>	<b>171,631</b>	<b>186,754</b>	<b>194,373</b>	<b>203,392</b>	<b>214,997</b>	<b>225,048</b>	<b>233,670</b>
<sup>1)</sup> incl. other countries		<sup>2)</sup> incl. Mediterranean countries			2005 preliminary figures		

Sources: IEA, Australian Coal Report, Joint Coal Board, Queensland Coal Board



Hard Coal Export of Indonesia								1,000 t
Importing Countries	1999	2000	2001	2002	2003	2004	2005	
Germany	114	150	400	400	405	492	132	
The Netherlands	1,680	1,630	2,100	1,500	1,881	1,106	2,139	
Italy	1,500	1,600	1,600	2,500	4,580	5,198	6,285	
Great Britain	52	40	0	0	531	1,080	1,302	
Ireland	43	320	300	400	0	0	602	
Denmark	-	-	-	200	8	0	0	
Spain	2,870	2,800	2,400	2,700	3,004	2,776	3,317	
Slovenia	-	-	-	-	-	623	634	
Other						1,106	770	
<b>EU-15<sup>1)</sup>/since 2004 EU-25</b>	<b>6,500</b>	<b>6,540</b>	<b>7,500</b>	<b>9,000</b>	<b>10,409</b>	<b>12,381</b>	<b>15,181</b>	
USA	1,070	650	710	900	1,914	1,960	2,050	
Chile	1,150	1,000	1,000	1,000	271	839	1,368	
Japan	13,000	14,000	15,500	18,000	20,486	22,700	27,313	
South Korea	5,200	5,000	6,000	7,000	7,857	11,741	14,377	
Hongkong	2,950	2,900	4,700	4,600	6,814	7,439	9,409	
Taiwan	13,300	13,700	14,500	14,500	15,798	17,769	17,896	
Malaysia	1,200	2,500	3,000	4,000	5,199	6,113	7,400	
Philippines	2,500	3,000	3,500	4,000	3,091	3,603	3,906	
Thailand	2,900	3,000	3,000	4,000	4,338	4,787	6,404	
India	2,700	3,500	4,000	5,000	7,846	10,674	16,255	
China	-	-	700	2,000	534	1,473	2,503	
Other countries	2,012	2,507	2,390	2,320	4,477	4,386	4,981	
<b>Export in total</b>	<b>54,482</b>	<b>58,297</b>	<b>66,500</b>	<b>76,320</b>	<b>89,034</b>	<b>105,865</b>	<b>129,043</b>	

1) incl. other countries

2005 preliminary figures

Sources: IEA, Coal Manual, Indonesian Coal &amp; Power, International Coal Report, internal calculations

## Hard Coal Export of China

1,000 t

Importing Countries	1999	2000	2001	2002	2003	2004	2005
Germany	250	70	244	264	257	347	75
France	780	450	512	820	556	240	8
Belgium/Luxembourg	140	110	400	736	82	127	282
The Netherlands	60	145	100	368	240	313	141
Italy	360	385	324	201	380	185	0
Great Britain	-	100	391	68	84	172	54
Spain	-	145	0	71	319	0	332
Greece	140	-	0	0	0	136	0
<b>EU-15/since 2004 EU-25</b>	<b>1,730</b>	<b>1,405</b>	<b>1,971</b>	<b>2,528</b>	<b>1,918</b>	<b>1,520</b>	<b>892</b>
Japan	13,500	17,000	26,557	27,662	31,255	28,471	23,175
South Korea	13,400	23,000	29,380	25,387	29,722	24,798	21,206
Taiwan	6,500	11,000	15,753	14,249	16,040	19,855	16,230
Hongkong	940	2,300	3,494	2,964	2,118	1,123	944
India	800	1,900	3,401	2,323	2,363	3,084	3,855
Malaysia	170	240	368	389	102	65	46
Thailand	160	-	141	262	69	249	0
North Korea	430	170	420	258	468	407	147
Philippines	595	1,800	3,812	2,879	2,908	2,928	1,916
Brazil	200	-	1,990	1,989	2,489	548	278
Other countries	575	185	2,713	2,651	4,187	3,512	2,986
<b>Export in total</b>	<b>39,000</b>	<b>59,000</b>	<b>90,000</b>	<b>83,541</b>	<b>93,639</b>	<b>86,560</b>	<b>71,675</b>

2005 preliminary figures

Sources: The McCloskey Group, Coal Americas

## Hard Coal Export of Russia

1,000 t

Importing Countries	1999	2000	2001	2002	2003	2004	2005
Germany	296	937	2,065	1,870	2,600	5,460	6,620
Belgium/Luxembourg	618	691	750	900	400	900	1,000
Italy	690	250	950	1,600	1,660	2,400	1,800
Great Britain	1,929	2,268	3,900	4,400	5,200	9,820	18,000
Spain	644	1,239	1,600	2,200	1,960	3,130	4,200
Finland	1,640	2,223	2,600	2,000	5,900	5,430	2,400
Poland						2,300	2,500
<b>EU-15<sup>1)</sup>/since 2004 EU-25</b>	6,000	7,700	12,000	14,000	21,100	32,000	37,000
Turkey	3,868	6,195	4,000	4,000	5,000	6,500	7,000
Romania	707	1,596	1,400	1,500	1,700	2,500	3,000
Japan	4,595	5,651	5,700	6,300	7,600	9,280	10,700
South Korea	2,070	1,993	2,000	3,000	3,500	5,140	3,300
Taiwan	779	730	1,500	1,900	2,000	1,380	1,200
China	0	0	0	1,150	2,000	570	800
Other countries <sup>2)</sup>	581	735	6,400	8,150	6,500	2,000	1,700
<b>Export in Total <sup>3)</sup></b>	<b>18,600</b>	<b>24,600</b>	<b>33,000</b>	<b>40,000</b>	<b>49,400</b>	<b>59,370</b>	<b>64,700</b>

<sup>1)</sup> incl. other EU-countries  
<sup>2)</sup> 2001-2004 exports via Cyprus/Libanon; the quantities were partially exported in other not known countries  
<sup>3)</sup> only hard coal exports (seaborne trade) in countries outside of the former UdSSR

Sources: Coal Information, internal calculations, partly estimates, The Federal Statistic Office of Germany

## Hard Coal Import of EU-Countries: Import and Domestic Trade

1,000 t

Countries	1999	2000	2001	2002	2003	2004	2005
Germany	26,000	28,000	33,400	33,070	35,360	39,080	36,300
France	15,434	17,500	14,450	15,130	18,500	19,300	20,500
Italy	17,194	19,006	19,540	18,800	21,190	25,500	24,500
The Netherlands	17,300	18,400	16,000	13,300	13,800	14,000	13,000
Belgium	10,836	11,425	11,070	8,900	9,500	11,100	10,000
Luxembourg	151	177	220	125	150	150	150
Great Britain	20,757	21,752	35,540	28,700	31,490	36,110	43,800
Ireland	2,800	3,033	3,750	2,000	2,100	2,300	2,500
Denmark	7,115	6,413	6,950	7,000	9,030	7,120	5,200
Greece	821	691	660	1,300	850	800	700
Spain	20,081	21,600	18,940	24,500	21,480	24,300	24,700
Portugal	6,042	6,365	4,810	4,300	5,000	5,500	5,300
Finland	2,316	3,721	4,200	5,700	9,070	7,650	4,500
Austria	3,732	3,796	3,280	4,000	4,000	3,900	4,100
Sweden	2,921	3,121	2,990	2,800	3,000	3,000	2,700
Poland					2,000	2,000	2,000
Czech Republic					1,000	1,000	1,000
Hungary					600	600	500
Slovakia					6,500	6,000	5,600
Slovenia					500	500	500
Latvia					200	200	200
Lithuania					500	500	500
Estonia					500	500	500
Cyprus					-	-	-
Malta					-	-	-
<b>EU-15/since 2004 EU-25</b>	<b>153,500</b>	<b>165,000</b>	<b>175,800</b>	<b>169,625</b>	<b>196,320</b>	<b>211,110</b>	<b>208,750</b>
Thereof domestic trade (Poland and Czech Republic)							25,000
<b>Coke</b>	8,830	12,130	8,350	11,750	13,000	10,000	9,000
2005 preliminary figures							

Sources: McCloskey, internal calculations

## Energy Consumption in the EU-Countries in Million tce

Countries	Hard Coal		therefrom Hard Coal- Import <sup>1)</sup> in t=t		Lignite <sup>2)</sup>		Primary Energy Consumption in Total	
	2004	2005	2004	2005	2004	2005	2004	2005
Germany	65.8	62.8	39.0	36.3	56.2	54.4	492	486
France	18.0	18.0	20.0	20.5			381	379
Italy	24.0	23.0	25.5	24.5			266	260
The Netherlands	13.0	12.5	14.0	13.0			138	140
Belgium	8.0	8.0	10.0	10.0			95	94
Luxembourg	1.0	0.2	0.2	0.2			7	7
Great Britain	55.0	58.0	36.1	43.8			329	335
Ireland	2.0	2.2	2.3	2.5	0.5		21	22
Denmark	6.0	4.5	7.1	5.2			27	26
Greece	0.5	0.5	0.8	0.7	22.0	21.0	47	48
Spain	28.6	29.0	24.0	24.7	2.5	2.0	210	211
Portugal	5.5	5.5	5.5	5.3			36	35
Finland	5.5	3.5	7.7	4.5	2.0		41	42
Austria	4.5	4.7	3.8	4.1	0.5		47	46
Sweden	3.5	3.0	3.0	2.7			70	72
<b>EU-15</b>	<b>240.9</b>	<b>235.4</b>	<b>199.0</b>	<b>198.0</b>	<b>83.7</b>	<b>77.4</b>	<b>2.207</b>	<b>2.203</b>
Poland	67.0	66.0	2.0	2.0	18.5	18.7	133	134
Czech Republic	9.5	9.5	1.0	1.0	20.0	20.1	64	66
Hungary	1.5	1.5	0.6	0.5	3.6	3.0	34	37
Slovakia	5.0	4.0	7.0	5.6	1.0		26	26
Slovenia	0.5	0.5	0.5	0.5	1.4	1.4	7	8
Latvia	0.2	0.2	0.2	0.2			8	8
Lithuania	0.3	0.0	0.5	0.5			13	14
Estonia	0.5	3.0	0.5	0.5			10	10
Cyprus							7	7
Malta							7	7
<b>Total</b>	<b>325.4</b>	<b>320.1</b>	<b>211.3</b>	<b>208.8</b>	<b>128.2</b>	<b>120.6</b>	<b>2.516</b>	<b>2.520</b>

<sup>1)</sup> Million t (without coke)

<sup>2)</sup> incl. Peat

Sources: Arbeitsgemeinschaft Energiebilanzen, internal calculations, estimations

## Primary Energy Consumption in Germany

Energy Resources	1999	2000	2001	2002	2003	2004	mill. tce
							2005
Hard Coal	67.1	68.5	65.8	64.3	68.7	65.8	62.8
therefrom Import Coal	(27.6)	(30.5)	(36.5)	(35.7)	(37)	(40)	(37.0)
Lignite	50.3	52.8	55.6	56.6	55.9	56.2	54.4
Mineral Oil	191.0	187.7	190.3	183.2	180.2	177.9	174.8
Natural Gas	102.7	102.2	106.6	106.2	110.0	110.4	110.4
Nuclear Energy	63.3	63.1	63.7	61.4	61.5	62.2	60.7
Hydro and Wind Power	3.1	3.6	4.2	4.9	4.6	5.6	5.8
Foreign Trade Balance Electricity	0.1	0.4	0.3	0.1	-1.0	-0.9	-1.0
Other Energy Resources	11.1	11.7	12.3	12.7	13.2	15.1	17.9
<b>Total</b>	<b>488.7</b>	<b>490.0</b>	<b>498.8</b>	<b>489.4</b>	<b>493.1</b>	<b>492.3</b>	<b>485.8</b>
Energy Resources	1999	2000	2001	2002	2003	2004	shares in %
							2005
Hard Coal	13.7	14.0	13.2	13.1	13.9	13.4	12.9
therefrom import Coal	(5.7)	(6.2)	(7.3)	(7.3)	(7.5)	(8.1)	(7.5)
Lignite	10.3	10.8	11.1	11.6	11.3	11.4	11.2
Mineral Oil	39.1	38.3	38.2	37.4	36.6	36.2	36.0
Natural Gas	21.0	20.9	21.4	21.7	22.3	22.4	22.7
Nuclear Energy	13.0	12.9	12.8	12.6	12.5	12.6	12.5
Hydro and Wind Power	0.6	0.7	0.8	1.0	0.9	1.1	1.2
Foreign Trade Balance Electricity	0.0	0.0	0.1	0.0	-0.2	-0.2	-0.2
Other Energy Resources	2.3	2.4	2.4	2.6	2.7	3.1	3.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

since 2000 preliminary

Sources: Arbeitsgemeinschaft Energiebilanzen, Statistisches Bundesamt, internal calculations

Coal Handling in German Ports								1,000 t
	1999	2000	2001	2002	2003	2004	2005	
<b>North Sea Ports</b>								
Hamburg	2,681	2,555	3,607	4,301	4,794	4,944	4,636	
Wedel - Schulau		730	944	707	700	700	600	
Bützfleth	22	7	21	27	43	12	19	
Wilhelmshaven	1,557	1,591	1,844	890	1,453	1,672	1,520	
Bremen	1,157	1,617	1,418	1,547	1,464	1,505	1,216	
Brunsbüttel	310	441	666	655	387	393	273	
Nordenham	952	554	1,867	1,703	1,439	2,058	1,915	
Papenburg		142	164	170	260	289	214	
Remaining North Sea Ports S,H,	-	67	70	62	67	126	37	
Remaining North Sea Ports N,S,	-	9	4	7	2	-		
<b>Total</b>	<b>6,679</b>	<b>7,713</b>	<b>10,605</b>	<b>10,069</b>	<b>10,609</b>	<b>11,699</b>	<b>10,430</b>	
<b>Baltic Sea Ports</b>								
Rostock	742	960	976	993	1,145	1,187	1,145	
Wismar	15	51	40	41	41	42	33	
Stralsund	2	6	4	2	2	1	3	
Lübeck	-	3	-	-	3	-	-	
Flensburg	302	262	399	261	358	343	325	
Kiel					113	418	402	
Remaining Baltic Sea Ports	2	4	4	4	7	4	2	
<b>Total</b>	<b>1,063</b>	<b>1,286</b>	<b>1,423</b>	<b>1,301</b>	<b>1,669</b>	<b>1,995</b>	<b>1,910</b>	
<b>Turnover in Total</b>	<b>7,742</b>	<b>8,999</b>	<b>12,028</b>	<b>11,370</b>	<b>12,278</b>	<b>13,694</b>	<b>12,340</b>	

Sources: Bundesamt für Seeschifffahrt und Hydrographie, Hamburg, Statistisches Bundesamt

## Imports of Hard Coal, Coke and Briquettes to Germany

1,000 t

Countries	2002					2003				
	Steam C.	Cok. C.	Anthr.	Coke	Total <sup>1)</sup>	Steam C.	Cok. C.	Anthr.	Koks	Total <sup>1)</sup>
Poland	6,727	170	5	2,288	9,192	6,780	130	0	2,886	9,801
Czech Republic	905	-	-	367	1,272	865	0	0	448	1,313
Spain	-	-	-	359	359	-	-	-	515	515
France	-	-	-	180	180	-	-	-	161	161
<b>EU-15/since 2004 EU-25</b>	7,632	170	5	3,194	11,003	7,645	130	0	4,010	11,790
CIS	1,906	6	121	654	2,687	2,526	7	149	536	3,218
Norway	215	58	1	1	275	644	0	0	0	644
USA	321	11	6	476	814	381	900	2	-	1,283
Canada	-	1,123	-	2	1,125	0	1,290	0	5	1,295
Colombia	5,823	-	-	79	5,932	5,900	0	-	-	5,918
South Africa	9,871	27	0	0	9,898	8,950	12	0	0	8,962
Australia	805	3,705	8	-	4,518	1,934	3,070	18	-	5,022
China	251	73	123	1,112	1,559	178	7	79	1,218	1,482
Indonesia	381	0	0	0	381	405	0	0	0	405
Venezuela	62	0	0	0	62	131	0	0	0	131
Other Third Countries	167	1	204	534	913	719	70	177	71	1,050
<b>Third Countries</b>	19,802	5,004	463	2,858	28,164	21,768	5,356	425	1,830	29,410
<b>Total</b>	<b>27,434</b>	<b>5,174</b>	<b>468</b>	<b>6,052</b>	<b>39,167</b>	<b>29,413</b>	<b>5,486</b>	<b>425</b>	<b>5,840</b>	<b>41,200</b>

2005 preliminary figures

<sup>1)</sup> incl. briquettes<sup>2)</sup> due to precise entry option of BAFA (K-Bogen) there are additions/modifications possible regarding the data of the Statistisches Bundesamt, mainly concerning steam coal imports.

Source: Statistisches Bundesamt, BAFA, internal calculations



<b>2004</b>					<b>2005</b>					<b>Countries</b>
Steam C.	Cok. C.	Anthr.	Coke	Total <sup>1)</sup>	Steam C.	Cok. C.	Anthr.	Coke	Total <sup>1)</sup>	
7,085	40	-	1,828	8,954	6,875	147	14	1,175	8,211	Poland
469	-	-	384	857	522	-	-	354	880	Czech Republic
-	-	-	416	416	-	-	-	144	144	Spain
-	-	-	449	449	-	-	-	207	207	France
7,554	40	0	3,077	10,676	7,397	147	14	1,880	9,442	<b>EU-15/since 2004 EU-25</b>
5,288	125	126	471	6,011	5,855	480	286	135	6,756	CIS
1,387	-	-	-	1,387	905	323	-	-	1,228	Norway
778	763	-	-	1,541	198	1,274	-	-	1,472	USA
73	2,050	-	-	2,123	-	1,566	-	-	1,566	Canada
4,719	-	-	-	4,719	4,750	7	-	-	4,757	Colombia
9,860	16	-	-	9,876	8,230	5	4	-	8,239	South Africa
440	3,915	2	-	4,357	434	3,115	-	-	3,549	Australia
239	-	108	1,472	1,819	160	-	19	1,040	1,219	China
814	-	-	24	838	206	-	-	-	206	Indonesia
16	-	-	-	16	1	-	-	-	1	Venezuela
336	347	72	130	888	623	165	112	560	1,465	Remaining Third Countries
23,950	7,216	308	2,097	33,575	21,362	6,935	421	1,735	30,458	<b>Third Countries</b>
<b>31,504</b>	<b>7,256</b>	<b>308</b>	<b>5,174</b>	<b>44,251</b>	<b>28,759</b>	<b>7,082</b>	<b>435</b>	<b>3,615</b>	<b>39,900</b>	<b>Total</b>

Hard Coal Sales in Germany								1,000 t
	1999	2000	2001	2002	2003	2004	2005	
<b>Total Sales<sup>1)</sup> in Hard Coal, Coke and Briquettes</b>								
Power Stations	54,518	51,903	52,522	49,630	51,618	55,319	53,100	
Iron and Steel Industry	13,729	15,786	14,634	14,666	14,588	14,836	13,500	
Heating Market/Other <sup>2)</sup>	3,315	3,735	3,605	2,954	2,155	1,882	1,600	
<b>Total</b>	<b>71,562</b>	<b>71,424</b>	<b>70,761</b>	<b>67,250</b>	<b>68,361</b>	<b>72,037</b>	<b>68,200</b>	
<sup>1)</sup> Domestic Sales <sup>2)</sup> incl. Consumption of Mines, Benefits <i>Sources: Statistik der Kohlenwirtschaft, 2005: internal calculations</i>								
<b>Therefrom Import Coal</b>								
Power Stations <sup>3)</sup>	20,458	21,544	26,647	26,100	27,900	30,900	28,600	
Iron and Steel Industry	6,844	9,700	10,100	10,300	11,300	11,600	9,900	
Heating Market	3,000	2,616	2,715	2,767	2,000	1,800	1,400	
<b>Total Imports</b>	<b>30,302</b>	<b>33,860</b>	<b>39,462</b>	<b>39,167</b>	<b>41,200</b>	<b>44,300</b>	<b>39,900</b>	
<sup>3)</sup> Imports of power plants accord. to K-Bogen (BAFA, Referat 431), own calculations								

Source: BAFA, Statistik der Kohlenwirtschaft, internal calculations/partly estimations



## European/International Price Quotations

	1999	2000	2001	2002	2003	2004	2005	
<b>Crude Oil Prices</b>								
USD/Barrel Brent	17,90	28,40	24,40	25,00	29,00	38,00	55,00	
USD/t SKE	92,00	146,00	125,00	128,00	150,00	195,00	283,00	
<i>Source: MWV</i>								
<b>Natural Gas Prices: Free German Border</b>								
EUR/tce	53,00	93,00	123,00	105,00	111,00	105,00	142,00	
<i>Source: Statistik der Kohlenwirtschaft</i>								
<b>Steam Coal Marker Prices 1 % S, CIF NW Europe</b>								
USD/t SKE	34,00	42,00	46,00	37,00	50,00	83,90	71,25	
EUR/tce	31,90	45,50	51,50	39,10	44,20	67,44	57,27	
<i>Source: McCloskey</i>								
<b>Sea Freight Rates Capesize Units - Port of Destination ARA (Amsterdam, Rotterdam, Antwerp)</b>								
South Africa	USD/t	5,50	9,70	6,70	6,50	14,60	20,60	15,75
USA/East Coast	USD/t	4,30	7,30	5,40	5,30	11,90	19,60	16,60
Australia/NSW	USD/t	7,90	14,50	10,50	9,50	20,50	31,00	24,00
Colombia	USD/t	4,30	7,30	5,30	5,40	12,10	20,10	16,10
<i>Sources: Frachtcontor Junge, internal calculations</i>								
<b>EU: Price Development for Imported Hard Coal from non-EEC Countries</b>								
						2004		1.HY, 2005
						EU-15	EU-25	EU-25
Steam Coal EUR/tce	34,70	41,00	52,00	45,50	39,80	56,20	55,98	62,50
Coking Coal EUR/t	46,30	51,00	60,00	59,00	53,50	61,66	61,20	77,41
<p>Steam Coal: Utilization in power plants; weighted average of cross border price in the EU-countries,            Coking Coal: Indicative CIF-price, own calculations for determination of the annual values.</p> <p><i>Source: EU-commission</i></p>								

## Germany - Energy Prices/Exchange Rates

	1999	2000	2001	2002	2003	2004	2005
<b>Exchange Rates</b>							
EURO / 1 USD	0.9383	1.0827	1.1166	1.0575	0.8840	0.8039	0.8038
<i>Source: Deutsche Bundesbank</i>							
<b>Cross Border Price for Coking Coal and Coke - EUR/t</b>							
Imported Coking Coal	42.32	46.74	54.53	59.49	56.47	63.50	95.25
Imported Coke	72.38	77.91	91.42	87.32	102.15	214.35	230.30
<i>Sources: Coking Coal - 2002 BAFA. Referat 432; since 2003 Statistisches Bundesamt Coke: Statistisches Bundesamt</i>							
<b>Cross Border Price for Steam Coal in EUR/tce: Utilization in Power Plants</b>							
	Year	1. quarter	2. quarter	3. quarter	4. quarter	Annual Value	
	1999	34.62	34.71	34.08	33.91	34.36	
	2000	36.90	39.22	43.13	47.76	42.08	
	2001	50.17	54.08	55.26	53.47	53.18	
	2002	50.76	47.33	40.31	39.41	44.57	
	2003	38.42	37.83	40.43	42.27	39.87	
	2004	48.68	55.44	58.76	61.81	55.36	
	2005	64.81	64.01	65.59	65.80	65.02	
<i>Source: BAFA Referat 431 (cross border prices=cif price ARA + freight German border)</i>							
<b>Energy Prices free power station EUR/tce</b>							
	1999	2000	2001	2002	2003	2004	2005
<b>Sources of Energy</b>							
Natural Gas	105.00	129.00	159.00	151.00	167.00	176.00	188.00
Heating Oil. Heavy	87.00	125.00	108.00	115.00	124.00	117.00	166.00
Steam Coal	39.00	47.00	58.00	50.00	45.00	60.00	70.00
<i>Sources: BAFA, Statistik der Kohlenwirtschaft, own calculations, natural gas 2004/5 preliminary</i>							

## Hard Coal Market in Germany

### Quantities and Prices 1957 - 2005

Quantities								Prices							
Imports of Hard Coal, - Coke and Briquettes t=t				Domestic Mining <sup>1)</sup> of Hard Coal t v.F.				Steam Coal from non-EEC Countries <sup>2)</sup>				Domestic Industry Coal <sup>3)</sup>			
Year	Mill. t	Year	Mill. t	Year	Mill. t	Year	Mill. t	Year	EUR/tce <sup>4)</sup>	Year	EUR/tce	Year	EUR/tce	Year	EUR/tce
1957	18.9	1981	11.3	1957	149.4	1981	87.9	1957	40	1981	84	1957	29	1981	113
1958	13.9	1982	11.5	1958	148.8	1982	88.4	1958	37	1982	86	1958	29	1982	121
1959	7.5	1983	9.8	1959	141.7	1983	81.7	1959	34	1983	75	1959	29	1983	125
1960	7.3	1984	9.6	1960	142.3	1984	78.9	1960	33	1984	72	1960	29	1984	130
1961	7.3	1985	10.7	1961	142.7	1985	81.8	1961	31	1985	81	1961	29	1985	130
1962	8.0	1986	10.9	1962	141.1	1986	80.3	1962	30	1986	60	1962	30	1986	130
1963	8.7	1987	8.8	1963	142.1	1987	75.8	1963	30	1987	46	1963	30	1987	132
1964	7.7	1988	8.1	1964	142.2	1988	72.9	1964	30	1988	42	1964	31	1988	134
1965	8.0	1989	7.3	1965	135.1	1989	71.0	1965	29	1989	49	1965	32	1989	137
1966	7.5	1990	11.7	1966	126.0	1990	69.8	1966	29	1990	49	1966	32	1990	138
1967	7.4	1991	16.8	1967	112.0	1991	66.1	1967	29	1991	46	1967	32	1991	139
1968	6.2	1992	17.3	1968	112.0	1992	65.5	1968	28	1992	42	1968	30	1992	147
1969	7.5	1993	15.2	1969	111.6	1993	57.9	1969	27	1993	37	1969	31	1993	148
1970	9.7	1994	18.1	1970	111.3	1994	52.0	1970	31	1994	36	1970	37	1994	149
1971	7.8	1995	17.7	1971	110.8	1995	53.1	1971	32	1995	39	1971	41	1995	149
1972	7.9	1996	20.3	1972	102.5	1996	47.9	1972	31	1996	38	1972	43	1996	149
1973	8.4	1997	24.3	1973	97.3	1997	45.8	1973	31	1997	42	1973	46	1997	149
1974	7.1	1998	30.2	1974	94.9	1998	40.7	1974	42	1998	37	1974	56	1998	149
1975	7.5	1999	30.3	1975	92.4	1999	39.2	1975	42	1999	34	1975	67	1999	149
1976	7.2	2000	33.9	1976	89.3	2000	33.3	1976	46	2000	42	1976	76	2000	149
1977	7.3	2001	39.5	1977	84.5	2001	27.1	1977	43	2001	53	1977	76	2001	149
1978	7.5	2002	39.2	1978	83.5	2002	26.1	1978	43	2002	45	1978	84	2002	160
1979	8.9	2003	41.3	1979	85.8	2003	25.7	1979	46	2003	40	1979	87	2003	160
1980	10.2	2004	44.3	1980	86.6	2004	25.7	1980	56	2004	55	1980	100	2004	160
		2005	39.9			2005	24.7			2005	65			2005	160

2003 preliminary figures; since 1991 incl. new federal states, EUR-values are rounded

<sup>1)</sup> Excl. small mines

<sup>2)</sup> Price free German border (BAFA Ref. 432), since 1996: BAFA Ref. 431

<sup>3)</sup> RAG-list price ex mine for bituminous small coal after deduction of quantity and patronage discounts, estimated

<sup>4)</sup> Cross border value 1957 - 1973 in EUR / t=t

Sources: Statistisches Bundesamt, Statistik der Kohlenwirtschaft, BAFA, RAG, own calculations

## Glossary

<b>ARA</b>	Amsterdam-Rotterdam-Antwerp	<b>fob</b>	INCOTERM: free on bord
<b>BAFA</b>	Bundesamt für Wirtschaft und Ausfuhrkontrolle	<b>LNG</b>	liquefied natural gas
<b>BEE</b>	Black Economic Europeanment	<b>NAR</b>	coal trade: net as received
<b>capysize</b>	definition for bulk-carrier > 150.000 DWT, due to size not being able to pass the Suez Canal	<b>mt</b>	metric ton
<b>CHP</b>	combined heat and power	<b>Panamax</b>	vessel, able to pass the Panama Canal
<b>cif</b>	INCOTERM: cost-insurance-freight	<b>PCI-coal</b>	metallurgical area: pulverized coal injection
<b>CIS</b>	formerly Soviet Union	<b>sintering coal</b>	low-volatile coal, used in sintering plants
<b>DIW</b>	Deutsches Institut für Wirtschaftsforschung	<b>spot market</b>	trade with contracts, which imply the delivery of electricity on next day
<b>ECE</b>	Economic Commission for Europe	<b>st</b>	short ton
<b>EEG</b>	Erneuerbare-Energien-Gesetz	<b>t</b>	ton
<b>EEX</b>	Energy Exchange, Leipzig	<b>t/a</b>	ton per annum
<b>GVSt</b>	Gesamtverband Steinkohle	<b>tce</b>	coal equivalent per ton
<b>IEA</b>	International Energy Agency	<b>TWh</b>	terrawatt hour
<b>IISI</b>	International Iron and Steel Institute	<b>VDEW</b>	Verband der Elektrizitätswirtschaft
<b>HS-prices</b>	prices for fuel oil heavy	<b>VDN</b>	Verband der Netzbetreiber
<b>kWh</b>	kilowatt hour	<b>WCI</b>	World Coal Institute

## Institutions/Links

<b>AGEB (Arbeitsgemeinschaft Energiebilanzen)</b> <a href="http://www.ag-energiebilanzen.de">www.ag-energiebilanzen.de</a>	<b>EIA (Energy Information Administration)</b> <a href="http://www.eia.doe.gov">www.eia.doe.gov</a>
<b>American Coal Council</b> <a href="http://www.americancoalcouncil.org">www.americancoalcouncil.org</a>	<b>Euracoal</b> <a href="http://www.euracoal.org">www.euracoal.org</a>
<b>Australian Bureau of Agriculture and Resource Economics</b> <a href="http://www.abareconomic.com">www.abareconomic.com</a>	<b>GVSt</b> <a href="http://www.Gvst.de">www.Gvst.de</a>
<b>Australian Coal Association</b> <a href="http://www.australiancoal.com">www.australiancoal.com</a>	<b>IEA (International Energy Agency)</b> <a href="http://www.iea.org">www.iea.org</a>
<b>Australian Institute of Energy</b> <a href="http://www.aie.org.au">www.aie.org.au</a>	<b>National Mining Association</b> <a href="http://www.infomine.com">www.infomine.com</a>
<b>Chamber of Mines of South Africa</b> <a href="http://www.bullion.org.za">www.bullion.org.za</a>	<b>US Department of Energy - Fossil.Energy.gov</b> <a href="http://www.fe.doe.gov">www.fe.doe.gov</a>
<b>Coal International</b> <a href="http://www.coalinternational.co.uk">www.coalinternational.co.uk</a>	<b>World Coal Institute</b> <a href="http://www.wci-coal.com">www.wci-coal.com</a>
<b>DEBRIV (Bundesverband Braunkohle)</b> <a href="http://www.braunkohle.de">www.braunkohle.de</a>	

## Members of VDKI

Member Company	Area Code	Phone	Fax	Homepage
<b>AG der Dillinger Hüttenwerke</b> Postfach 1580, 66748 Dillingen / Saar	(06831)	47-2220	47-3227	www.dillinger.biz
<b>AMCI CARBON GMBH</b> Berliner Straße 101, 40880 Ratingen	(02102)	4295-26	4295-27	www.amciworld.com
<b>Amsterdam Port Authority</b> De Ruijterkade 7, NL-1013 AA Amsterdam	(0031 20)	523 45 77	523 40 77	www.amsterdamports.nl
<b>Anker Coal Company B.V.</b> Vasteland 4, NL-3011 BK Rotterdam	(0031 10)	411 2770	411 4300	www.ankercoal.nl
<b>Antwerp Port Authority</b> Entrepotkaai 1, B-2000 Antwerpen	(0032 3)	2052246	205 22 69	www.portofantwerp.be
<b>Bayer AG Bayer Industry Services GmbH &amp; Co. KG OHG</b> BIS-ED BM, Geb. G11, 51068 Leverkusen	(0214)	3065043	3072755	www.bayerindustry.de
<b>BBC Trading</b> Frankrijklei 119 (5th floor), B-2000 Antwerpen	(0032 3)	470 26 36	470 26 49	www.bcctrading.com
<b>BHP Billiton Marketing AG</b> Jöchlerweg 2, CH-6341 Baar	(0031 70)	315 65 90	315 68 38	www.bhpbilliton.com
<b>BS/ENERGY Braunschweiger Versorgungs-AG &amp; Co. KG</b> Taubenstraße 7, 38106 Braunschweig	(0531)	383-0	383-2644	www.bvag.de
<b>CMC Coal Marketing Company Ltd</b> 7 Bachelor's Walk, Dublin 1, IRELAND	(00353 1)	878 7799	878 7804	www.cmc-coal.ie
<b>Constellation Energy Commodities Group Ltd.</b> 1 Tenterden Street, 4th Floor, London W1S 1TA, U.K.	(0044)	2076 292297	2076 298745	
<b>Douglas Services GmbH</b> Rohrbergstr. 23 b, 65343 Eltville	(06123)	70390	703920	
<b>Duisburger Hafen AG</b> Alte Ruhrorter Str. 42-52, 47119 Duisburg	(0203)	803-330	803-436	www.duisport.de
<b>Electrabel Deutschland AG</b> Friedrichstr. 200, 10117 Berlin	(030)	72 61 53-500	72 61 53-502	www.electrabel.de
<b>EnBW Trading GmbH</b> Durlacher Allee 93, 76131 Karlsruhe	(0721)	63-15419	63-18848	www.enbw.com
<b>Enerco bv</b> Keerweg 2, NL-6122 CL Buchten	(0031 46)	4819900	485 9211	www.enerco.nl
<b>E.ON Kraftwerke GmbH</b> Tresckowstraße 5, 30457 Hannover	(0511)	439-02	439-4052	www.eon-kraftwerke.com
<b>EUROKOR Logistics B.V.</b> Kastanjelaan 8, NL-2982 CM Ridderkerk	(0031 180)	4855555	585533	www.eurokor-logistics.com



<b>Member Company</b>	<b>Area Code</b>	<b>Phone</b>	<b>Fax</b>	<b>Homepage</b>
<b>European Bulk Services (E.B.S.) B.V.</b> Elbeweg 117, NL-3198 LC Europoort Rotterdam	(0031 181)	258 121	258 125	www.ebsbulk.nl
<b>Europees Massagoed-Overslagbedrijf (EMO) bv</b> Missouriweg 25, NL-3199 LB Maasvlakte RT	(0031 181)	37 1111	37 1222	www.emo.nl
<b>EVN AG</b> EVN Platz, A-2344 Maria Enzersdorf	(0043)	2236 20012352	2236 20082352	www.evn.at
<b>Frachtcontor Junge &amp; Co. GmbH</b> Ballindamm 17, 20095 Hamburg	(040)	3000-0	3000-343	www.frachtcontor.com
<b>GLENCORE International AG</b> Baareremattstrasse 3, CH-6341 Baar	(0041 41)	7092000	7093000	www.glencore.com
<b>Großkraftwerk Mannheim AG</b> Marguerestr. 1, 68100 Mannheim	(0621)	8684310	8684319	www.gkm.de
<b>HANSAPORT Hafenbetriebsgesellschaft mbH</b> Am Sandauhafen 20, 21129 Hamburg	(040)	740 03-1	74 00 32 22	www.hansaport.de
<b>HCC Hanseatic Coal &amp; Coke Trading GmbH</b> Sachsenfeld 3-5, 20097 Hamburg	(040)	23 72 03-0	23 26 31	
<b>HMS Bergbau Agentur AG</b> An der Wuhlheide 232, 12459 Berlin	(030)	656681-0	656681-15	www.hms-ag.com
<b>Holcim (Deutschland) AG</b> (formerly Alsen AG). Willy-Brandt-Str. 69, 20457 Hamburg	(040)	360 02-0	36 24 50	www.holcim.com
<b>HTAG Häfen und Transport AG</b> Baumstraße 31, 47198 Duisburg	(02066)	209-112	209 194	www.htag-duisburg.de
<b>Imperial Reederei GmbH</b> Dr. Hammacher-Str. 49, 47119 Duisburg	(0203)	806-336	806 750	www.imperial-reederei.de
<b>Infracor GmbH, VO-EAW</b> Paul-Baumann-Straße 1, 45722 Marl	(02365)	49-04	49-2000	www.infracor.de
<b>L.B.H. Group International Agencies and Services B.V.</b> Rijsdijk 13, NL-3161 HK Rhoon	(0031(0) 10)	5065000	501 34 00	www.lbh.nl
<b>LEHNKERING Reederei GmbH</b> (formerly VTG L.) Schifferstraße 26, 47059 Duisburg	(0203)	31 88-0	31 46 95	www.vtg-lehnkering.de
<b>Mark-E Aktiengesellschaft</b> Körnerstraße 40, 58095 Hagen	(02331)	12 3-0	123-22222	www.mark-e.de
<b>OBA Bulk Terminal Amsterdam</b> Westhavenweg 70, NL-1042 AL Amsterdam	(0031 20)	5873701	6116908	www.oba.bulk.nl
<b>OVET B.V.</b> P.O.Box 1200, NL-4530 GE Terneuzen	(0031 11)	5676700	5620316	www.ovet.nl
<b>Pfeifer &amp; Langen KG</b> Dürener Str. 40, 50189 Elsdorf	(02274)	701-300	701-293	www.pfeifer-langen.com

<b>Member Company</b>	<b>Area Code</b>	<b>Phone</b>	<b>Fax</b>	<b>Homepage</b>
<b>Port of Rotterdam</b> P.O.Box 6622, NL- 3002 AP Rotterdam	(0031 10)	252 1638	252 4041	www.portofrotterdam.com
<b>RAG Trading GmbH</b> Rellinghauser Straße 5, 45128 Essen	(0201)	177-3576	177-3103	www.rag-trading.de
<b>Rheinbraun Brennstoff GmbH</b> Stüttgenweg 2, 50935 Köln	(0221)	480-25210	480-1369	www.energieprofi.com
<b>Rhenus PartnerShip GmbH &amp; Co. KG</b> August-Hirsch-Str. 3, 47119 Duisburg	(0203)	8009-326	8009-221	www.rhenus.de
<b>RWE Power AG</b> Huysenallee 2, 45128 Essen	(0201)	12-01	12-22010	www.rwepower.com
<b>RWE Trading GmbH</b> Huysenallee 2, 45128 Essen	(0201)	12-09	12-17900	www.rwetrading.com
<b>SEA-Invest N.V.</b> Skaldenstraat 1, B-9042 Gent	(0032 9)	255 02 51	259 08 93	www.SEA-INVEST.BE
<b>SSM Coal &amp; Coke GmbH</b> Schifferstraße 200, 47059 Duisburg	(0203)	31 91-0	31 91-105	www.ssmcoal.com
<b>Stadtwerke Flensburg GmbH</b> Batteriestraße 48, 24939 Flensburg	(0461)	487-0	487-1880	www.stadtwerke-flensburg.de
<b>Stadtwerke Hannover AG</b> Ihmeplatz 2, 30449 Hannover	(0511)	430-0	430-2772	www.enercity.de
<b>STEAG Aktiengesellschaft</b> Rüttenscheider Straße 1-3, 45128 Essen	(0201)	801-0	801-2364	www.steag.de
<b>Stinnes AG, STINNES Logistics</b> Rheinstraße 2, 55116 Mainz	(06131)	15-61109	15-61199	www.stinnes.de
<b>Südzucker AG Mannheim/Ochsenfurt</b> Maximilianstraße 10, 68165 Mannheim	(0621)	421-0	421-466	www.suedzucker.de
<b>swb Erzeugung GmbH &amp; Co. KG</b> Theodor-Heuss-Allee 20, 28215 Bremen	(0421)	359-2270	359-2366	www.swb-gruppe.de
<b>Terval s.a.</b> Ile Monsin 129, B-4020 Liège	(0032)	4 264 9348	4 264 0835	www.terval.com
<b>ThyssenKrupp Stahl AG</b> Kaiser-Wilhelm-Straße 100, 47166 Duisburg	(0203)	52-2 57 36	52-26 196	www.thyssen-krupp-stahl.com
<b>Vattenfall Europe Berlin AG &amp; Co. KG</b> (formerly Bewag) Puschkinallee 52, 12435 Berlin	(030)	267-0	267-10719	www.vattenfall.de
<b>Vattenfall Europe Generation AG &amp; Co KG</b> Vom-Stein-Str. 39, 03050 Cottbus	(0355)	2887-2520	2887-2530	www.vattenfall.de
<b>Vattenfall Europe Hamburg AG</b> (formerly HEW) Überseering 12, 22297 Hamburg	(040)	63 96-3770	63 96-3151	www.vattenfall.de

---

## Board of Directors VDKI

### Chairman

Dr. Erich Schmitz  
E.ON Kraftwerke GmbH, Hannover

Manfred Trübenbach  
Vattenfall Europe Hamburg AG, Hamburg

### Vice-Chairman (since 11.5.2006)

Reinhard Seifert  
HCC Hanseatic Coal & Coke Trading GmbH, Hamburg

Rainer Winge (since 11.5.2006)  
Südzucker AG Mannheim/Ochsenfurt, Mannheim

Dr. Ingo Batzel  
ThyssenKrupp Stahl AG, Duisburg

Retired from the board of directors:

Joachim Fehling (- 10.5.2006)

Dr. Wolfgang Cieslik (since 11.5.2006)  
RAG Trading GmbH, Essen

Dr. Christoph Kirsch (- 10.5.2006)  
Südzucker AG Mannheim/Ochsenfurt, Mannheim

Holger Eichentopf  
SSM Coal & Coke GmbH, Duisburg

Willem G. Rottier (- 10.5.2006)  
Anker Coal Company B.V., NL-Rotterdam

Bert Legendijk  
L.B.H. Group, NL - Rhoon

Dirk Schmidt-Holzmann  
TERVAL s.a., B-Liége

Managing Director:  
Dr. Wolfgang Ritschel

---

Publisher:

**Verein der Kohlenimporteure e.V.**

20095 Hamburg, Ferdinandstraße 35

Phone: +49 (0) 40 32 74 84

Fax: +49 (0) 40 32 67 72

e-mail: Verein-Kohlenimporteure@t-online.de

**Internet: [www.verein-kohlenimporteure.de](http://www.verein-kohlenimporteure.de)**

Design & Layout:

Werbeagentur Knopf, Dielheim

(ISSN 1612-5371)

