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The market for solid fuels in the Community in 2002 and 2003

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COMMISSION STAFF WORKING PAPER

The market for solid fuels in the Community in 2002 and 2003

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The following definitions apply in this document:

- Steam coal: coal used for the generation of electricity and heat.
- Coking coal: coal used for the production of coke.
- Metallurgical coal: coking coal plus PCI coal used in the steel industry.
- PCI coal: Pulverised Coal Injection: thermal coal injected into the blast furnaces.

This report has been produced using data provided by the Member states in November 2003 and observations from market participants.

The views expressed in this document do not engage the European Commission.

1. MARKET OVERVIEW

1.1 INTERNATIONAL COAL MARKET SUMMARY

Although the world production and consumption of coal, both for electricity generation and steel production, is growing at a steady pace, the world economic recession of 2001 and its partial recovery during 2002 saw coal consumption fall in 2002 in all regions except the Far East. However, with the strengthening of the global economy in 2003, coal demand and consumption increased more than forecast in most regions, particularly in the Atlantic Basin.

During the second half of 2003, the international coal market changed dramatically following China's unexpected and dramatic increase in domestic demand in both the power generation and steel sectors. These events in China were primarily responsible for an escalation in global freight rates not seen in the past 30 years, particularly for deliveries into Europe.

Delivered prices of steam coal into Europe rose from around \$34.50 at the beginning of 2003 to over \$62 towards the end of the year.

The scale of China's demand growth for imports of raw materials for its booming steel sector, which became evident at the beginning of Q4, 2003, coupled with a government decision at the end of November 2003 to severely curtail steam coal exports because of chronic domestic supply shortages, has thrown into question the level of future export volumes from China of steam coal, coking coal and coke.

It has also started yet another round of further steep freight rate increases in an already record high market.

With exports from Poland possibly set to fall during 2004 and South African shippers reaching their limits, analysts are forecasting a tightness of supply and continuing high price levels in the coming 12 months for all major coal products – steam coal, coking coal and coke.

The level of production fell slightly in most producing countries, particularly Colombia which reduced output by 2 million tonnes, and to a lesser extent South Africa, in an effort by producers to prop up the continuing fall in market price levels in the first half of 2002 in the hope of recovery.

Coal consumption in the European Union totalled some 251 million tonnes in 2002, of which around 207 million tonnes was steam coal for power and heat generation and 44 million tonnes coking coal for iron, steel and coke manufacturing.

Community hard coal output fell by 5 million tonnes to around 73.8 million tonnes and imports fell by 12.8 million tonnes to 180 million tonnes in 2002 from 192.8 million tonnes in 2001.

COMPARISON OF THE MAIN FEATURES OF THE SOLID FUEL MARKET			
(million tonnes)			
	2001	2002	2002/2001
	actual	actual	(%)**
HARD COAL			
Resources			
- Production	78.3	73.8	-5.7
- Recoveries	1.5	1.8	+22.3
- Imports from third countries	192.7	180.0	-6.6
Total	272.5	255.6	-6.2
Deliveries			
- To coking plants	45.6	41.9	-8.2
- To power stations*	183.7	185.2	+0.8
- To others	24.9	23.7	-4.9
- Exports to third countries	0.7	0.5	-21.7
Total	254.8	251.3	-1.4
COKE			
Resources			
- Production	34.0	29.3	-14.0
- Imports from third countries	10.4	9.6	-8.3
Total	44.5	38.9	-12.7
Deliveries			
- To steel industry	38.9	34.4	-11.4
- Other deliveries within the Community	4.7	4.0	-15.0
- Exports to third countries	0.0	0.4	+814.7
Total	43.6	38.8	-10.9
LIGNITE			
Resources			
- Production and imports	254.1	263.6	+3.7
Deliveries			
- To briquetting plants	13.9	13.8	-0.9
- To power stations	239.8	246.4	+2.8
- Others (incl. exports to third countries)	1.7	1.5	-13.1
Total	255.5	261.7	+2.5
PEAT			
Resources			
- Production and imports	13.0	n.a.	
Deliveries			
- To briquetting plants	0.0	n.a.	
- To power stations	8.9	n.a.	
- Others (incl. exports to third countries)	3.1	n.a.	
Total	11.9	n.a.	

(!) The sums may not add up due to rounding. n.a.: Not available

* Including industrial and pithead power stations

1.2 STEAM COAL: MARKET SUMMARY

1.2.1 European Demand

In Europe, 2002 started with a depressed market for steam coal, with low demand and prices hitting lows of \$34.50 CIF ARA. Coal stocks were rising, with UK buyers dropping 5 million tonnes of imported tonnage in 2002 to 21.96 million tonnes, following record imports in 2001 of 27.1 million tonnes – up from 13.8 million tonnes in 2000.

Buying in Germany slowed down with steam coal imports falling by 2%, but an increase in coking coal imports kept total imports more or less the same as in 2001 at 31 million tonnes.

Spain was the only significant buyer in Europe to increase imports in 2002 because of poor hydro availability, with imports increasing to 19.8 million tonnes from 13.1 million tonnes in 2001. During the course of 2003, however, hydro levels hit almost record highs accounting for around 23% of power generation in the first five months.

As prices continued to fall in North-West Europe during the first half of 2002, Poland announced that it would not sell below \$25 per tonne FOB. Delivered ARA price levels bottomed out at around \$25.80 per tonne.

Depleting stocks and sudden buyer nervousness that further price decreases would not be sustainable lead to sudden buyer activity in the market in the second half of 2002. Over a period of three weeks, the trend was reversed, with prices increasing over \$3 per tonne from around \$31.10 per tonne to \$34.60 per tonne in early October 2002.

Table 1: Demand for Steam Coal Imports in the EU (in million tonnes)

Country	2001	2002	2003 (estimate)	2004 (forecast)
Belgium	5.38	4.38	4.98	4.48
Denmark	6.87	6.07	8.07	7.32
Finland	4.50	4.40	7.15	6.15
France	7.42	8.32	8.82	8.82
Germany	22.52	21.72	22.72	22.72
Greece	0.82	0.82	0.82	0.82
Ireland	2.88	2.88	2.88	2.88
Italy	12.51	13.71	15.21	15.21
Netherlands	11.78	9.08	10.08	9.58
Portugal	5.33	5.53	5.03	5.03
Spain	13.14	19.84	18.34	19.34
Sweden	1.12	1.02	1.22	1.02
UK	27.16	21.96	23.96	26.96
Total	121.43	119.73	129.28	130.33

Source: McCloskey's Steam Coal Forecaster

The cold winter of 2002/2003 in most of Europe, including Germany, Scandinavia, the UK and Eastern Europe, coupled with a dry winter in Spain, kept prices propped up at \$34.50/\$35 CIF ARA throughout the first quarter of 2003.

Apart from a reduction in Spain's coal demand due to the return of hydro in the first quarter of 2003, everywhere else in Europe the buyer shortage became more and more acute. With a hot summer throughout Europe increasing the demand for air-conditioning in the second and third quarters and low river levels causing French nuclear power plants to cut generation capacity, coal demand for the additional electricity requirement rose sharply.

In Scandinavia also, where the hydro situation was the opposite of that in Spain, buyers remained active. Prices did not stop increasing, reaching levels of around \$62 CIF ARA in early December 2003. This was largely due to the escalating freight rates, which reached historic levels, as well as additional demand in the Atlantic Basin.

1.2.2 Supply into Europe

The supplier response to the increased European growth has been realised most dramatically from Colombia, which increased production by almost 10 million tonnes to around 46 million tonnes during 2003. Of this, around 5 million tonnes has been shipped into Europe as producers strove to take advantage of the lucrative market. The balance has gone into the growing US import market.

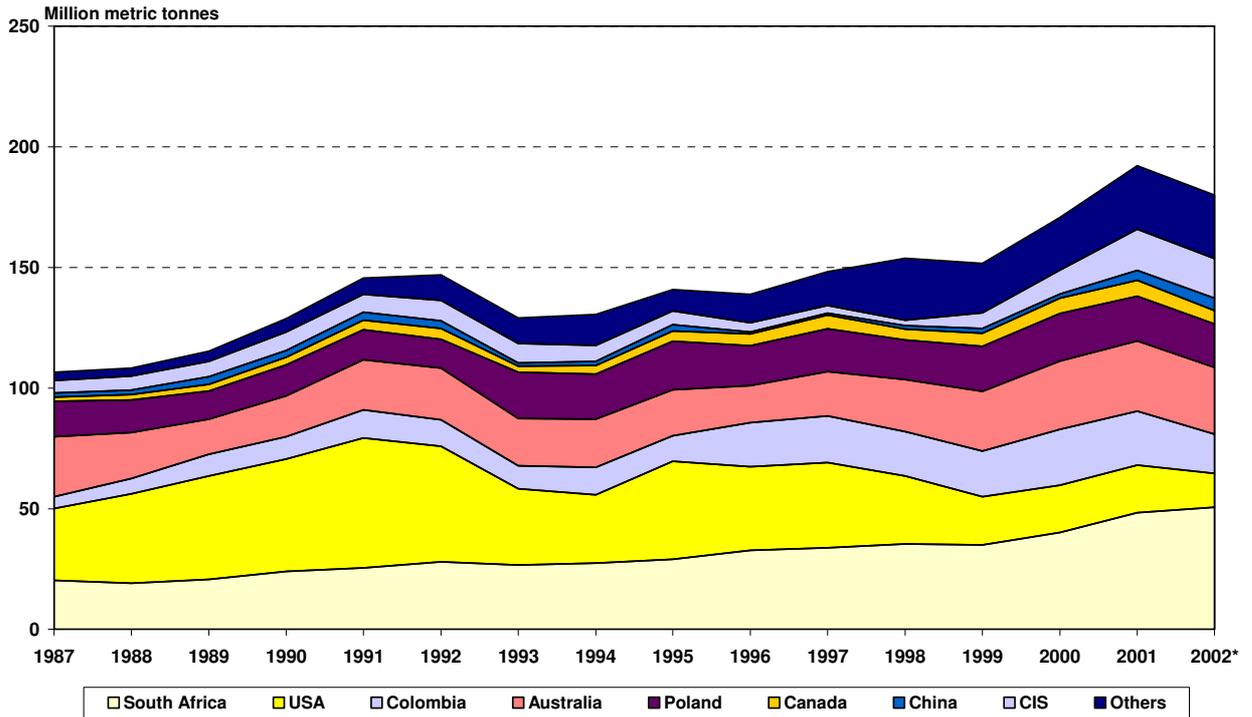
Other suppliers have been struggling to meet the European demand growth, with the South African railway infrastructure problems continuing and the ownership changes in Russia affecting the expansion of export volumes.

The coal restructuring programme in Poland which is accelerating production cuts to meet new requirements following the country's accession into the EU in May 2004, may well lead to exports being cut during 2004-2005. This will undoubtedly create greater supply opportunities, particularly for Indonesian and Australian coal, although Indonesia is reported to be nearing its production capacity limits.

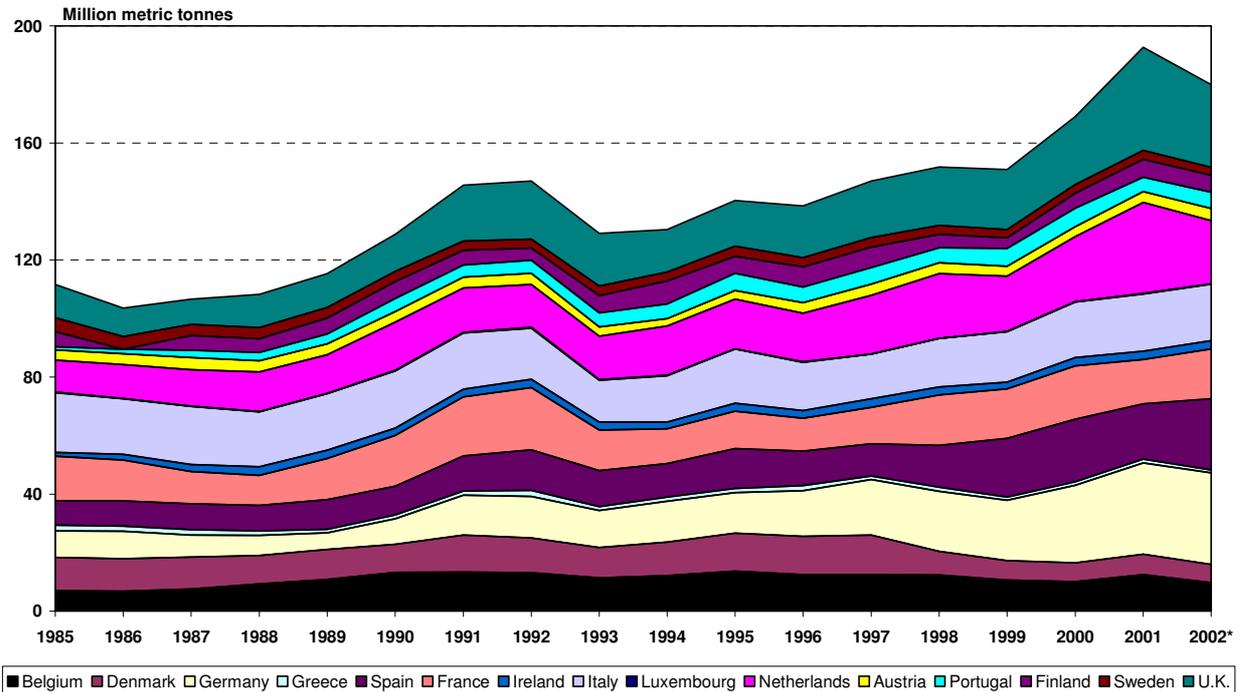
Although the price hikes were not as marked in the Asian region as in Europe up to the end of 2003, Australian and Indonesia FOB levels nevertheless increased in line with additional demand from Japan as buyers built up stocks prior to the introduction of the Coal Tax on October 1. In addition, with the Japanese nuclear plants back in operation, coal demand is expected to dip with additional tonnage available for the European market, probably at lower FOB prices.

However, with the recent events in China, analysts are now forecasting a tightness of supply in both the Asian region and Atlantic Basin, with sustained high price levels for both steam and coking coal deliveries into Europe.

Origin of hard coal imports into the European Union



Coal imports into EU-15 : by importing Member state



1.2.3 Freight Increases

The speed at which freight levels rose during the second half of 2003 took the international market by surprise. This has been driven primarily by the steel boom in China, which has seen demand for iron ore imports rise during 2003 by some 37 million tonnes (from around 111 million tonnes in 2002 to what is forecast to total somewhere between 145 million tonnes and 152 million tonnes in 2003). This level of import requirement was not foreseen by the market.

Similarly steel production in China has increased from 180 million tonnes in 2002 to around 210 million tonnes in 2003. With an additional 20 million tonnes of new blast furnace capacity coming on-stream in China in 2004 and the government's commitment to expansionist policies, it looks unlikely that freights will ease for some time.

Other factors instrumental in keeping freight rates high have been the overall global increase in the seaborne trade of iron ore and grain, and the increase in coal demand in the Atlantic Basin, particularly the rise in import volumes into Europe and the United States.

Nevertheless, during the early part of the fourth quarter of 2003, a majority of market analysts were forecasting that demand and price levels would ease, driven by signs of a lack in demand growth for 2004, particularly in the Far East and also, to a certain extent, in Europe.

1.2.4 Asian Demand

Demand in Asia was looking very low from the 4th quarter of 2003 and into 2004 as Japan was set to cut back on coal imports in 2004 with the re-commissioning of Tokyo Electric's five nuclear power stations, following their closure for safety reasons.

Japan was also expected to have very high stocks from the 4th quarter 2003 onwards, with buyers building stocks before the coal tax took effect in October 2003. This tax is designed to force power generators to switch to alternative fuels as part of the country's commitment to the Kyoto Protocol. As a result of this tax, Australia exported an extra 5/6 million tonnes into Japan during 2003.

However, the freight market has remained strong. In addition, there has been a sudden announcement in early December 2003 by key Chinese exporters that they had to cut back heavily on exports, with immediate effect, following government pressure to pump all available supplies into the domestic power generation market. With supply from Indonesia already stretched, this put substantial pressure on Australian producers to sell fast every tonne they could produce, particularly to power generators in Korea and Taiwan, pushing Australian FOB price levels to between \$40 and \$42 at the beginning of January 2004. It is now highly likely that international prices may remain high for some time to come as international availability becomes more strained.

Coal analysts say that the two main features which have driven up the international demand for steam coal during 2003 - Europe's historic long, hot summer and the temporary shut-down of Japan's nuclear power plants - will have increased international demand by almost 40 million tonnes to around 440 million tonnes. This higher than expected demand growth created a growing shortage of supply in the second half of the year, with most exporters unable to keep up with extra shipments.

In Europe, the poor hydro availability not only hit the Scandinavian countries but also France, Germany, Italy and Switzerland, along with the cross-border sales of electricity. As a result, coal-burn and coal imports surged, particularly in Scandinavia, the UK and France, with the growth in imports into the EU countries set to show an increase of more than 5 million tonnes in 2003. However, buyer activity in the EU appeared to have calmed down during the 4th quarter of 2003 as the dramatic increase in international freight rates throughout the third and fourth quarters failed to subside, keeping delivered prices into ARA for 6,000kcal/kg product well above \$60 per tonne.

1.3 COKING COAL – MARKET SUMMARY

For hard coking coal importers, 2002 was a tough year, but perhaps not as difficult as the coming one will prove to be. With freight rates at an all-time high and hard coking coal availability set to become even tighter than recently forecast, hard coking coal prices into Europe are currently estimated to increase to \$80 per tonne for 2004/2005 deliveries.

The current scarcity of hard coking coal supplies began during 2002, when seaborne demand grew in line with the expansion of crude steel production. Export supply to EU countries fell by just over 4 million tonnes on 2001 levels, but fortunately, demand was also down by some 3.5 million tonnes during the same period.

While crude steel production was down in the EU and North America, there was a 7% growth, totalling 916 million tonnes, in all other iron making regions, with China accounting for a significant share.

The rate of growth in pig iron output for 2002 was slightly lower than for crude steel, while hot metal output reached close to 596 million tonnes in 2002, or 34 million tonnes above 2001 levels.

World demand for seaborne imported hard coking coal increased over 2 million tonnes in 2002 to 114 million tonnes (excluding semi-soft and semi-hard coking coals), up from 112.5 million tonnes the previous year.

In sharp contrast, world export supply fell by 6.3 million tonnes to only 106.8 million tonnes on 2001 levels, according to statistical data compiled by McCloskey's Metallurgical Coal Quarterly (MCQ). The biggest export shortfalls came from the United States with over 4 million tonnes, Canada at 3 million tonnes and Australia with almost 1 million tonnes less available for world markets.

1.3.1 *EU Coking Coal Demand*

World trade for imported coal for coke making, which includes trade in all seaborne and overland coking coal (excluding PCI) was 168.8 million tonnes in 2002, with EU demand totalling 38 million tonnes in 2002 and forecast to be around 36.2 million tonnes in 2003.

However, the effect of further possible reductions in blast furnace capacity within the EU will be to reduce the requirement for imported coal for coke making. By 2005 the EU's requirement is expected to fall to slightly under 38 million tonnes, compared to 43.2 million tonnes in 2000. This assumes the closure of one more integrated steel mill in the UK during 2004/2005, resulting in a loss of 3 million tonnes of iron making capacity and the associated production of coke. Imported coking coal in the period 2002 to 2005 in the EU is forecast to be fall by 2.5%

Coking coal production in the EU is limited, with Germany the only country producing any substantial amounts of indigenous coking coal. This totalled 5.75 million tonnes in 2002 and is estimated at 5.5 million tonnes in 2003. The UK produces some 500,000 metric tonnes.

The levels of imports into the EU for both coking coal and pulverised coal injection (PCI) coal in 2002 totalled 47.8 million tonnes, a drop from 50.4 million tonnes in 2001. This is forecast to increase again to 49.7 million tonnes in 2003, according to McCloskey's Metallurgical Coal Quarterly (MCQ).

The principal driving factor for the fall between 2000 and 2003 was the decline in pig iron output, which fell to 89.484 million tonnes in 2002 from 89.714 million tonnes in 2001. During this period, many European steel mills used increasing amounts of blast furnace coal injection, which meant that one kilogramme of coal replaced 1 kilogramme of coke, or around 1.4 kilogrammes of coking coal that would be required to make the coke. The result is a disproportionate drop in the amount of coking coal used as coal injection goes up.

In the EU, pig iron output increased in 2002, compared to 2001, in France (+10%), Austria (+6.7%), Belgium (+3%), Sweden (+2.5%), Netherlands (+1.4%) and Germany (0.8%). Production decreased by 3.1% in Spain and 13% in the UK with the closure of the 2.5 million tonnes blast furnace at the iron making plant at Llanwern.

A number of large steel companies, such as Arcelor, have published plans outlining that they will not continue operating certain blast furnaces at various points in time during 2004 to 2008. For example, Arcelor intends not to continue production at one or more of its smaller furnaces at plants in Florange.

In Germany there is consideration currently being given by the industry to the possibility of constructing a new coke oven plant close to the North Sea. This would go some way to offsetting possible closures under consideration elsewhere.

Total metallurgical coal usage in the EU fell to 54.6 million tonnes in 2002 from 58 million tonnes in 2001, although it is estimated to increase to 57 million tonnes in 2003. However, it is not likely that the usage will continue to rise due to the fact that most blast furnace operators in the EU aim to decrease the amount of coke usage in the blast furnace, generally referred to as the “coke rate per tonne of hot metal”. This is being achieved by increasing the amounts of PCI coal, with coal replacing coke directly.

Also, with one exception, as there are no plans to build or commission new coke ovens, the projected trend into the future is to import more coke and less coking coal.

1.3.2 Metallurgical Coal Supply to the EU

In calendar 2002 shipments of metallurgical coal to EU countries dropped 14% or 3.2 million tonnes compared with 2001 levels of nearly 20 million tonnes.

Of the four major supplying countries – Australia, Canada, the US and Poland, Australian hard coking coal imports into Belgium, Finland, Germany and the Netherlands were up on 2001 volumes. All other countries took less tonnage, with the UK down by almost 1 million tonnes.

Canada’s global metallurgical coal exports dropped 11% to approximately 23 million tonnes in 2002. Deliveries to EU customers fell by 1% on 2001 levels to 5.8 million tonnes

Total US shipments fell 15% or 3.5 million tonnes to 19.5 million tonnes in 2002. The biggest fall was in deliveries to the EU, which dropped 22% to approximately 9.6 million tonnes

Poland’s metallurgical coal exports totalled 2.9 million tonnes in 2002, including hard and semi-soft coking coals, or 2% down on 2001 levels. However, exports into the EU increased by some 15% to just over 1 million tonnes. For 2004/05 deliveries, exports of hard coking coal are expected to total around 1.6 million tonnes. Poland’s biggest customers are: Finland, which imported over 400,000 tonnes in 2002; France, with around 230,000 tonnes; Germany, with about 170,000 tonnes and Spain with some 145,000 tonnes.

1.3.3 Price Trends

As concerns pricing levels and fluctuations in metallurgical coal traded, the 2003/04 delivered levels saw decreases of \$2.00 FOB per tonne from the previous year.

Canadian and Australian mid-volatile product fell in the range of \$43/46 FOB per tonne for delivery the financial year 2003/04.

Similarly, PCI coal also fell around \$2.00 per tonne to \$31/33 FOB per tonne in the same timeframe. However, with China becoming an importer for PCI coals, all signs point to a price increase in 2004.

US high volatile metallurgical coke strengthened to around \$55 FOB per tonne, while the low volatile product stayed unchanged at \$52/53 FOB per tonne.

The higher calorific value 6,700kcal/kg PCI steam coal prices also rose by around \$1.00 in 2003 compared to 2002 levels and a further price hike is forecast for 2004 as an increasing number of mills favour the ultra low volatile coals from Australia.

The mills are not only using more PCI coals to replace coke but are also turning to the low volatile coals. This is due to the fact that they get better replacement ratios; they can use more low volatile than high volatile product in the blast furnace and, as a result, use less coke.

Signs started to emerge in the market during the course of 2003 that coking coal prices would increase in 2004 due to the tightness of supply in Australia, the US and Canada. The crucial question in Europe is what US exporters do.

US internal prices are currently high. Although there are indications that US coking coal exports may be strengthening, if coking coal prices stay high in the US, more tonnage may be sold into the domestic market. This will mean that less is available for export, with a repeat of 2002 when similar circumstances caused exports to fall over 3 million tonnes compared to the year before.

The sudden rise in freight rates during Q3 and Q4 of 2003 has obviously also had a dramatic effect on the delivered prices of coking coal into the EU. The market was already relatively tight for hard coking coal, as well as PCI and semi-soft product, and it could become even tighter in 2004 and 2005 if China continues to import steel-making raw materials at the rate it has been doing throughout 2003. Many coking coal exporters believe this could be the case, with the market preparing itself for substantial price hikes in the 2004 negotiations.

Supporting this forecast also is the emergence of Russia, the Ukraine and the US as significant coking coal importers. Some suppliers believe that China and the Ukraine could together import around 6 million tonnes in 2004, absorbing nearly all additional export capacity.

Traders and some steel mill operators are also saying that there are indications that coke exports from China could be severely cut back to around 10 million tonnes in 2004 from some 16 million tonnes in 2003. This is already sending coke prices to over \$170/\$180 per tonne.

With the steel boom in China intensifying and China holding back coke supplies for its own consumption, its imports of hard coking coal are also increasing. From nearly 3 million tonnes in 2003, some suppliers believe that Chinese imports could reach in excess of 5 million tonnes in 2004 and even balloon to 10 million tonnes in 2005. According to the Chinese Iron and Steel

Association, China's iron making capacity is forecast to reach 391 million tonnes by 2010, compared to the 2003 output of about 190 million tonnes.

With the global economic recovery on the back of clear signs of the US economy regaining strength, analysts see good output growth in global iron and steel production in 2004. Apart from the EU, demand also looks strong, with growth for steel expected to reach nearly 5%.

In line with the rise in FOB prices of steam coal in the second half of 2003, PCI coals have also climbed some \$3 to \$5 per tonne to between \$31 and \$33 FOB per tonne. Further increases are expected for 2004/5 deliveries into Europe. While Australian low-vol PCI into Europe is expected to rise by about \$3 FOB per tonne, South American and South African PCI and semi-soft product is forecast to increase by between \$4 and \$6 FOB per tonne.

With US domestic coking coal prices maintaining a high of almost \$40 per tonne FOB, in normal freight market circumstances this would most certainly take the bulk of US supply off the market. However, with freight differentials for shipments into Europe between the US, Australia and Canada at over \$15 per tonne (October 2003 freights from Australia to Rotterdam stood at around \$34 per tonne and from the US to ARA at about \$20 per tonne), the US may gain some ground in the European market over their Australian rivals, despite capacity constraints.

US hard coking coal FOB prices into Europe are forecast to rise by more than \$5 per tonne in 2004/5, to around \$55/\$58 per tonne. These increases will particularly concern the high-volatile product, which fetched \$60/\$63 CIF in 2003/2004.

With a freight increase of some \$10 per tonne, from \$9.50 to \$19.75 per tonne for October 2003, the delivered price of US hard coking coal into ARA could hit \$75-\$78 per tonne or more to compete with the Australian price levels.

Australian suppliers are also expected to seek FOB increases of around \$5 per tonne for most brands and although the Canadians are expected to follow suit, their export recovery is taking longer than expected. With the freight levels seen in the 4th quarter of 2003, this could mean CIF ARA prices of around \$80 per tonne for Australian hard coking coal for deliveries into the EU in 2004/2005.

The volume of crude steel production in the EU has fluctuated over the past 4 years. While there was a substantial increase from 155.1 million tonnes in 1999 to 163.2 million tonnes in 2000, production dropped to 159.1 million tonnes in 2002. (*Source: Eurostat*). With the current recovery in the steel industry, production is forecast to increase again to some 160.6 million tonnes in 2003, with a further increase expected in 2004. (*Source: IISI and MCQ*).

Crude steel output in 2003 rose in all EU countries from the previous year, except for Belgium and Portugal and Spain which showed minor decreases.

Table 2. EU Crude Steel Output (million tonnes /year)

COUNTRY	2003	2002
Austria	6.26	6.19
Belgium	11.14	11.34
Denmark	0.00	0.39
Finland	4.77	4.00
France	19.76	20.26
Germany	44.81	45.02
Greece	1.70	1.84
Italy	26.70	26.07
Luxembourg	2.68	2.72
Netherlands	6.57	6.12
Portugal	0.73	0.92
Spain	16.47	16.41
Sweden	5.71	5.75
UK	13.268	11.67
EU TOTAL	160.550	158.689

Source: IISI, MCQ

2. THE EU MARKET

2.1 THE ECONOMIC SITUATION IN 2003 AND THE OUTLOOK FOR 2004

After bottoming out in the first half of 2003, the economies of the euro area and European Union turned around in the second half of the year. EU GDP did not grow at all (quarter on quarter) in the first and second quarters of 2003. The average growth rate for the year as a whole is estimated to have been 0.8%. For the euro area, the rebound was driven by a surge in the growth of exports, while the growth-contribution of domestic demand was negative. World GDP growth is estimated to have been stronger-than-expected at 3.7% in 2003. The momentum of global trade boosted by buoyant world economy partially offset the impact of the strong euro. The contribution of net exports to growth in the second half of the year is neutral. Domestic demand somewhat took over in the last quarter of 2003 as the engine of growth in the last quarter of the year. Investment picked up, breaking a prolonged downward trend. However, lacklustre private consumption provided no impulse to growth, except in countries outside the euro area. A rebound to average growth rates of 2% for the EU is projected for 2004, levelling off at around 2.4% in 2005. Apart from the external stimulus from global demand, the main factors behind the outlook for the recovery include accommodative macroeconomic policy conditions, continued disinflation, supportive financial conditions, and progress in structural reforms.

Monetary and financial conditions have remained supportive in 2003. The ECB cut short-term interest rates to 2.5% in March and to 2% in June 2003. After having declined to about 3.5% in June 2003, long-term interest rates rose strongly as a result of receding deflation fears and evidence of stronger growth around the world and levelled off later on to about 4% at the end of the year. The euro appreciated further against the US dollar to a peak of 1.27 USD in the fourth

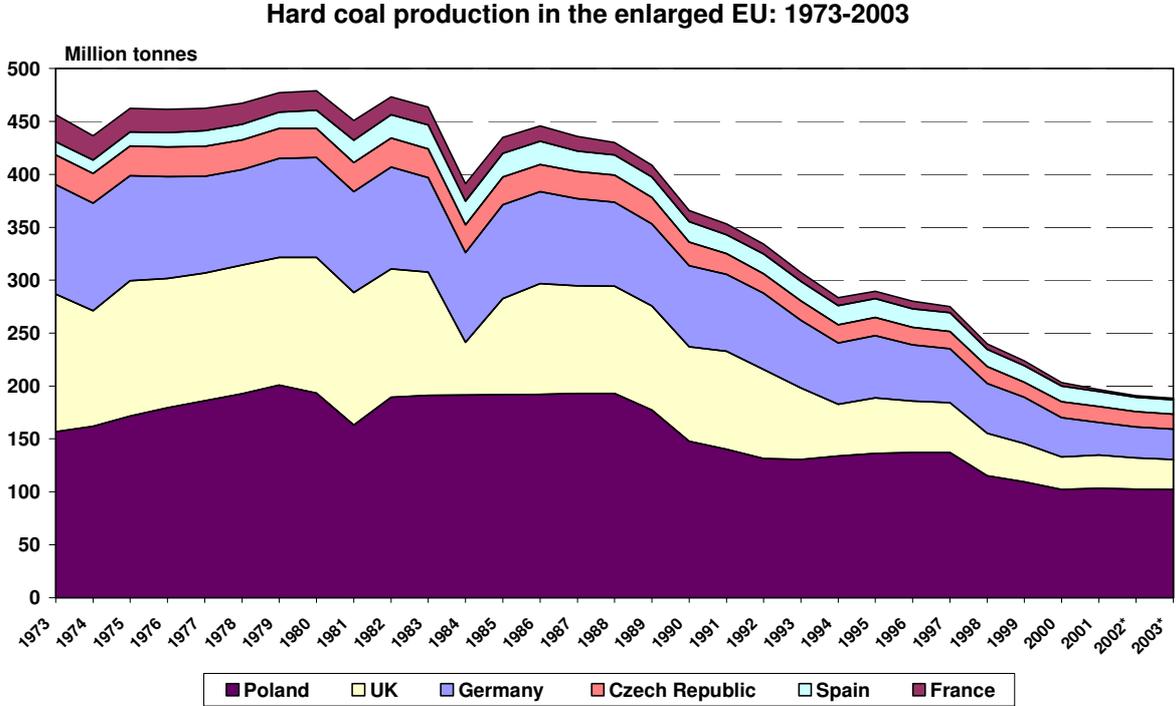
quarter and declined subsequently. Corporate bond spreads dropped to very low levels in the second half of the year against a background of a return of confidence.

Core inflation hovered around 2% in the course of 2003, after the declining trend of 2002. Headline inflation was also sluggish at around 2% and even temporarily peaked at 2.4% in the first quarter of 2003, reflecting price increases in energy and unprocessed food. The average inflation rate in 2003 was 2.1% in the EU. Inflation is nevertheless expected to decelerate to 1.8% in 2004 as a result of the lagged effects of the euro appreciation and weak domestic price pressures. It should decrease further to 1.6% in 2005.

The European Union **unemployment** rate stabilised at 8% in the second quarter of 2003. No jobs were lost in net terms in the recent downturn and the performance of the labour market is encouraging in comparison to previous cycles. In line with the gradual nature of the recovery and the usual lagged response of the labour market, more than half a million jobs are expected to be created this year. However, this figure should more than double in 2005 as the recovery gathers pace. The EU unemployment rate is expected to remain broadly stable at 8.1% in 2004, before edging downwards in 2005. Unit labour costs rose above trend in recent years as growth of compensation increased and labour productivity fell. With the recovery gaining momentum, the cyclical pick-up of labour productivity, from 0.5% in 2003 to about 1.4% in 2005, should allow for a deceleration of unit labour costs.

The EU-wide government budget deficit deteriorated from 2% in 2002 to 2.6% of GDP in 2003. The main explanation for the deterioration in the budgetary position is the cyclical downturn; the budgetary stance in the euro area (measured by the change in the cyclically adjusted primary balance) was broadly neutral in 2003. The deficit is expected to remain stable at 2.6% of GDP in 2004, before declining marginally in 2005.

2.2 HARD COAL PRODUCTION IN THE EU.



2.2.1 *France*

Hard coal production in France, under the umbrella of state-owned company Charbonnages de France (CdF), is diminishing rapidly in accordance with the National Coal Pact agreed in 1994. Only some 1.5 million tonnes were being extracted in 2003, roughly comparable to that in 2002. With the closure of the *Merlebach* mine in the Lorraine in November 2003, only the *La Houvre* deep mine is still in operation. This is scheduled to close during 2004, with CdF expected to wind up its operation by 2007.

Employment has fallen to 4,071 workers in 2003, from 4,850 in 2002 and 5,935 in 2001.

2.2.2 *Germany*

As one of Europe's major coal producers and consumers, Germany's domestic hard coal production continues to diminish with a total of 29.2 million tonnes produced in 2002, a drop of 3.6% on the previous year. A similar level is expected for 2003.

Parallel to the continuing decrease in production, employment levels in the industry fell to 48,700 in 2002, a drop of 7.4% on the previous year. By mid-2003 employment had dropped further to 46,640.

The German hard coal industry restructuring programme is continuing as planned with 10 deep mines currently in operation. The plan foresees that, by 2005, production to be in the region of 26 million tonnes.

2.2.3 *Spain*

Spain's produced 13.6 million tonnes in 2002, down from nearly 14 million tonnes the year before. Opencast production increased from 4.8 million tonnes to just over 5 million tonnes, while underground production decreased by 600,000 tonnes to 8.6 million tonnes.

The main mining regions in Spain are located in the Asturias, Leon and Palencia regions, which contain around 98% of the country's reserves of hard coal.

Employment in the hard coal sectors dropped to 13,450 workers in 2003, from 13,826 in 2002 and 15,409 in 2001.

2.2.4 *United Kingdom*

Although prices started strengthening during 2002 from the previous year and have continued to do so throughout 2003, UK coal producers are still facing a number of challenges. Some deep mines have had to close because of geological problems, faults and continued financial losses. The largest of these is the Selby Complex, owned by UK Coal and located in North Yorkshire. Consisting of three related mines, the complex produced a total of more than 7 million tonnes of steam coal per annum, making it the largest coal complex in Europe. The entire operation will close by spring 2004.

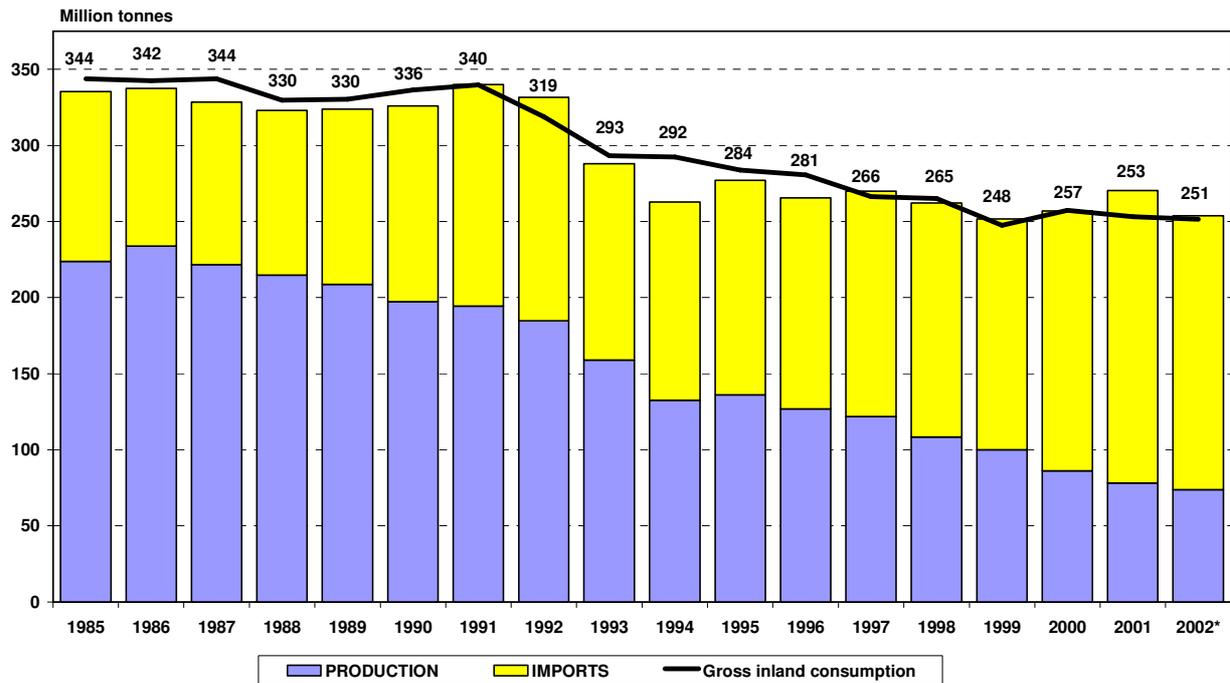
In 2002 total domestic production was 29.5 million tonnes, of which 16.4 million tonnes came from deep mines and 13.4 million tonnes from open cast pits, representing a slight decline on the 2001 figure of 31.5 million tonnes.

During the first six months of 2003, production has maintained a steady pace and is expected to be down by around 3% on the first half of 2002.

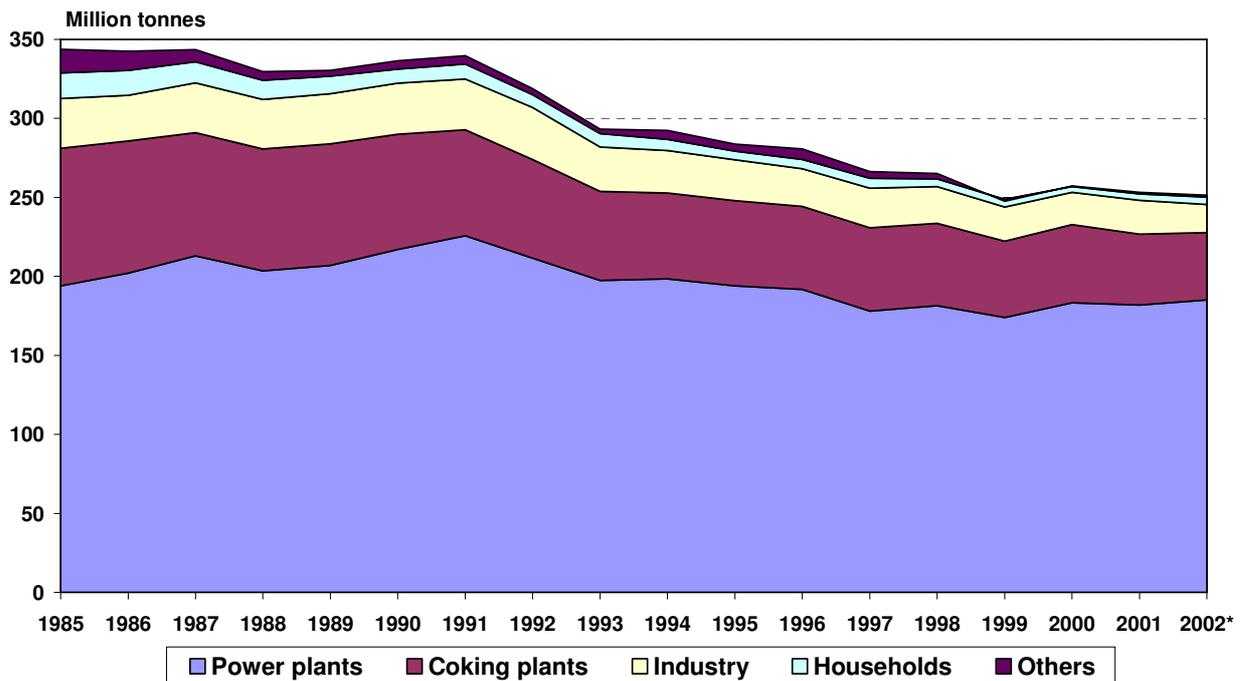
Total production estimate for 2003 is expected to be in the order of 28.5 million tonnes, about 1 million tonnes less than the previous year.

Employment has been diminishing from 11,439 in 2001 to 9,578 in 2002 with a further fall to 7,650 in 2003.

Production, imports and gross inland consumption of hard coal: EU-15



Gross inland consumption of hard coal in EU-15



2.3 EU COUNTRY PROFILES

2.3.1 *Austria*

All of Austria's coal requirements are imported. In 2002 imports totalled 4.1 million tonnes, of which 1.8 million tonnes was steam coal for electricity production. A slight increase is expected for 2003 due to the hot European summer and increased power demand.

Coking coal imports reached 2,3 million tonnes in 2002 with the only consumer being the VOEST-Alpine steel works in Linz and Donawitz.

Lignite production and consumption in 2002 was around 1.4 million tonnes, contributing only some 3% of the country's total power generation. However, the main producing mine in western Styria is expected to close by the end of 2004, with a further undertaking closing by the end of 2006.

Poland is the main supplier to Austria of both steam and coking coal with imports in 2002 totalling 1.5 million tonnes for steam coal; in excess of 798,000 tonnes for coking coal and some 401,000 million tonnes for coke.

2.3.2 *Belgium*

Belgium imported a total of 9.7 million tonnes of hard coal in 2002, with steam coal totalling 6.35 million tonnes and coking coal some 3.36 million tonnes. For coking coal this represented a drop from 4.2 million tonnes the previous year due to a decrease in steel production and for steam coal a fall from 8.3 million tonnes in 2001. Main suppliers continue to be South Africa and Australia for steam coal and US and Australia for coking coal.

Belgium's overall coal burn may come down further in 2003, with the completion of Electrabel's Twinerg CCGT plant expected in the second half of the year.

2.3.3 *Denmark*

The two main steam coal importers into Denmark, E2 Energi and Elsam imported a total of 5.9 million tonnes in 2002; Elsam 3.8 million tonnes and E2, 2.1 million tonnes which was basically unchanged from the year before.

For 2003, both companies expect consumption and imports to increase; E2 to 2.8 million tonnes and Elsam to 4.8 million tonnes. The extra consumption of some 1 million tonnes for Elsam is largely due to 0.4 million tonnes being taken by the new 600MW Ensted power plant in Denmark which used to be jointly owned by Elsam and Eon, but is now fully owned by Elsam. The balance of the increase will be due to making up for the lack of hydro power.

As in the case of E2, about 50% of Elsam's imports come from Poland and Russia and the balance mainly from South Africa and Colombia.

E2's increase is a result of the re-conversion of one unit from orimulsion to coal in the mid-2003. This unit has to go out for a "life extension overhaul" in order to extend its operation for an additional 15 years. It is not certain yet whether orimulsion may be used again at this unit, but coal will replace it for at least the second half of 2003. No other utility burns orimulsion in

Denmark and at the end of 2003, a decision will be taken as to whether to continue orimulsion deliveries to Denmark or not.

As in the case with Elsam, the rest of E2's increase is due to lack of hydro energy which persisted well into 2003 following the long, hot European summer. With wind power also down in Denmark and Germany, demand by Denmark's coal-fired plants may be even greater in 2003 than estimated.

While steam coal imports were well over the 4 million tonnes mark in the first half of 2003, Denmark's electricity production was nearly 25% higher in the first half of 2003 on last year's levels, as its power exports continue to increase into northern Scandinavia and Germany.

2.3.4 *Finland*

Like its other Scandinavian neighbours, Finland has suffered a chronic shortage of hydro power. Coupled with a drop in electricity imports of more than 60% and low coal stocks, this has caused steam coal imports to surge during 2003. Forecasts estimate total steam coal imports for 2003 at more than 7 million tonnes, compared to 4.52 million tonnes in 2002.

Coking coal imports have been increasing to an estimated 1.5 million tonnes in 2003, from 1.26 million tonnes in 2002 and 1.47 million tonnes in 2001. Imports of coke have also gone up from 292,000 tonnes in 2001 to 476,000 tonnes in 2002 with a similar level forecast for 2003. However, with the ongoing steep rise in coke prices on the international market, the 2003 import figure could be lower.

Even though Finland continues to take supplies from a wide range of diverse sources such as South Africa, Indonesia, Colombia and Norway, the main traditional suppliers Poland, with 1.3 million tonnes, and Russia, with 2.4 million tonnes in 2002, continue to hold prime position.

Coal, demand in 2004 will depend highly on weather conditions restoring hydro supplies in the Scandinavian region, along with power imports from Norway.

2.3.5 *France*

With coal-fired electricity production largely replaced by nuclear power, coal makes up only around 5% of the country's primary energy consumption, with nuclear taking 39% of the share followed by oil 35% and natural gas 15%.

With its domestic production of hard coal now only around 1.5 million tonnes, France imported a total of 17 million tonnes in 2002, an increase of nearly 2 million tonnes on the previous year. About 8 million tonnes was for power generation, some 9 million tonnes for the steel sector and 2 million tonnes for industry.

Key supplying countries were South Africa, Australia and the US.

2.3.6 *Germany*

In 2002, hard coal consumption in Germany totalled around 62 million tonnes, of which 53 million tonnes was steam coal for the power generation and heating markets and almost 8 million tonnes of coking coal for the steel industry. Indigenous hard coal production was 29.2 million tonnes, while just over 27 million tonnes of steam coal and around 4 million tonnes of coking coal was imported, roughly similar to that in 2001.

However, because of a decrease in power imports and poor nuclear and renewables generation during the summer, it is estimated that coal-burn could increase by about 5% and imports by around 1 million tonnes in 2003.

Even though the transportation of imported coal within Germany experienced difficulties throughout the summer of 2003 because of the severely low river levels, inventories in Germany have been sufficiently high to cope with the problem. The main suppliers to German power stations are Poland, South Africa and Colombia.

Lignite production in 2002 totalled 181.8 million tonnes, of which 168.1 million tonnes went into the power generation market.

2.3.7 *Greece*

With a large lignite industry, Greece uses only about 1 million tonnes of steam coal for its cement industry, all of which is imported. These imports declined from 1.4 million tonnes in 2001 to about 900,000 tonnes in 2002 and are expected to increase slightly to 1 million tonnes for 2003.

Lignite production is currently about 70 million tonnes per annum from 5 open-cast mines, and this contributes to about 70% to total electricity production.

Greece does not have integrated steel mills so does not import raw iron ore and coking coal for blast furnace production of steel. Instead it produces some 1 million tonnes per annum of crude steel using the Electric Arc Furnace method which involves melting down scrap steel, re-melting it and refining the product.

2.3.8 *Ireland*

Peat remains the most significant fuel for electricity production in Ireland, with domestic production totalling approximately 5 million tonnes per annum. Between 75% and 80% of domestic peat production is used for power generation and the balance for domestic heating. Around 800-900,000 tonnes of this production comes from the private sector.

The Electricity Supply Board is on target with its modernisation programme of peat generating stations and in 2004 two new power stations will open to replace two smaller and older ones.

All the coal used in Ireland is imported. Of the 3 million tonnes imported per annum, some 80% is used at the Monerpoint power plant in County Clare, with the balance used by industry and for domestic heating.

In 2002 Ireland imported about 2.9 million tonnes of steam coal, mostly from Australia, Indonesia, South Africa and Colombia, almost the same volume as in 2001. This volume is estimated to remain fairly steady for 2003.

2.3.9 *Italy*

As market projections indicated in the early part of 2003, Italy experienced severe electricity blackouts as well as brown-outs during the summer of 2003. With air-conditioning demand soaring, power demand rose by around 3% and electricity imports well over 5% in the first half of 2003, with the main generating company ENEL being forced to put back into operation several moth-balled plants.

Coal burn is expected to increase by more than 1.5 million tonnes in 2003 on the 14 million tonnes total in 2002. All the coal is imported, with Colombia, Australia and Indonesia ranking as main suppliers. Deliveries from South Africa, which stood at around 3.8 million tonnes in 2002, were expected to fall back in 2003 as Italy's importers intensified their diversification of supply. However, the firm freight market could curtail deliveries from the Far East in favour of South African and Colombian tonnage.

Public objection to the development of new coal-fired power stations continues to gain momentum while, at the same time, the generators, who clearly need to expand generating capacity, are pushing the use of coal for long-term security of supply reasons against the high oil and gas prices. Some oil-fired plant is being converted to coal.

The blackout problems in Italy and in the north of Europe demonstrate the need to strengthen energy networks in Europe, to establish sufficient capacity and to provide alternative transit routes. In this context, the Commission submitted a package of proposals on this question on 10th December 2003.¹ Meanwhile, it is forecast that power generation in Italy could remain under pressure throughout 2004 and maybe beyond.

2.3.10 Netherlands

The Netherlands is completely dependent on imports of coal, with a total annual demand of between 12 million tonnes and 13 million tonnes. About 9 million tonnes is used for electricity production, accounting for about one-third of total electricity generation. This level is expected to remain steady for the foreseeable future. However, if coal prices rise substantially, which they have been doing in the second half of 2003 (and particularly during the fourth quarter), then natural gas may increase its share of the market.

In 2002 approximately 5 million tonnes of coking coal and 1.2 million tonnes of PCI coal were imported mainly from South Africa, Indonesia, Colombia and Australia. Although Government figures indicate steam coal imports to be 16.68 million tonnes in 2002, down from a high of 24 million tonnes in 2001, more than 5 million tonnes of these volumes were traded on.

In addition, domestic consumption of imported steam coal dropped by more than 1 million tonnes from the previous year as utility buyers bought from high stockpiles accumulated the previous year.

By far the biggest supplier of steam coal to the Netherlands is South Africa, which totalled almost 7.3 million tonnes in 2002, followed by China with 2.9 million tonnes and Colombia 1.8 million tonnes.

2.3.11 Portugal

With no domestic coal production and its steel industry having closed down in early 2001, Portugal imported 5.6 million tonnes of steam coal in 2002. This is an increase from the 4.8 million tonnes imported the previous year. The estimates for 2003 show a decrease in imports to just over 4.9 million tonnes. About 95% of these imports are for electricity production and are supplied mainly by South Africa and Colombia.

¹ Communication from the Commission to the European Parliament and the Council. "Energy Infrastructure and Supply". COM(2003) 743 final of 10.12.2003

2.3.12 Spain

Imports of steam coal totalled nearly 21 million tonnes in 2002, an increase from 15.4 million tonnes in 2001. They are expected to fall to 16.5 million tonnes in 2003 due to the increased availability of hydro.

The decline in imports has been borne mainly by South Africa, dropping from 10.7 million tonnes in 2002 to 9.3 million tonnes in 2003, Australia, dropping from 2.2 million tonnes to 1.3 million tonnes and Indonesia decreasing from 3.2 million tonnes to 2.6 million tonnes. This may be largely also a knock-on effect of the steep rise in freight rates during the second half of 2003.

Imports of coking coal totalled 3.788 million tonnes in 2002, compared to 4.235 in 2001. Imported coal continues to be used in blends with locally produced coal and lignite.

2.3.13 Sweden

Most of Sweden's power is generated by nuclear and hydro, with coal mainly used for district heating. The lack of hydro during the September 2001 to May 2002 "burning season" caused a dramatic increase in steam coal imports in the Scandinavian region, including to Sweden's EFO, the main coal supplier to the country's power plants, to generate electricity.

Normally, EFO imports only around 400,000 tonnes/year of steam coal, a marginal figure compared with the larger end users in the region. However, this volume increased to around 700,000-800,000 tonnes over the period July 2002 to June 2003. EFO only imports steam coal from Poland and Russia, with Poland supplying the bulk of the tonnage.

There are three main electricity producers in Sweden. The Swedish Power Board Vatenfall is the biggest generator with the largest number of nuclear power stations and the biggest share of hydro. Sydkraft, which buys some marginal tonnage of coal and Fortum, who are part-owners of EFO and for whom EFO does all the purchasing. However the main usage for coal is district heating. However, if the price of electricity is competitive, then Fortum can generate electricity in a combined cycle plant.

2.3.14 United Kingdom

Despite the difficulties in the domestic coal industry, coal continues to retain a strong place in the UK's energy supply and currently accounts for 32% of the UK's electricity production, just slightly behind gas at 38% and ahead of nuclear at 23%.

Total coal demand in 2002 was 59 million tonnes compared to 64 million tonnes in 2001.

The UK currently produces just under half of its total coal requirements with the balance made up of imports, mainly consisting of steam coal for power generation and coming largely from South Africa, Colombia, Australia, Russia and Poland.

With the steel industry in decline, the diminishing demand for coking coal saw imports fall by around 1.5 million tonnes in 2002 to 6.3 million tonnes.

Although the government foresees a strong demand for coal continuing in the UK electricity sector, it will have to be in line with the development of cleaner coal technologies. The government's White Paper places a lot of emphasis on the development of renewable sources of energy and has set very ambitious targets. It aims to see renewable sources supplying 10% of

electricity by 2010 and to increase further to 20% by 2020. It remains to be seen if these ambitious targets will be met. It should be noted that these aims are very similar to those of the Commission which wants to ensure that, by 2020, 22% of the EU's electricity production comes from renewable sources.

Another major concern for coal producers, as well as for the generators, is the increasing environmental regulations. One of the issues of particular concern to coal producers is the Large Combustion Plant Directive, which has spurred discussions over the approach which should be adopted to meet the targets.

2.4 THE ACCESSION COUNTRIES

2.4.1 Poland

Poland has been a key exporter of hard coal, mainly into the European region, for many years. Total exports have declined from around 31 million tonnes in 1995 to around 22 million tonnes recently. The hard coal industry will have to continue to restructure as Poland enters the EU in the Spring of 2004 and this will have an impact on the level of its coal exports.

Since the mid-1990s, under the government programmes, the main aim has been to achieve gradual pit closures, reduce overall production levels and downsize the workforce, which accounts for some 50% of operational costs.

Of the seven coal corporations which previously existed, producing more than 140 million tonnes per year of steam and coking coal from some 70 mines, today there are three companies producing 102 million tonnes per year from 38 pits plus 2 independent mines. Four of these pits are expected to be closed in the near future. At the same time, the workforce has shrunk from well over 200,000 to around 140,000 in 2002.

In January 2003, the government approved a new restructuring plan for the period from 2003 to 2006 and then revised it in the summer of 2003. Soon after this revision, it announced the intention to close four mines and reduce the workforce by some 35,000 people. However, the number of redundancies was then revised downwards to 25,000.

Although the level of exports has been maintained at around 22 million tonnes per year in the past few years, domestic consumption of both steam and coking coal has steadily diminished to around 75-80 million tonnes per year. The downward trend is forecast to continue to 62 million tonnes per year in 2010 and 59 million tonnes per year by 2020.

At the same time a question mark hangs over the immediate and short-term future of Poland's export volumes are likely to fall in the coming years.

It has been announced by the exporting agency, Weglokok, that seaborne trade will halve in 2004 to around 6 million tonnes. While both seaborne and cross-border are set to continue to major customers Germany, Austria, the Czech Republic and the Scandinavian countries, albeit at perhaps lower volumes to some destinations, it is forecast that the only significant future seaborne business to survive will be better quality specialist coals into Scandinavia.

The anticipated export cuts will obviously mean European buyers of Polish coal will have to look elsewhere. However, with the current market conditions of tightness of supply and the historic hike in delivered prices, the Polish situation could put a further strain on buyers.

Despite the decrease in production, hard coal will still remain the main source for electricity production.

Poland has also been importing coal in the past few years, mainly from Russia, Belarus, the Czech Republic and the Ukraine, with imports totalling around 2.6 million tonnes in 2002 and about 1.6 million tonnes in 2003.

Although exports of steam coal have been maintained at 20-22 million tonne levels recently, coking coal exports have been gradually falling from 5 million in 1999 to 2.0 million tonnes in 2002 and an expected 2.5 million tonnes in 2004.

2.4.2 The Czech Republic

Coal is still the pillar of the Czech energy resources portfolio, accounting for a 50% share of the country's total primary supplies. This share was as high as 70% under the central planning period, but has been slowly reduced since 1991 under the government's coal restructuring plan.

In 2002 domestic hard coal output reached more than 15 million tonnes and brown coal about 50 million tonnes. The hard coal mines are located in the Upper Silesian Basin and North Moravia, while brown coal is mined from large open-cast pits in Northern Bohemia.

Power utilities, responsible for 60% of total domestic coal production, are the largest consumers, followed by coke ovens 17%, industry 17% and households 3%.

Some 6 million tonnes per year of hard coal and around 1.8 million tonnes per year of lignite are exported to Germany, Poland, Austria, Hungary and Slovakia.

2.4.3 Hungary

Having closed its last hard coal mine in 2003, Hungary produces a total of 14 million tonnes per year of lignite from two open-cast pits and brown coal from underground operations. Lignite, which makes up around 85% of the country's solid fuel reserves, is the most important indigenous fuel.

Indigenous gas and oil reserves are expected to last about 20 years and made up about 40% and 33% respectively of primary energy consumption in 2002. Coal accounted for 15% and nuclear energy around 10%.

3. STEAM COAL SUPPLY

With the continuing rise in delivered coal prices into Europe, the Northern European producers, Poland and Russia, have not been able to respond by raising exports. With the announcement in September 2003 of further mine closures in Poland, as part of its Coal Restructuring Programme, and Russia's domestic demand growing, neither supplier has been in a position to take advantage of the lucrative market conditions.

With South Africa coming close to its shipment limits, Colombian producers have been the only ones experiencing historic export volume increases into the European market and may be the only supplier, along with perhaps Australia, to be in a position to supply any significant additional volumes into Europe in the immediate future. It was thought, around mid-2003, that

any tightness of supply in the Atlantic market could be made up at short notice by Chinese and Indonesian product, but by the end of 2003, this was no longer so certain.

Table 3: Forecast Supply Availability of Steam Coal (in million tonnes)

Country	2001	2002	2003	2004
Poland	16.00	16.00	16.00	6.50
Russia	23.00	27.50	28.00	27.5
Canada	3.00	1.60	0.85	0.85
US	9.10	5.50	2.60	2.12
Colombia	37.10	35.44	44.94	46.94
Venezuela	8.10	8.10	7.40	8.90
South Africa	68.30	67.75	70.75	72.75
China	71.70	69.55	?	?
Indonesia	66.60	76.00	88.50	92.00
Australia	86.50	98.60	100.60	104.60

Source: McCloskey Steam Coal Forecaster / Others

3.1 CHINA

At the end of November 2003, the availability of Chinese steam coal for export was suddenly cut following a dictat from the government to exporters to essentially stop exporting. This has raised the whole issue of the shape of future export volumes of Chinese steam coal as well as coking coal and coke.

Severe supply shortages in the southern part of the country forced the government to directly intervene to secure the supplies to 12 domestic generators. The export companies, China Coal, Shanxi Import Export Group and Shenhua were instructed to cancel contractual deliveries for December, 2003.

Electricity generators in Korea, the Philippines and Taiwan were primed to issue tenders for up to 6 million tonnes of steam coal for the first quarter of 2004, with the bulk of this tonnage expected to be supplied by China.

Within the first week of the government announcement, FOB prices and freight rates in Asia took a sharp rise. According to McCloskey's Coal Report, export FOB prices soared \$4 to \$38 and domestic prices even further.

As with the sudden steel industry requirement scenario, the international market did not see this situation coming either. The problem appears to have stemmed from China's railway system being unable to cope with the enormity of domestic demand as well as exports, rather than a failure of production keeping up with demand.

With Indonesia sold out for most of the first half 2004, particularly for bituminous coals, the only realistic alternative supplier to the region is Australia. Within days of the Chinese export cuts being announced, prices in Newcastle rose by about \$1.50 to around \$32.50 FOB and were expected to keep rising well into 2004.

Freight rates were also forecast to maintain a sustained rise as ships from Australia into the Asian region continue to be tied up for longer periods of time.

This situation could have an even greater effect on international prices, for both steam and coking coal into Europe. The unpredicted level of demand in China in both the generation and steel sectors will not only force international freight rates even higher than December 2003 levels, but also push FOB prices for both steam and coking coals higher as export supply is further strained.

3.2 POLAND

European coal buyers as well as freight brokers continue to watch closely what the likely export figures from Poland will be in 2004. Although the export agency Weglokoks states that close to 15 million tonnes will be exported in 2004, of which 1.5 million tonnes is hard coking coal, some buyers and analysts question this figure in view of further mine closures.

Weglokoks has stated that seaborne exports will be halved in 2004 to between 6 million tonnes and 7 million tonnes, and during the second half of 2003 Poland already had to defer some of its 19.5 million tonnes contractual deliveries into the first quarter of 2004. For this reason, there has been no new business booked for delivery in the first quarter of 2004.

However, in early December 2003, Weglokoks was offering steam coal into the export market for delivery from the second quarter of 2004 onwards at over \$60 FOB basis 6,000kcal/kg Polish port. But with Panamax rates from Poland to ARA at around \$8 per metric tonne at the time, this would have made the offers some \$6 above international prices.

In early 2003 Weglokoks had been expecting Polish exports to total about 15 million tonnes in 2004 if there were no further imminent closures, but when Kompania Weglowa announced the closure of four of its mines in September 2003, mining industry sources said this was bound to make a dent in the overall export figure.

Kompania Weglowa, which operates the largest number of mines of the three existing coal corporations, announced it would close four of its 27 mines – Bytom II, Centrum, Polska-Wirek and Boleslaw Smialy. These mines produce a total of 12 million tonnes, of which about 3 million tonnes goes into the export market. These closures could cause exports to shrink to 13-14 million tonnes or even less.

Germany, in particular, stands to be affected more than most of Poland's customers. Poland is by far Germany's major coal supplier, with 3.6 million tonnes imported in the first half of 2003 according to Statistisches Bundesamt. In comparison, South African imports into Germany totalled 3 million tonnes and Colombian 1.4 million tonnes in the same period.

Polish sources say that if export availability does sink to around 13-14 million tonnes levels, Poland's cross-border customers will be serviced first and any remaining tonnage will go to seaborne destinations. They indicate that export cutbacks could affect France, which imported some 1.3 million tonnes in 2002 and 1.7 million tonnes in 2003, as well as the UK, which imported 1.24 million tonnes from Poland in 2002 and 1.3 million tonnes in 2003.

The question regarding Poland's diminishing export availability will be whether Europe's other major suppliers – Colombia, South Africa and Russia - will be able to sufficiently fill the gap.

3.3 RUSSIA

In the past three years Russia has established itself as a player on the European market, especially in the UK, Finland, Germany and Spain, where it has secured large contractual

tonnages of between 1 and 2 million tonnes per year to each country. Although many buyers, sellers and energy analysts say that Russian coal in the medium to long-term will not be able to remain competitive on the international market, it appears that Russia is gearing itself for a greater presence in Europe.

If plans to develop Panamax ports in the Baltic at Ventspils and Riga come to fruition, it will lower the delivered costs of Russian coal markedly and will permit throughput to be expanded, particularly with the development of more mines and the projected production increases. The only question will be the railroad system and whether the high transportation costs (\$15 to \$20 plus from mine to port) will enable the coal to compete on the world market. Russian industry sources say it will, because there is a serious intention amongst the bodies concerned to keep tariffs at levels which work.

In the continuing strong market, exports should currently be very profitable for Russian suppliers, with around 14-15 million tonnes forecast for the European market during 2003. It is also estimated that an additional 2 million tonnes could be absorbed into Europe in 2004, with the potential for a further 10 million tonnes following the port expansions.

The other side of the story is that there is growing domestic demand in Russia for both steam and coking coal with the recent integration of coal producer and coal consuming companies. With the domestic market always taking preference over exports, this puts the expansion of future export volumes in doubt, especially when international prices drop.

The Scandinavian market is expected to continue as an export priority and supplies to the rest of Europe will depend on price levels and demand growth.

3.4 SOUTH AFRICA

South Africa could also increase its presence on the European market, with additional export tonnage available as current production is far below the upper limits of export capacity.

South Africa's production increased by more than 3 million tonnes in 2003 to just over 71 million tonnes, from 68 million tonnes in 2002, and is expected to exceed well over 73 million tonnes in 2004. Although South African exports seem to have lost their market position in northern Asia, mainly because of the ongoing high freights, they have held onto their strong position in Europe, particularly in Spain, France and Germany.

Spain imported over 10 million tonnes of South African product in 2002, France around 3 million tonnes and Germany 6.8 million tonnes. These volumes are expected to have risen further in 2003. Further South African production growth will most certainly be accommodated into Europe, but ongoing railway congestion problems will need to be solved for these figures to be realised.

3.5 COLOMBIA

Of all the suppliers into Europe, Colombia has gained the most from the recent FOB and CIF coal price increases. With the ability to increase production from 35 million tonnes in 2002 to approximately 46 million tonnes in 2003, Colombian producers increased exports by more than 9 million tonnes to 37 million tonnes for the period January to October 2003. Most of this increase has been absorbed by US customers, although exports to European Union countries increased by more than 1.5 million tonnes, from 15.6 million tonnes to 17.2 million tonnes.

Table 4. Colombian Exports into EU – October 2003 (tonnes)

COUNTRY	JAN-OCT. 2003	JAN-OCT 2002
Belgium	147,193	468,069
Denmark	2,164,933	594,258
Finland	0	134,112
France	1,959,868	1,821,986
Germany	542,993	449,106
Greece	0	0
Ireland	299,243	290,346
Italy	1,689,335	1,602,846
Netherlands	5,541,989	6,102,973
Portugal	1,497,445	1,243,125
Spain	1,251,398	928,954
Sweden	41,364	0
UK	2,107,490	1,942,376
EU TOTAL	17,243,251	15,578,151

Source: McCloskey Group

There have been minimal imports of Australian and Indonesian steam coal into the European market in the back half of 2003 due to the ongoing hikes in the freight market.

4. COKING COAL

4.1 DEMAND AND SUPPLY (excluding PCI)

In line with the increasing volume of imports of coke is the decrease in imports of coal for coke making. Coking coal imports into the EU have been falling from 43.3 million tonnes in 2000, to 41.6 million tonnes in 2001, 37.7 million tonnes in 2002 and an estimated 36.2 million tonnes in 2003. Again, because of the added coke production capacity in Germany, this is likely to increase to 36.8 million tonnes in 2004.

The only EU countries which produce coal used for making coke are Germany and the United Kingdom. In Germany, the production of coking coal used in coke ovens fell from around 5.75 million tonnes in 2002 to an estimated 5.5 million tonnes in 2003 and 2004, with a further fall to some 4 million tonnes expected in 2005. In the UK, coking coal production is forecast to remain at around 200,000 tonnes through to 2005.

Total world requirement for metallurgical coal has decreased slightly by just over 1 million tonnes to around 204 million tonnes, largely due to increased coke imports into the EU and South America.

Table 5. Imports of Metcoal for Coke Making into EU (in million tonnes)

Calendar Year	2001	2002	2003 (estimate)	2004 (forecast)
Austria	1,960	1,938	1,882	1,978
Belgium	4,379	4,296	3,024	2,985
Finland	1,297	1,286	1,537	1,603
France	6,974	6,260	6,967	7,359
Germany	4,200	3,377	4,864	5,484
Italy	6,615	5,799	4,457	4,571
Netherlands	3,075	2,953	2,141	2,195
Portugal	97	0	0	0
Spain	3,982	3,560	3,748	3,860
Sweden	1,759	1,548	1,836	1,873
UK	7,263	6,692	5,736	4,859
EU TOT AL	41,602	37,707	36,192	36,766

Source: MCQ

4.2 PCI COAL

Pulverised Coal Injection (PCI) coals are used to displace a proportion of the more expensive coke in blast furnaces. PCI coals consist of a broad range of coals from anthracite to lignite and from low volatile Australian to high volatile Colombian steam coals with some operators blending both types of product. The low volatile PCI coals appear to have a stranglehold in Asia, whereas elsewhere the full range of volatiles is being used.

While the coke making process is operationally expensive, environmentally problematic and requires large capital costs, enabling only coals with coke making properties to be used which command a premium, the use of the PCI product circumvents some of this, enabling operators to use non-coking coals with a substantially lower cost premium and which are operationally simpler to use.

There are limits, however, as to how much PCI can be used as blast furnaces still require a substantial proportion of coke. For example, approximately 500 kilogrammes of carbon-based fuel is used to produce each tonne of hot metal (pig iron). The operational limit of PCI is about 200 kilogrammes of this, with the balance being made up of coke. Nearly all users operate on a higher coke rate and lower PCI rate.

Imports of PCI coals is set to increase in the EU as end users continue to replace high priced coke imports (\$170 per tonne plus) with PCI coals (\$40 per tonne approx.). PCI imports are also expected to increase in South America and, more significantly, in China as well.

In the EU, imports of PCI coals have been growing from around 8.4 million tonnes in 2001 to 9.4 million tonnes in 2002 and are estimated to reach 10.3 million tonnes in 2003, with further increases forecast through to 2005.

Table 6. Imported Coal for PCI (in million tonnes)

CALENDAR YEAR	2001	2002	2003 (estimate)	2004 (forecast)
Austria	0	0	0	0
Belgium	1.46	1.55	1.57	1.64
Finland	0	0	0	0
France	2.12	2.32	2.52	2.74
Germany	0.49	1.20	1.50	1.50
Italy	1.36	1.25	1.30	1.32
Netherlands	1.14	1.15	1.19	1.22
Portugal	0	0	0	0
Spain	0.71	0.69	0.69	0.77
Sweden	0.43	0.48	0.53	0.55
UK	0.74	0.74	0.95	0.92
EU TOTAL	8.45	9.38	10.25	10.66

Source: IEA, Other

4.3 EXTERNAL SUPPLY OF METALURGICAL COAL

4.3.1 Australia

Australia is expected to export a total of some 112 million tonnes of metallurgical coal (hard coking coal and PCI coal) in 2003, up from 102.5 million tonnes in 2002.

Seaborne exports of metallurgical coal into the EU fell from close to 20 million tonnes in 2002 to an estimated 17 million tonnes for 2003, according to Australian government and trading sources.

While exports to Belgium and the Netherlands have shown a significant fall of some 15% (576,000 tonnes and 2.0 million tonnes respectively) to the end of the third quarter of 2003 compared to the same period the previous year, exports to France and the UK are growing steadily, totalling 2.8 million tonnes and 2.0 million tonnes respectively at the end of the third quarter of 2003. Exports to Spain dropped by 4% to 1.3 million tonnes in the same timeframe.

The overall fall in exports to the EU were largely offset by Australia's increased volume of metallurgical coal exports to Turkey, Romania, India and China.

For PCI, soft and semi-soft exports, the first six months of 2003 showed exports to the EU falling by more than 8% to just over 900,000 tonnes. However, those to other regions, mainly Asia and North and South America, rose substantially.

4.3.2 United States

Although US metallurgical coal exports recovered in the first quarter of 2003 from last year's fall in tonnage, particularly into the EU, this trend has again slowed down. This is due to high domestic prices, as was the case in 2002.

In the first half of 2003, shipments to the EU fell by nearly 14% to 4.5 million tonnes on 2002 levels, but increased to other European destinations, South America and the Middle East. These increases pushed up total US exports for the first half of 2003 to close to 11 million tonnes. The gain was not just the strengthening of the US and Canadian dollar, but also the extremely high freight rates which affected the longer haul suppliers.

4.3.3 *Canada*

Given the negative currency situation for Canadian exporters, shipments fell by some 1.5 million tonnes in the first half 2003 to just over 10 million tonnes. It is forecast that total exports for 2003 will be almost 2.5 million tonnes down on 2002 levels to around 20 million tonnes.

4.3.4 *Poland*

Poland's coking coal exports, which totalled around 2.9 million tonnes of both hard and soft coking coal, will be reduced in 2004-5 to 1.5 million tonnes of only hard coking coal. It is not clear where the tonnage will go as negotiations were about to begin in early December 2003. However, it is more than likely it will be distributed between Poland's traditional customers Finland, Austria, the Czech Republic and Slovakia.

4.3.5 *Others*

Although Russian coking coal production is reported to have increased over 11% to 26.7 million tonnes, according to MCQ, in the first five months to end of May 2003 compared to the same period the previous year, no exports have been reported into the EU.

Estimates of South African hard coking coal exports to the EU point to an almost 100% increase, from around 980,000 tonnes in 2002 to around 1.8 million tonnes in 2003.

5. METALLURGICAL COKE

The world trade in metallurgical coke currently stands at around 25 million tonnes, with China supplying between 13 and 16 million tonnes per annum.

EU imports of metallurgical coke were 9.8 million tonnes in 2001, 10.2 million tonnes in 2002 and an estimated 12.8 million tonnes for 2003. A new coke oven has been commission at the TKS plant in Germany – the only new one in the EU. A large proportion of the coke imports into the EU come from China, in addition to a reasonable amount of intra-EU trade.

The issue over the next 20 years is whether the EU will become wholly dependent on imports or whether new coke ovens will be built. With countries like Poland, a big coke producer, joining the EU, the question will be whether it can produce coke economically enough without subsidies. A number of market observers are doubtful.

There is also uncertainty with respect to China, which is exporting unprecedented levels of coke into the international market. At the same time, there is an enormous increase in iron production in China and a huge internal demand for coke. It appears that China's metallurgical coal production is unable to keep up with demand, which could swing China's role around from a major exporter to a sizable importer in the coming years. This would result in a severe escalation of prices.

On the back of the possibility of Chinese coke exports being cut back, the decrease in Poland's coking coal exports and the general tightness of supply of coking coal in the market, coke prices escalated to around \$170/180 per tonne FOB China during the fourth quarter of 2003 and reached over \$200 FOB during January 2004.

With respect to coke production and consumption in the EU, total EU production has decreased from approximately 34.5 million tonnes in 2001 to 31.5 million tonnes in 2002, with an estimated 30.5 million tonnes in 2003. There will be a slight increase in 2004 due to the new German cokery coming into operation.

In turn, imports have been increasing from 9.5 million tonnes in 2000 to 9.8 million tonnes in 2001, 10.2 million tonnes in 2002 and an estimated 12.8 million tonnes for 2003. This is expected to fall to close to 12 million tonnes in 2004.

Even though coke production also decreased in the US, overall world production increased by around 1.2 million tonnes net in 2003, largely due to a 4 million tonnes increase in Asian production. However, availability is expected to become tight from 2004 onwards if China decreases its coke exports in 2004 as forecast.

The first half of 2003 saw Chinese coke exports surge to 9.5 million tonnes, more than 30% above 2002 levels for the same period. The increase went mostly into Japan and some EU countries, including France, Germany, Italy, Sweden and the UK which absorbed most of the 1 million tonnes growth in the EU. With the rapid growth in China's domestic requirements of raw materials for its steel sector, however, the question which is currently causing concern in the industry is how long its coke exports will continue at present levels.

Table 7. Coke Usage in EU (approx. in million tonnes)

CALENDAR YEAR	2001	2002	2003 (estimate)	2004 (forecast)
Austria	2.39	2.47	2.56	2.62
Belgium	3.09	3.14	3.11	3.08
Finland	1.30	1.29	1.38	1.42
France	5.75	6.10	6.13	6.17
Germany	12.21	12.26	12.55	12.50
Italy	5.16	4.80	4.78	4.86
Netherlands	2.06	2.09	2.14	2.18
Portugal	0.08	0.03	0.03	0.03
Spain	2.31	2.22	2.11	2.13
Sweden	1.58	1.57	1.57	1.59
United Kingdom	4.99	4.35	4.50	3.88
EU TOTAL	40.92	40.32	40.86	40.46

Source: IEA, Other

Table 8. EU Coke Imports (in thousand tonnes)

Calendar Year	2001	2002	2003 (estimate)	2004 (forecast)
Austria	840	760	1,200	1,200
Belgium	1,020	312	1,110	1,110
Finland	87	30	300	300
France	1,310	1,390	1,444	1,200
Germany	5,000	5,977	5,000	4,500
Italy	600	548	1,650	1,650
Netherlands	390	562	1,000	1,000
Portugal	0	0	0	0
Spain	150	126	160	100
Sweden	222	401	320	320
United Kingdom	156	190	590	590
EU TOTAL	9,775	10,296	12,774	11,970

Source: IEA, IISI, Others

6. FREIGHT MARKET

With freight rates continuing to soar since the third quarter of 2003, most brokers don't expect to see them ease for perhaps another 18 months. Accurate forecasts are impossible as all will depend on the rate of growth of coal demand in Asia and, more importantly, at which rate China's iron ore imports continue to grow

The level of recent increases has resulted in freight rates reaching the highest seen in the past 30 years, with most routes having quadrupled over the past year.

By way of example, according to H. Clarkson (London-based shipbrokers), early December 2003 rates have seen the following increases between the fourth quarter of 2002 and the same period in 2003.

Table 9. Indicative freight rates.

ROUTE	DEC. 2003	DEC. 2002
Hampton Roads – Rotterdam	\$19.75	\$5.30
US Gulf-ARA	\$18.25	\$7.00
Bolivar-Rotterdam	\$18.50	\$5.30
Queensland-Rotterdam	\$32.00	\$8.10
RBCT-Rotterdam	\$25.00	\$6.10
Rizhao-Rotterdam	\$30.50	\$7.00

Source: H. Clarksons

With the unexpected level of Chinese demand creating a severe vessel shortage in the international market, and a finite volume of shipyard capacity available, dock space for shipbuilding has become extremely restricted.

At the moment the available shipbuilding capacity is not enough to build all the container ships, tankers and bulk carriers to match demand. Some dry bulk carriers which have already been on order for some time and are due for delivery in 2004, will add another 5% fleet capacity during 2004 and about 4% in 2005. However, as some old ships will be scrapped during 2004, the real growth in the fleet will probably be only 3-4% in 2004.

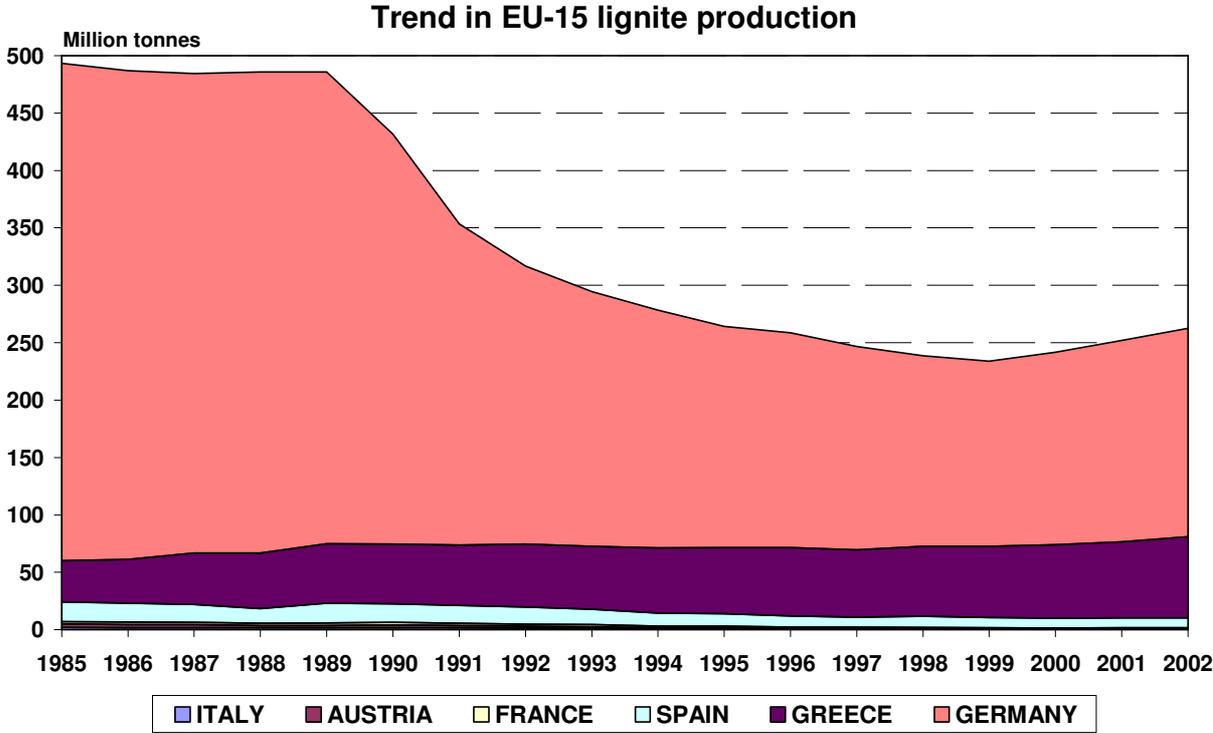
Given the rate of increase in demand this will not be enough. Freight rates are therefore expected to stay very high, particularly since dry bulk carriers are also used for transporting iron ore, grain, cement, fertilizer etc., as well as coal.

Shipowners say that if a dry bulk carrier is ordered now, earliest delivery would be around early 2007, because shipyards are congested building container ships. There is a clear preference for shipyards to build tankers, container ships and gas carriers over dry bulk carriers as these more sophisticated vessels maximise revenues for the shipyard. For example, an LNG (liquefied natural gas) carrier costs some \$160 million, but uses up the same amount of dock space as an ordinary dry bulk carrier which costs just \$25 million. The dry bulk carriers are therefore inevitably being pushed at the end of the queue.

The absolute minimum timeframe for the building and delivery of a Panamax bulk carrier is usually 18 months but, because the order book is so full, it is now three years. Over 90% of commercial ships are currently being built in Korea, Japan and China with almost nothing in the way of bulk carriers being built in Europe any more, apart from the smaller, more sophisticated chemical tankers and gas ships which are still being built in Spain, Germany and Poland.

7. LIGNITE

7.1 LIGNITE IN THE EU



Only five of the current European Union produce lignite, namely Austria, France, Greece, Germany and Spain. Total production was around 262.5 million tonnes in 2002, compared with 251.9 million tonnes in 2001 and is expected to decrease slightly to 249.64 million tonnes in 2003. A number of the countries joining the EU in 2004 also produce lignite.

7.1.1 Germany

Germany is by far the biggest lignite producer with output reaching in excess of 181 million tonnes in 2002, a slight increase on the previous year and one which is expected to remain constant in 2003.

Lignite is a vital energy source for Germany and with the abundance of supply and vast ongoing reserves, prices are able to remain competitive. The industry is also a significant employer and investor in the various mining areas.

Production is all from opencast mines situated in the Rhineland, the Lusatian mining area in south-east Brandenburg and north-east Saxony, the Central German mining area in south-east Saxony-Anhalt and north-west Saxony and the Helmstedt mining area in Lower Saxony.

More than 90% of domestic lignite production and some small volumes of intra-European imports is consumed by the country's power stations.

7.1.2 Greece

With lignite reserves of more than 6 billion tonnes, of which about half are economically viable to mine, Greece continues to increase its production and reliance on lignite as the country's major power generating fuel.

In 2002, production stood at around 70.5 million tonnes, which was an increase from 66.3 million tonnes the previous year. Lignite-based power generators produced around 31 TWh, or more than 60% of the country's total electricity consumption of more than 51 TWh. The rest came from natural gas (13%), oil (19%) and hydro (6-7%).

The main deposits are located in the north of the country at Ptolemais-Amynteon and Florina. There are 5 open-cast pits which are owned by the Public Power Corporation (PPC) and which account for nearly the entire annual production. This is supplied to seven of PPC's power plants which have a total installed capacity of some 5,000MW, compared to the country's total generating capacity of over 11,500MW.

7.1.3 Spain

Spain produced 8.73 million tonnes of lignite in 2002, a slight increase on the previous year.

The main lignite fields are situated in the north-west of the Iberian Peninsula in Galicia, as well as smaller operations in the province of Orense in Southern Galicia and two further minor deposits in the province of Grenada. Estimated reserves in the Andalusian region are about 40 million tonnes but, like the deposits in Southern Galicia, they have not been exploited for economic reasons.

The largest deposit, the As Pontes mine north-east of La Coruna, is operated by Endesa, the largest of the country's four private utilities.

Spain's total production volume is used for power generation and district heating, contributing in excess of 1,900 MW to the total of close to 53,000 MW.

7.1.4 Austria

Austria has been producing around 1.2 to 1.4 million tonnes per annum of lignite, which has contributed to about 3% of the country's electricity production. Its last lignite mine will close by the end of 2006.

7.1.5 France

France is the smallest producer in the EU of 15, with an output of only 147,000 tonnes mined in Gardanne in 2002 from 324,000 tonnes in 2001. This operation closed in January 2003.

7.2 LIGNITE IN THE ACCESSION COUNTRIES:

7.2.1 Poland

Poland produced a total of some 58 million tonnes of lignite in 2002, with almost the entire output used by power plants located near to the mines. Lignite provides some 9,000MW of power capacity compared with the total of approximately 35,000MW.

The open-cast operations, which are situated in the Belchatow Basin and the Konin-Adamow Basin in central Poland and the Turow Lignite Basin in the south-west of the country, supply about 35% of the country's power generation. Production is expected to increase and be maintained at around 70 million tonnes per year until about 2040.

7.2.2 The Czech Republic

Lignite and brown coal production in the Czech Republic has decreased from nearly 79 million tonnes in 1990 to around 50 million tonnes currently. However, it still plays a vital role as the main energy source for power generation.

With the commissioning of two new units at the Temelin nuclear power station and the decline of exports into Germany, a further decline in lignite production is likely in the future.

7.2.3 Hungary

With the closure of the last hard coal mine in 2003 due to poor mining conditions, Hungary now mines only brown coal from underground operations and lignite from two open-cast sites.

In 2002 lignite output totalled 13.5 million tonnes, with some 95% used in the power generation and heating sectors. The rest was used mainly by municipalities and households.

Gas and oil reserves, on the other hand, are estimated to last approximately another 20 years and recoverable coal another 100 years. Brown coal and lignite currently accounts for about 15% of the primary energy consumption, while gas has the biggest share with some 40%, oil about 35% and nuclear around 10%.

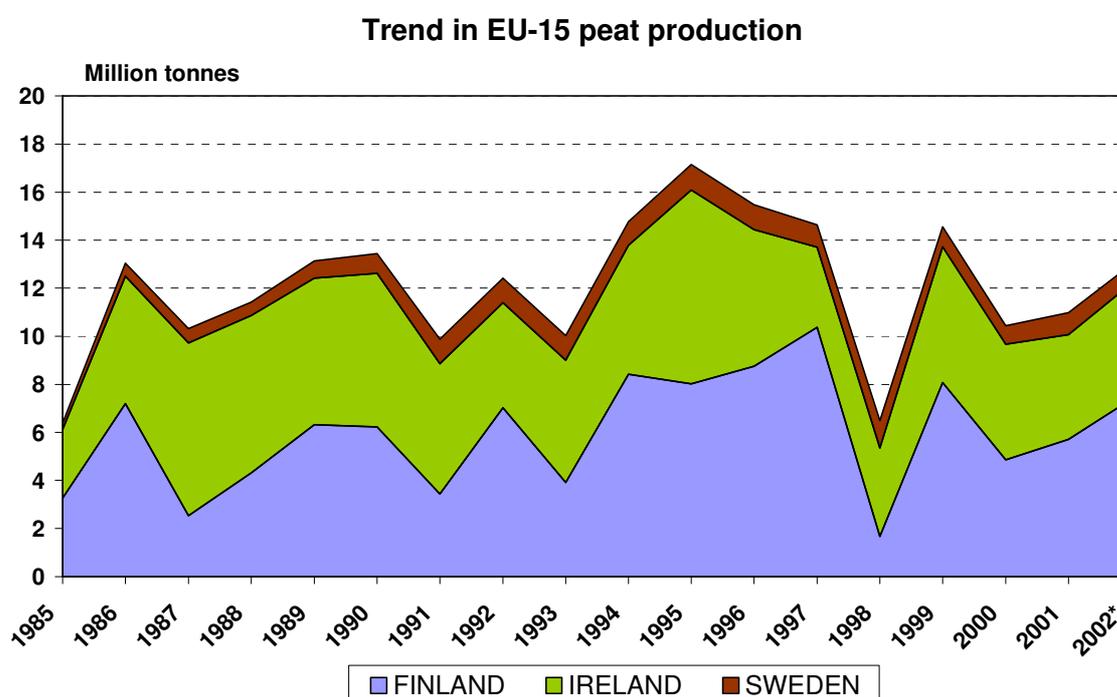
8. PEAT

8.1 Ireland

With a domestic production totalling 4.88 million tonnes in 2002, peat remains Ireland's key fuel, contributing around 80% to total yearly electricity production with the balance used for domestic heating.

A modernisation programme for peat generating plants, which is currently being carried out by the Electricity Supply Board, is on target with two new power stations opening in 2004 to replace older ones.

Peat production showed a slight increase in 2003 to 4.89 million tonnes and is expected to continue increasing steadily in 2004 and beyond.



8.2 Finland

Finland produced nearly 8 million tonnes of peat in 2001, with the majority consumed by the electricity generating sector.

9. STATE AID TO THE INDIGENOUS HARD COAL INDUSTRY.

Due to unfavourable geological conditions, a significant proportion of EU indigenous coal production is not competitive with imported coal. After the expiry of the ECSC Treaty on 23 July 2002, the Council adopted a Regulation on State aid to the coal industry² to provide a framework within which State aid to the hard coal industry could be considered from 24 July 2002 onwards.

² Council Regulation No 1407/2002 of 23 July 2002. OJ L 205 of 02.08.2002, p. 1

This framework is based on a minimal production of coal, which will help to maintain a proportion of indigenous primary energy sources, in order to strengthen the EU energy security of supply. State aid to the coal industry will also support the restructuring of this sector, taking into account the social and regional repercussions as a result of the reduction in activity. Therefore, Member states notify the state aid that they wish to grant to the coal industry on an annual basis for consideration and eventual approval by the European Commission. In order to be able to grant aid for the reduction of activity or production aid for accessing coal reserves, Member States shall submit beforehand a long-term restructuring plan of the coal industry.

Different kinds of aid may be considered compatible with the common market:

<u>Aid</u>	<u>Conditions</u>
Aid for the reduction of activity (Article 4)	<ul style="list-style-type: none"> - closure plan (notification 31 October 2002 at the latest) ; - aid may not exceed difference between production costs and revenue ; - aid may not cause lower prices than those for coal from third countries ; - aid may not cause distortion of competition.
Aid for accessing coal reserves (article 5) : 1) aid for initial investment : 2) current production aid :	<ul style="list-style-type: none"> - operating plan to ensure the economic viability (notification 31 December 2002 at the latest) ; - not more than 30% of the total costs. - part of a plan for accessing coal reserves (notification 31 October 2002 at the latest) ; - aid granted to production units which afford the best economic prospects.
Aid to cover exceptional costs (article 7) :	<ul style="list-style-type: none"> - costs arising from rationalisation and restructuring.

The overall amount of aid to the coal industry granted has to follow a downward trend so as to result in a significant reduction.

State aid authorized 2001 – 2002 (in millions €)

EUR million	2001	2002
Germany		
- production aid	2,755.3	2,404.7
- aid not related to production	1,400.9	1,152.4
Spain		
- production aid	659.5	609.1
- aid not related to production	1,283.61	469.4
France		
- production aid	350.6	303.4
- aid not related to production	642.3	692.4
United Kingdom		
- production aid	105.7	23.5
- aid not related to production	0.0	1.3
EU TOTAL		
- production aid	3,871.1	3,340.7
- aid not related to production	2,512.3	2,315.5

During 2002, some € 5.6 billion was granted to the hard coal sector. Aid to current production has continued to decrease steadily in line with the agreements on the reduction of volumes of aid to the coal industry until 2005. The table above provides an overview of aid to the coal industry in 2001 and 2002.

9.1 France

On 21 January 2004, the Commission authorised France³ to grant aid of nearly € 1 billion for 2003 to cover the costs of the closure of its last two operating mines.

9.2 Germany

The German hard coal industry, mainly based in the region Nordrhein-Westfalen, is non-competitive against internationally-traded coal. Due to geological circumstances, production costs are very high and over many years significant amounts of State aid have been granted to the hard coal producer RAG AG.

On 7 May 2003 the Commission authorised both the restructuring plan of the German coal industry and aid to the German coal industry for the year 2003⁴. The restructuring plan contains detailed data for the period 2003 to 2005 and provides for a gradual reduction of the financial aid measures to the German coalmining industry from € 3.3 billion in 2003 to € 2.7 billion in the year 2005. The reduction in State aid will lead to a permanent reduction in coal production. Production will be reduced from 26.45 million tonnes in 2003 to 22.45 million tonnes in 2007. In order to achieve this goal, two production units will be closed in the years 2006 and 2007.

The total amount of the approved aid for the year 2003 was € 3,323.5 million. This aid can be divided into :

- Aid for the reduction of activity, approximately € 400 million ;
- Production aid, approximately € 2,100 million ;
- Aid to cover exceptional costs, approximately € 800 million ;

On 31 October 2003 Germany notified the aid for 2004, amounting to € 3.0 billion.

In November 2003 the German government announced further long-term plans up to 2012, with a production target of some 16 million tonnes by that date. However Council Regulation (EC) No 1407/2002 only applies until 31 December 2010.

9.3 Spain

On 2nd July 2002, the Commission authorised⁵ Spain to grant, for the period from 1 January 2002 to 23 July 2002, operating aid of € 162,840,571, aid for the reduction of activity of € 202,230,309 and aid for historical liabilities of € 277,146,000.

On 21 January 2003, the Commission authorised an aid in respect of private coal mining companies in the Principality of Asturias for research and technological development,

³ Commission decision of 21.01.2004, C(2004) 35

⁴ Commission decision of 07.05.2003, C(2003)1295

⁵ Commission decision 2002/826/ECSC of 02.07.2002. OJ L 296 of 30.10.2002

environmental protection and mining training for the period from 23 July 2002 to 31 December 2004⁶.

On 19 February 2003 the Commission authorised an aid for the second half of 2002⁷.

On 19 February 2003, the Commission opened the procedure provided for in Article 88(2) of the EC Treaty to the aid to cover exceptional costs of the restructuring process, for research and development, environmental protection, mining training en mining safety in respect of private coal mining companies in the Autonomous Community of Castile-Leon for the years 2001 and 2002⁸. The Commission has is to investigate the possible risk of an unlawful accumulation between the aid granted by the Spanish central authorities and the aid granted by the Community of Castile-Leon.

On 19 February 2003, the Commission authorised an aid to cover the outsourcing of activities related to the restructuring process in respect of the coalmining company of Hunosa for the years 1999 and 2001⁹.

On 19 February 2003 the Commission decided to reopen the procedure against the Spanish coalmining company González y Diez S.A. in order to replace the Decision 2002/827/ECSC of 2 July 2002 by a new decision¹⁰. By Decision 2002/827/ECSC the Commission ordered Spain to recover the aid for the years 1998 and 2000 and did not authorise an aid for the year 2001. The Commission considered that, after the expiry of the ECSC Treaty on 23 July 2002, the procedural rules that are now applicable offer better opportunities to guarantee the rights of Member States, the concerned company and third parties. On 5 November 2003, the Commission closed the procedure and decided that the aid for 1998 and 2000 has partly been abused and that the aid for 2001 can only partly be authorised¹¹. The Commission ordered Spain to recover the abused aid for 1998 and 2000 and part of the aid for 2001.

On the aid for 2003 and the long-term restructuring plan of the Spanish coal industry, Spain has not yet submitted all the necessary information to permit the Commission to make a decision.

9.4 UK

In its decisions of 21 January 2003 and 5 March 2003, the Commission authorised an aid for the year 2002¹², which marked the end of the UK coal operating aid scheme, under which the Government paid out just over £160m to eligible coal producers. The scheme helped mines which had a viable future to continue, and most of those are still operating.

On 28 May 2003, the Commission authorised an aid in respect of redundancy payments arising from the closure of the Selby Complex owned by UK Coal¹³.

On 25 June 2003, the Commission authorised an aid scheme to cover initial investment costs to the United Kingdom coal industry for the period 2003 - 2005¹⁴. The aid scheme is designed to

⁶ Commission decision of 21.01.2003, C(2003)244

⁷ Commission decision of 19.02.2003, C(2003)521

⁸ Commission decision of 19.02.2003, C(2003)525

⁹ Commission decision of 19.02.2003, C(2003)526

¹⁰ Commission decision of 19.02.2003, C(2003)524

¹¹ Commission decision of 05.11.2003, C(2003)3910

¹² Commission decisions of 21.01.2003, C(2003)242 and 05.03.2003, C(2003)661

¹³ Commission decision of 27.05.2003, C(2003)1668

support commercially realistic investment projects that maintain access to reserves at mines with a viable future and create or safeguard jobs in socially and economically disadvantaged areas. Following this approval, the UK government has launched Coal Investment Aid. Slightly less money is available under this programme than under the Operating Aid Scheme with £60m over 3 years. The government is currently at the stage of receiving applications and assessing them to see which operators might be eligible.

10. DATA TABLES.

The data for these tables has been provided by the Member states in November 2003 and completed where necessary with Commission estimations.

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¹⁴ Commission decision of 24.06.2003, C(2003)1908

**TABLE 1
SUPPLIES AND REQUIREMENTS OF HARD COAL IN THE
EUROPEAN UNION: 2001**

7-juin-04

(In thousands of metric tons)

Member state	Belgium	Denmark	Germany	Spain	France	Greece	Ireland	Italy	Luxembourg	Netherlands	Austria	Portugal	Finland	Sweden	UK	EUR-15
1. PRODUCTION (t=t)			30669	13994	1972			139							31513	78287
of which :																
A.- Underground			30669	9213	1875										17347	59104
B.- Opencast				4781	97			139							14166	19183
2. RECOVERIES	218		5		375		16	436							417	1467
3. RECEIPTS FROM OTHER EU COUNTRIES	219	9	2281	152	565		220	2	3	67	1			16	239	3774
4. TOTAL IMPORTS FROM THIRD COUNTRIES	12462	6915	31230	18824	15204	1363	2900	19516	149	31079	3779	4807	6151	3048	35303	192730
of which :																
A.- USA	2410		827	1884	2688		332	5142		3390		529	238	487	2610	20537
B.- CANADA	625		920	173	517			1210		1685			394		1182	6706
C.- AUSTRALIA	3824	160	3221	3498	3891		511	2684		2486	11	399	190	1167	7076	29118
D.- SOUTH AFRICA	3550	1880	5773	7147	3361	141	298	4639	81	10466		1462			10259	49057
E.- POLAND	661	2094	7394	293	877	40	176	234		957	2211		1957	280	1235	18409
F.- RUSSIAN FEDERATION	830	1816	2220	1759	224	573		868		953		28	2837	190	3895	16193
G.- CHINA	250	278	244	660	733	265		194		910			120		705	4359
H.- COLOMBIA	215	415	3159	395	1393	142	866	1451		5810	1	1815		166	6722	22550
I.- INDONESIA			405	2735		106	464	2199		3314		465	132			9820
J.- VENEZUELA	70			148	710			895		276	192	109		297	56	2753
K.- OTHERS	27	272	7067	132	810	96	253		68	832	1364		283	461	1563	13228
5. TOTAL AVAILABILITIES (1+2+3+4)	12899	6924	64185	32970	18116	1363	3136	20093	152	31146	3780	4807	6151	3064	67472	272484
6. GROSS INLAND CONSUMPTION	9859	6973	65854	32971	19306	1220	2846	19404	150	13556	3780	4807	5905	3300	64243	254174
A.- POWER STATIONS (public & mine)	3723	6582	49041	27045	7233	2	2400	11219		9156	1544	4513	4194	500	49313	176465
B.- COKING PLANTS - coal input	3911		9040	3216	6942			6424		3100	1861		1250	1930	7896	45570
COKING PLANTS - coke output																
C.- IRON AND STEEL INDUSTRY	1535		2276	972	2251			1139	40	5				480	1	8699
D.- OTHER INDUSTRIES	342	325	3944	1368	1947	1218		619	110	1257	271	294	457	390	4093	16635
(of which POWER STATIONS)			3926		285	1085	290								1614	7200
E.- DOMESTIC HEATING	324	1	1288	320	732		446	3		10	104		4		2360	5592
F.- MISCELLANEOUS (TOTAL FROM (i) TO (iii))	24	65	265	50	201					28					580	1213
i. ISSUE TO WORKERS			65													65
ii. PATENT FUEL PLANTS	9		138		78										495	720
iii. OTHERS	15	65	62		123					28					85	378
7. DELIVERIES TO OTHER EU COUNTRIES	1833	106	143		101					16334					452	18969
8. EXPORTS TO THIRD COUNTRIES	53	58	1		4	49				411					98	674
9. TOTAL DELIVERIES (6+7+8)	11745	7137	65998	32971	19411	1269	2846	19404	150	30301	3780	4807	5905	3300	64793	254848

n.a.: data not available

TABLE 2
SUPPLIES AND REQUIREMENTS OF HARD COAL IN THE
EUROPEAN UNION: 2002

7-juin-04

(In thousands of metric tons)

Member state	Belgium	Denmark	Germany	Spain	France	Greece	Ireland	Italy	Luxembourg	Netherlands	Austria	Portugal	Finland	Sweden	UK	EUR-15
1. PRODUCTION (t=t)			29209	13611	1483										29540	73843
of which :																
A.- Underground			29209	8591	1483										16392	55675
B.- Opencast				5020											13418	18438
2. RECOVERIES	173		145		437		16	573							450	1794
3. RECEIPTS FROM OTHER EU COUNTRIES	179	12	1817	137	754		200	1	4	50	5	72	6	21	367	3625
4. TOTAL IMPORTS FROM THIRD COUNTRIES	9708	6249	31308	24375	17008	991	2884	19212	123	21627	4127	5595	5739	2724	28320	179990
of which :																
A.- USA	1840		338	1904	1890		460	2935		2350	2	114	223	319	1566	13941
B.- CANADA	321		1123	332	474			725		1639			147		750	5511
C.- AUSTRALIA	2576	250	3387	3708	4297		760	2416		2833	34	838	405	1038	5093	27635
D.- SOUTH AFRICA	2798	1214	6798	10765	4869	335	420	3871	55	7396	101	2120	66		9876	50684
E.- POLAND	540	2263	6901	241	1002			491		321	2285	335	1645	358	1597	17979
F.- RUSSIAN FEDERATION	969	1085	2035	2338	288	401		1424		590			2630	250	4320	16330
G.- CHINA	230		447	71	652			587		2940					336	5263
H.- COLOMBIA	314	791	2823	1622	1348		282	1950		1857		1583	134	83	3547	16334
I.- INDONESIA		150	381	3152		213	575	3375				605	200			8651
J.- VENEZUELA	120			65	756			1279		1218				381		3819
K.- OTHERS		496	6366	176	1432	72	387	159	68	71	1706		289	295	1235	12752
5. TOTAL AVAILABILITIES (1+2+3+4)	10060	6261	62479	38123	19682	991	3100	19786	127	21677	4133	5667	5745	2745	58677	255627
6. GROSS INLAND CONSUMPTION	9198	6968	62338	38122	19947	960	3100	19770	n.a.	13411	4032	5667	5905 b	3300 b	58641	251359
A.- POWER STATIONS (public & mine)	3974	6592	46350	32480	8337	6	2400	12705		9110	1805	5461	4194 b	500 b	46175	180089
B.- COKING PLANTS - coal input	3725		8921	3280	6405			5596		2980	1864		1250 b	1930 b	6534	42485
COKING PLANTS - coke output																
C.- IRON AND STEEL INDUSTRY	824		2295	791	2506	160		953	n.a.	1247	28			480 b		9284
D.- OTHER INDUSTRIES	269	254	3304	1189	1942	792	280	513	n.a.	42	256	206	457 b	390 b	3619	13513
(of which POWER STATIONS)			3280		244										1537	5061
E.- DOMESTIC HEATING	304	122	1173	322	668		420	3		7	79		4 b		1804	4906
F.- MISCELLANEOUS (TOTAL FROM (i) TO (iii))	102		295	60	89	2				25					509	1082
i. ISSUE TO WORKERS			125													125
ii. PATENT FUEL PLANTS	11		122		68										436	637
iii. OTHERS	91		48		21					25					73	258
7. DELIVERIES TO OTHER EU COUNTRIES	1898	7	116		112	4				8223					445	10805
8. EXPORTS TO THIRD COUNTRIES	73	1	2		11	4				345					92	528
9. TOTAL DELIVERIES (6+7+8)	11169	6976	62456	38122	20070	968	3100	19770	n.a.	21979	4032	5667	5905	3300	59178	251887

n.a.: data not available; b) Commission estimates

**TABLE 3
SUPPLIES AND REQUIREMENTS OF HARD COAL IN THE
EUROPEAN UNION: 2003**

7-juin-04

(In thousands of metric tons)

Member state	Belgium	Denmark	Germany	Spain	France	Greece	Ireland	Italy	Luxembourg	Netherlands	Austria	Portugal	Finland	Sweden	UK	EUR-15
1. PRODUCTION (t=t)			n.a.	13600	1450			n.a.							28500	43550
of which :																
A.- Underground			n.a.	8600	1450										15800	25850
B.- Opencast				5000				n.a.							12700	17700
2. RECOVERIES	n.a.		n.a.		310		10	n.a.							500	820
3. RECEIPTS FROM OTHER EU COUNTRIES	n.a.		n.a.	140	n.a.		190	n.a.	n.a.	n.a.	n.a.	237		n.a.	383	950
4. TOTAL IMPORTS FROM THIRD COUNTRIES	n.a.	4837	n.a.	19780	n.a.	1000	2750	n.a.	n.a.	n.a.	n.a.	4941	n.a.	n.a.	29617	62925
of which :																
A.- USA	n.a.	70	n.a.	1900	n.a.		450	n.a.		n.a.		365	n.a.	n.a.	1638	4423
B.- CANADA	n.a.		n.a.	300						n.a.					784	1084
C.- AUSTRALIA	n.a.	413	n.a.	3160	n.a.	100	750	n.a.		n.a.		689	n.a.	n.a.	5326	10438
D.- SOUTH AFRICA	n.a.	1763	n.a.	9300	n.a.	300	400	n.a.	n.a.	n.a.		2126			10328	24217
E.- POLAND	n.a.	643	n.a.	120	n.a.			n.a.		n.a.	n.a.		n.a.	n.a.	1670	2433
F.- RUSSIAN FEDERATION	n.a.	267	n.a.	1000	n.a.	400		n.a.		n.a.			n.a.	n.a.	4568	6235
G.- CHINA	n.a.		n.a.	200	n.a.			n.a.		n.a.			n.a.	n.a.	399	599
H.- COLOMBIA	n.a.	1502	n.a.	1200	n.a.		300	n.a.		n.a.		1761		n.a.	3709	8472
I.- INDONESIA	n.a.	147	n.a.	2600	n.a.	200	850	n.a.		n.a.			n.a.			3797
J.- VENEZUELA	n.a.		n.a.					n.a.		n.a.	n.a.			n.a.		
K.- OTHERS	n.a.	32	n.a.		n.a.				n.a.	n.a.			n.a.	n.a.	1293	1325
5. TOTAL AVAILABILITIES (1+2+3+4)	n.a.	4837	n.a.	33520	n.a.	1000	2950	n.a.	n.a.	n.a.	n.a.	5178	n.a.	n.a.	59000	107295
6. GROSS INLAND CONSUMPTION	n.a.	5678	n.a.	33520	n.a.	954	2950	n.a.	n.a.	n.a.	n.a.	5178	n.a.	n.a.	61400	109680
A.- POWER STATIONS (public & mine)	n.a.	5504	n.a.	27900	n.a.	2	2300	n.a.		n.a.	n.a.	4923	n.a.	n.a.	49500	90129
B.- COKING PLANTS - coal input	n.a.		n.a.	3200									n.a.	n.a.	6400	9600
COKING PLANTS - coke output																
C.- IRON AND STEEL INDUSTRY	n.a.		n.a.	820	n.a.	150		n.a.	n.a.	n.a.				n.a.		970
D.- OTHER INDUSTRIES	n.a.	103	n.a.	1200	n.a.	800	250	n.a.	n.a.	n.a.		255	n.a.	n.a.	3400	6008
(of which POWER STATIONS)			n.a.		n.a.										1500	1500
E.- DOMESTIC HEATING	n.a.	71	n.a.	350	n.a.		400	n.a.		n.a.			n.a.		1600	2421
F.- MISCELLANEOUS (TOTAL FROM (i) TO (iii))	n.a.		n.a.	50	n.a.	2				n.a.					500	552
i. ISSUE TO WORKERS			n.a.													
ii. PATENT FUEL PLANTS	n.a.		n.a.		n.a.										428	428
iii. OTHERS	n.a.		n.a.		n.a.					n.a.					72	72
7. DELIVERIES TO OTHER EU COUNTRIES	n.a.	74	n.a.		n.a.	4				n.a.					410	488
8. EXPORTS TO THIRD COUNTRIES	n.a.	25	n.a.		n.a.	4				n.a.					90	119
9. TOTAL DELIVERIES (6+7+8)	n.a.	5777	n.a.	33520	n.a.	962	2950	n.a.	n.a.	n.a.	n.a.	5178	n.a.	n.a.	61900	109799

n.a.: data not available

**TABLE 4
SUPPLIES AND REQUIREMENTS OF STEAM COAL IN
THE EUROPEAN UNION: 2001**

7-juin-04

(In thousands of metric tons)

Member state	Belgium	Denmark	Germany	Spain	France	Greece	Ireland	Italy	Luxembourg	Netherlands	Austria	Portugal	Finland	Sweden	UK	EUR-15
1. PRODUCTION (t=t)			13557	13994	1972			139							31513	61175
of which :																
A.- Underground			13557	9213	1875										17347	41992
B.- Opencast				4781	97			139							14166	19183
2. RECOVERIES	218		5		375		16	102							417	1133
3. RECEIPTS FROM OTHER EU COUNTRIES	219	9	2281	152	565		220	2	3	66				16	239	3772
4. TOTAL IMPORTS FROM THIRD COUNTRIES	8309	6915	27246	15400	8295	1363	2900	12758	149	24524	1544	4807	4655	1127	27580	147572
of which :																
A.- USA	673		785	778	272		332	1909		1488		529		33	875	7674
B.- CANADA					40					109						149
C.- AUSTRALIA	2212	160	299	1587	690		511	567		1090		399		50	2299	9864
D.- SOUTH AFRICA	3403	1880	5765	7147	3081	141	298	4444	81	9990		1462			10230	47922
E.- POLAND	661	2094	7377	161	748	40	176	234		759	1352		1512	280	1235	16629
F.- RUSSIAN FEDERATION	830	1816	2220	1759	224	573		865		953		28	2608	190	3895	15961
G.- CHINA	218	278	191	562	639	265		194		910			120		705	4082
H.- COLOMBIA	215	415	3154	395	1299	142	866	1451		5810		1815		166	6722	22450
I.- INDONESIA			405	2735		106	464	2199		2558		465	132			9064
J.- VENEZUELA	70			144	694			895		25	192	109		245	56	2430
K.- OTHERS	27	272	7050	132	608	b	96	253		832			283	163	1563	11347
5. TOTAL AVAILABILITIES (1+2+3+4)	8746	6924	43089	29546	11207	1363	3136	13001	152	24590	1544	4807	4655	1143	59749	209880
6. GROSS INLAND CONSUMPTION	5948	6973	56814	29547	12364	1220	2846	12980	150	9246	1544	4807	4655	1370	56347	206811
A.- POWER STATIONS (public & mine)	3723	6582	49041	27045	7233	2	2400	11219		9156	1544	4513	4194	500	49313	176465
B.- COKING PLANTS - coal input																
COKING PLANTS - coke output																
C.- IRON AND STEEL INDUSTRY	1535		2276	764	2251			1139	40	5				480	1	8491
D.- OTHER INDUSTRIES	342	325	3944	1368	1947	1218		619	110	50		294	457	390	4093	15157
(of which POWER STATIONS)			3926		285	1085	290								1614	7200
E.- DOMESTIC HEATING	324	1	1288	320	732		446	3		7			4		2360	5485
F.- MISCELLANEOUS (TOTAL FROM (i) TO (iii))	24	65	265	50	201					28					580	1213
i. ISSUE TO WORKERS			65													65
ii. PATENT FUEL PLANTS	9		138		78										495	720
iii. OTHERS	15	65	62		123					28					85	378
7. DELIVERIES TO OTHER EU COUNTRIES	1833	106	142		101					15002					452	17636
8. EXPORTS TO THIRD COUNTRIES	53	58	1		4	49				411					98	674
9. TOTAL DELIVERIES (6+7+8)	7834	7137	56957	29547	12469	1269	2846	12980	150	24659	1544	4807	4655	1370	56897	207485

a) Steam and coking coal; b) Commission estimate

**TABLE 5
SUPPLIES AND REQUIREMENTS OF STEAM COAL IN
THE EUROPEAN UNION: 2002**

7-juin-04

(In thousands of metric tons)

Member state	Belgium	Denmark	Germany	Spain	France	Greece	Ireland	Italy	Luxembourg	Netherlands	Austria	Portugal	Finland	Sweden	UK	EUR-15	
1. PRODUCTION (t=t)			11248	13611	1483											29540	55882
of which :																	
A.- Underground			11248	8591	1483											16392	37714
B.- Opencast				5020												13418	18438
2. RECOVERIES	173		145		437		16	112								450	1333
3. RECEIPTS FROM OTHER EU COUNTRIES	177	12	1817	137	754		200	1	4	50		72	6	21	367	3618	
4. TOTAL IMPORTS FROM THIRD COUNTRIES	6347	6249	27266	20972	17008 a	991	2884	14077	123	16680	1805	5595	4479	1092	22007	147575	
of which :																	
A.- USA	475		327	708	1890 a		460	676		1270		114	3		280	6203	
B.- CANADA					474 a			126		189						789	
C.- AUSTRALIA	1145	250	814	2181	4297 a		760	674		1593		838	65	48	864	13529	
D.- SOUTH AFRICA	2798	1214	6771	10696	4869 a	335	420	3761	55	7257		2120	66		9876	50238	
E.- POLAND	418	2263	6732	96	1002 a			491		321	1487	335	1255	358	1597	16355	
F.- RUSSIAN FEDERATION	968	1085	2029	2319	288 a	401		1424		417			2467	250	4320	15968	
G.- CHINA	153		374		652 a			292		2940					288	4699	
H.- COLOMBIA	314	791	2823	1622	1348 a		282	1950		1771		1583	134	83	3547	16248	
I.- INDONESIA		150	381	3152		213	575	3375				605	200			8651	
J.- VENEZUELA	76			21	756 a			1279		510				98		2740	
K.- OTHERS		496	6306	176	1432 a	72	387	29	68		317		289	255	1235	11062	
5. TOTAL AVAILABILITIES (1+2+3+4)	6697	6261	40476	34720	19682 a	991	3100	14190	127	16730	1805	5667	4485	1113	52364	204790	
6. GROSS INLAND CONSUMPTION	5473	6968	53417	34720	13542	960	3100	14174	n.a.	9196	1805	5667	4655 b	1370 b	52107	207154	
A.- POWER STATIONS (public & mine)	3974	6592	46350	32480	8337	6	2400	12705		9110	1805	5461	4194 b	500 b	46175	180089	
B.- COKING PLANTS - coal input																	
COKING PLANTS - coke output																	
C.- IRON AND STEEL INDUSTRY	824		2295	669	2506	160		953	n.a.	12				480		7899	
D.- OTHER INDUSTRIES	269	254	3304	1189	1942	792	280	513	n.a.	42		206	457 b	390 b	3619	13257	
(of which POWER STATIONS)			3280		244										1537	5061	
E.- DOMESTIC HEATING	304	122	1173	322	668		420	3		7			4 b	b	1804	4827	
F.- MISCELLANEOUS (TOTAL FROM (i) TO (iii))	102		295	60	89	2				25					509	1082	
i. ISSUE TO WORKERS			125													125	
ii. PATENT FUEL PLANTS	11		122		68										436	637	
iii. OTHERS	91		48		21					25					73	258	
7. DELIVERIES TO OTHER EU COUNTRIES	1898	7	115		112	4				7501					445	10082	
8. EXPORTS TO THIRD COUNTRIES	73	1	2		11	4				342					92	525	
9. TOTAL DELIVERIES (6+7+8)	7444	6976	53534	34720	13665	968	3100	14174	n.a.	17039	1805	5667	4655	1370	52644	207679	

n.a.: data not available; a) Steam and coking coal; b) Commission estimate

**TABLE 6
SUPPLIES AND REQUIREMENTS OF STEAM COAL IN
THE EUROPEAN UNION: 2003**

7-juin-04

(In thousands of metric tons)

Member state	Belgium	Denmark	Germany	Spain	France	Greece	Ireland	Italy	Luxembourg	Netherlands	Austria	Portugal	Finland	Sweden	UK	EUR-15
1. PRODUCTION (t=t)			n.a.	13600	1450			n.a.							28500	43550
of which :																
A.- Underground			n.a.	8600	1450										15800	25850
B.- Opencast				5000				n.a.							12700	17700
2. RECOVERIES	n.a.		n.a.		310		10	n.a.							500	820
3. RECEIPTS FROM OTHER EU COUNTRIES	n.a.		n.a.	140	n.a.		190	n.a.	n.a.	n.a.	n.a.	237		n.a.	383	950
4. TOTAL IMPORTS FROM THIRD COUNTRIES	n.a.	4837	n.a.	16460	n.a.	1000	2750	n.a.	n.a.	n.a.	n.a.	4941	n.a.	n.a.	29617 a	59605
of which :																
A.- USA	n.a.	70	n.a.	700	n.a.		450	n.a.		n.a.		365		n.a.	1638 a	3223
B.- CANADA	n.a.									n.a.					784 a	784
C.- AUSTRALIA	n.a.	413	n.a.	1340	n.a.	100	750	n.a.		n.a.		689		n.a.	5326 a	8618
D.- SOUTH AFRICA	n.a.	1763	n.a.	9300	n.a.	300	400	n.a.	n.a.	n.a.		2126			10328 a	24217
E.- POLAND	n.a.	643	n.a.	120	n.a.			n.a.		n.a.	n.a.		n.a.	n.a.	1670 a	2433
F.- RUSSIAN FEDERATION	n.a.	267	n.a.	1000	n.a.	400		n.a.		n.a.			n.a.	n.a.	4568 a	6235
G.- CHINA	n.a.		n.a.	200	n.a.			n.a.		n.a.			n.a.	n.a.	302 a	502
H.- COLOMBIA	n.a.	1502	n.a.	1200	n.a.		300	n.a.		n.a.		1761		n.a.	3709 a	8472
I.- INDONESIA	n.a.	147	n.a.	2600	n.a.	200	850	n.a.		n.a.			n.a.			3797
J.- VENEZUELA	n.a.							n.a.		n.a.	n.a.			n.a.		
K.- OTHERS	n.a.	32	n.a.		n.a.				n.a.	n.a.			n.a.	n.a.	1291 a	1323
5. TOTAL AVAILABILITIES (1+2+3+4)	n.a.	4837	n.a.	30200	n.a.	1000	2950	n.a.	n.a.	n.a.	n.a.	5178	n.a.	n.a.	59000 a	103975
6. GROSS INLAND CONSUMPTION	n.a.	5678	n.a.	30200	n.a.	954	2950	n.a.	n.a.	n.a.	n.a.	5178	n.a.	n.a.	55000	99960
A.- POWER STATIONS (public & mine)	n.a.	5504	n.a.	27900	n.a.	2	2300	n.a.		n.a.	n.a.	4923	n.a.	n.a.	49500	90129
B.- COKING PLANTS - coal input																
COKING PLANTS - coke output																
C.- IRON AND STEEL INDUSTRY	n.a.		n.a.	700	n.a.	150		n.a.	n.a.	n.a.				n.a.		850
D.- OTHER INDUSTRIES	n.a.	103	n.a.	1200	n.a.	800	250	n.a.	n.a.	n.a.		255	n.a.	n.a.	3400	6008
(of which POWER STATIONS)			n.a.		n.a.										1500	1500
E.- DOMESTIC HEATING	n.a.	71	n.a.	350	n.a.		400	n.a.		n.a.			n.a.		1600	2421
F.- MISCELLANEOUS (TOTAL FROM (i) TO (iii))	n.a.		n.a.	50	n.a.	2				n.a.					500	552
i. ISSUE TO WORKERS			n.a.													
ii. PATENT FUEL PLANTS	n.a.		n.a.		n.a.										428	428
iii. OTHERS	n.a.		n.a.		n.a.					n.a.					72	72
7. DELIVERIES TO OTHER EU COUNTRIES	n.a.	74	n.a.		n.a.	4				n.a.					410	488
8. EXPORTS TO THIRD COUNTRIES	n.a.	25	n.a.		n.a.	4				n.a.					90	119
9. TOTAL DELIVERIES (6+7+8)	n.a.	5777	n.a.	30200	n.a.	962	2950	n.a.	n.a.	n.a.	n.a.	5178	n.a.	n.a.	55500	100079

n.a.: data not available; a: Steam and coking coal

**TABLE 7
SUPPLIES AND REQUIREMENTS OF COKING COAL IN THE
EUROPEAN UNION: 2001**

7-juin-04

(In thousands of metric tons)

Member state	Belgium	Denmark	Germany	Spain	France	Greece	Ireland	Italy	Luxembourg	Netherlands	Austria	Portugal	Finland	Sweden	UK	EUR-15
1. PRODUCTION (t=t)			17112													17112
of which :																
A.- Underground			17112													17112
B.- Opencast																
2. RECOVERIES								334								334
3. RECEIPTS FROM OTHER EU COUNTRIES										1	1					2
4. TOTAL IMPORTS FROM THIRD COUNTRIES	4153		3984	3424	6909			6758		6555	2235		1496	1921	7723	45158
of which :																
A.- USA	1737		42	1106	2416			3233		1902			238	454	1735	12863
B.- CANADA	625		920	173	477			1210		1576			394		1182	6557
C.- AUSTRALIA	1612		2922	1911	3201			2117		1396	11		190	1117	4777	19254
D.- SOUTH AFRICA	147		8		280			195		476					29	1135
E.- POLAND			17	132	129					198	859		445			1780
F.- RUSSIAN FEDERATION								3					229			232
G.- CHINA	32		53	98	94											277
H.- COLOMBIA			5		94						1					100
I.- INDONESIA										756						756
J.- VENEZUELA				4	16					251				52		323
K.- OTHERS			17		202 b						1364			298		1881
5. TOTAL AVAILABILITIES (1+2+3+4)	4153		21096	3424	6909			7092		6556	2236		1496	1921	7723	62604
6. GROSS INLAND CONSUMPTION	3911		9040	3424	6942			6424		4310	2236		1250	1930	7896	47363
A.- POWER STATIONS (public & mine)																
B.- COKING PLANTS - coal input	3911		9040	3216	6942			6424		3100	1861		1250	1930	7896	45570
COKING PLANTS - coke output																
C.- IRON AND STEEL INDUSTRY				208												208
D.- OTHER INDUSTRIES										1207	271					1478
(of which POWER STATIONS)																
E.- DOMESTIC HEATING										3	104					107
F.- MISCELLANEOUS (TOTAL FROM (i) TO (iii))																
i. ISSUE TO WORKERS																
ii. PATENT FUEL PLANTS																
iii. OTHERS																
7. DELIVERIES TO OTHER EU COUNTRIES			1							1332						1333
8. EXPORTS TO THIRD COUNTRIES																
9. TOTAL DELIVERIES (6+7+8)	3911		9041	3424	6942			6424		5642	2236		1250	1930	7896	47363

n.a.: data not available; b: Commission estimation

**TABLE 8
SUPPLIES AND REQUIREMENTS OF COKING COAL IN THE
EUROPEAN UNION: 2002**

7-juin-04

(In thousands of metric tons)

Member state	Belgium	Denmark	Germany	Spain	France	Greece	Ireland	Italy	Luxembourg	Netherlands	Austria	Portugal	Finland	Sweden	UK	EUR-15
1. PRODUCTION (t=t)			17961													17961
of which :																
A.- Underground			17961													17961
B.- Opencast																
2. RECOVERIES								461								461
3. RECEIPTS FROM OTHER EU COUNTRIES	2										5					7
4. TOTAL IMPORTS FROM THIRD COUNTRIES	3361		4042	3403	n.a.			5135		4947	2323		1260	1632	6313	32416
of which :																
A.- USA	1365		11	1196	n.a.			2259		1080	2		220	319	1286	7738
B.- CANADA	321		1123	332	n.a.			599		1450			147		750	4722
C.- AUSTRALIA	1431		2573	1527	n.a.			1742		1240	34		340	990	4229	14106
D.- SOUTH AFRICA			27	69	n.a.			110		139	101					446
E.- POLAND	122		169	145	n.a.						798		390			1624
F.- RUSSIAN FEDERATION	1		6	19	n.a.					173			163			362
G.- CHINA	77		73	71	n.a.			295							48	564
H.- COLOMBIA					n.a.					86						86
I.- INDONESIA					n.a.											
J.- VENEZUELA	44			44	n.a.					708				283		1079
K.- OTHERS			60		n.a.			130		71	1389			40		1690
5. TOTAL AVAILABILITIES (1+2+3+4)	3363		22003	3403	n.a.			5596		4947	2328		1260	1632	6313	50838
6. GROSS INLAND CONSUMPTION	3725		8921	3402	6405			5596		4215	2227		1250 b	1930 b	6534	44205
A.- POWER STATIONS (public & mine)																
B.- COKING PLANTS - coal input	3725		8921	3280	6405			5596		2980	1864		1250 b	1930 b	6534	42485
COKING PLANTS - coke output																
C.- IRON AND STEEL INDUSTRY				122						1235	28					1385
D.- OTHER INDUSTRIES											256					256
(of which POWER STATIONS)																
E.- DOMESTIC HEATING											79					79
F.- MISCELLANEOUS (TOTAL FROM (i) TO (iii))																
i. ISSUE TO WORKERS																
ii. PATENT FUEL PLANTS																
iii. OTHERS																
7. DELIVERIES TO OTHER EU COUNTRIES			1							722						723
8. EXPORTS TO THIRD COUNTRIES										3						3
9. TOTAL DELIVERIES (6+7+8)	3725		8922	3402	6405			5596		4940	2227		1250	1930	6534	44208

n.a.: data not available; b) Commission estimate

**TABLE 9
SUPPLIES AND REQUIREMENTS OF COKING COAL IN THE
EUROPEAN UNION: 2003**

7-juin-04

(In thousands of metric tons)

Member state	Belgium	Denmark	Germany	Spain	France	Greece	Ireland	Italy	Luxembourg	Netherlands	Austria	Portugal	Finland	Sweden	UK	EUR-15
1. PRODUCTION (t=t)			n.a.													
of which :																
A.- Underground			n.a.													
B.- Opencast																
2. RECOVERIES								n.a.								
3. RECEIPTS FROM OTHER EU COUNTRIES	n.a.									n.a.	n.a.					
4. TOTAL IMPORTS FROM THIRD COUNTRIES	n.a.		n.a.	3320	n.a.			n.a.		n.a.	n.a.		n.a.	n.a.	n.a.	3320
of which :																
A.- USA	n.a.		n.a.	1200	n.a.			n.a.		n.a.			n.a.	n.a.	n.a.	1200
B.- CANADA	n.a.		n.a.	300	n.a.			n.a.		n.a.			n.a.	n.a.	n.a.	300
C.- AUSTRALIA	n.a.		n.a.	1820	n.a.			n.a.		n.a.	n.a.		n.a.	n.a.	n.a.	1820
D.- SOUTH AFRICA	n.a.		n.a.		n.a.			n.a.		n.a.					n.a.	
E.- POLAND			n.a.		n.a.					n.a.	n.a.		n.a.			
F.- RUSSIAN FEDERATION			n.a.					n.a.					n.a.			
G.- CHINA	n.a.		n.a.		n.a.										97	97
H.- COLOMBIA			n.a.		n.a.						n.a.					
I.- INDONESIA			n.a.							n.a.						
J.- VENEZUELA			n.a.		n.a.					n.a.				n.a.		
K.- OTHERS			n.a.		n.a.						n.a.			n.a.	2	2
5. TOTAL AVAILABILITIES (1+2+3+4)	n.a.		n.a.	3320	n.a.			n.a.		n.a.	n.a.		n.a.	n.a.	n.a.	3320
6. GROSS INLAND CONSUMPTION	n.a.		n.a.	3320	n.a.			n.a.		n.a.	n.a.		n.a.	n.a.	6400	9720
A.- POWER STATIONS (public & mine)																
B.- COKING PLANTS - coal input	n.a.		n.a.	3200	n.a.			n.a.		n.a.	n.a.		n.a.	n.a.	6400	9600
COKING PLANTS - coke output																
C.- IRON AND STEEL INDUSTRY			n.a.	120	n.a.											120
D.- OTHER INDUSTRIES			n.a.		n.a.					n.a.	n.a.					
(of which POWER STATIONS)			n.a.		n.a.											
E.- DOMESTIC HEATING			n.a.		n.a.					n.a.	n.a.					
F.- MISCELLANEOUS (TOTAL FROM (i) TO (iii))			n.a.		n.a.											
i. ISSUE TO WORKERS			n.a.													
ii. PATENT FUEL PLANTS			n.a.		n.a.											
iii. OTHERS			n.a.		n.a.											
7. DELIVERIES TO OTHER EU COUNTRIES																
8. EXPORTS TO THIRD COUNTRIES																
9. TOTAL DELIVERIES (6+7+8)	n.a.		n.a.	3320	n.a.			n.a.		n.a.	n.a.		n.a.	n.a.	6400	9720

n.a.: data not available

**TABLE 10
SUPPLIES AND REQUIREMENTS OF COKE IN THE
EUROPEAN UNION: 2001**

7-juin-04

(In thousands of metric tons)

Member state	Belgium	Denmark	Germany	Spain	France	Greece	Ireland	Italy	Luxembourg	Netherlands	Austria	Portugal	Finland	Sweden	UK	EUR-15
1. PRODUCTION (t=t)	3221		7265	2455	5091			4829		2127	1439		891	1148	5516	33982
of which :																
A.- Underground																
B.- Opencast																
2. RECOVERIES			106													106
3. RECEIPTS FROM OTHER EU COUNTRIES	280	2	852	14	214		260	94		83	72	7	193	142	108	2321
4. TOTAL IMPORTS FROM THIRD COUNTRIES	735	29	6009	129	1102			504		530	791	12	292	263	49	10445
of which :																
A.- USA	18		80							6	1					105
B.- CANADA			53	60						5	2					120
C.- AUSTRALIA			868													868
D.- SOUTH AFRICA																
E.- POLAND	14		2366		86					19	484		70	20		3059
F.- RUSSIAN FEDERATION	507		707	3	11					13	1		44			1286
G.- CHINA	196	28	1351	42	872			495		487		12	70	243	48	3844
H.- COLOMBIA			13													13
I.- INDONESIA																
J.- VENEZUELA																
K.- OTHERS		1	571	24	133			9			303		108		1	1150
5. TOTAL AVAILABILITIES (1+2+3+4)	4236	31	14232	2598	6407		260	5427		2740	2302	19	1376	1553	5673	44533
6. GROSS INLAND CONSUMPTION	4020	38	14019	2069	5525	4	60	5111		2082	2302	19	1376	1454	5472	43551
A.- POWER STATIONS (public & mine)																
B.- COKING PLANTS - coal input																
COKING PLANTS - coke output																
C.- IRON AND STEEL INDUSTRY	3927		12358	1562	4631	4		4780		1870	2033		1223	1388	5084	38860
D.- OTHER INDUSTRIES	80	38	1330	507	685			227		212	92	19	153	66	125	3534
(of which POWER STATIONS)							200									200
E.- DOMESTIC HEATING	2		209		44		60	104			176				67	662
F.- MISCELLANEOUS (TOTAL FROM (i) TO (iii))	11		122		165										196	494
i. ISSUE TO WORKERS			122													122
ii. PATENT FUEL PLANTS																
iii. OTHERS	11				165											176
7. DELIVERIES TO OTHER EU COUNTRIES	176	1	15	543	579			52		778	0					2144
8. EXPORTS TO THIRD COUNTRIES	4		1		9			29			0					43
9. TOTAL DELIVERIES (6+7+8)	4200	39	14035	2612	6113	4	60	5192		2860	2302	19	1376	1454	5472	43594

**TABLE 11
SUPPLIES AND REQUIREMENTS OF COKE IN THE
EUROPEAN UNION: 2002**

7-juin-04

(In thousands of metric tons)

Member state	Belgium	Denmark	Germany	Spain	France	Greece	Ireland	Italy	Luxembourg	Netherlands	Austria	Portugal	Finland	Sweden	UK	EUR-15
1. PRODUCTION (t=t)	2966		7226	2415	4552			4065		2127	1395		n.a.	n.a.	4559	29305
of which :																
A.- Underground																
B.- Opencast																
2. RECOVERIES																
3. RECEIPTS FROM OTHER EU COUNTRIES	54	1	950	11	350	3	250	41		65	62	7	n.a.	n.a.	194	1988
4. TOTAL IMPORTS FROM THIRD COUNTRIES	230	37	6234	137	997			630		510	756	12	n.a.	n.a.	49	9592
of which :																
A.- USA	26		476							37	2					541
B.- CANADA	9		2	46							3					60
C.- AUSTRALIA			1132													1132
D.- SOUTH AFRICA										17						17
E.- POLAND			2288	3	140					9	401					2841
F.- RUSSIAN FEDERATION	141		654	29	22			2		30		12				890
G.- CHINA	54	37	1112	58	683			580		417					48	2989
H.- COLOMBIA			79													79
I.- INDONESIA															1	1
J.- VENEZUELA																
K.- OTHERS			491	1	152			48			350					1042
5. TOTAL AVAILABILITIES (1+2+3+4)	3250	38	14410	2563	5899	3	250	4736		2702	2213	19	n.a.	n.a.	n.a.	38897
6. GROSS INLAND CONSUMPTION	3019	36	13850	1947	5740	3	200	4590		2072	2219	19	n.a.	n.a.	4733	38428
A.- POWER STATIONS (public & mine)																
B.- COKING PLANTS - coal input																
COKING PLANTS - coke output																
C.- IRON AND STEEL INDUSTRY	2966		12371	1671	4902	3		4323		1866	1995		n.a.	n.a.	4343	34440
D.- OTHER INDUSTRIES	47	36	1267		682		200	244		206	83	19	n.a.	n.a.	212	2996
(of which POWER STATIONS)							50									50
E.- DOMESTIC HEATING	2		204	276	39			23			141				178	863
F.- MISCELLANEOUS (TOTAL FROM (i) TO (iii))	4		8		117											129
i. ISSUE TO WORKERS			8													8
ii. PATENT FUEL PLANTS																
iii. OTHERS	4				117											121
7. DELIVERIES TO OTHER EU COUNTRIES	142		17	462	335			80		681	2				162	1881
8. EXPORTS TO THIRD COUNTRIES	1		5	154	22			47		13	0				155	397
9. TOTAL DELIVERIES (6+7+8)	3162	36	13872	2563	6097	3	200	4717		2766	2222	19	n.a.	n.a.	5050	38826

n.a.: data not available

**TABLE 12
SUPPLIES AND REQUIREMENTS OF COKE IN THE
EUROPEAN UNION: 2003**

7-juin-04

(In thousands of metric tons)

Member state	Belgium	Denmark	Germany	Spain	France	Greece	Ireland	Italy	Luxembourg	Netherlands	Austria	Portugal	Finland	Sweden	UK	EUR-15
1. PRODUCTION (t=t)	n.a.		n.a.	2400	n.a.			n.a.		n.a.	n.a.		n.a.	n.a.	4400	6800
of which :																
A.- Underground																
B.- Opencast																
2. RECOVERIES																
3. RECEIPTS FROM OTHER EU COUNTRIES	n.a.		n.a.	90	n.a.	3	240	n.a.		n.a.	n.a.	10	n.a.	n.a.	410	753
4. TOTAL IMPORTS FROM THIRD COUNTRIES	n.a.	12	n.a.		n.a.			n.a.		n.a.	n.a.		n.a.	n.a.	99	111
of which :																
A.- USA																
B.- CANADA																
C.- AUSTRALIA																
D.- SOUTH AFRICA																
E.- POLAND																
F.- RUSSIAN FEDERATION																
G.- CHINA		12													97	109
H.- COLOMBIA																
I.- INDONESIA															2	2
J.- VENEZUELA																
K.- OTHERS																
5. TOTAL AVAILABILITIES (1+2+3+4)	n.a.	12	n.a.	2490	n.a.	3	240	n.a.		n.a.	n.a.	10	n.a.	n.a.	4900	6911
6. GROSS INLAND CONSUMPTION	n.a.	15	n.a.	2070	n.a.	3	240	n.a.		n.a.	n.a.	10	n.a.	n.a.	4861	7199
A.- POWER STATIONS (public & mine)																
B.- COKING PLANTS - coal input																
COKING PLANTS - coke output																
C.- IRON AND STEEL INDUSTRY	n.a.		n.a.	1550	n.a.	3		n.a.		n.a.	n.a.		n.a.	n.a.	4460	6013
D.- OTHER INDUSTRIES	n.a.	15	n.a.	520	n.a.		200	n.a.		n.a.	n.a.	10	n.a.	n.a.	218	963
(of which POWER STATIONS)																
E.- DOMESTIC HEATING	n.a.		n.a.		n.a.		40	n.a.		n.a.	n.a.				183	223
F.- MISCELLANEOUS (TOTAL FROM (i) TO (iii))	n.a.		n.a.		n.a.			n.a.		n.a.	n.a.					
i. ISSUE TO WORKERS																
ii. PATENT FUEL PLANTS																
iii. OTHERS																
7. DELIVERIES TO OTHER EU COUNTRIES	n.a.		n.a.	400	n.a.			n.a.		n.a.	n.a.				150	550
8. EXPORTS TO THIRD COUNTRIES	n.a.		n.a.	180	n.a.			n.a.		n.a.	n.a.				80	260
9. TOTAL DELIVERIES (6+7+8)	n.a.	15	n.a.	2650	n.a.	3	240	n.a.		n.a.	n.a.	10	n.a.	n.a.	5091	7459

n.a.: data not available

