

for the Press Conference on 17/07/2014

Hard coal 2013: the world's second-most important energy source and guarantor for the security of energy supplies during times of crisis

Hard coal is again in 2013 the fastest-growing fossil primary energy source in the world. As shown in the BP Statistical Review 2014, it covered about 30% of the world's demand for primary energy of 12.7 billion TOE (tonnes of oil equivalent).

According to the German Federal Institute for Geosciences and Natural Resources (BGR), coal, which has a share of 56% of the reserves and about 89% of the resources of all fossil primary energy sources, has the greatest potential among all of the non-renewable energy sources and has been declared to be the most important energy source.

Hard coal is also broadly distributed over many regions, and calculations by the VDKi based on today's quantities, prices, and costs indicate that there are sufficient quantities to last for at least another 110 years. Even if a significant coal-exporting country were to prohibit the export of coal tomorrow (speaking theoretically), producing countries on other continents would be able to compensate the loss without any problems. The VDKi would like to call attention to the fact that the debate on the security of supply has become one-sided and closely focused on securing supply using primary energy sources tied to pipelines. The primary topic is the security of our electric power supply. Coal has a number of advantages in this respect. In contrast to renewable energies, it is available at all times. Moreover, it is not tied to pipeline facilities, can be stockpiled as an energy source right at power plant sites, is found all around the world, and there are many and varied means of transport across both the Atlantic and the Pacific Oceans.

Global hard coal consumption rises by 3%

According to initial estimates by BP in its Statistical Review 2014, global energy consumption of 12.7bn TOE (= tonne oil equivalent = 1 tonne OE = oil equivalent = 1.43 TCE) in 2013 rose by a little less than 2.3% in comparison with 2012 (12.5bn TOE). The background to this development is the low or non-existent growth in many OECD countries such as in Europe and Japan (with the exception of the USA). Coal consumption continued to increase in China (+4.4%) and India (+3.8%), on the other hand, although growth was more moderate than in previous years.

Coal consumption once again posted the strongest rise. In comparison with 2012, there was growth of 3%. The decline in coal consumption in the USA by 11.9% in 2012 was followed by growth of 4.3% in 2013. In terms of the average growth rates of 3.5% over the past five years, coal is and remains the Number 1 source of primary energy in the 21st century and has been the second-most important source of primary energy in the world since 2012, surpassed only by oil.

Estimates by the EU Commission indicate that total primary energy consumption in **Europe** declined by 0.6% (98m TOE) to 1.49bn TOE. The initial estimates indicate that there has been virtually no change in the mix of primary energy sources used for electric power generation in the EU 28. Hard coal and lignite together maintained their share of 27%, while hard coal alone posted a share of 19% in spite of the massive expansion of renewable energies. However, hard coal output in Europe declined by 15m tonnes to 114m tonnes. On the other hand, hard coal imports to the EU 28 rose by 3m tonnes (+1.4%) to 216m tonnes.

Seaborne world trade in steam coal grows by 6%

World trade in hard coal totalling 1,237m tonnes in 2013 represented an increase of 73m tonnes (about 6%) in comparison with the previous year. Seaborne and internal trade posted the following development: in 2013, seaborne trade rose by 60m tonnes to 1,142m tonnes (= +5.5%), while internal trade increased by 18m tonnes (= +16%) to 95m tonnes. The steam coal market grew by 4% (37m tonnes) to a total of 863m tonnes.

Projections from the IEA show that the demand for coal will grow worldwide by an average of 2.3% p.a. over the coming years.

Preliminary calculations by the VDKi for the first four months of 2014 indicate that the seaborne hard coal market worldwide grew by just under 3% (10m tonnes) in comparison with the same period of the previous year.

Coking coal market grows by 9%

Worldwide crude steel production in 2013 reached the level of 1,607m tonnes, a new record. The increase by 3.5% (59m tonnes) occurred mainly in Asia (+6%) and in the Middle East (+2.5%). Crude steel production in Europe, North and South America, Russia and Korea declined by between 1.8% and 4.4%. Pig iron production, the decisive factor for the consumption of coking coal, PCI coal and coke, rose by 52m tonnes (about 5%) to 1,164m tonnes. The coking coal market increased correspondingly by 23m tonnes (+9%) to 279m tonnes.

With the exception of Australia, there were no fundamental changes in the supplier structure. Australia's market share increased by another 8 percentage points and has now reached the mark of 61%. The USA again lost market share to Australia and now holds a share of 20%.

Hard coal and coke imports to Germany rise by 10%, hard coal consumption increases by 4%

The demand for domestic German and imported hard coal rose by 2.4m TCE (4.1%) to almost 61m TCE in 2013. About 86% of the demand for hard coal was covered by imports; domestic coal today covers only about 14%. Total imports of hard coal and coke reached a new record level of 52.8m tonnes in 2013, an increase by 4.9m tonnes (10%) over 2012.

Most of the hard coal sales go to power plants as the dominant buyers (71%; previous year 66%) and the iron and steel industry (26%; previous year 30%); the heating market (4%) plays only a subordinate role. The import demand for steam coal was covered primarily by Russia, the USA and Colombia, while the primary supplier countries for coking coal were Australia (45%) and the USA (30%).

Power generation from hard coal-fired power plants rose substantially in 2013 thanks to the favourable price situation in comparison with gas and the low CO₂ certificate prices in European emission trading. Hard coal-fired power plants supplied 124 TWh of electric

power, about 8 TWh (6.5%) more than in the past year, giving hard coal a share of more than 19% in the energy mix in 2013.

The balance in power exchange (total exports less imports) in 2013 amounted to about 34 TWh, an increase of 46% over 2012.

The price advantage of coal over gas (difference between the so-called clean dark spread less clean spark spread) in recent years has fluctuated between €-15 and €-25 per MWh. However, this difference favouring hard coal must not be allowed to obscure the fact that the revenues from power generation are inadequate because of the artificially low prices on the EEX and their unfair competitive advantage created by the priority given to feed-in of renewable energies. A German hard coal-fired power plant has generation costs of between €50/MWh and €60/MWh, depending on its age. At the moment, however, it receives only about €35/MWh for the generated base load, i.e. it can usually achieve only very low contribution margins, if any at all, with the consequence that power revenues fall far short of covering the total operating costs.

This has prompted Dr Wolfgang Cieslik, VDKi CEO, to call on politicians for action:

“We urgently need a form of regulation which will guarantee hard coal-fired power plants a return to profitability in the long term as well because this is the only course which can guarantee the security and profitability of power supply and the successful realisation of the energy turnaround.”

Despite the increase in steam coal imports of 3.3% in Q1 2014, the VDKi estimates that only 37m tonnes of steam coal and 51m tonnes of hard coal and coke in total will be imported during all of 2014.

Price developments: A surplus in supply meets moderate demand

Developments in which a worldwide surplus in the supply of coal runs into demand which is not growing fast enough began in 2011, and the trend continued in 2013. Prices remained under pressure in 2013 as a result. From October 2013 to today (beginning of July 2014) alone, prices for steam coal fell from US\$89/tonne to US\$72/tonne, about 20%. The same is true of coking coal prices. Both coking coal and coke prices declined in 2013 because of the general slump in demand accompanied by a simultaneous expansion in supply.

While prices between US\$160 and US\$165/tonne were still being paid for coking coal at the beginning of 2013, this level had decreased to US\$138/tonne by the end of 2013. This development continues to hold sway in 2014; as of the middle of 2014, spot prices for HCC quality had fallen to US\$116/tonne.

About the German Coal Importer Association

The *Verein der Kohlenimporteure e.V.* (VDKi) is the lobby organisation for the hard coal import market in Germany. Its German and European members come from the sectors power, industry, trade and logistics. The Association currently has 78 members who consume about 70% of the German demand for hard coal of approximately 61 million tonnes in their facilities. The VDKi clearly represents the major part of the hard coal market (German domestic and imported hard coal) in Germany.

Additional information is available at www.verein-kohlenimporteure.de.

Activities: The VDKi regularly examines the significance of imported coal for the international, European and German hard coal markets, describes prospects for future import development and regularly publishes statistics about German hard coal imports and prices.

Publications: Annual reports describing the inclusion of imported coal in the international, European and German hard coal markets and prospects for further developments in import.

Statistics about hard coal imports and prices are published monthly on the internet.

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