

## **Response to the Commission Green Paper on EU Security of Energy Supply by UK COAL PLC**

### **1. Introduction**

- 1.1 UK COAL (formerly known as RJB Mining) is the UK's largest coal mining company producing just under 20 million tonnes, 60% of UK production, from 13 deep-mines and a similar number of surface mines. We welcome the opportunity to contribute to this crucial debate on the future direction of European energy policy.
- 1.2 Recent UK energy projections indicate that by 2020 around 75% of UK electricity will be generated by gas fired plant. UK COAL supports the UK Government's central energy policy objective to "ensure secure, diverse and sustainable supplies of energy at competitive prices", but is concerned that no energy policy has been put into place to counter the growing use of gas, much of which will be imported over large distances. There has to be a diverse and secure fuel base which includes the utilisation of indigenous energy sources, and coal fired generation has a major role to play in meeting this objective both in the UK and Europe-wide.
- 1.3 This submission contains the formal response of UK COAL which supersedes the initial response of 12 February 2001, submitted in the name of RJB Mining. (RJB Mining PLC changed its name on 25 May 2001 to UK COAL PLC following a vote of shareholders). Also attached as an annex are responses to the 13 questions raised within the Green Paper.

### **2. Competitive Position**

- 2.1 The UK coal mining industry over recent years has made great strides to improve its productivity and reduce its cost base. UK coal production is the lowest cost within Europe and with the recent increase in world coal prices is currently competitive with imported coal delivered into inland UK power stations
- 2.2 Therefore, UK COAL is concerned with the global references, within the main body of the text, to coal production within Europe as uneconomic, uncompetitive and having no chance of a viable future. Only hidden away in Annex 3, is there any acknowledgement that the UK could compete on the international market.

### **3. EU Energy Position**

- 3.1 The Green Paper highlights graphically the increasing risk being faced by EU member states, all of which the UK coal industry has been stressing for some time. We have itemised out some of the more salient points below:
  - i. The EU will become increasingly dependent on external energy sources which could be 70% of supply by 2030. (*Part Three, Section I, paragraph B2*)
  - ii. It is impossible for the EU to be self sufficient in energy. (*Part One, Section I*)
  - iii. Greater consumption of gas could be followed by an upward trend in prices and undermine the EU's security of supply and competitiveness. (*Part One, Section II, paragraph C1c*)
  - iv. 80% of the EU's energy reserves are coal. (*Part One, Section I, paragraph B2a*)

- v. World reserves of oil and gas are predominantly in the Middle East and Former Soviet Union. (*Part One, Section I, paragraph B1a-b*)
- vi. The EU has no influence over international energy prices. (*Part One, Section I, paragraph C3b*)
- vii. The EU's Kyoto targets will not be met. (*Part Three, Section I, paragraph B1b*)
- viii. The EU's renewable targets will not be met. (*Part Three, Section I, paragraph B1b*)
- ix. Nuclear capacity is declining within the EU and 100GW of new nuclear capacity will be required by 2025 to replace existing stations. (*Annex1*)
- x. Five out of eight EU nuclear States have announced a moratorium on new nuclear build. (*Part One, Section II, paragraph A1b*)
- xi. 90% of the expected growth in CO2 emissions between 1990 and 2010 will be attributable to the transport sector. (*Part Two, Section I, paragraph A2*)
- xii. Coal can be easily and safely stored and its transport does not entail the same environmental hazards as the transport of oil and gas. (*Part One, Section II, paragraph A2b*)
- xiii. International oil and gas prices have been subject to major fluctuations unlike world coal prices which have remained relatively stable. (*Part One, Section II, paragraph A2c*)

#### **4. Green Paper Conclusions**

- 4.1 After having determined the above facts, UK COAL believes that the Green Paper's conclusions side-step the fundamental problems of security of supply and are flawed in concluding that there is no positive long-term role for coal.
- 4.2 The Green Paper proposes a solution to the problems through better demand management, upward tax harmonisation, increased spending on renewable energies, increasing strategic oil and gas stocks and establishing long term relationships with energy supply countries.
- 4.3 UK COAL believes the above strategies will either not deliver any meaningful benefit or would not be acceptable to the vast majority of Member States. The proposal on tax harmonisation would be particularly unpalatable for the UK. The run down of the nuclear industry will leave a huge gap in European energy needs whilst increasing carbon emissions by over 300 million tonnes per annum. With renewables struggling to achieve a target of 12% of primary energy consumption by 2010 it is unlikely that further substantial growth could be achieved to cover this shortfall.
- 4.4 UK COAL strongly believes that market liberalisation alone cannot deliver EU energy security, as the 'market' will always look towards the short term without any regard of long term consequences. The drive to open the European electricity and gas markets, whilst aiming to deliver short-term consumer benefits may in the long term damage indigenous coal production within the Community. Short-term investment decisions currently point to the building of new gas generation stations as they have lower capital costs, shorter build time and are technically proven. The trend of replacing coal by gas will lead to the closure of existing mining capacity and effectively ignores 80% of the EU's energy reserves

- 4.5 Over the last few months, the UK has seen sustained high demand for coal in the power generation sector. This has been driven by high gas prices, interruptions to gas supply and the poor performance of nuclear units. Coal generators and UK producers have been able to respond to this increased demand by the usage of coal stocks.
- 4.6 UK suppliers and generators together can safely and easily hold six months fuel supply. This option is not economically available to oil or gas generators. Increasing strategic oil and gas stocks may provide some cover for short-term problems and relief against speculators in the market, but it cannot provide any real answer to underlying security of supply problems. UK COAL believes the Commission should recognise the benefits coal stocks can bring to both national and European energy security.
- 4.7 Future supplies of oil and gas within the EU will be more expensive. The North Sea is now a mature field and most of the reserves from the larger fields have now been recovered. Future production will concentrate on much smaller fields and those previously classified as ‘uneconomic’. The UK Offshore Operators Association sums up the position in their 2000 Economic Report when they state:
- “What is clear is that the development of the remaining oil and gas will be more difficult, given the combination of smaller field sizes, higher development costs, ageing infrastructure and lower real product prices”*. UKOOA Economic Report 2000
- 4.8 Additional reserves do exist in the much deeper waters of the Atlantic to the west of the Shetlands. However, these will require new infrastructure and because of the more difficult operational environment will inevitably cost substantially more to exploit.
- 4.9 The Green Paper acknowledges it has no influence over international energy prices and as the EU becomes more reliant on supplies of imported gas, Member States will have less control over price. In addition to the purchase price, gas shipped over several countries before it reaches the EU will unavoidably incur high transport costs.
- 4.10 The Green Paper aims to reduce the risk of dependence on any one fuel or supply region within its energy supplies. However, entering into long term contracts with Russia could lead to increased dependence on a country which has recently cut gas supplies with its neighbours over a contractual dispute. Russia has also delayed ratification of the international Energy Charter Treaty due to fears that the treaty would weaken its control over pipelines running across its land.
- 4.11 In short, UK COAL believes the Green Paper has come to the wrong conclusions and totally ignores the benefits that utilisation of indigenous coal reserves can bring.

## **5 International Coal Market**

- 5.1 Although not explicitly stated within the Green Paper coal will continue to be an important energy source within the EU as nuclear declines. The assumption is that this coal will be imported, due to the uncompetitive position of the European industry. However the international coal market is changing and it would be unwise to assume the low coal prices of just a few months ago will return in the future.

- 5.2 A trend of consolidation between coal producers worldwide, has seen five companies Billiton, Anglo, Rio Tinto, Glencore and BHP control over 50% of the world's traded seaborne steam coal market of around 320 million tonnes per annum. The recent proposed merger of BHP and Billiton will lead to further consolidation. Whilst production is spread worldwide, the reduction in the number of competitive suppliers could lead to a continued upward pressure on international prices threatening Europe's economy.

## 6 Environmental Solutions

- 6.1 UK COAL is already playing its part in reducing greenhouse gases. In pledging to increase mine methane utilisation by over 100%, the Company was the first industrial concern in the UK to commit to the UK Government's Corporate Commitment Campaign. The reduction in emissions of 320,000 tonnes of CO<sub>2</sub>, whilst welcome, is small in the overall scale of the EU's Kyoto target of 316 million tonnes. What is needed is the introduction of clean coal technology to help play a major part in meeting the EU's Kyoto obligation.
- 6.2 Investment in clean coal technology across the EU would provide both diversity and security in the European energy market whilst helping to meet international environmental commitments. Emissions of CO<sub>2</sub> could be reduced by up to 25% and SO<sub>2</sub> by 95% as well as giving significant reductions in other pollutants.
- 6.3 As with all new technologies, initial investment is difficult to arrange given the associated risks. Private finance is available but is unlikely to be attracted without the guarantee of long term contracts. Therefore, to pump-prime the initial building of commercial units, UK COAL would propose the introduction of a 'Clean Coal' Obligation where electricity suppliers would purchase specified quantities of electricity generated from clean coal sources. This method has already been successfully adopted within the UK, to support both the renewable and nuclear industries.
- 6.4 Whilst UK COAL would welcome a debate on which clean coal technologies should be supported, our own preference is for gasification (IGCC). The main reasons are:
- i. True alternative to gas cartels, as it provides a cap on gas prices.
  - ii. IGCC builds on the proven technology of gas turbines for power generation and is fully compatible with fuel cells.
  - iii. 40-45% efficient today, potential to reach 50% in the near term and >60% in the longer term (US Vision 21 programme)
  - iv. Fuel flexibility provides arbitrage opportunities between coal, petcoke, orimulsion and natural gas at a single plant.
  - v. Gasification technology provides a clean disposal route for many difficult wastes: municipal solid waste, sewage sludge, plastics, refinery residues.
- 6.5 IGCC power stations using indigenous reserves, offer an environmentally acceptable way to guarantee long term security of energy supplies within the EU. The flexibility of gasification means that coal gasifiers can provide an alternative to conventional gas supplies. The ability to utilise coal gas in clean coal stations or conventional gas power plant will place a cap on gas prices providing a predictable cost to the European economy.

- 6.6 Currently available clean coal technologies could also be used as a stepping stone towards the capture and sequestration of CO<sub>2</sub>, providing the ultimate zero emissions coal plant. Used for enhanced oil recovery, CO<sub>2</sub> has a natural market in the UK where it could be usefully used to extend the life of North Sea oil reserves.
- 6.7 Around the world such technologies are being developed. Currently, CO<sub>2</sub> from a previously supported US Department of Energy coal gasification plant in North Dakota is being sold via a pipeline to recover oil from the Weyburn field in Saskatchewan, Canada.

## **7 Conclusions**

- 7.1 The Green Paper pays little regard to indigenous coal, its most abundant energy reserve, or to the possibility of utilising imported coal to diversify its energy mix. The UK coal industry is currently competitive with internationally traded coal and the recent increase in oil and gas prices have showed how valuable indigenous energy reserves can be.
- 7.2 IGCC power stations using indigenous reserves, offer an environmentally acceptable way to guarantee security of energy supplies within the EU. It also provides flexibility and diversity to the European energy mix and does provide the best solution to the security of supply problems being posed within the Green Paper.
- 7.3 Finally, UK COAL recognises that the EU has no formal power over Member States on energy issues but it believes in light of the Green Paper, that Member States should now formally review their energy policy and formulate a framework which includes clean coal technology.

## **Annex: Responses to Specific Questions**

1. The EU cannot accept an increase in its dependence on external energy sources without compromising its security of supply or its competitiveness. The Paper has totally ignored the fact that much of the UK coal industry is competitive with world prices and that any production from such sources must be valuable in reducing the dependence on imported fuel sources.

Gas reserves within Member States have rapidly diminished since the relaxation, in March 1991, of the 1975 EC Council Directive restricting natural gas being burnt in power stations. Gas should be treated as a premium fuel and should not be wasted in large power generation installations.

It is important to diversify fuel sources to provide security of supply and indigenous coal can play its part. This was demonstrated last year in the UK where coal stocks were lifted at short notice to compensate for the poor performance of nuclear and gas stations and to combat rising gas prices.

2. Decisions taken in other countries can affect other States. The EU should ensure that any measures taken by individual governments which may be necessary to meet their unique circumstances do not cause any market distortion between Member States.
3. Tax and state aid policies may be applied in clearly defined circumstances within the EU, provided they are properly directed so that low cost competitive operations in other countries are not adversely affected.
4. Stable prices can never be guaranteed in agreements with non Member States. A recent example is the dispute between Russia and Georgia where Russian gas supplies were suspended. Russia has also delayed ratification of the international Energy Charter Treaty due to fears that the treaty would weaken its control over pipelines running across its land. The EU therefore, should always look to maximise its own indigenous reserves.

Security of supply arrangements being negotiated by the EU in respect of long term energy supply deals with Russia should be available to all EU fuel suppliers. UK COAL would welcome the opportunity to sign 20+ year supply contracts, thus providing financial stability and allowing long term investment to be made. These types of contract are not available in the commercial world and the EU should not favour Gazprom over indigenous EU energy producers.

5. Coal can be easily and safely stockpiled in large quantities to safeguard security of supply. Any increase in strategic oil and gas stocks may provide some relief against speculators in the market, but it cannot provide any real answer to security of supply problems.
6. Liberalisation of energy markets or energy transport networks, whilst desirable, cannot in itself guarantee security of supply. The current situation in California is a prime example of how energy prices have risen due to power shortages in a liberalised market.

UK COAL strongly believes that market liberalisation alone cannot deliver EU energy security, as the 'market' will always look towards the short term without any regard of

long term consequences. The drive to open the European electricity and gas markets, whilst aiming to deliver short-term consumer benefits may in the long term have a damaging effect on indigenous coal production within the Community. Short-term investment decisions currently point to the building of new gas generation stations as they have lower capital costs, shorter build time and are technically proven. The trend of replacing coal by gas will lead to the closure of existing mining capacity and effectively ignores 80% of the EU's energy reserves.

7. In addition to renewables, money has to be spent on the commercial development and deployment of new clean coal technologies. As with all new technologies initial start up costs are high and financial support is required. In the UK nuclear power was subsidised for many years, and early gas stations were supported by the 'sweetheart deals', paid for by captive electricity consumers. When the technology becomes proven and more units are built, costs start to fall. Therefore, to pump-prime the initial building of commercial units, UK COAL would propose the introduction of a 'Clean Coal' Obligation along similar lines to the proposed Renewables Obligation where electricity suppliers would purchase specified quantities of electricity generated from clean coal sources.
8. Whilst this area does not directly affect the coal industry, UK COAL believes that nuclear energy does have a long term role in a diverse energy mix. Reduced nuclear capacity would lead to even greater dependence on imported gas, exacerbating security of supply problems.
9. The rapid growth of transport and the slow take up of renewable technologies has led the EU to forecast that it will not meet its Kyoto targets. The run down of the nuclear industry will also increase carbon emissions by over 300 million tonnes per annum. It also appears that national politicians will be reluctant to tackle the transport issue, as shown by tax reductions across Europe, following recent petrol price rises.

The adoption of clean coal technology across Member States could help the EU meet its Kyoto obligations as well as providing diversity and security in the European energy market. Emissions of CO<sub>2</sub> could be reduced by up to 25% and SO<sub>2</sub> by 95% as well as giving significant reductions in other pollutants.

10. UK COAL has no comment on this matter.
11. A combination of energy saving measures is required; for example regulatory measures should be introduced for new buildings together with tax breaks for refurbishing old properties to new standards.
12. UK COAL acknowledges the environmental benefits provided by rail and canal transport and, excluding coal sold to neighbouring sites by conveyor, over 80% of our sales are via these methods of transport. It is our policy wherever possible, to use them in preference to road.
13. It is important to have joined up thinking both across Member States and between different governmental functions within Member States in order to meet EU wide targets. Planning and Environmental policies must be consistent with energy policy, with regulatory bodies properly controlled and the local planning system taking cognisance of wider national and European objectives. California is a prime example of where a lack of co-ordination and vision have led to power cuts in one of the

world's strongest economies, and with the State's two biggest energy providers pushed to the brink of bankruptcy.