

**EURACOAL**

European Association  
for Coal and Lignite



## **Coal in a Sustainable European Power Policy**

European Energy Forum  
Brussels - 28<sup>th</sup> November 2006

Nigel Yaxley  
President

### **Coal in a Sustainable European Power Policy**

- Coal in a world context
- Coal and the Energy Green Paper
- Emissions trading as a barrier to investment
- Clean coal – a three stage concept
- Policy requirements for sustainable coal

## Coal in a Sustainable European Power Policy

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EEF 28<sup>th</sup> November 2006, Figure 3

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## Perceptions of coal are changing...



*The Economist - July 2002*

Coal-fired electricity  
**The future is clean**

Coal is costly, but coming back into favour—and cleaner

*The Economist - September 2004*

EEF 28<sup>th</sup> November 2006, Figure 4

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## ...as they are for gas!

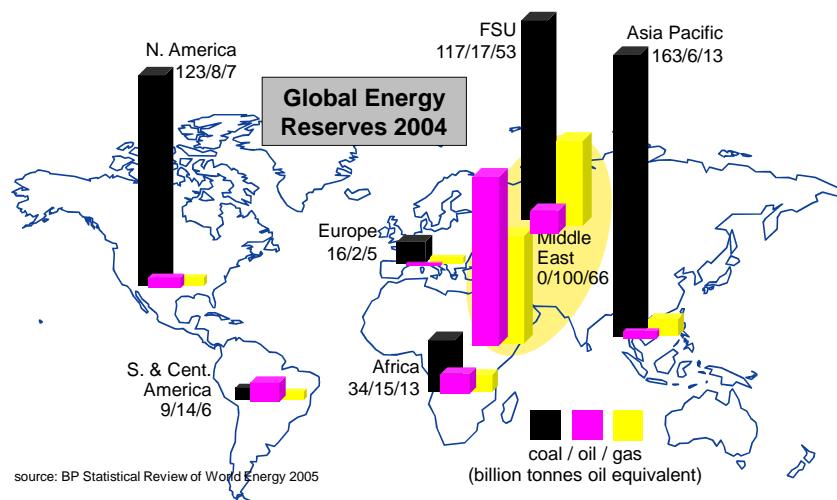
“For us, our contracts  
are like a Holy Bible”  
(Alexander Medvedev, Gazprom  
Deputy CEO)



EEF 28<sup>th</sup> November 2006, Figure 5

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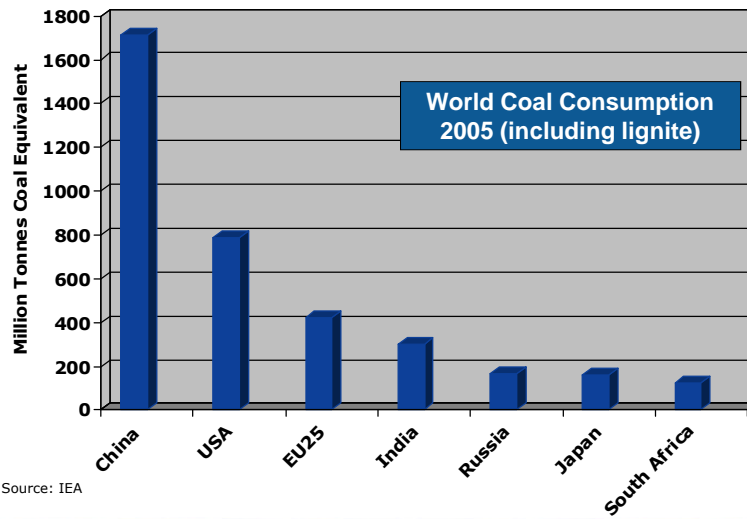
## Reserves of coal are evenly distributed around the globe



EEF 28<sup>th</sup> November 2006, Figure 6

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## China already dominates world demand...

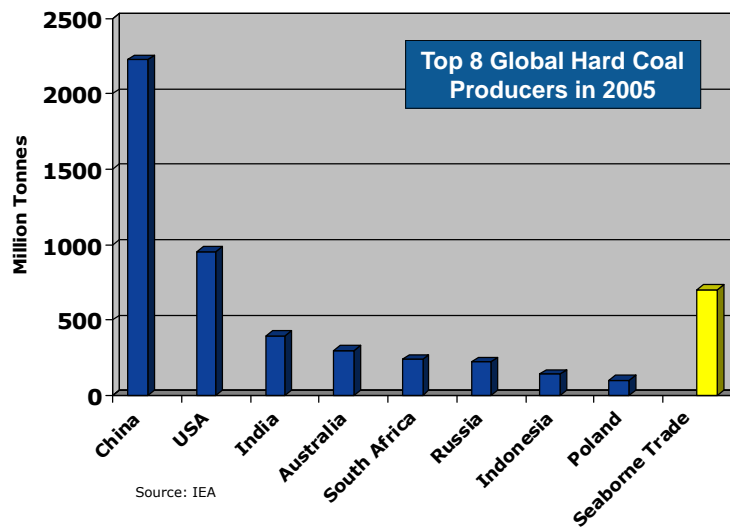


Source: IEA

EEF 28<sup>th</sup> November 2006, Figure 7

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## ...and most of the world's coal is produced 'at home'

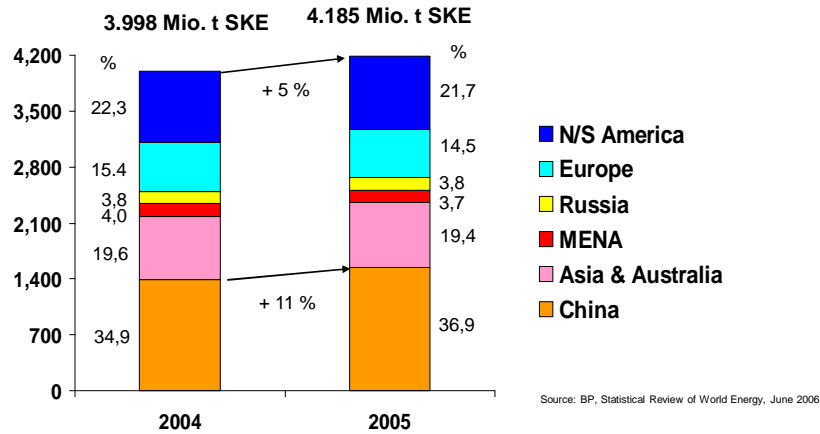


Source: IEA

EEF 28<sup>th</sup> November 2006, Figure 8

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## World coal consumption is increasing

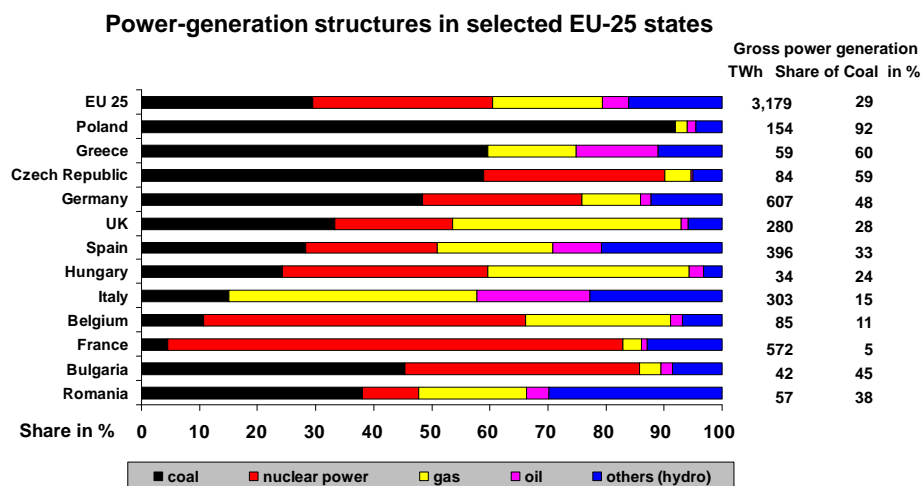


China, India and the developing world are basing their growth on coal – Europe must help make clean coal part of the solution to climate change

EEF 28<sup>th</sup> November 2006, Figure 9

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## Coal is important in EU power generation ...



Data as per: 08/2006

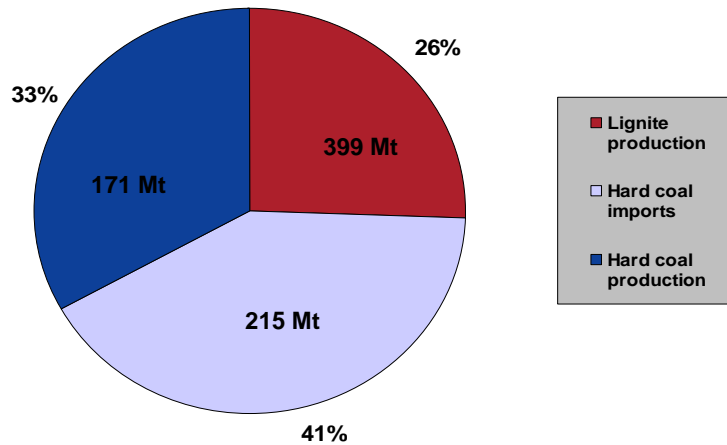
Source: EUROSTAT – Energy / Yearly Statistics 2004

EEF 28<sup>th</sup> November 2006, Figure 10

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## ... with indigenous coal supply making a major contribution

EU25 Solid Fuel Supply 2005 (adjusted for calorific value)



Source: European Commission / Euracoal

EEF 28<sup>th</sup> November 2006, Figure 11

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EEF 28<sup>th</sup> November 2006, Figure 12

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## New European energy policies are emerging

- Energy Green Paper published March 2006
  - Security – Sustainability – Competitiveness

Consultation

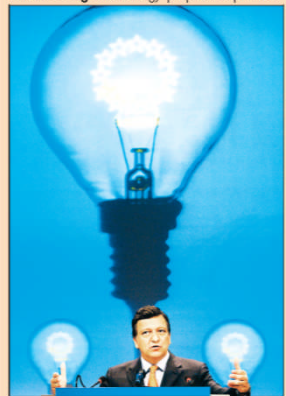
- Strategic Energy Review
  - Communication on Sustainable Coal
- } Early 2007

EEF 28<sup>th</sup> November 2006, Figure 13

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## The Green Paper was largely preoccupied with non-coal issues...

Barroso's big idea Energy proposal explained



**Barroso's big idea** Energy proposal explained

European Commission president José Manuel Barroso says the big idea for creating the continent's energy distribution system is to create a single market for energy. The energy green paper, which is the first step in the process, will be published in the next few days, Barroso says. He says the Commission will take the energy plan to the Council of Ministers in the next few days, where he will try to get the Council to agree to the plan. The plan is to create a single market for energy across the continent.

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“Coal and lignite, for example, presently account for around one third of the EU’s electricity production: climate change means that this is only sustainable if accompanied by commercialised carbon sequestration and clean coal technologies on an EU level”

EEF 28<sup>th</sup> November 2006, Figure 14

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## **...but coal responds well to the Green Paper priorities (1)**

- Energy for growth and jobs in Europe: completing the internal European electricity and gas markets
  - Coal already has a fully functioning market – aiding competitiveness
- An internal market that guarantees security of supply: solidarity between member states
  - Coal can be safely transported and stored and is not subject to the major foreign policy concerns of oil and gas
- Tackling security and competitiveness of energy supply: towards a more sustainable, efficient and diverse energy mix
  - Coal provides a unique contribution to security of supply
  - Reasonable and relatively stable prices of coal help competitiveness

EEF 28<sup>th</sup> November 2006, Figure 15

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## **Coal responds well to the Green Paper priorities (2)**

- An integrated approach to tackling Climate Change
  - Continuous modernisation and major efficiency improvements help reduce emissions significantly in the short and medium term
  - Carbon Capture and Storage in coal-fired power plants and geological storage to be developed for 2020 and beyond
- Encouraging innovation: a strategic European energy technology plan
  - The coal industry backs the ZEP and SMR Technology Platforms
  - EURACOAL welcomes planned coal-based pilot and demonstration plants with CO<sub>2</sub> Capture and Storage
- Towards a coherent external energy policy
  - Indigenous coal reduces import dependency
  - Imports are from diverse sources

EEF 28<sup>th</sup> November 2006, Figure 16

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EEF 28<sup>th</sup> November 2006, Figure 17

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## Uncertainty over the future of the EU ETS is a barrier to investment in cleaner plant



Modern for a long time!

1999

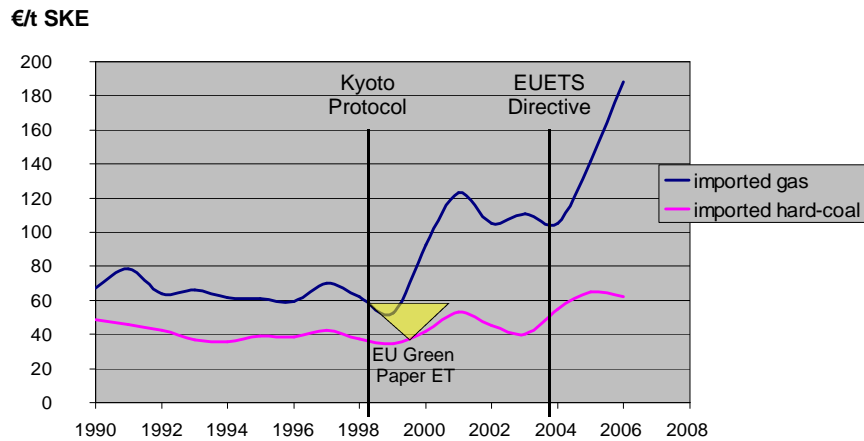
2006

NAP I NAP II

EEF 28<sup>th</sup> November 2006, Figure 18

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## EU emissions trading regulators did not foresee the major divergence of coal and gas prices



Source: Statistik der Kohlenwirtschaft e.V.

EEF 28<sup>th</sup> November 2006, Figure 19

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## EUETS can only drive investment if there is longer term certainty

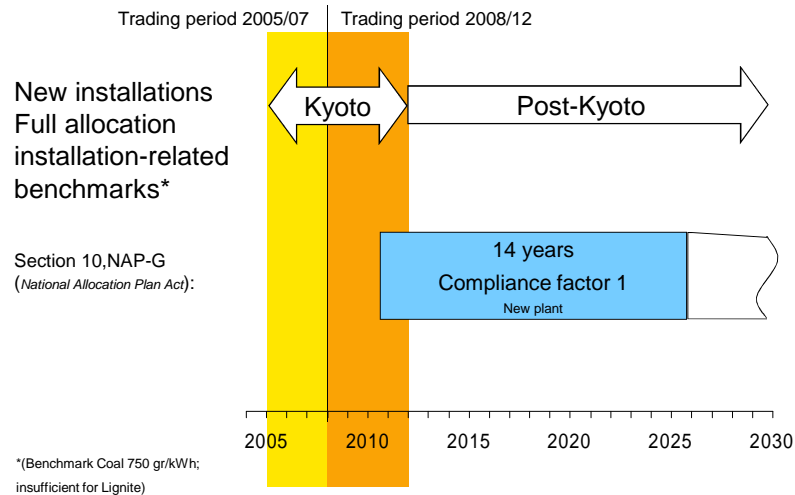
- CO<sub>2</sub> reduction through fuel switching has become increasingly expensive and risks jeopardising European competitiveness
- Technologies for CO<sub>2</sub> capture in fossil-fuel power plants and CO<sub>2</sub> sequestration could be exploited in the longer term
- Significant CO<sub>2</sub> reductions can be achieved in the meantime with more efficient capacity replacing life-expired plants
- The Emissions Trading Scheme is the main reason for a lack of investment in coal-fired power plants in many EU Member states

Fuel specific benchmarks are needed together with longer term certainty as in the German model

EEF 28<sup>th</sup> November 2006, Figure 20

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## Emission trading regime in Germany gives longer term certainty



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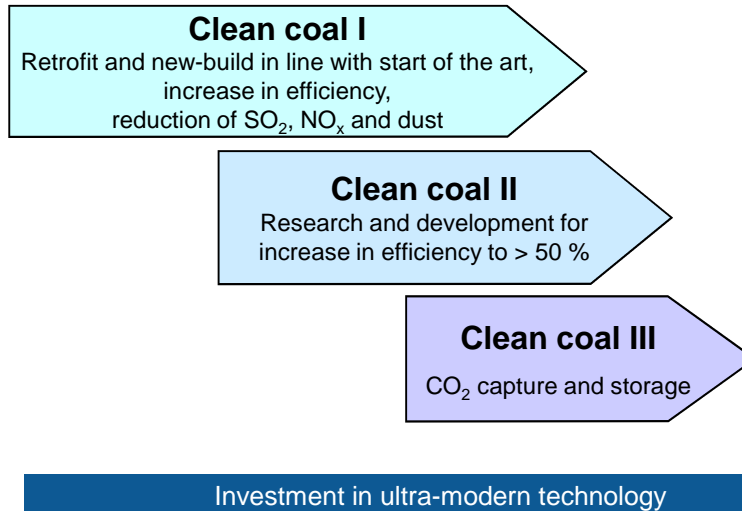
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EEF 28<sup>th</sup> November 2006, Figure 22

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## Clean coal comes in three stages



EEF 28<sup>th</sup> November 2006, Figure 23

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## Political as well as technological action is needed to make CCS a reality

- EU - Elements of a Directive on CCS
  - Management of the environmental risks associated with CCS
  - Effective and reliable permitting of storage sites
  - Liability for CCS activities
- International maritime and national legal frameworks
- Public Acceptance
  - Less than 10 % heard of CCS – Before explanation only 13 % were positive, after explanation 55 % agreed
  - An early information campaign is necessary to get public support for the large scale implementation of CCS

EEF 28<sup>th</sup> November 2006, Figure 24

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EEF 28<sup>th</sup> November 2006, Figure 25

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## Coal Industry's Policy Requirements

- Acknowledge the unique role of coal to security of supply and its contribution to competitiveness
- Commit to the vision of CCS including financial support of pilot and demonstration plants and adoption of a legal framework for CO<sub>2</sub> storage
- Recognise that increased plant efficiency and continuous modernisation have the potential to preserve resources and reduce CO<sub>2</sub> from the short and medium terms
- Support regulation of NAPs that promote power plant modernisation and efficiency improvements

Coal as a sustainable part of the EU energy mix

EEF 28<sup>th</sup> November 2006, Figure 26

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**Thank you**

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Nigel Yaxley  
President