Ensuring Energy for Europe – How Can Coal Contribute?
Overview

- **Security of energy supply**
  - Coal reduces import dependence
  - Unconventional gas – a hype?

- **The climate protection challenge**
  - Which objectives?
  - Till 2020 – how to achieve lower emissions with coal
  - After 2020 – CCS demonstration programme and infrastructure next tasks
Primary energy sources: They all have pros and cons

- Coal: Relatively high emissions, but available and not expensive
- Oil: Easy to handle when being used, but restricted resources – offshore extraction at danger (Golf of Mexico spill revealed major issue to the public)
- Gas: Less emissions, but rather expensive in the long term – also the 2009 “Winter Gas War” (Wall Street Journal) showed Europe’s vulnerability
- Nuclear: Cheap and reliable, but waste issue
- Wind/Sun: “Sexy”, but expensive and unreliable
Projected EU energy import dependence

The use of coal reduces import dependence

Source: European Commission, EU Trends to 2030, update 2007
Major advantages of coal

- Almost 80% of EU 27 domestic fossil fuel reserves
- Hard coal and/or lignite are available in most EU Member States
- Coal balances the EU energy mix and avoids security of supply and price risks
- Coal mining and value chain create wealth in the EU, particularly in a number of disadvantaged regions
- The coal industry employs around 280,000 persons
Coal production - What can the EU do?

- In all relevant impact assessments (e.g. climate/air/water/waste protection and other environmental policies)
  - Security of energy supply, particularly the role of indigenous fossil fuel resources, and
  - access to resources

are a part of sustainable development and must be treated equally with environmental considerations.

DG Energy’s role here is and remains essential.

- An inventory of strategic EU fossil fuel resources may be helpful.

- Share best practices with industry.
Observations on EU Unconventional Gas

- Activities mainly in Poland

- According to the Polish Government (presentation 7 June 2010)
  - June 2010 – 1st exploration well
  - >2015 – 1st estimate of reserves
  - 2020 – 2025 - 1st commercial production

- Issues to be dealt with in depth:
  - Geology
  - Competing supplies
  - Number of rigs, pipes, chemicals, emissions, energy needed
  - Environmental issues
Why maintain the -20% GHG objective?

- "Leading by example" does not work for global climate protection policies.

- The EU industry needs a level playing field to compete on the world markets. Before going beyond the 20% target the other developed countries and – to a certain extent - the threshold countries must follow.

- Increasing objectives for the Emissions Trading sector above and beyond -21% (2005 to 2020) would strangulate coal utilisation. A detailed discussion is indispensable.

- A comprehensive Impact Assessment is a precondition for any decision. It must include effects of higher gas use on security of supply. The underlying assumptions concerning energy prices and the basis for calculations must be proven.
Till 2020 – How to achieve lower emissions with coal

- Coal-fired power plant technology still has **substantial potential for development**

- Cost-efficient climate protection is already possible today by replacing old, less efficient coal-fired power plants built in the 60s by **new highly efficient installations** based on BAT which can save one third of the emitted CO$_2$

- Decision-makers should increase the potential for new coal-fired power plants by creating a **stable, long-term framework**
Modernisation and increased efficiencies

The right basis: continuous power plant modernisation/renewal

EURACOAL Conference, 21st June 2010 - Figure 11
After 2020 – commercial CCS expected

- Carbon Capture and Storage is important for international climate protection policies; it is expected to deliver one fifth of very ambitious GHG reductions by 2050.

- For CCS to become commercial in the next decades, an EU CCS demonstration network has to be created in the current decade.

- The demonstration network does not need high CO₂ prices – it has to be financed by other means.
CO₂ sources > 3 Mio t/a & potential storage regions
CCS infrastructure – Who will take care?

- An efficient and affordable CO$_2$ transport network can better be established at European level than at national level.

- The EU should actively promote the creation of a CO$_2$ infrastructure together with EU Member States; it must be included in the up-coming EU energy infrastructure package.
The way forward (I)

**Competitiveness**
Coal prices are lower and less volatile than oil and gas prices

**Sustainable Development**
Clean coal and CCS must be part of the solution

**Security of Supply**
Indigenous coal plus diverse and well functioning world markets give security
The way forward (II)

- A balanced energy mix remains a winning strategy for Europe.

- Continuous modernisation of coal-fired power generation and new builds that are BAT, efficient and capture ready, i.e. constructed in a way that retrofitting CCS would remain possible (space and access of CCS to the plant), should be promoted.

- The option for Member States to cover 15% of investment costs of capture ready plants should be extended till 2020.

- EURACOAL welcomes the CCS demonstration programme by 2015 and encourages members to contribute.

- EU and Member States should actively promote a CO₂ infrastructure, also by including it in the energy infrastructure package.

Coal is a part of the solution to Europe’s energy policy issues
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