

EURACOAL

European Association
for Coal and Lignite



Ensuring Energy for Europe – How Can Coal Contribute?

Brussels – 21st June 2010

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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

Towards an Energy Strategy till 2020 & the 2050 Roadmap

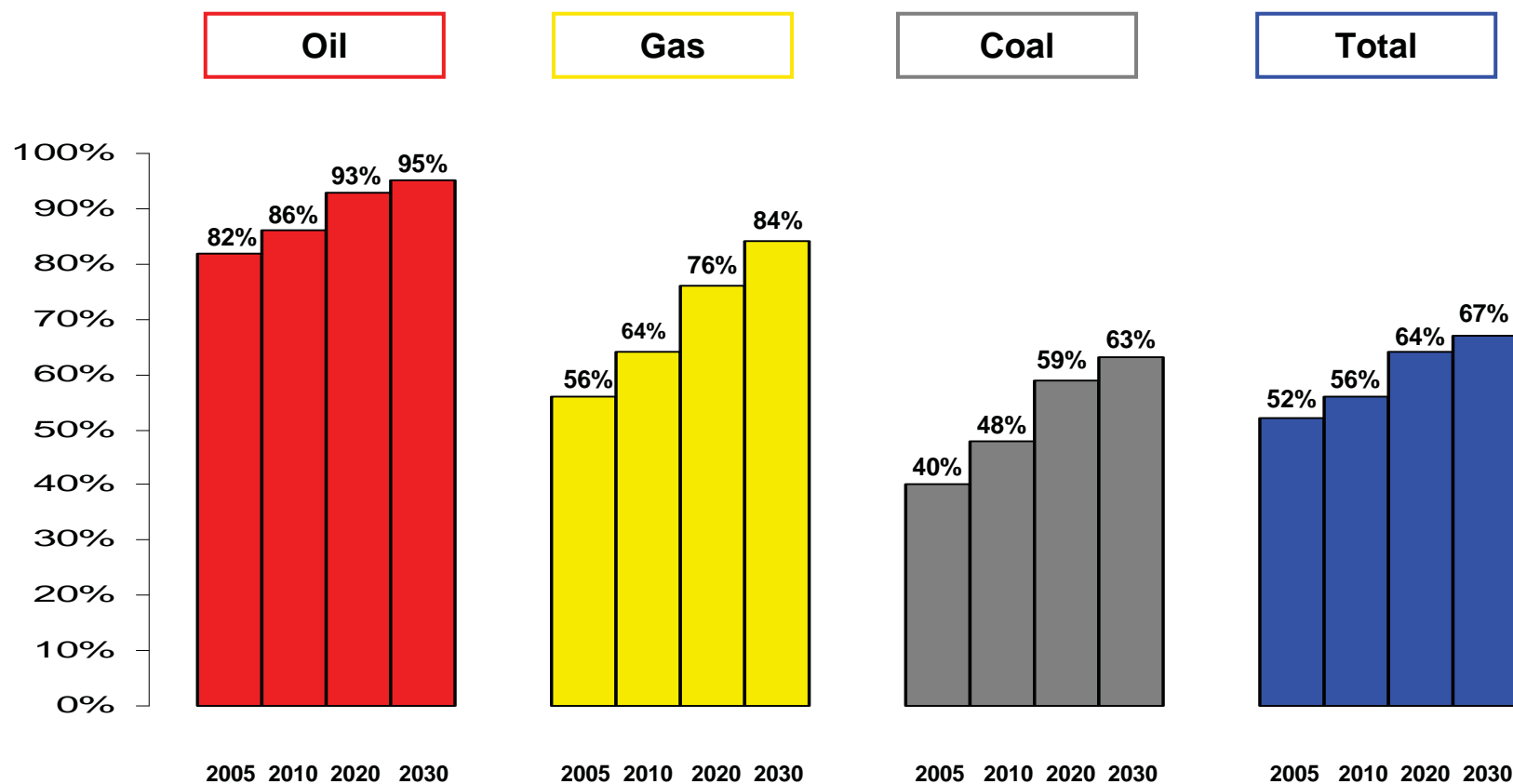
Primary energy sources:

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 (Gulf 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



Source: European Commission, EU Trends to 2030, update 2007

The use of coal reduces import dependence

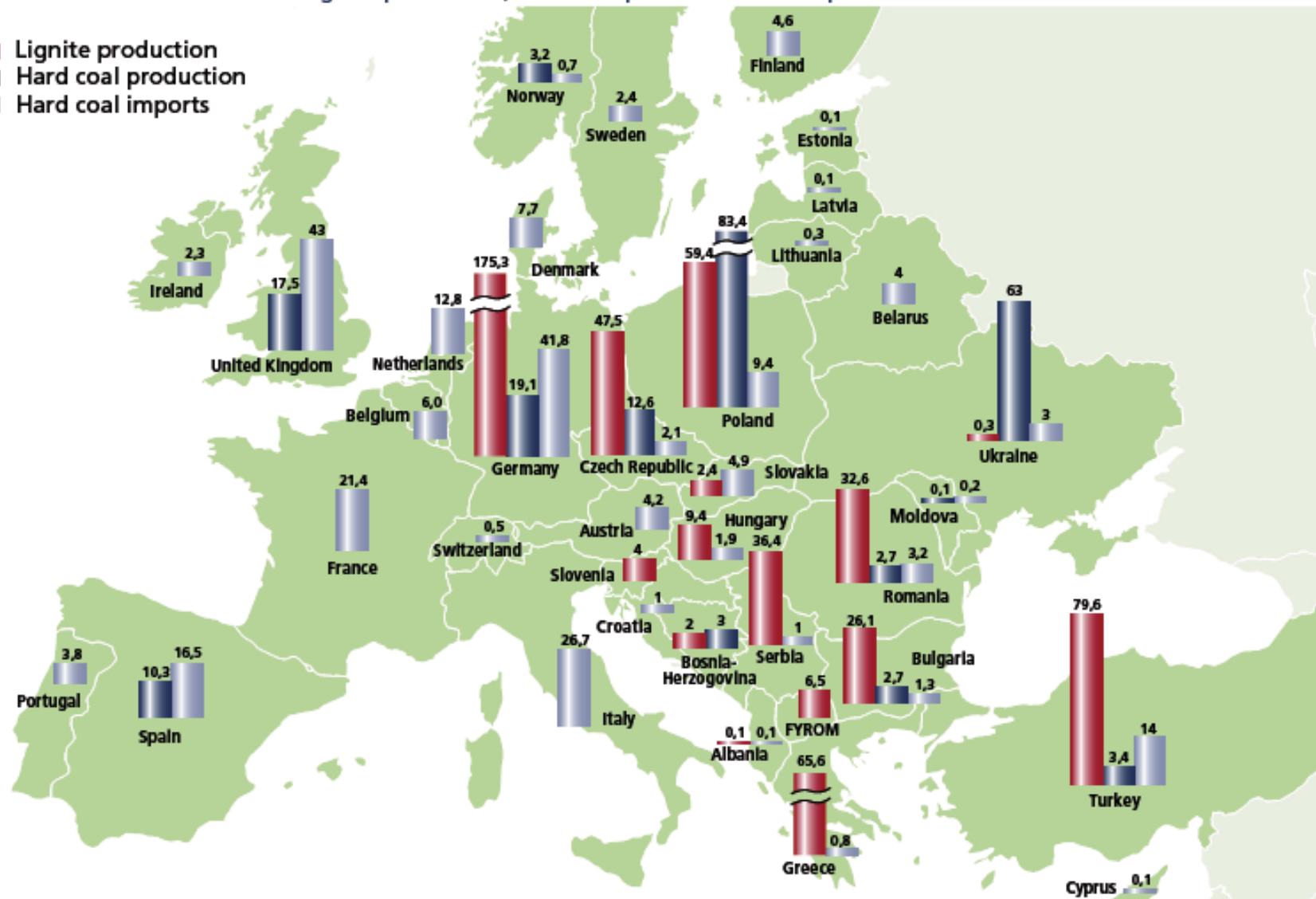
Major advantages of coal

- 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 in Europe

Lignite production, hard coal production and imports in Mt in 2008

- Lignite production
- Hard coal production
- Hard coal imports



Data as per 2/2009

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

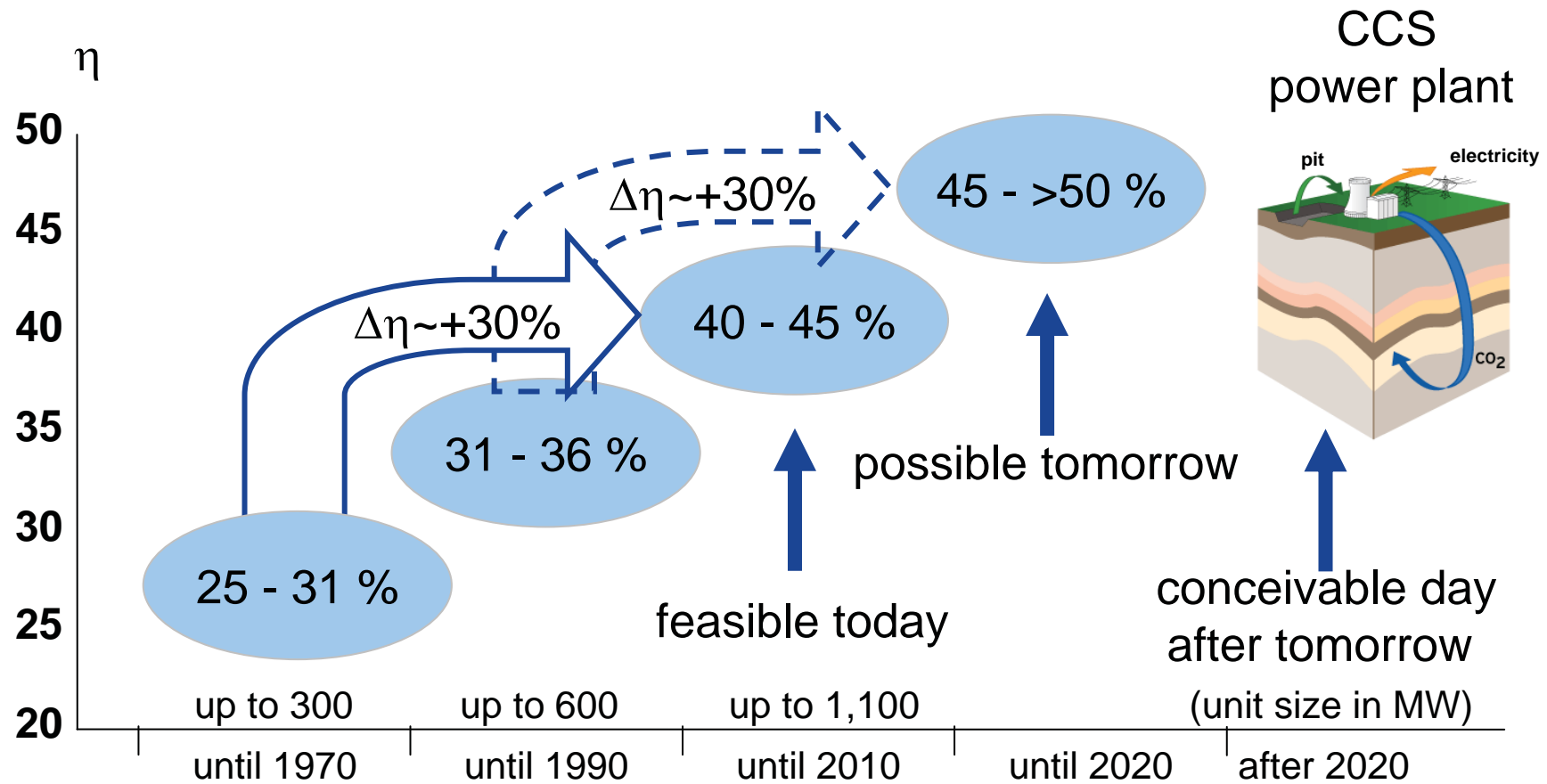
Why maintain the -20% GHG objective ?

- **„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 strangle 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 CO₂**
- Decision-makers should increase the potential for new coal-fired power plants by creating a **stable, long-term framework**

Modernisation and increased efficiencies

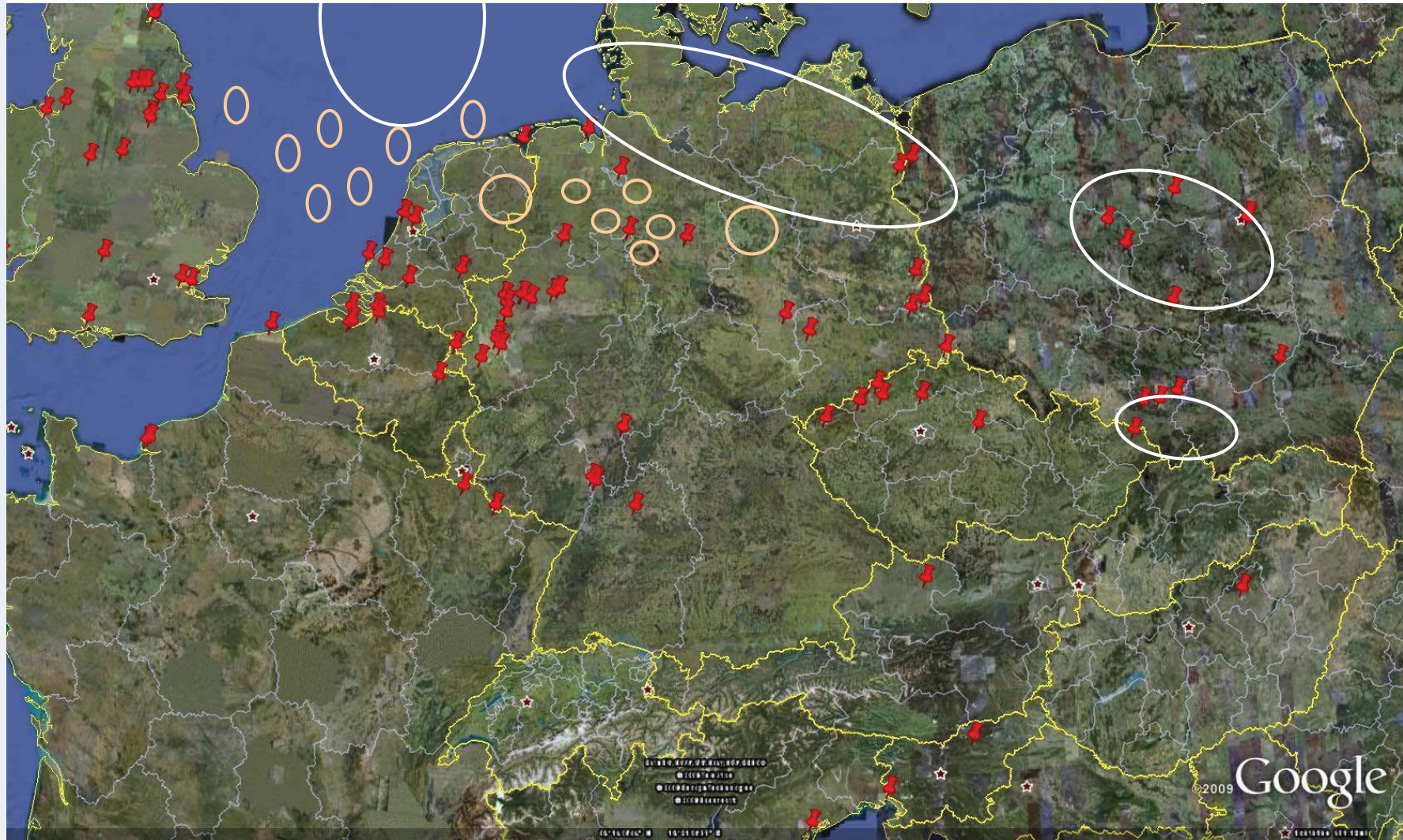


The right basis: continuous power plant modernisation/renewal

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



Quelle: EPER 4/2009 – Daten für 2004



CO₂-Speicherformationen



Öl-Gas-Felder

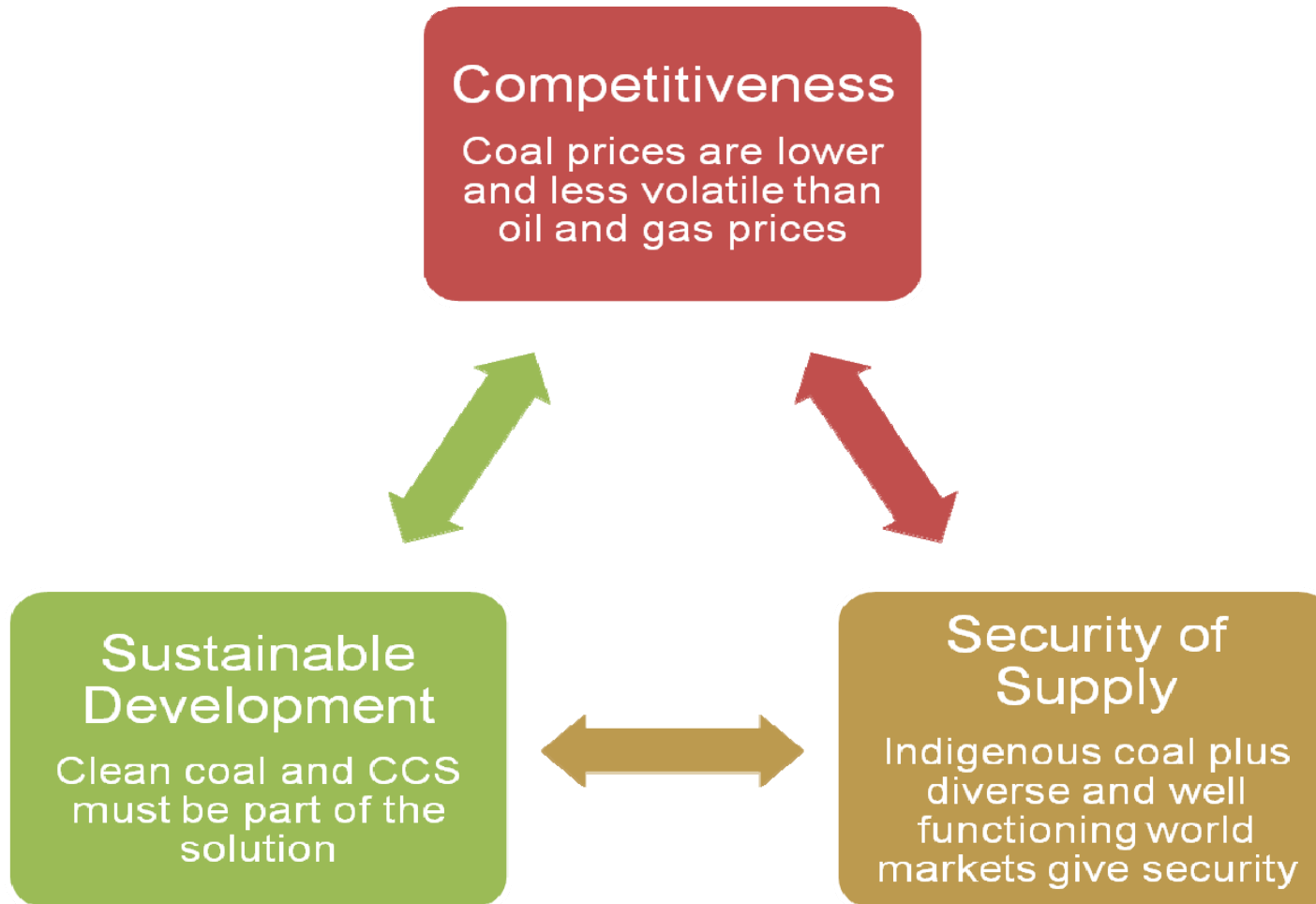


Schwerpunkt
CO₂-Emissionen

CCS infrastructure – Who will take care?

- An efficient and affordable **CO₂ transport network** can better be established at **European level** than at national level
- The EU should actively promote the creation of a CO₂ infrastructure together with EU Member States; it **must be included in the up-coming EU energy infrastructure package**

The way forward (I)



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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