

EURACOAL

European Association
for Coal and Lignite



Coal in Current European Union Policies – The Energy Package of January 2007

Belchatow – 11th June 2007

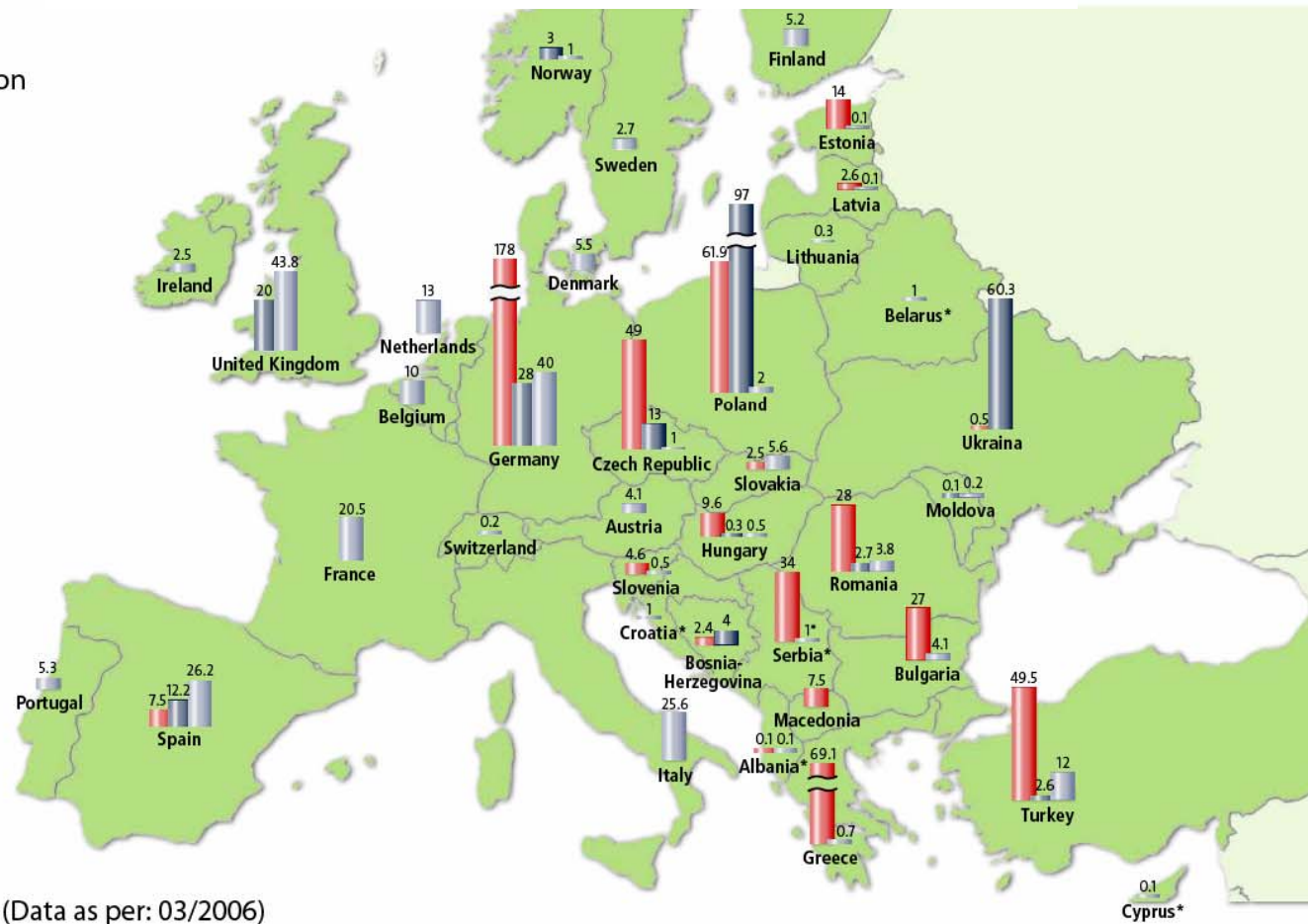
Dr. Thorsten Diercks
Secretary-General

Coal in Current European Union Policies - Overview

- The European Commission's Energy Package of January 2007
- The Communication on Sustainable Power Generation from Fossil Fuels
- EURACOAL's Clean Coal Concept
- Future EU actions – EURACOAL's view

Coal in Europe

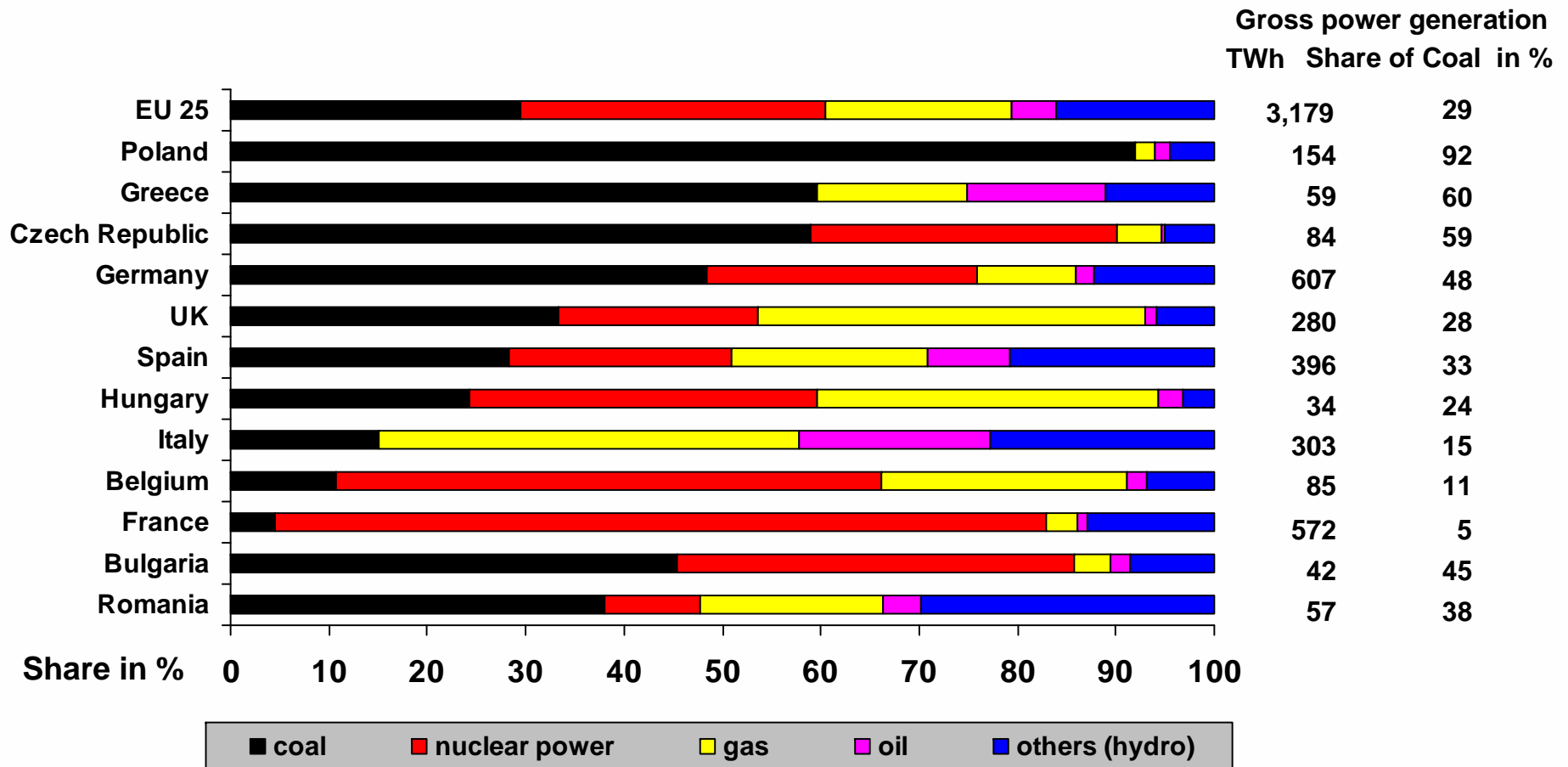
- Lignite production
- Hard coal production
- Hard coal imports



provisional / forecast (Data as per: 03/2006)
 *2003/2004

Coal is important in EU power generation

Power generation structures in selected EU 25 states



Data as at: 08/2006

Source: EUROSTAT – Energy / Yearly Statistics 2005

The Commission's Energy Package

AN ENERGY POLICY FOR EUROPE		
Renewable Roadmap	Sustainable Power Generation from Fossil Fuels	Internal Market for Gas and Electricity
Renewables in Electricity	Nuclear Safety and Security	Gas and Electricity Infrastructures
Biofuels in Transport		Strategic Energy Technology Plan

An Energy Policy for Europe

Major Objectives

- Greenhouse gas reduction of 20 % in EU 27 (2020 compared to 1990) – Objective of 30 % to be proposed at international negotiations – Aim of 50 % reduction by 2050.
- 13 % less energy use from now to 2020
- 20 % energy efficiency increase (1990 to 2020)
- 20 % share of renewables in 2020; even more in electricity production (Status 2004 – EU 27: 6,4 %)

An Energy Policy for Europe

EURACOAL's general comments

- Objectives well accepted by the public and the Member States
- Too much focussed on GHG policies compared to security of supply and competitiveness
- 13 % less energy use and 20 % share of renewables almost impossible to reach
- The burden of far-reaching measures still to be distributed among Member States, coal-consuming Member States must be careful

Coal and Energy Security

‘Coal is a key contributor to the EU's security of energy supply and will remain so. Coal represents the fossil fuel with by far the largest and most widely distributed global reserves, estimated to last for some 130 years for lignite and 200 years for hard coal. Even with strategies to increase energy efficiency and the use of renewable sources, coal should remain an important option in the coming decades for covering essential electricity needs not satisfied by renewable energies.’

(The European Commission's Energy Package adopted 10th January 2007)

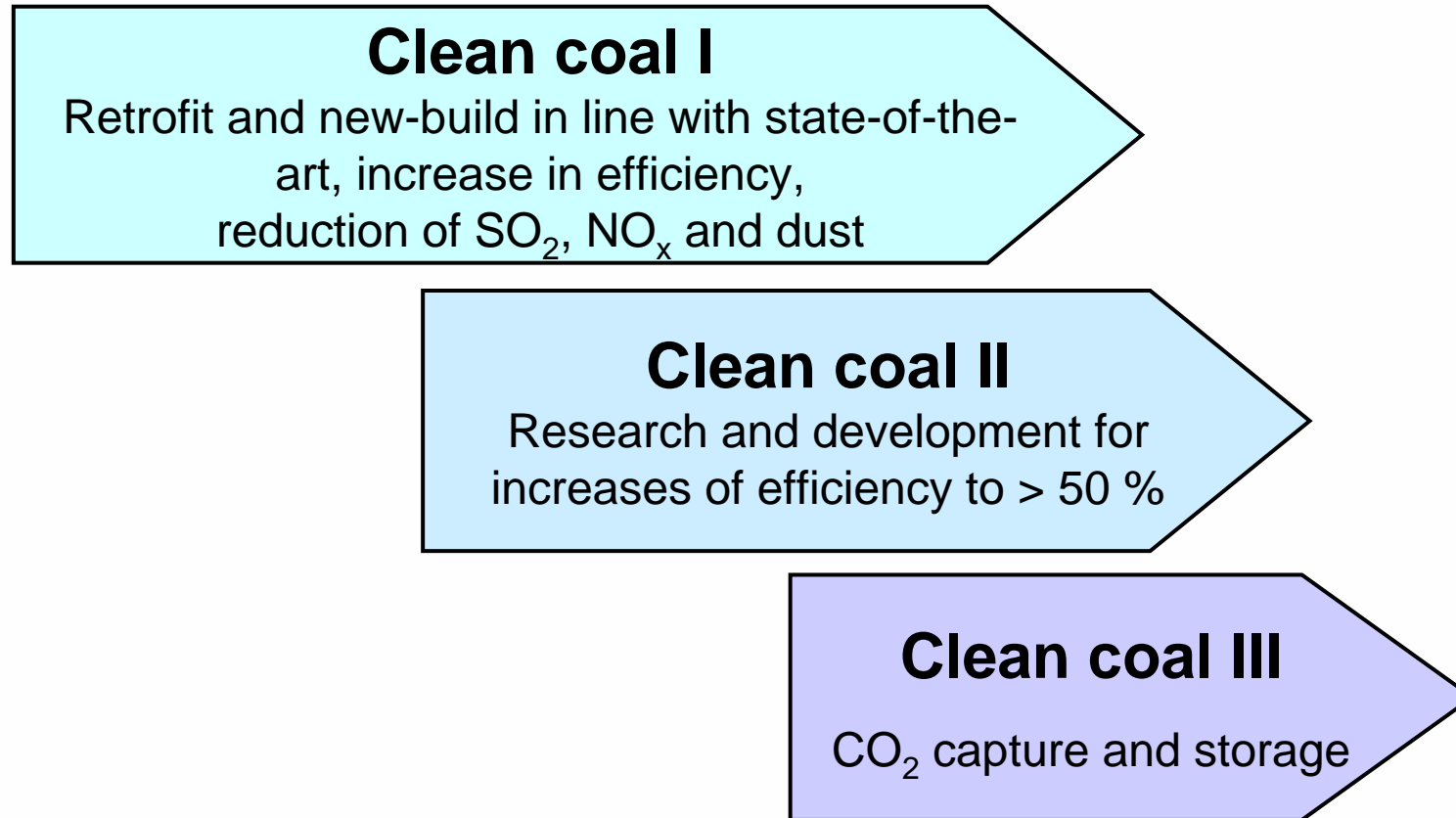
The EU Energy Package includes a vision for 'Sustainable Coal' (1)

- 'Coal can continue to make its valuable contribution to the security of energy supply and the economy ... only with technologies allowing for drastic reduction of the carbon footprint of its combustion'
- 'Technological solutions involving only efficiency improvements ... or only CCS technologies are not able to meet in the long term the combined objectives of achieving near-zero CO₂ emissions at acceptable costs while preserving ... security of supply'

The EU Energy Package includes a vision for 'Sustainable Coal' (2)

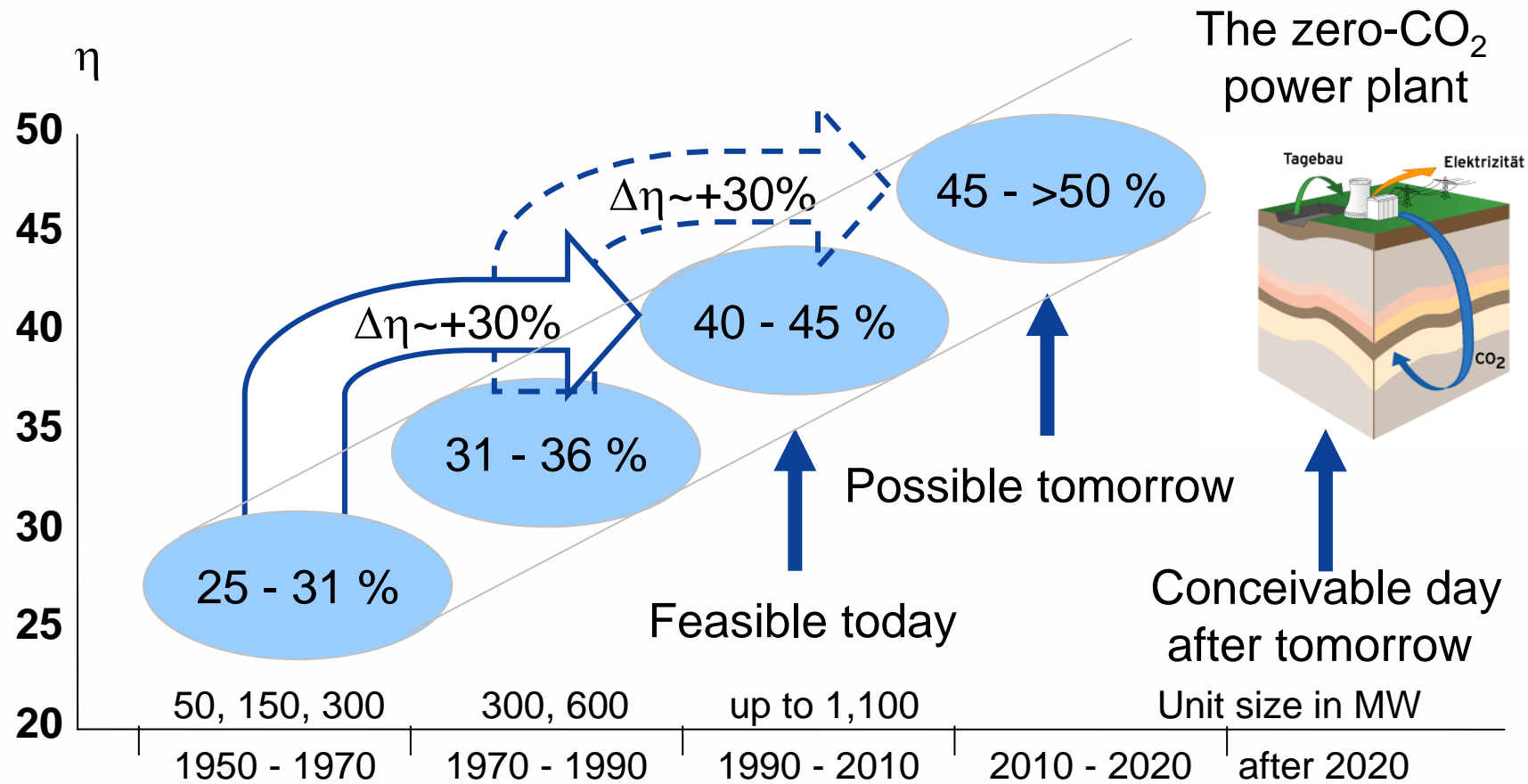
- CCS to be developed until 2020; 10 to 12 demonstration plants until 2015
- Capture-readiness as an integral part to avoid a “technology lock-in”
- EU legislation to remove barriers and to provide economic incentives for CCS
- CCS obligations to be considered

Clean coal comes in three stages



Investment in ultra-modern technology

Continuous modernization and increased efficiency is a pre-requisite to CCS...



The right approach: continuous power plant modernization/renewal

Road towards the Zero-CO₂ Power Plant

From a power plant viewpoint

- Development still in its infancy (focus on feasibility and availability):
 - Various options
 - Post-combustion
 - IGCC with carbon capture
 - Oxyfuel
 - EU FP6 projects have been underway for just 1 year
 - National programmes such as COORETEC have just started
- Further investigate technology options to be able to subsequently make a dependable selection

From a CO₂ storage viewpoint

Many issues require solutions:

- Technical, environmental and economic feasibility of long-term storage
- Investigation of storage potential, regions, sites
- Approval and legal issues
- Public Acceptance of CO₂ storage

**Pursue activities in both fields with the same commitment.
"Without storage and acceptance there will be no zero-CO₂ power plant"**

Further EU action – EURACOAL's view (1)

Overview

The Commission should now focus on:

- Taking measures to help 10-12 demonstration installations by 2015
- The legal framework for CCS
- Removing barriers for investments in better efficiencies

Any obligations to build CCS only as from a certain year are not possible at the moment.

Further EU action – EURACOAL’s view (2)

Demonstration installations – subjects to be included

- Major efficiency improvements
- All capture technologies
- Storage: Saline formations
- Possibly: Transport infrastructure issues

Further EU action – EURACOAL's view (3)

Legal framework for CCS – Selected elements

- Management of the environmental risks
- Effective and reliable permits for storage sites - do not allow CCS only theoretically
- Remove barriers with regard to EU water regulations
- Exclude CCS from Waste Directives
- Possible conflicts between landowners and storage site operators to be dealt with at the level of national law
- Non discriminatory access to CO₂ infrastructure

Further EU action – EURACOAL’s view (4)

Emissions Trading

In case of a EUETS after 2012 the coal industry calls for:

- A fair burden sharing agreement between the Member States
- A grandfathering allocation with benchmark rules that are fuel and technology specific
- An instrument to create investment security for new plants for an appropriate part of the power plant lifetime

Conclusions (1)

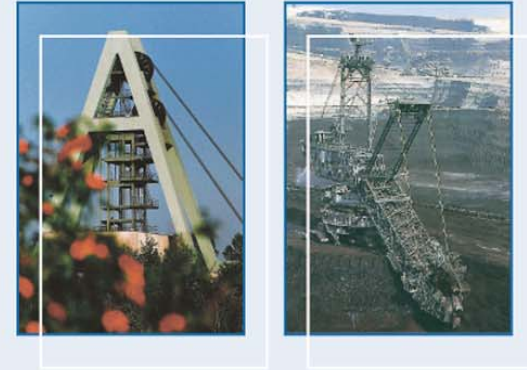
- EU-27 Member States' energy mix and systems differ a lot – this is an advantage for security of supply that should be maintained
- Coal has major advantages for security of supply and costs
- EURACOAL welcomes the major coal-related statements of the Commission's Energy Package
- CCS is a promising technology route – the work of the Technology Platform ZEP is most important and has to be backed
- Up to 12 large-scale demonstration plants with CCS to be built by around 2015 with the objective of developing CCS until 2020 according to the TP ZEP and the Commission

Conclusions (2)

- Efficiency improvements are necessary as a pre-requisite to CCS
- A reliable regulatory framework for CCS, particularly storage, is needed to enable the planning of CCS
- EUETS or other mechanism needs designing to create an incentive for investments in higher efficiency and in CCS
- Industry, national governments and the EU must work hard to make the technological leap to CCS and “Sustainable Coal” happen

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Thank you

Social Dialogue – 31.05.2007

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Secretary-General