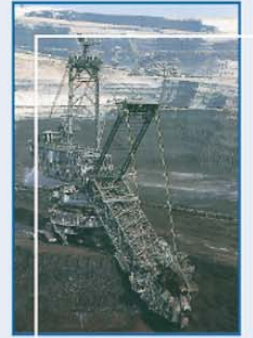


EURACOAL

European Association
for Coal and Lignite



PERSPECTIVES FOR COAL – A POLISH AND EUROPEAN VIEW

EURACOAL Conference
Brussels – 29th January 2007

Dr. Maksymilian KLANK
President

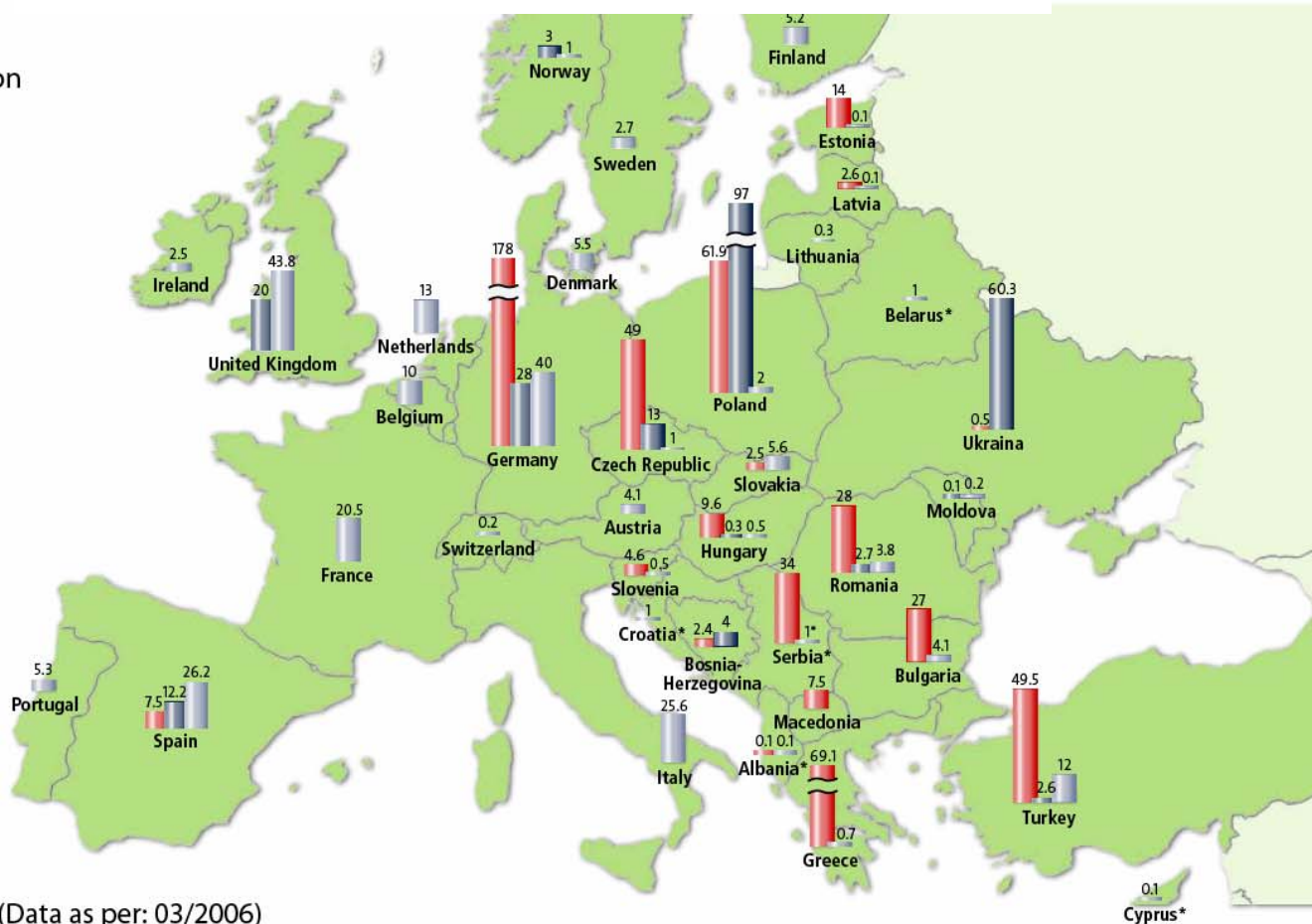
Perspectives for coal

A Polish and European view

- **The Polish coal industry and its perspectives**
- Coal in European energy policy
 - Energy package
 - CO₂ Emissions Trading Scheme

Coal in Europe

- Lignite production
- Hard coal production
- Hard coal imports



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

Polish Coal Basins and Reserves



**DZW Lower
Silesia Coal Basin**

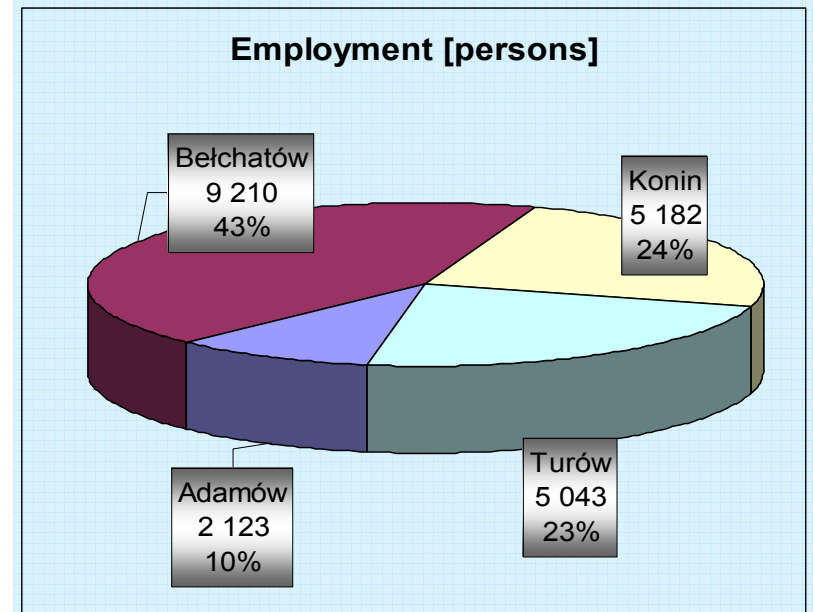
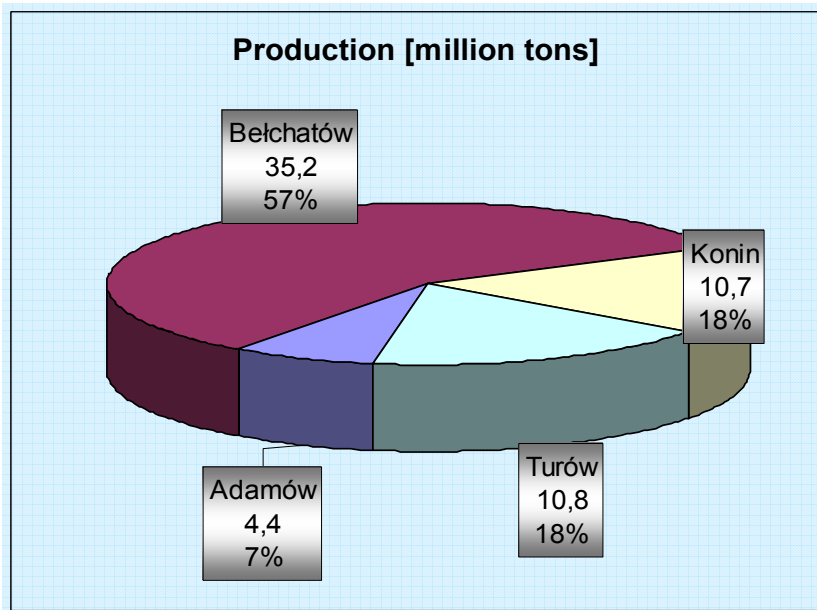
**GZW Upper
Silesia Coal Basin**

**LZW Lubelskie
Coal Basin**

- **Viable reserves** 16 050 million t
- **Industrial reserves** 6 725 million t
- **Operational reserves** 4 800 million t
- **Easily accessible reserves** 2 750 million t

Brown Coal Industry in Poland in 2005

- The 2005 production of brown coal was 61,6 million tons.
- At the end of 2005 the employment in brown coal industry amounted to 20 148 persons.



Polish Coal Basins and Reserves



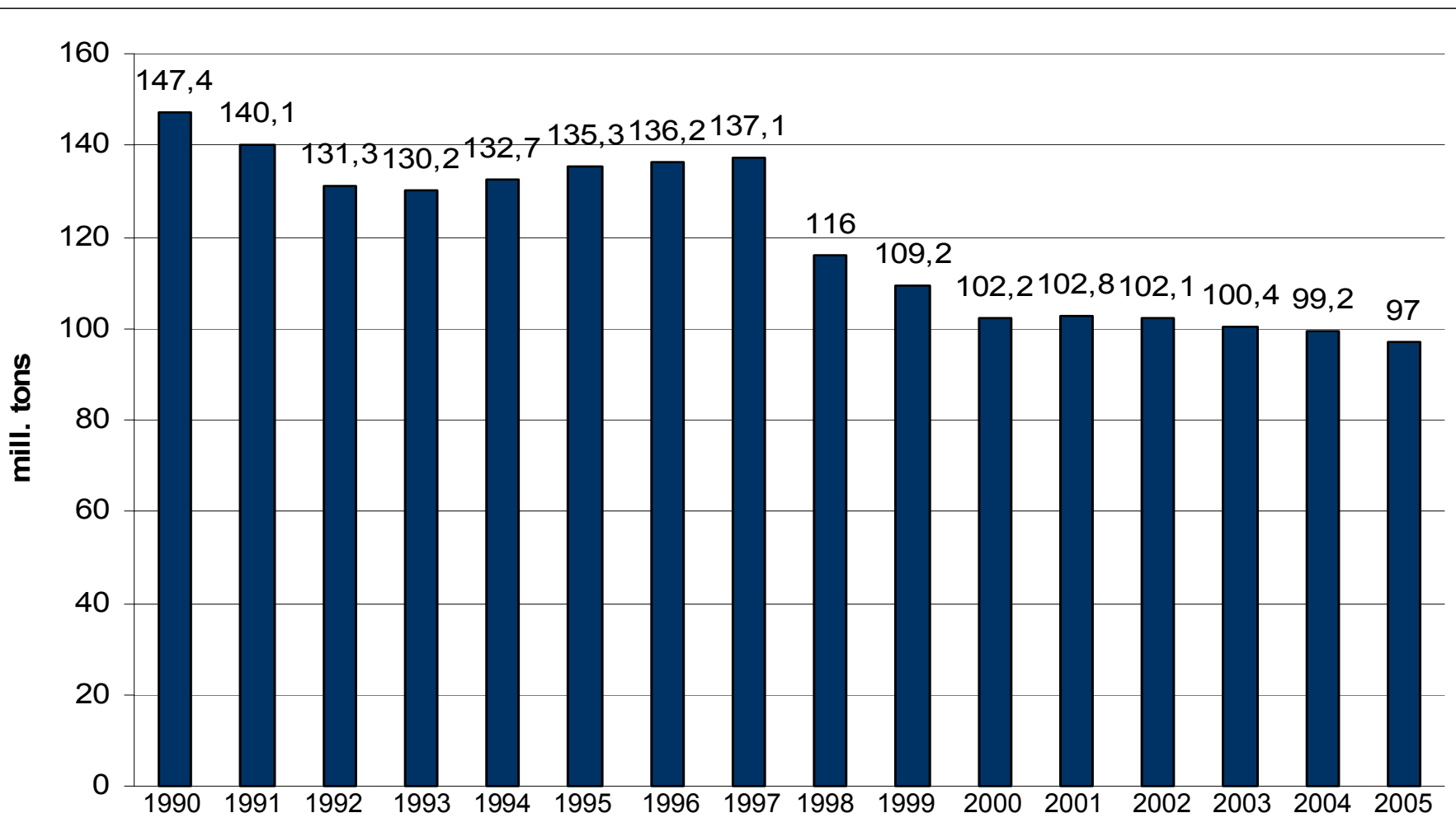
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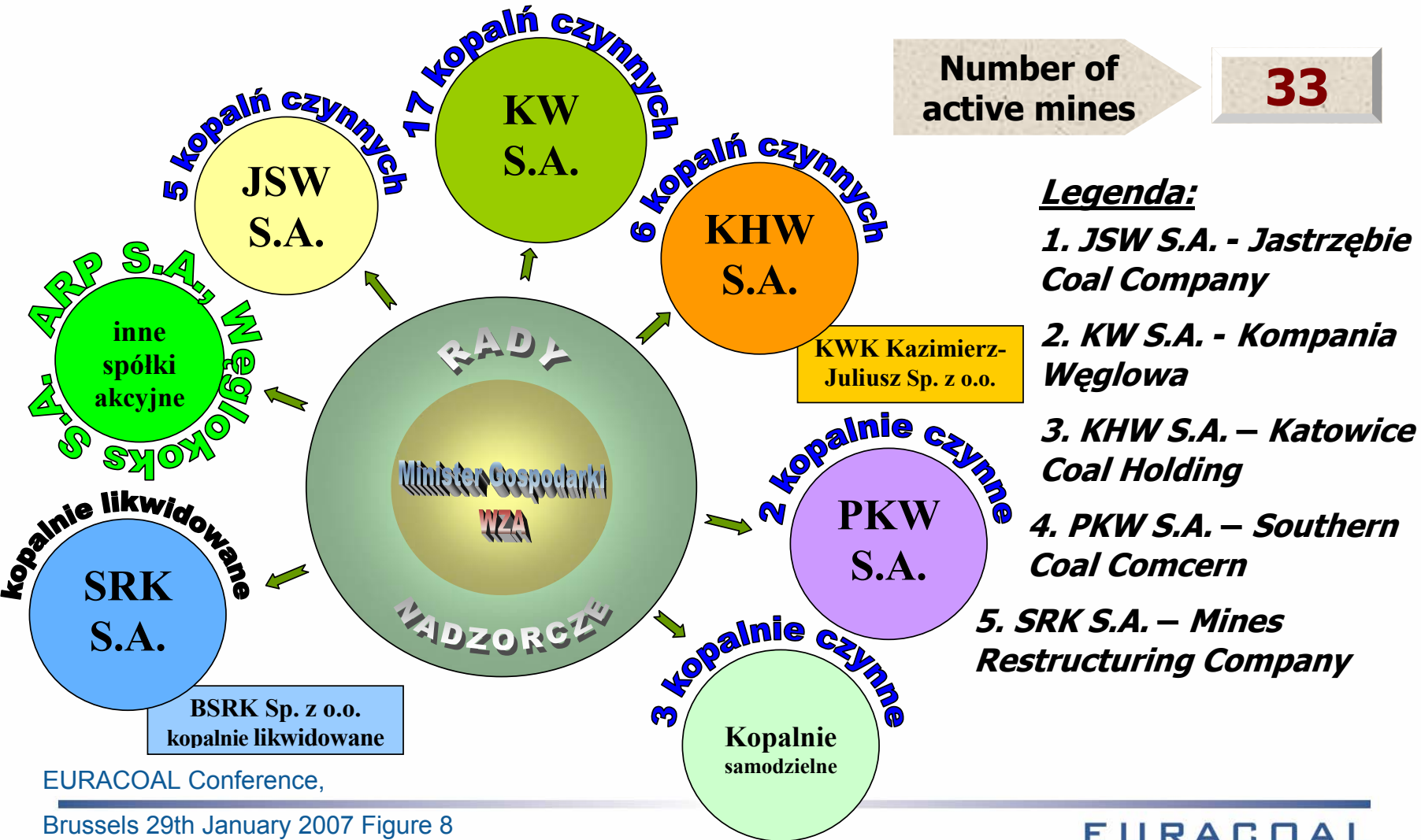
Hard Coal Production



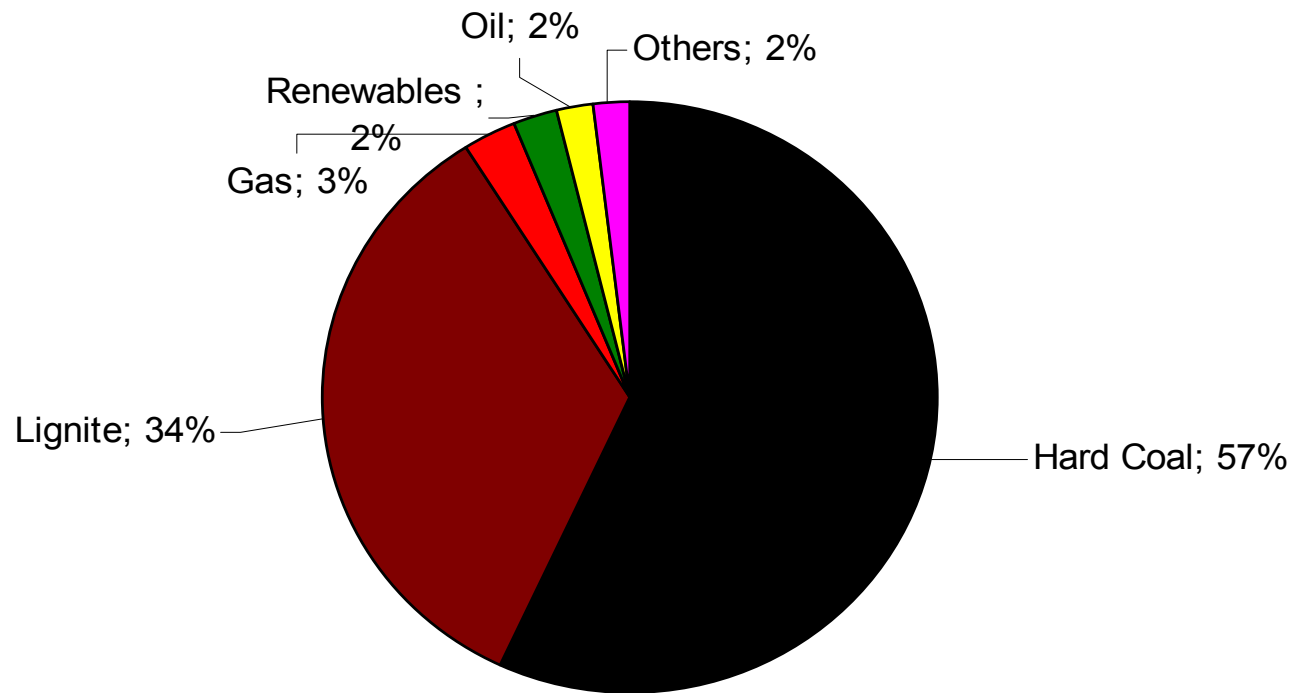
Hard coal mining in Poland

Organisation

Structure of hard coal mining industry in Poland – end2006.



Coal and Lignite making a major contribution to Polish electricity production

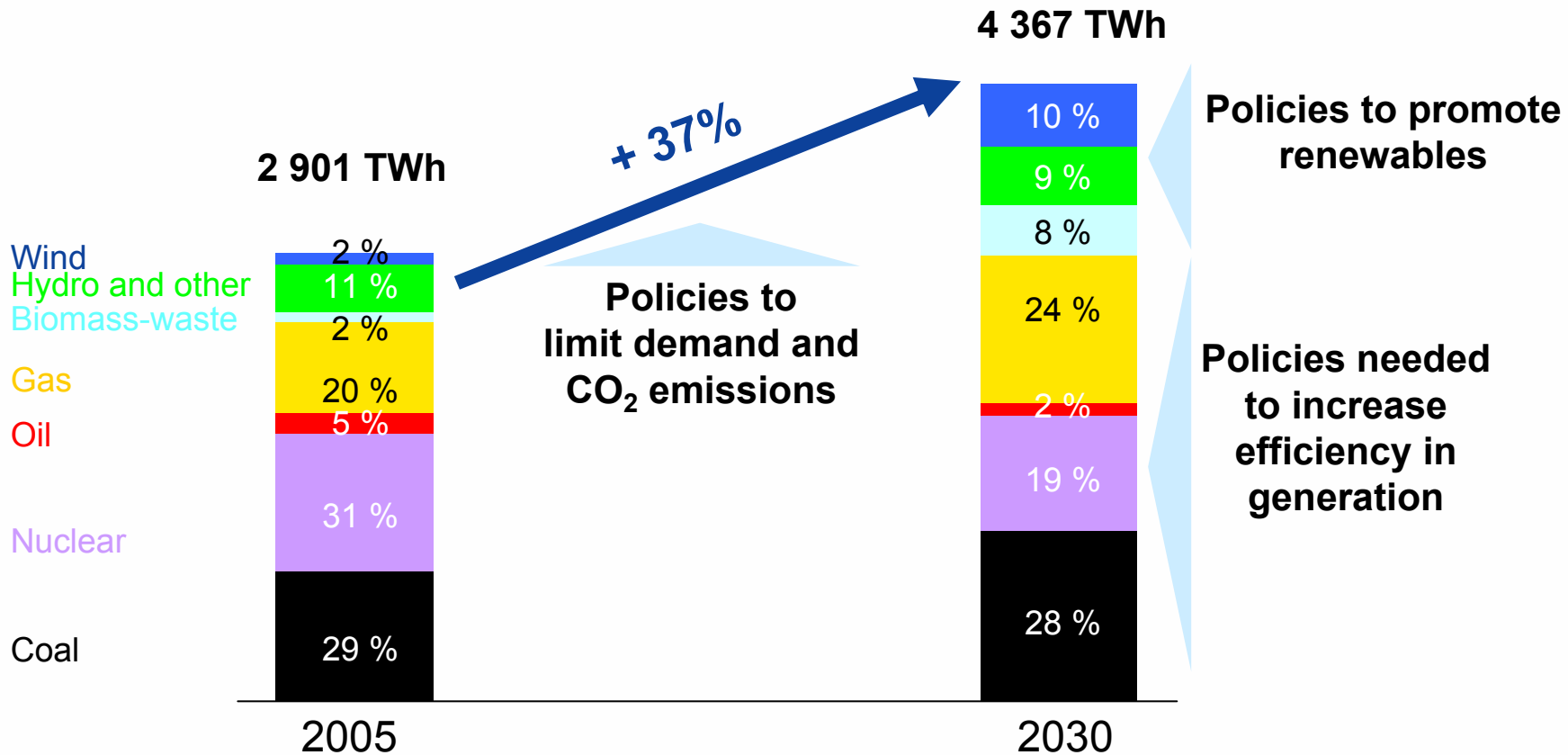


Perspectives of coal

A Polish and European view

- The Polish coal industry and its perspectives
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Coal will remain a major component of the European energy mix



Source: EU Commission, Trend to 2030 – update 2005

Eu-dg-002b

Policies are needed to enable all fossil fuels to contribute to the solutions for climate change

Coal's major advantages

- **Large reserves and extraction capacities in Europe and worldwide**
- **A well-supplied world market**
- **Coal can be easily stockpiled at mines, power stations or intermediate locations; stocks can be drawn on in emergency situations.**
- **Coal-based electricity is highly reliable.**
- **Coal prices are very stable and low; indigenous coal in particular can guard against import dependence and price shocks.**
- **Indigenous coal enables economic development and creates national as well as regional prosperity and employment.**

EURACOAL welcomes major coal-related statements of the EU Energy Package

- Objective to develop efficiency improvements and CCS particularly until 2020 according to the TP ZEP
- Up to 12 large-scale demonstration plants with CCS to be built by around 2015
- About 5 years of demonstration
- Reliable regulatory framework for CCS, particularly storage, as soon as possible

Clean coal comes in three stages

Clean coal I

Retrofit and new-build in line with state of the art, increase in efficiency, reduction of SO₂, NO_x and dust

Clean coal II

Research and development for increase in efficiency to > 50 %

Clean coal III

CO₂ capture and storage

Important aspects to be considered

- CCS is a promising technology route which must first be put in practice; not all countries have sufficient storage facilities.
- Not necessarily all installations have to be retrofitted with CCS after 2020.
- In some places, top efficiencies may be the best option.
- Capture-readiness must be defined.
- Formal decisions must be taken regarding timing of CCS deployment when the technological chain is developed.
- Incentives/Appropriate framework for deployment needed

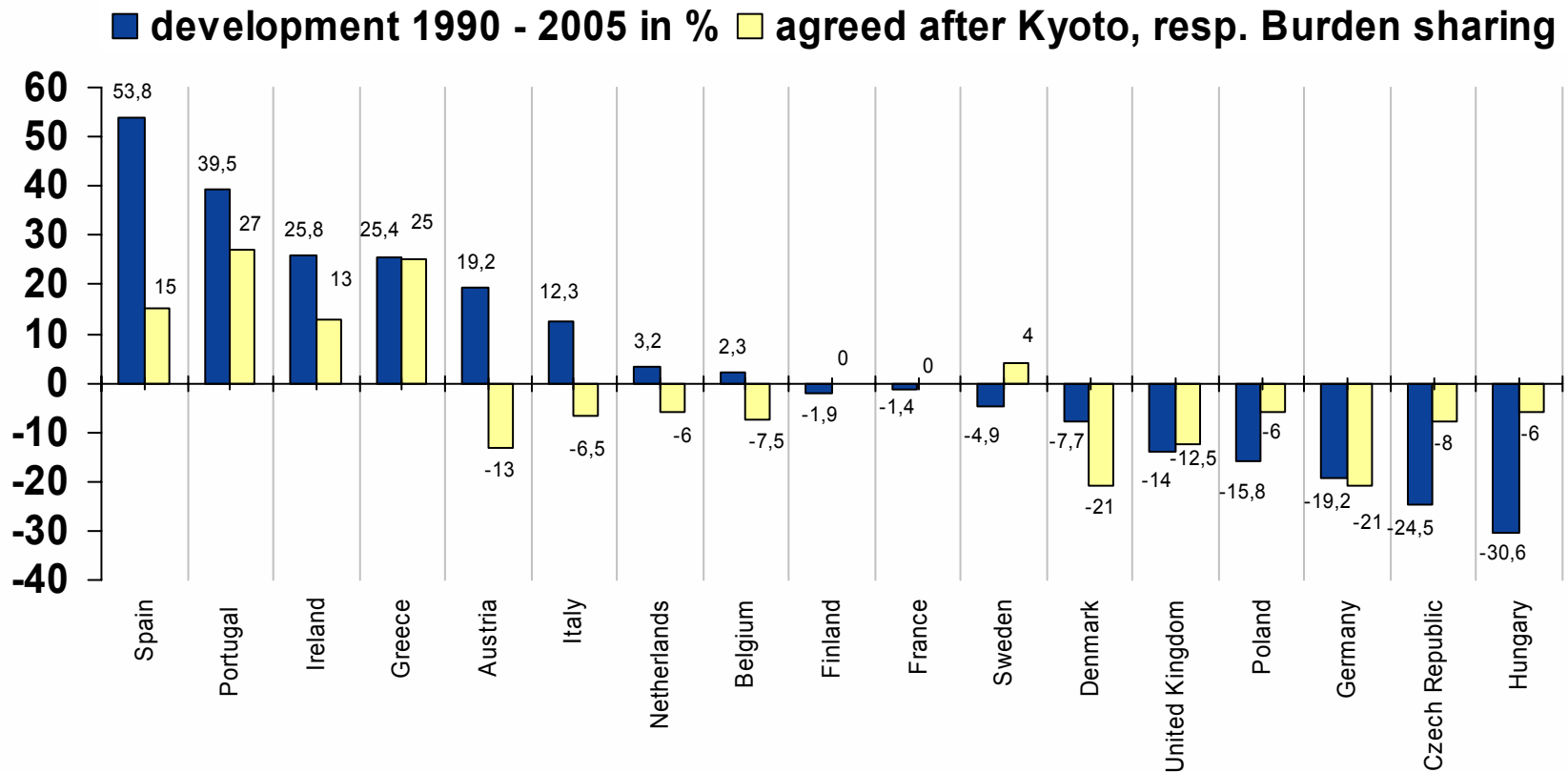
Emissions Trading - Experiences

- CO₂ reduction through fuel switch has become increasingly more expensive and will jeopardize European competitiveness as well as security of supply.
- Regulation including Emissions Trading needs to stimulate investments – security for investors in coal-fired power plants beyond 2012 is needed.
- The Member States Kyoto and (for EU-15) the burden sharing commitments should be respected. Major coal-using countries are well on track.

Climate protection policies are to be tackled globally

Emissions Trading – Burden Sharing

EU-Greenhouse Gas Emissions



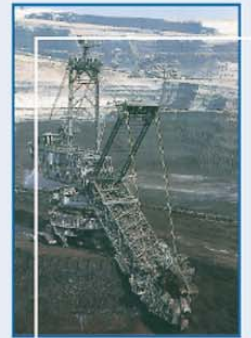
Source: UNFCCC 2006, DIW Berlin

Conclusions

- EU-27 Member States' energy mix and systems differ a lot – this is an advantage for security of supply that should be kept.
- The EU to fix the objectives and the details to be dealt with by the Member States according to the principle of subsidiarity.
- Coal has major advantages.
- Industry and national governments must work hard to make a technological leap in coal use happen.
- EU CO₂ regime to ensure investments in coal and coal-fired generation also in the medium term.

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Thank you

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