

Coal in the EU energy mix – present situation and future challenges

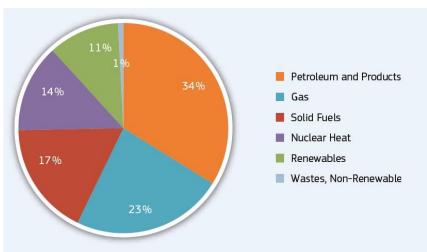
EESC Hearing "Contribution of coal and lignite to EU's energy security"

Brussels, 14 September 2015

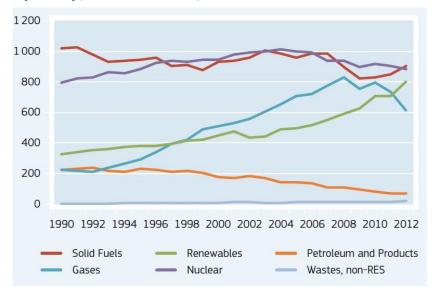


Coal as a key component of EU energy mix

Primary energy supply in the EU in 2012 (Mtoe), Eurostat



Gross electricity generation by fuel (TWh), 1990-2012, Eurostat





Indigenous coal is EU's most abundant non-renewable fuel

| Country | Coal Reserves in 2012 (hard coal and lignite) (Million tonnes) | Reserves-to-Production (R/P) Ratio (years) |
|----------------|--|---|
| Bulgaria | 1,854 | 76 |
| Czech Republic | 1,054 | 22 |
| Germany | 42,900 | 218 |
| Greece | 2,978 | 61 |
| Hungary | 20,722 | 174 |
| Poland | 1,1156 | 40 |
| Spain | 8,495 | 136 |
| United Kingdom | 1,000 | 20 |

Abundant reserves

- Hard coal and lignite account for 88% of the EU's fossil fuel reserves
- Conventional and nonconventional natural gas accounts for 7.3%

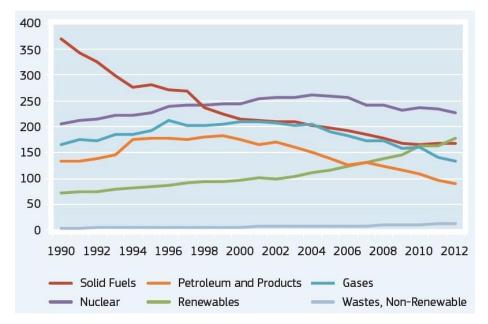
Substantial role of indigenous producers

 Around 60% of coal consumed in the EU is produced domestically, in comparison to less than 35% for natural gas and 14% for oil.

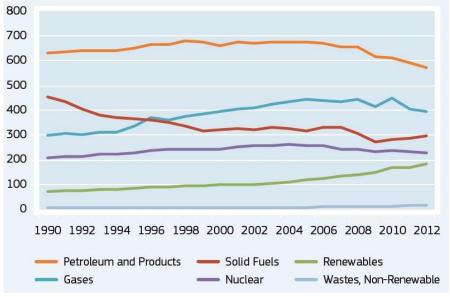


EU production and consumption of coal in decline since 1990s

EU energy production by fuel in 2012 (Mtoe), Eurostat



EU energy consumption by fuel in 2012 (Mtoe), Eurostat





Policy Framework

Legal basis

According to the treaties (art. 194 TFEU) it is for the Member States to determine the conditions for exploiting their energy resources, the choice between different energy sources and the general structure of their energy supply.

EU rules for state aid support for the coal industry

The Council Decision of 10 December 2010 on State aid to facilitate closure of uncompetitive coal mines allows for closure aid and aid for exceptional costs to be granted to uncompetitive coal mines in order to mitigate the negative economic and social effects that such closure may entail, it requires irrevocable closure by 2018.

May 2014 Energy Security Strategy

"Increasing energy production in the EU" is one of the eight priorities defined in the new strategy. Clean coal, together with the production of other fossil fuels and renewables are listed as key areas for action to increase indigenous energy production in the EU.

Energy Union Communication

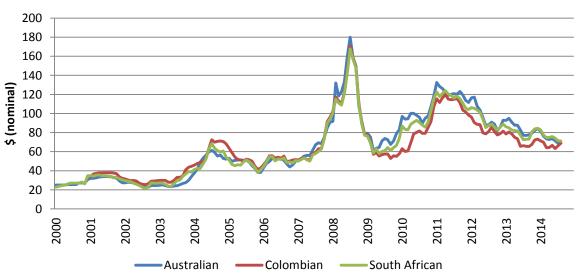
The aim of the Energy Union is to bring a holistic approach to the energy trilemma of addressing competitiveness, sustainability and security challenges.



Competitiveness threatened now and going forward

Production costs and difficult geological conditions as well as low world coal prices and oversupply of coal on the international market make it increasingly difficult for indigenous producers in the EU to remain competitive.

International coal price benchmarks, 2000-2014





New opportunities for coal-based power generation in the EU

Growing need for flexibility in energy generation matched by new technology developments.



RWE's flexible coal power plant in Niederaussem

- Growing intermittent generation needs conventional power plants to deliver greatly varying electricity output to maintain grid stability and security of supply.
- New technologies and techniques for flexible coalfired power generation create an opportunity for coal to continue its role in the EU power generation system.



EC's commitment to sustainable use of coal

Funding for clean coal technologies and carbon capture and storage

- 7th Framework Programme: estimated Euro 200 million has been spent on CCT and CCS (2007-2013)
- EERP: Euro 1billion was made available
- NER 300: up to Euro 300 million available for the White Rose project, more was available
- Horizon 2020: up to around Euro 35 million can be used to co-fund fossil fuel related research with CCS being the main focus of such research.
- Research Fund for Coal and Steel: estimated Euro 14 million annually can be used to cofund coal projects (roughly Euro 200 million spent on coal project since 2003)

The EC has made available roughly Euro 2 billion for CCS alone.



Thank you for your attention.