



**MINUTES**  
**22<sup>nd</sup> EUROPEAN ROUND TABLE ON COAL**  
**“Coal Gasification”**

**European Parliament (Brussels), Altiero Spinelli ASP 5G305, 13 November 2013**

**Participants included:**

Dr. Christian Ehler (EPP, DE), chair; Mr. Bogdan Marcinkiewicz (EPP, PL); Mr. Salvador Garriga Polledo (EPP, ES) and MEPs’ assistants; European Commission officials Jörg Köhli and Marion Wilde from DG Energy, Murad Wisniewski and Ciprian Alionescu from DG Employment; officials from Member State permanent representations; representatives from academia and NGOs; EURACOAL members and representatives from industry including:

Mr. Claudio Marsico, Sales Director – Gas Technologies Division, ThyssenKrupp Uhde GmbH

Mr. Francisco García-Peña. Engineering R&D Director, ELCOGAS, S.A.

Prof. Krzysztof Stańczyk, Główny Instytut Górnictwa (GIG – Central Mining Institute, Poland)

**Summary**

The 22<sup>nd</sup> European Round Table on Coal focussed on coal gasification: the design, manufacture and supply of gasification projects by a German company; a successful large-scale commercial integrated gasification combined cycle (IGCC) electricity generation project in Spain and research and development of underground coal gasification in Poland.

**1. Introduction and welcoming remarks by the chair**

After welcoming the sixty or more participants, **Dr. Christian Ehler** explained that despite the rapid evolution of European energy policy, reports by the European Commission and the European Parliament – including the ENVI committee’s forthcoming report on CCS – showed that coal will play a key role in Europe’s energy supply over the foreseeable future. In a system of increasingly intermittent and often localised renewable energy production, coal-fired power plants can serve as reliable sources of flexible and base-load electricity as and when needed, balancing the trilemma of climate protection, energy security and competitiveness.

Even though the EU energy industry is often criticised for not having delivered the promised CCS demonstration projects, several innovative technologies are already in operation or being developed across Europe. Three of these were presented during this round table: new technology options to exploit Europe’s coal reserves in a presentation by ThyssenKrupp Uhde; the successful ELCOGAS IGCC project in Spain; and the work on underground coal gasification carried out by the Central Mining Institute (GIG) in an experimental mine as well as at its newly opened Clean Coal Technology Centre in Katowice.

**2. Coal gasification renewed – technology options to exploit Europe’s coal reserves –  
Mr. Claudio Marsico, Sales Director – Gas Technologies Division, ThyssenKrupp Uhde GmbH**

See presentation. **Dr. George Milojcic** of DEBRIV and **Dr. Lars Kulik** of RWE both expressed an interest in the gasification of lignite to produce liquid fuels and chemicals, with projects proposed in Germany that could produce clean, low-sulphur diesel. However, carbon pricing under the ETS prohibits investments in such capital-intensive projects, at least within the EU. In yet another example of carbon leakage, only the free allocation of ETS allowances could make projects competitive against alternatives which include imported fuels.

**3. Coal gasification in Spain – the future of sustainable coal – Mr. Francisco García-Peña,  
Engineering R&D Director, ELCOGAS, S.A.**

See presentation. EESC member, **Mr. Dumitru Fornea** of Meridian – the National Trade Union Confederation (NTUC) in Romania, welcomed the hard work of ELCOGAS over many years that led to one of the world’s few successful IGCC projects. However, he saw hypocrisy around the world with much rhetoric on climate and yet China (and even Germany) used more coal whilst others are told to stop. He called for “the tape to be changed”, so that jobs were not lost to unfair competition – an issue that he said the WTO should address.

**4. The new Clean Coal Technology Centre and underground coal gasification in Poland –  
Prof. Krzysztof Stańczyk, Główny Instytut Górnictwa (GIG – Central Mining Institute, Poland)**

See presentation. Opened in May 2013, the Clean Coal Technology Centre (CCTC) will allow GIG and its research partners to improve the competitiveness of modern clean coal technology solutions for the benefit of the economy and environment in Poland and beyond. It includes facilities dedicated to the art of underground coal gasification, as reported by the BBC ([www.bbc.co.uk/news/world-europe-24997778](http://www.bbc.co.uk/news/world-europe-24997778)).

**5. Discussion & wrap-up**

To keep coal in the energy mix, **Dr. Ehler** said that innovative technologies such as those presented at the meeting would be needed widely. With ongoing advances in the areas of health and safety, improved efficiency and reduced CO<sub>2</sub> emissions, there was much to look forward to. Whilst the German “*Energiewende*”, with the phase-out of nuclear power by 2022, has led to a rapid increase of solar PV and wind power, greenhouse gas emissions are increasing for the first time in 20 years. Due to falling electricity market prices and peculiarities in the German subsidy and taxation systems for renewable power, investments in new gas-fired power plants have turned sour. Instead, energy suppliers continue to run old power plants which were written off long ago, but which sometimes operate with efficiency rates as low as 25%.

Pointing to Japan’s ultra-supercritical power plants, Dr. Ehler showed a way forward for efficient power technologies that would allow coal to remain as a reliable back-up technology without being a “climate killer”. For this reason, about EUR 800 million from the Horizon 2020 budget will be allocated to projects in the field of non-nuclear, non-alternative energy research, including coal and especially projects that develop CCS and CCU technologies. For this to be a success, however, CO<sub>2</sub> must become a valuable resource for the industry, he said. In this respect, coal gasification – underground and at the surface – seems to be a promising technology since the produced syngas can be used for electricity production or as a “building block” in chemical processes. For power

generation, coal gasification is also claimed to have greater efficiency potential than conventional coal-combustion – of 50% or more – because it uses the coal’s heat energy twice: once in firing a gas turbine and again using waste heat to raise steam for a steam turbine. However, mature gasification technologies perform best on high-rank coals and petroleum coke – a waste product from oil refining, but are less efficient, less reliable and more expensive to operate when processing low-rank coals. Given that low-rank coals are especially abundant in Europe, more R&D is needed to improve the prospects for a broad range of coal gasification technologies.

When developing an energy policy for the years to 2030, coal should retain a key role in the energy mix, being a secure and competitive fuel, but there is still work to do on coal clean technologies so that coal can be fully compatible with EU climate protection targets. Dr. Ehler called for a discussion on the Commission’s future work programme – now under discussion with Member States – which should be facilitated with a EURACOAL paper. The Commissioners for Energy and RTD could be invited to the next round table to help reach a political agreement on “technology openness”, since a range of energy technology options is needed across Europe and RTD support should not simply become another subsidy for renewables. Finally, he reflected on the legacy that DG Energy would leave for the next Commission, lamenting the fact that EU energy and climate policy had left Poland isolated.

Next steps: 5 December – Horizon 2020 Energy Information Day, Charlemagne Building, Brussels  
11 December – Adoption of Work Programme & First Horizon 2020 Call for Proposals

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Annexes: Presentations by Messrs. Marsico, García-Peña and Stańczyk.