MINUTES

ROUND TABLE ON COAL
European Parliament (Brussels), 15th September 2010

Participants numbered over 40 and included, among others:
Dr. Christian EHLER MEP (chair)
MEPs BREZINA, GLANTE, MARCINKIEWICZ, PIEPER, HERCZOG and RAPKAY
MEPs’ assistants
representatives of the European Commission (Dr. WILDE, Directorate-General for
Energy, Unit 3 – Coal and Oil), of national government representations to the EU, of
the European coal and lignite industries, and of the power industry.

1. Introduction and welcoming remarks – Dr. Christian Ehler, MEP

Dr. Ehler welcomed participants, apologising for some MEPs who were attending
Group Meetings and would arrive later. He especially welcomed EURACOAL’s
President, Mr. Pudil, and EURACOAL’s new Secretary-General, Mr. Ricketts; he was
looking forward to a fruitful co-operation with him.

Reference was made to media reports that day in various countries that Vattenfall
would opt out of coal and lignite. Mrs. Widmer (Vattenfall) denied rumours that had
spread after a meeting between the new Vattenfall CEO and the Brandenburg
government. While it was true that lignite was not mentioned in the German
government’s new “energy concept”, Vattenfall remained committed to lignite, and to
the development of CCS.

2. About the necessity of a CO₂ transport and storage infrastructure in
Europe – Dr.-Ing. George Milojcic, Chief Executive, DEBRIV – Deutscher
Braunkohlen-Industrie-Verein e.V. (German Association of Lignite
Producers)

Dr. Milojcic highlighted the potential benefits of a carbon transport and storage
infrastructure from a coal industry perspective (Annex 1). The need to capture CO₂
was obvious in view of the EU’s objectives to achieve a low-carbon economy but
public acceptance had to be obtained. CCS was however proving to be complex and
EU measures to date were insufficient. How could the risk for investors in
infrastructure, especially CO₂ transport and storage, be compensated, perhaps
through state guarantees for project developers and funding mechanisms? A CCS
infrastructure could also be included in the Trans-European Networks (TENs).
Dr. Ehler replied that TENs, being part of overall EU planning, could provide a framework to secure private-sector investment for CCS. Member States could drive this through the Council. Another option would be to look at the Energy Package; in this context, Dr. Wilde said that the European Commission was aware of what industry wanted and an outcome was expected in November 2010 with a draft report to the EP.

Dr. Ehler added that a progress update on the EU CCS projects should be on the agenda of the next Coal Round. He would also ensure that all reports of interest to the Coal Round were monitored, including on energy infrastructure and TEN guidelines.

Ms. Herczog MEP recalled that there was no fresh money foreseen in the Council’s budget for 2011 and beyond; she therefore advocated legislative solutions to finance a CCS infrastructure. Dr. Ehler agreed that a legal framework was needed. The EP perceived CCS as a European issue but acceptance had to be obtained in Member States, who must agree to CCS being part of a common transport infrastructure.

Dr. Wilde of DG Energy referred to the 300 million new entrants’ reserve allowances, providing a potential source of revenue under the EU Emissions Trading Scheme (ETS), including for pipelines associated with the CCS demonstration projects, and also to other parts of Article 10 of the ETS Directive that require 50% of auctioning revenue to be spent on greenhouse-gas mitigation, including CCS.

Dr. Ehler concluded that, although an enormous task, a CCS infrastructure was needed, since there was no alternative route to deep CO₂ cuts in the foreseeable future. This related to energy and industrial policy in general, it was not only a coal issue. Vattenfall stressed that it was necessary to speed up permitting procedures for CCS projects.

3. Update on coal industry state aid in the EU — Professor Dr. Franz-Josef Wodopia, Chief Executive, GVSt – Gesamtverband Steinkohle e.V. (German Coal Association)

Prof. Wodopia recalled in his presentation (Annex 2) that the current EU Regulation 1407/2002, permitting aid for the reduction of activities, initial investment and operating costs, as well as aid to cover exceptional costs, expires at the end of 2010. The new Commission Proposal COM(2010)372 of 20.07.2010 now only mentioned aid for definite mine closures and exceptional costs. He said that if operating aid was abolished after 1 October 2014, as proposed, then there would be no time to implement closure plans in a socially responsible way. Importantly, the Commission had acted in contradiction to several arguments mentioned in its own Impact Assessment. A Council decision was expected in December 2010.

Referring to a separate issue, Mr. Roberto Zangrandi of ENEL said that his company opposed a proposed Spanish Royal Decree that would demand a certain level of
electricity production from domestic coal. He believed that the coal subsidy question should be addressed by other measures, outside of the electricity market.

Ms. Mercedes Martin Gonzalez (CARBUNION) reported that in Spain, hard-hit by the global economic crisis, social problems resulting from mine closures within the next year could become explosive and questioned how the Commission would determine if a mine was “uncompetitive” and hence to be closed. This issue of State aid was vital to the Spanish coal mining industry: utilities burned less expensive imported coal, and imported gas. Consequently, coal stocks had risen sharply. Ms. Martin concluded that if coal mines closed in Spain, this would push prices up on the world markets – a sentiment that Mr. Wolfgang Ritschel of the German Hard Coal Importers Association did not agree with.

In welcoming Spain’s first input to the coal round, Dr. Ehler recalled the important role that COREPER could play to influence decisions that directly affect the regions. He believed the proposal was socially, politically and logically flawed - as confirmed by the impact assessment. He was sure that the rapporteurs would engage with stakeholders on this serious issue. Mr. Rapkay MEP, who will draft the report for the leading ITRE committee, agreed. In Hungary, the proposed EU regulation would also result in a mine closure. EP committees should send a strong signal to postpone the 2014 deadline.

4. Investment in coal production and use – opportunities, barriers and solutions – Mr. David Brewer, Director-General, Confederation of UK Coal Producers

Mr. Brewer recalled that indigenous coal production provides security of supply and diversity of sources at stable prices, before giving an overview of investment in coal production and use in the UK (Annex 3). Mining required continual investment, but finance was difficult to obtain, especially for new deep mine projects. Traditional sources of finance had become more risk averse and emphasis had shifted to renewable energy projects with guaranteed revenues. Major coal projects would therefore need to be given higher priorities with EU institutions, such as the European Investment Bank, and a more supportive investment framework by the EU and Member States.

Looking at coal-fired power generation, the portfolio was ageing and some plants were due to close by the end of 2015, others needed NOx abatement technologies, and new plants were required to have partial CCS. In the future, international companies may want to spread risk, investing throughout Europe in different fuels. Investment in coal in the UK was hampered by uncertainty concerning the market for coal; the global financial crisis and risk averse financial institutions reinforced this trend. Mr. Brewer concluded by asking why investment patterns in the UK were different to Germany, since many factors were identical in both countries, and if there were any lessons here.
Dr. Ehler agreed that this was a good question to pose and highlighted the differentiated responses of Member States to similar challenges. He summed up the three presentations by noting that security of energy supply is not an abstract question – political dynamics will dictate future gas supply, and Asia will flourish on its growing coal use. He returned to the State aid issue, saying that a balanced solution was needed to step out of subsidies: subsidised production has no future, but burdening productive mines with heavy debts for past subsidies was no way forward either.

5. An introduction to the European Coal Days at the European Parliament, 8-12 November 2010 – Dr. Christian Ehler, MEP and Mr. Petr Pudil, President, EURACOAL

Dr. Ehler confirmed that the European Coal Days 2010 were scheduled for 8-12 November 2010. They would include an opening ceremony, an ITRE hearing on the future of coal in the energy mix, a Coal Round, possible interviews with Commissioner Oettinger, President Pudil and others, a dinner hosted by Vattenfall and an RWE breakfast. Dr. Ehler stressed the need for a clever media strategy and for interesting news items to be prepared that could be released to the press during the course of the week. He concluded by requesting members of the Coal Round to invite their national and regional press using the budgets available to MEPs for this purpose.

President Pudil, after announcing that a poster was available, thanked MEPs and their staff, alongside the EURACOAL secretariat, for their preparations and looked forward to meeting everyone at the European Coal Days.

Dr. Wilde’s suggestion to invite National Coal Experts, whose next meeting was on 10 November 2010, was accepted.

Dr. Ehler thanked all participants of this well-attended Coal Round and closed the meeting.

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Annexes: Presentations by Messrs. Milojcic, Wodopia and Brewer.
About the benefits of a CO$_2$ transport and storage infrastructure in Europe

A coal industry perspective

EP Round Table on Coal – 15th September 2010
Stand: 17. August 2010
**CO₂ infrastructure as location factor**

- The utilization of oil, gas and coal, increasingly after 2020 and – as things stand today – only possible at all in 2050, with carbon capture.

- Security of supply in the electricity sector and industrial production are linked with CCS technology in the medium term already.

- A CO₂ transport and storage infrastructure will be needed after 2015/2020.

The need for carbon capture and a CO₂ transport and storage infrastructure follows from the climate targets and the fact that Central Europe is to remain an industrial region.
CO₂-infrastructure provides planning reliability as CO₂-prices become calculable (qualitative illustration)

Decision-makers know their costs of capture and are able to estimate the operating expense for transport and storage, if a CO₂-transport-storage-infrastructure is available. With the exhaustion of the cheapest mitigation potentials CO₂-prices rise slowly over time.
## Major CO₂ sources in Central Europe

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of operations &gt; 10 m t/a</th>
<th>Number of operations 10 – 3 m t/a</th>
<th>Number of operations 3 – 0.35 m t/a</th>
<th>Total CO₂ emissions of selected operations, in m t/a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>0</td>
<td>10</td>
<td>33</td>
<td>86</td>
</tr>
<tr>
<td>Belgium</td>
<td>0</td>
<td>5</td>
<td>33</td>
<td>51</td>
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<tr>
<td>Germany</td>
<td>9</td>
<td>23</td>
<td>153</td>
<td>434</td>
</tr>
<tr>
<td>Poland</td>
<td>2</td>
<td>10</td>
<td>56</td>
<td>162</td>
</tr>
<tr>
<td>Czech Rep.</td>
<td>0</td>
<td>8</td>
<td>33</td>
<td>74</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>56</strong></td>
<td><strong>308</strong></td>
<td><strong>807</strong></td>
</tr>
</tbody>
</table>

Reducing complexity

- CCS-Demonstration as integrated technological process proves to be difficult; lack of concepts for industrial application

- Separation of tasks in industrial-scale application reasonable:
  - Capture conducted by operator of facility:
    - Technology exists, industrial application needs incentives: three processes available in power generation
  - Setup and operation of CO$_2$ transport- and storage-infrastructure by specialized companies:
    - CO$_2$-transport tested, acceptance and regulation needed
    - CO$_2$-storage needs balance of interests between regions and utilization competition

Government action guarantees non-discriminatory access to a CO$_2$ – infrastructure and ensures sufficiently large capacities in the future
CO₂ sources > 3 m t/a and potential storage regions


- CO₂ storage formations
- Oil/gas fields
- Focus of CO₂ emissions

DEBRIV
Bundesverband Braunkohle
Objectives in energy and electricity policies

- secure
  - infrastructure
  - Trans-European Network
  - electricity, gas, CO$_2$?

- competitive
  - competition
  - market design, unbundling

- investment

- energy mix
  - CCS-CO$_2$-Hedge

- environmentally compliant
  - IED – SO$_2$ – NO$_X$, dust
  - ET – CO$_2$

Who is responsible for “security” of supply in electricity sector?
EP Round Table on Coal
Meeting on 15 September 2010

“Update on coal industry state aid in the EU”

Prof. F.-J. Wodopia
German Coal Association
Overview

- Regulation (EC) 1407/2002 will expire on 31 December
- Public Consultation on the aftermath of the expiry of this Regulation between May and July 2009
- Follow-up regime drafted by EU Commission as from late 2009
- Various drafts discussed under ISC procedure
Public consultation outcome

- **Governments of subsidised coal-producing MS**
  - in favour of either prolonging Regulation 1407/2002 (esp. Spain) or a new Regulation allowing at least part of the currently covered aid,
  - a Regulation allowing investment aid and aid for inherited liabilities (esp. Poland)
  - or sector-specific rules that would allow State aid in the context of the gradual closure of its mines until 2018 (esp. Germany)

- **Social partners** in favour of continuing of aid categories currently allowed or at least a new EU regime on State aid for the reduction of activity as well as aid for mine closures and inherited liabilities

- **Environmental organisations** not in favour of new State aid regime
Comparison of legislation

  Title: “*State aid to the coal industry*”
  - Aid for the reduction of activity (Article 4)
  - Aid for accessing coal reserves, either aid for initial investment or current production aid (Article 5)
  - Aid to cover exceptional costs (Article 7)

- **Commission proposal COM (2010) 372**
  Title: “*State aid to facilitate the closure of uncompetitive coal mines*”
  - Closure aid (Article 3)
  - Aid to cover exceptional costs (Article 4)

⇒ several aid categories dropped
Commission proposal on Closure aid, Article 3 (I)

- **Conditions:**
  - operation of production units must form part of a closure plan with **deadline** not beyond **1 October 2014**
  - production units must be **closed definitively**
  - production units **in activity on 31 December 2009**
  - overall amount of closure aid to follow a **downward trend**, reduction between successive 15 months periods **not less than 33 percent** of the aid provided in the initial period
Commission proposal on Closure aid, Article 3 (II)

■ Conditions:
- not higher than 2010 aid under (EC) 1407/2002
- conditional on plan to mitigate environmental impact of coal use

If the production units are not closed at the date fixed in the closure plan, the Member State concerned shall recover all aid granted in respect of the whole period covered by the closure plan.
Commission proposal on
Aid to cover exceptional costs, Article 4

■ Type of aid:
- granted to undertakings which carry out or have carried out an activity in connection with coal production to enable them to cover the costs arising from or having arisen from the closure of coal production units and which are not related to current production.

■ Aid may be used to cover:
(a) the costs incurred only by undertakings which are carrying out closure of or have closed production units, including undertakings benefiting from closure aid or
(b) the costs incurred by several undertakings.
Impact assessment: Commission policy objectives

Summary
- horizontal State aid rules in as many sectors as possible
- move towards renewable energy sources and environmentally sustainable use of indigenous energy sources
- but also recognizes the importance of making the best use of domestic energy resources, including fossil fuels.
- indefinite coal aid not in line with broad policy objectives, “especially when it counteracts efforts to raise competitiveness or to move to renewable energy sources.”
- But COM also recognizes that “the closure of uncompetitive mines may have consequences, especially on the social level, which need to be addressed.”
Impact assessment: six policy options

- **Discarded**
  1 - “Baseline scenario” (general State aid rules)
  2 - Guidelines based on TFEU Article 107(3)(c);
  3 - Council Regulation only for time-limited operating aid ("closure aid")
  4 - Council Regulation only for aid to cover exceptional costs
  6 - Temporary prolongation of Regulation 1407/2002

- **Retained**
  5 - Combination of “closure aid” and “aid to cover exceptional costs based on TFEU, Article 107(3)(c)
Choice reflected in considerations of COM (2010) 372:
- “The Union's policies of encouraging renewable and lower carbon fossil fuels for power generation do not justify the indefinite support for uncompetitive coal mines.”
- ”However, in the absence of sector-specific State aid rules, only the general State aid rules will apply to coal. In this context, uncompetitive coal mines, currently benefiting from aid under Regulation (EC) No 1407/2002, may no longer be eligible for aid and may be forced to close.”
- “Member States should be able to take measures to alleviate the social and regional consequences of the closure of those mines, …”
Some impact assessment statements (I)

- “Sudden closure of coal mines with massive lay-offs overburden the regional labour market to a point where many mine workers remain unemployed for long periods”

- “The Regulation would allow clearly digressive operating aid aimed at covering current production losses as long as it accompanies an orderly winding-down of activities …”

- “This would be a gradual phasing-out of operating aid over a maximum period of 10 years…”

- “Aid must be clearly digressive at a rate of minimum 10% per year.”

⇒ not considered in current proposal
- “... It follows that, first, financial resources would only be freed up in the longer term, when job losses are gradually absorbed by the labour market and when exceptional costs linked to mine closures are reduced. Second, the amount of budgetary resources freed up by the stop of subsidies depends very much on the ability of local/regional labour markets to absorb the labour formerly employed in the mines.”

⇒ not considered in current proposal
Some important statements

- „Given the regional concentration of coal mines …, the social impact of the simultaneous closure of the mines could be significant. …up to **100000 jobs may be at stake.**“

- “From an **environmental** point of view, there is a **lot of uncertainty**. … This uncertainty results from the high substitution rate of domestic coal by imported coal. Although this would not be a 100% substitution, the difference between the policy options would depend upon the modalities of the national policies with regard to favouring the switch to other energy sources.”

⇒ not considered in current proposal
Some contradictions

■ On the one hand:
  - “…the small contribution of subsidised hard coal to the overall energy mix strongly limits the capacity of such subsidies to compensate for such disruptions.” (Impact Assessment, p.17)
  - “Subsidised coal has only a marginal impact on the security of energy supply on the EU level.” (Explanatory Memorandum, p. 2)

■ On the other hand:
  - “In order to minimise the distortion of competition in the internal market resulting from aid, …”(Recital 7)
  - “… to mitigate the negative environmental impact of aid to coal, the Member State should provide a plan…” (Recital 8)

⇒ How can coal aid being phased out distort competition and how can it have a unique negative environmental impact?
Justification of the Commission proposal

- “The opinions of the Impact Assessment Board are not binding. However, the opinion accompanies the draft initiative together with the impact assessment report throughout the Commission's political decision-making. The Commission impact assessment is an aid - not a substitute - for political judgement. Ultimately it is the Commission which decides whether or not to adopt an initiative, taking account of the impact assessment and the Board's opinion.” (source: IAB)

- But: Why an impact assessment, if COM ignores the social impact in its political judgement?

- And why an explanatory memorandum preceding the proposal if COM also ignores the social impact stated in the direct context?

- On top: why did COM not cover other aspects?
Preparation of Member State Decision on final COM (2010) 372

- Opinion of the European Parliament
- Opinion of the European Economic and Social Committee
- Opinion of the Committee of the Regions
- Preparation of Member State decision in COREPER
- First examination in Competition WG: 21 Sept. 2010
- (poss.) Adoption in Competitiveness Council: 10 Dec. 2010
- Final decision to be applied from 01 Jan. 2011
Financing investment in coal production and use

David Brewer
Director General
Confederation of UK Coal Producers
Agenda

• Look at financing from mainly a UK perspective
• Mining Equipment
• Surface mines
• Underground mines
• Power Generation
Indigenous coal has a vital part to play in EU energy mix

- Provides security and diversity
- Can compete with imports
- Quality customer relationship and service valued by the market
- Removes variability associated with exchange rates and long distance transport movements, with the benefit of substantially lower carbon transport footprint
Mining needs continual investment

• Extractive industry
• Easiest reserves already worked
• Financing risks increasing
  – Market
  – Environment
  – Planning
  – Operational
Coal market within the UK much larger than indigenous production

UK Coal Supply 2009

Million Tonnes

<table>
<thead>
<tr>
<th>Country</th>
<th>Million Tonnes</th>
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<tbody>
<tr>
<td>UK</td>
<td>18</td>
</tr>
<tr>
<td>Russia</td>
<td>19</td>
</tr>
<tr>
<td>Colombia</td>
<td>4</td>
</tr>
<tr>
<td>S Africa</td>
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<tr>
<td>USA</td>
<td>4</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.5</td>
</tr>
<tr>
<td>Australia</td>
<td>4</td>
</tr>
<tr>
<td>Others</td>
<td>4</td>
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</table>
Mining equipment investment

• Economic downturn impacted on manufacturers as well
• Equipment companies willing to provide flexible payments to help finance some projects
• UK COAL has worked with companies to help provide new face equipment at Thoresby and Kellingley collieries
Surface mine investment

- Comparatively low start up costs, but can still be significant given relative size of companies
- Operationally less risky
- Less market uncertainty as relatively short duration
- Planning consent can be a major obstacle, with potentially a long judicial process before permission is obtained
Deep mine investment

• Long development lead times increases pressure on investment decisions and adds to supply uncertainties
• Potential investors want the certainty that they will get a payback which could be 10-15 years away
• Significant medium to long term market uncertainty
• Harworth Colliery - mothballed UK deep mine prospect - 54Mt in Top Hard seam. Cost around £200m
Sources of finance

- Internal cash resources
- Banking facility
  - Scottish Resources recently increased debt facility to £47.5m
- Share issue
  - UK COAL raised £100m in Q3 2009
- Venture capital
- European Investment Bank
- Government?
Global Financial Crisis

• Has caused the traditional providers of finance to business to become more risk averse
• In an attempt to re-establish credibility with the public all bank dealings have to be visible
• Projects perceived to have environmental benefit are ranked high on the list if viable returns are available
Investors perception of mining projects

• Coal mining projects are high risk (underground mining significantly more risky geologically than surface mine projects)
• Both underground and surface projects have significant planning, environmental and legislative risks
• Long term market decline/uncertainty
• Coal mining has low environmental stature in spite of the possible development of CCS
UK coal market uncertainty

• European environmental legislation on SO₂ and NOx will close coal power stations over the next 14 years with inevitable reduction in coal demand
  – 8GW of coal capacity supposedly due to close by 2015 under LCPD
  – IED requires further emissions abatement or close by early 2020s

• Tightening carbon emission caps placing downward pressure on coal burn
  – Coal generators to purchase 100% of EUETS allowances from 2013

• UK Government policy to reduce GHG emissions by 80% by 2050 from 1990 baseline.
  – Intermediate target 34% reduction by 2020
  – >30% renewable electricity by 2020

• No new coal build without partial CCS with obligation to fully retrofit at a later stage
European Investment Bank

• Furthers the objectives of the EU by providing long-term finance

• Corporate Operational Plan 2009-11
  – Support sustainable, competitive and secure energy
  – However, maximise the proportion of its projects associated with low carbon technologies

• Result no funding available for projects involving fossil fuel extraction, e.g Harworth

• Needs new direction from Board of Governors to change this approach
Summary – Mining Investment

• Coal important for security of supply within Europe
• Mining finance difficult to obtain especially for new deep mine projects
• Traditional sources of finance now more risk averse
• Investment emphasis more on renewable energy
• Major coal projects will only get financed with the support of EU / Member States in the medium term
• Coal mining investment needs to be given a higher priority within European institutions
Investment in Coal-Fired Power Generation

- Ageing plant
- Erosion of market by renewables
- Volatile electricity prices in liberalised market
- Carbon price
- No new (or reboilered) coal-fired plant without partial CCS
- Existing plant – 8GW out of 28GW LCPD closures (no FGD investment) by end 2015
- Remainder requires NOx abatement under IED

Round Table on Coal – 15 September 2010
Investment in Coal-Fired Power Generation

• Load following fossil fuel plant still required
• But coal-fired plant owned by international companies which can invest anywhere
• Gas the lower risk option – lower capital cost, lower carbon cost, no requirement for CCS on new plant
• Government will support four new coal plants with partial CCS (but subsequent CCS retrofit implied)
• Beyond that, why invest in new coal or ageing old coal? Portfolio generators may want to spread risk
Investment in Coal in the UK – the vicious circle

- Market and price uncertainty, and regulatory requirements and uncertainty means limited investment in coal-fired power generation, new or old
- Gas the preferred option
- Uncertainty over market for coal makes investment in new and replacement mining capacity difficult
- Exacerbated by global financial crisis and risk averse financial institutions
Is the UK different? Discussion

- Substantial investment in SOx and NOx abatement in Germany to meet LCPD and IED requirements
- Investment in new coal-fired plant in Germany
- But the same international companies are involved
- Germany faces same carbon price and same increased penetration by renewables
- Germany has a liberalised market
- Why the difference? Are there wider lessons here?