EURACOAL POSITION PAPER CONCERNING THE PUBLIC CONSULTATION "TOWARDS A NEW ENERGY STRATEGY FOR EUROPE 2011 – 2020"

N.B.: As the Stock Taking Document was formulated "in view of" a new comprehensive energy strategy for Europe until 2020 to be adopted early 2011, EURACOAL assumes that it will be fully reviewed. Therefore, EURACOAL is not proposing concrete amendments to the text of the Stock Taking Document; however, in order to facilitate the work for DG Energy, after some general remarks, the structure of the Stock Taking Document has been followed.

The position paper only deals with the most important items of a future EU energy strategy. Other essential aspects are summarized in EURACOAL's brochures "An Energy Strategy for Europe: Importance and Best Use of Indigenous Coal" (autumn 2009) and "Guaranteeing Energy for Europe – How can coal contribute?"(June 2010).

General Remarks

EURACOAL welcomes 2020 as an appropriate timeframe to look at a new energy strategy for Europe. The European Union has adopted most of its energy-related and climate protection-related objectives for the year 2020. The European Strategy for Sustainable Jobs and Growth (the EU headline targets) has also been adopted by the European Council on 17th June 2010 with a view to 2020.

For longer timeframes such as 2050, one can only create a "vision" and combine it with a roadmap. In this sense, EURACOAL understands that the EU, when adopting an energy strategy till 2020, would like to take into account ambitious climate protection objectives. However, geopolitical and security and supply issues till 2050 are most important as well. As renewable energy sources will not be able to cover much more than 20% of primary energy needs in the EU-27 by 2020, different options for the timeframe 2020-2050 have to be kept open. An energy mix with many energy sources is crucial. Any longer term vision clearly has to be marked as such; the EU should be careful not to give the impression that a zero carbon society would be possible by 2050.

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The following statements should be clearly made in future EU energy strategy papers:

- For electricity generation, nuclear and fossil fuels will be needed for decades – they will have to deliver by far most of the electricity in 2020. Looking at fossil fuels supply, first, we have to make sure that the fossil fuels are available and accessible. This is fundamental for Europe as a location for industry. Coal and lignite represent approximately 80% of the EU's fossil fuels reserves.

- Also in peaceful times, we have to consider to what extent power generation can be linked to pipelines or electricity grids way out of the EU's sphere of influence. Modern integrated grids are (only) a means to better distribute the energy sources that are available.

- In addition to electricity generation, mining fossil fuels will be further necessary in Europe. Access to fossil fuels, particularly coal and lignite, remains important. If we do not invest in coal-fired power plants, investments in mining are also under pressure. This again weakens the indigenous fossil fuel supply basis and leads to dangerous energy import dependence.

- There is a way out that serves security of supply, the competitivity of electricity production in Europe as well as climate protection objectives for 2020: the concept of continuous modernisation, particularly investing in new coal-fired capacity to replace ageing power plants and thereby to achieve scheduled reduction by 2020, this new capacity being capture-ready. It does not "lock-in" emissions because it can be combined with a CCS retrofit step by step once CCS is available under market conditions. EURACOAL does not see a convincing argument against such a way forward; it should therefore be promoted also by the Commission.

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Ad Stock Taking document / Introduction:

- EURACOAL welcomes that the new energy strategy until 2020 must fit into the European Strategy for Sustainable Jobs and Growth. The latter includes general society objectives like the 75% target for the employment rate and the 3% objective for research and development investments. The coal companies are actors in the regional economy, investing considerable amounts of capital. With its approx 280,000 employees (700,000 including indirect jobs) the coal industry is often the origin of long added value chains in the regions. Coal therefore contributes significantly to the objectives of the European Strategy for Sustainable Jobs and Growth.

  The Council has also confirmed the 20% target (1990 to 2020) for greenhouse gas emission reductions as well as the 30% reduction target, "provided that other developed countries commit themselves to comparable emission reductions and that the developing countries contribute adequately according to their responsibilities and respective capabilities". This conditionality is very significant from a coal industry point of view. Europe must persuade all important emitters from the developed world to contribute comparably, otherwise EU citizens and industry are heavily burdened while any climate protection objectives are unachievable.

- In the introduction to the Stock Taking Document, the Commission refers to the new Energy Title in the Lisbon Treaty. It contains a broad EU competency for all energy questions, but also makes clear that Member States maintain their right to determine their energy mix and the overall structures of their energy supply. When interpreting and putting this into practice, Europe needs to find a balance between EU competencies and national competencies. Challenges that can best be solved at a European level must be addressed in Brussels. On the other hand, the European institutions, when making decisions, must

respect the starting points, the resource situation and the resulting energy mix in the Member States. Particularly, they must not burden only countries with a considerable coal industry with climate protection measures. On the contrary, these Member States must have room for coal production and use to the extent they wish.

Ad 1. Progress since the Energy Action Plan of 2007

EURACOAL shares the Commission's view on the achievements of the 2007 Energy Action Plan (Part 1.1.). The summary of the remaining gaps and shortcomings shows the most relevant items to be looked at in the decade to come. We welcome the Commission's view that the role of public awareness-raising and acceptance is easily underestimated, particularly in relation to CCS. It would be good to go more into detail and to reveal how the EU, and Member States' authorities and interests could best achieve public acceptance of new technologies. EURACOAL is convinced that this remains a common task for industry, authorities, politicians and the media.

Ad 2. Next steps: towards an Energy Strategy for Europe 2011-2020

Ad 2.1. An evolving environment

The Commission rightly emphasises that security of energy supply is a matter of external policies and actions and "that the main challenge concerns the future security of gas imports". The fact that in times of political tension longer-term disruptions of fossil fuel supplies may be possible must be taken into account when shaping an energy policy until 2020 and beyond. Europe must avoid political blackmailing. A balanced energy mix with renewables, coal, oil, gas and nuclear is therefore best.

Energy dependence is not only an issue of infrastructure and energy markets (both of course can contribute to avoiding dependence). EURACOAL underlines the Commission's statement in the

Stock Taking Document that we need "a fresh look at our indigenous energy sources and the role they can play in the security of our energy supplies". This mainly concerns coal and lignite, respectively, representing almost 80% of the EU's fossil fuel reserves. Coal clearly limits the fossil fuel import dependence. Coal can also be purchased from a number of regions and countries that are geopolitically stable. Over the years and decades, coal prices have been much less volatile than other fossil fuel prices. Therefore, coal also limits risks concerning economic stability. Not only has coal vast advantages for the mining regions due to the added value it creates and the number of women and men employed (see above); European coal mining technology also leads the world market, with a share of more than 50%. And finally: coal is easy to store; the national and international infrastructure for coal allows safe transport.

Ad 2.2. Key issues for the new energy strategy

Ad 2.2.1. A strong focus on implementing agreed policies

The coal industry agrees with the Commission that a strong focus should also be on the implementation of agreed policies. This particularly includes the transposition of both the CCS Directive and the energy market packages into national law.

Ad 2.2.2. Full integration in the longer term perspective

See General Remarks

2.2.3. Priority areas for the future strategy

Under "Making progress towards a low-carbon energy system", the Commission confirms the role of the amended EU ETS and the "urgent need to replace the ageing power generation capacity". EURACOAL agrees with both statements, however, they need to be detailed further.

(1) The role of the EU Emissions Trading Scheme (ETS)

The EU ETS forces power generators and industry to reduce emissions by 21% by 2020 – with 2005 as the reference year. It is often misunderstood, therefore some cornerstones are again highlighted:

- The emissions cap is fixed and will be achieved; on the other hand emission allowances will be fully used.
- The cap does not only lead to a -21% reduction by 2020 (even more than -21% if compared to 1990); it will also be further tightened by 1.74% every year after 2020. This has already been adopted.
- Any additional future measure or instrument in addition to the EU ETS will therefore not lead to less or more emissions; it can however harm the functioning of the GHG allowance markets.

The EU ETS has already led power plant investors to postpone or drop their plans for new coal-fired power plants. The potential investors in coal-fired power generation fear high CO_2 prices in the longer term. Currently, much more gas capacity than coal capacity is being planned, constructed and going into operation. There is a danger of a „Dash for gas“. The power mix would in the medium term be shifted much more towards gas. This would imply enormous risks for supply and prices as Emissions Trading is blind to security of supply. Further gas capacities without CCS would only postpone the “climate problem”; it would occur with the emissions from gas-fired generation a few years later than with a coal/gas generation mix.

The paper „Dash for Gas versus broad modernisation“ (attached) shows the mechanics of this process and is attached as Annex 2. It outlines the cases “Investment in gas capacity only” and “Widespread modernisation (Investment in coal and gas)” till 2020 and then till 2030. A low fuel

price scenario (with values since 2000) and a high fuel price scenario (prices about 50% higher) are considered.

When comparing the fuel costs of both scenarios over two decades a relevant economic dimension becomes clear. During the period from 2010 to 2020, in the scenario "Dash for gas", between € 73 billion and € 115.5 billion more would be devoted to fuels than under the scenario "Widespread modernisation". During the period from 2020 to 2030 the gap between the two scenarios widens even more because of the increasing share of gas in the "Dash for gas" scenario.

These figures show that in the case of a "Dash for gas" the costs of power generation would increase sharply and at the same time supply risks would also increase considerably. The "Widespread modernisation" scenario counters this, further maintaining a balanced energy mix. The advantages of coal, especially in terms of security of energy supply, added value in the EU and price formation would be effective.

Efficiencies of new coal or lignite-fired power plants are expected in the medium term to increase from approximately 43% for lignite and approximately 45% for hard coal today to approximately 50%. Research and development efforts are essentially directed towards improvements concerning the steel, utilised allowing steam temperatures of 700 °C with a pressure of 350 bar.

From a EURACOAL point of view, the Commission and the EU should clearly acknowledge that new coal-fired power generation would save energy and CO_2 quickly, that it is to be built capture-ready (space and connection to the scrubbing plant) and that - once CCS is commercially available - as a rule a retrofit would be expected.

(2) Member States should be entitled to support investments in capture-ready fossil fuel power plants until 2020 (not 2016).

As a means Member States should use the option created by the "Formal Commission Statement ad Article 10 para 3 of the EU ETS Directive" to support new capture-ready plant constructors with up to 15% of the total costs of the investment. EURACOAL recommends extending this option that is now limited to 2013-2016 to the end of 2020.

Major considerations are again:

- In the SER II, COM expects that electricity production capacity will increase by 20% by 2020. The power plant fleet is ageing due to a lack of investments after the liberalization of the electricity markets. Consequently, investments in new generation capacity are crucial.

- Renewable energy sources will enter the market more and more, however slowly. Gas use is limited due to limited diversity of sources. For security of supply reasons, indigenous energy sources as well as coal from geopolitically stable countries remains necessary for the EU. Without new coal plants, there is a lack of investments in coal mines, weakening the EU's reserves and resources basis.

- The new plants will increase the share of highly efficient power plants and therefore contribute to the EU's energy efficiency targets for 2020 as well as the GHG reduction targets.

- A better investment framework will facilitate access for new electricity suppliers.

(3) CCS: To be developed quickly for all large emitters, including infrastructure

In the paragraph on "leadership in technological innovation" the Commission confirms the important role of CCS. We agree with that view: in case it is necessary to dramatically decrease GHG emissions by 2050, fossil fuels can only be sustainably used with CCS if the resulting CO_2 is

stored in geological formations. According to the IEA, CCS has to contribute to one fifth of the global GHG emission reductions envisaged for 2050.

The separation, transport and storage of CO_2 are generally regarded as safe. Via the CCS Directive a thorough monitoring above all of storage installations is already compulsory in the EU and is to be transposed by Member States in their national legislation. In its „Technology Roadmap Carbon Capture and Storage", the IEA assumes „that there will be a CCS technology growth from a hand-full of large-scale projects today to over 3,000 projects by 2050.

In the EU a network of CCS demonstration plants will probably be built by 2015, testing the three most important CO_2 separation technologies (oxyfuel, IGCC and post combustion), the transport of CO_2 as well as the storage options in gas or oil fields and saline aquifers. With regard to financing the CCS demonstration projects, it is widely acknowledged that the EU decided to encourage CCS with 1,05 billion € via the European Economic Recovery Programme and with revenues from up to 300 million ETS allowances. On the basis of the results, CCS chains have to be developed and become available at commercial scale as soon as possible.

From EURACOAL's point of view the CCS infrastructure is an important task to be dealt with at EU level. It should become a part of the EU energy infrastructure package to be adopted by the Commission towards the end of 2010. This would give the EU the opportunity to largely contribute to a real European rather than a national network.

The importance of a network infrastructure as such is undisputed. This is well-known for an effective supply of power and gas. Linking sources of energy/production plants and consumers with different capacities and load profiles via networks creates an additional benefit. For carbon dioxide, we cannot expect individual sources and sinks to work optimally in a linear point to point system.

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In Europe, there are currently approximately 1,000 sources of carbon dioxide, releasing more than 1,000 t per day, be it a goods train or a river boat. Many power stations are among them, but also about 200 industrial plants.

The first elements of a national and/or regional or fully European infrastructure for the transport and storage of carbon dioxide should be available at the same time as the commissioning of the large demonstration installations around 2015. A more widespread industrial application of carbon dioxide capture could be envisaged as from 2020, then requiring larger transport and storage capacities.

For more details, EURACOAL refers to the work of the Fossil Fuels Forum, particularly at the FFF Plenary in October 2009.

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Annexes 1 to 3
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