

“Coal in Europe and contribution to energy security”

Brian RICKETTS, Secretary-General, EURACOAL

EESC-CCMI own-initiative opinion

on the contribution of indigenous coal and lignite resources to the EU’s energy security

14 September 2015, Brussels

EURACOAL
European Association
for Coal and Lignite

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EESC Consultative Commission on Industrial Change
own-initiative opinion on the contribution of indigenous
coal and lignite resources to the EU’s energy security

Hearing on 14 September 2015
VMA3, 2 rue Van Maerlant, Brussels

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Secretary-General, EURACOAL

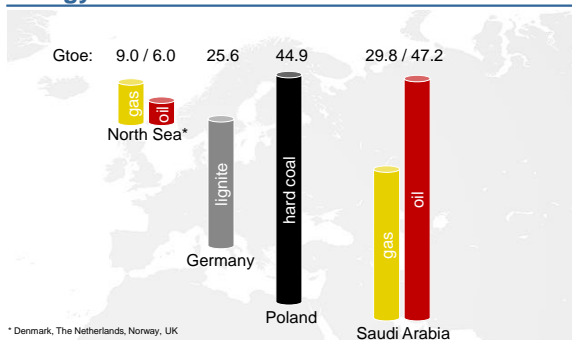
Members of the European Economic and Social Committee, members of the Consultative Commission on Industrial Change, Mr. Vidan, members of the study group. It is my privilege to address you today as Secretary-General of EURACOAL, the European Association for Coal and Lignite.

This own-opinion of the CCMI on coal and lignite is important. It allows us to reflect on the position of coal in Europe, not only in the context of Energy Union and the “energy transition”, but also as we approach the UN climate conference in Paris.

I will briefly cover:

1. the role of coal and lignite in EU energy supply;
2. the energy security challenges facing Europe; and finally,
3. coal from an environmental and climate perspective.

Energy reserves and resources in the EU



Coal and lignite in the EU: 89% of energy reserves and 93% of resources.

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Around the world coal is the most abundant source of energy, the most affordable and the most accessible. The EU’s reserves and resources of coal and lignite are enormous – far greater than North Sea oil and gas, and on a par with the remaining potential of oil and gas in the Middle East. We are not about to run out of coal and lignite in Europe, not in Poland, nor in Germany.

Hard coal in Europe ...

Six EU Member States mine hard coal: Czech Republic, Germany, Poland, Romania, Spain and the UK. Ukraine is a big producer and Norway a small one.



photos courtesy of LW „Bogdanka” SA

106 million tonnes of hard coal were mined in 2014; demand was >300 Mt.

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This photograph shows a deep mine in Poland, near Lublin. In February 2012, LW „Bogdanka” mine set a world production record from one of its coal faces. It is set to become one of the world’s largest and most productive deep mines at over 10 million tonnes per annum: a great success story that demonstrates what can be achieved with proper investment.

Six EU Member States mine hard coal. Ukraine is also a big producer, and Norway a small one.

... and brown coal or lignite



photo courtesy of PPC SA

Nine EU Member States exploit lignite as a competitive fuel for power generation: Bulgaria, the Czech Republic, Germany, Greece, Hungary, Poland, Slovakia, Slovenia and Romania. Several countries in South East Europe and Turkey are also big lignite producers.

At 178 Mt in 2014, Germany is the world’s largest lignite producer.

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There are large opencast or surface coal mines in many countries – the USA has some of the biggest, with

annual production from single mines of around 100 million tonnes.

In Europe, Greece and eight other EU member states make good use of their indigenous lignite resources, extracted from surface mines such as this one in Western Macedonia. Germany is the world's largest producer of lignite and although its lignite production has declined, electricity generation from lignite has increased, because Germany benefits from the most modern and most efficient power stations – using less coal to generate more electricity.

Coal mining creates economic wealth in the EU



photo: Northumberlandia, Banks Group

- 106 Mt hard coal
- >240 000 direct jobs
- 401 Mt lignite or brown coal
- ~2.5 indirect jobs / direct job
- €25 billion annual value of energy
- >1 million jobs across Europe

Those working in the coal industry should feel proud of what they achieve.

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In global terms, coal use in the EU, at around 700 million tonnes, ranks No.4, behind China, the USA and India. In terms of economic added value, the EU coal industry supplies energy worth around €25 billion annually. It directly employs almost a quarter of a million (240 000) men and women, a figure that rises to well over one million when indirect jobs and Energy Community countries are included.

Every year, each one of us spends about €1 000 on energy imports. Without indigenous coal and lignite production, that figure would be even higher and we would see more of our jobs disappear offshore. Seen from here, in the prosperous European quarter of Brussels, it's hard to believe that 11% of EU citizens live in energy poverty. They cannot afford to heat their homes – a situation that will only get worse if energy policy favours expensive gas and renewables.

It turns out that coal is the fuel of the 21st Century. Around the world, coal has accounted for almost half of the growth in energy supply this century: almost equalling the growth in oil, natural gas, nuclear and renewables ... combined. Coal's share in global electricity generation is growing and stands at around 40% today.

28% of EU electricity comes from coal



Coal is also important for:

- steel making
- district heating and industrial combined heat & power (CHP)
- small- and medium-size enterprises, e.g. food processors
- residential heating

Security and 24/7 reliability from coal and lignite.

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In the EU, 28% of our electricity comes from coal and lignite. New renewables – mainly wind and solar – contribute just 10%. The green revolution will take time and money, although I know that some are impatient and want to push ahead, regardless of cost.

I now turn to some key issues on this, my last slide.

Key issues to be addressed

Air pollution

- No correlation between coal use and air pollution.
- Must tackle emissions from transport and small-scale coal use.

Climate change

- Agreed GHG reduction targets for EU do not mean outlawing coal.
- Combination of more efficient coal use – so less coal – and CCS deployment means coal can be part of a competitive energy mix.

Security of energy supply

- Growing import dependence is not sensible and needs to be reversed.
- Security of electricity supply is low in some MS – a “de-rated capacity margin” would reveal where action is needed.

Social aspects of “energy transition”

- Do we alienate the coal sector or value it?
- Agreeing long-term aims to allow investment in jobs and industry.

A realistic, respectful and responsible “Action Plan for Coal”.

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Coal bashing has become fashionable. It is easy to point a finger at coal. After all, coal is black and some would say, “dirty”. But there is no correlation between particulate pollution and coal use. There are countries which use a lot of coal – Germany for example – that have lower levels of air pollution than other countries which use no coal. It is too simplistic to look at the total mass of pollutant emissions. What's important is where pollution ends up. In the case of pollution from motor transport, too much of it pollutes the cities where we live. I admit that the use of coal by households can also add unnecessarily to pollution. I say “unnecessarily” because there are smokeless fuels on the market and there are clean-burning stoves, but they cost more.

If we look at pollution from coal-fired power stations, huge progress has been made over the years. Compared with 1990, EU coal power plants now emit 85% less

sulphur, 55% less NOx and 70% less dust. Emissions continue to decrease as older power stations are replaced with new ones. The smogs of the 1950s have been consigned to history.

Electricity enables us to live healthier, more productive lives. We live longer today than ever before. So the benefits of coal use are very substantial, yet environmental impact assessments consider only the negatives, not the positives.

To reduce air pollution further, we need to target those sources which can be reduced most effectively and most economically. Right now, in Europe, that means paying attention to the transport sector and smaller users of coal and oil. Electric cars will improve city life – and will need a lot of electricity to power them, some from coal-fired power stations. Reducing the unprofessional use of coal, in open fire places for example, would be another positive step.

Coal is portrayed as public enemy No.1 in the fight against climate change. It would be great if there was a more economic alternative, especially for developing economies. But there isn't. So we have to look at how coal is used around the world.

In Europe, we have agreed GHG reduction targets that provide enough headroom for coal to be used in the energy mix. Some would like Europe to get out of coal. The gas industry, for example. But then Europe would become even more dependent on imported gas – from Norway, but also from North Africa, Russia and the Middle East, including Iran. We would have to compete against Asian customers who are also interested in Iranian gas, and can pay high prices. Having coal in the mix ensures competition and means that we cannot be held to ransom by a small group of gas suppliers. Indigenous energy production – of all types – reduces supply risks, as does holding energy stocks, such as coal stocks at power stations.

In the electricity sector, Europe has enjoyed a high level of supply security for many years. But the trend in some member states is towards lower capacity margins – that's the safety margin between peak demand and available generation capacity. With no margin, the power system falls over. What's interesting today is that the growth in wind and solar power generation adds capacity, but not security. How can you be sure that the wind will be blowing when you need electricity? You can't. So it's important to look at "de-rated capacity margins" which account for the availability of generation. In the case of coal-fired power stations, they are typically available for 85% of the year. A wind turbine for perhaps 20% of the year. We need

secure backup, and for now that comes from conventional plants, including coal.

The social aspects of the energy transition need to be understood. The European Union is built on shared beliefs and solidarity. What we see in the climate debate is an attempt by some to alienate a group of workers. Coal mining is tough work, well rewarded in terms of pay and provides the energy that we all take for granted. Miners should be well respected. Unfortunately, there is a growing campaign against coal. One of the roles of our political leaders, including you, is to avoid conflict. We can continue to exploit coal and lignite in Europe, providing we respect the agreed carbon cap and thus meet our GHG emission reduction targets. Some believe that we need to deliver more than has been politically agreed and there are even a few who have resorted to violence. For example, those climate activists who clashed with police last month during an illegal occupation of Garzweiler mine in Germany.

We have reached a turning point. Either we can move forward, respecting the law, respecting political decisions and respecting the contribution made to society by workers from all parts of the energy sector. Or we can take a confrontational approach that divides Europe into the "good" and the "bad", with no common ground. In my opinion, that would be a terrible route to take. People everywhere need to feel good about what they do – including those who exploit fossil fuels. We should not allow ourselves to be sucked into a downward spiral of alienation and hatred. That would not be European.

In response to these challenges, an "Action Plan on Coal" is needed – a plan that ensures that timely investments are made:

- in new state-of-the-art power plants,
- in the refurbishment of old power plants to improve efficiency,
- in pollution control equipment to reduce emissions,
- in the upgrading of district heating networks to reduce losses,
- in the demonstration of carbon capture and storage, and
- in coal mines to improve productivity.

Without these investments, the future of energy supply in Europe will be less clean, less competitive and with fewer jobs. Your opinion on this matters to the many good people who work hard, not to destroy the planet, but to fuel progress and prosperity.

Thank you!