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Phasing out coal the German way

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On 6 June, the German federal government established a Commission on Growth, Structural Change and Employment whose main task will be to develop a plan for decommissioning coal power plants and combined heat and power plants (a so-called 'coal phase-out', German *Kohleausstieg*) by December 2018. Plans to establish this body (the so-called 'coal commission') were announced already during the coalition talks between the CDU/CSU and the SPD in January 2018, but the adoption of a schedule for discontinuing coal combustion in Germany had become a topic of discussion during its previous term.

The commission will consist of 28 members – representatives of political parties, chambers of commerce and energy, and ecological organisations. During a press conference, the Minister for the Economy, Peter Altmaier (CDU), announced that the commission had two tasks: climate protection and, equally important, creating new jobs. The Minister for the Natural Environment, Svenja Schulze (SPD), has emphasised that the goal of the commission is to show that Germany treats climate protection seriously; therefore the first results of the work are expected to be presented before the climate summit in Katowice in Poland in December this year.

At present, Germany is the EU's largest brown coal consumer and producer and, after Poland, the second largest consumer of hard coal. Hard and brown coal each account for 11% of primary energy consumption and in total form the third most important source of energy after crude oil (35%) and natural gas (24%), and ahead of renewable energy sources (13%). Coal has the largest share in electricity production (39.7% in 2017 – hard coal 15.2% and brown coal 24.5%). Once nuclear power plants are decommissioned in 2022, the coal power plants will play even a greater role in guaranteeing the security of the energy system because this will be the only large-scale source of energy working uninterruptedly throughout the day.

Commentary

- Although the coal phase-out seems to be similar to the nuclear power phase-out, it has a different background. The German public has had an emotional approach to the use of nuclear power in the energy sector. People have protested against nuclear energy since the 1980s, and the attitude of political parties towards nuclear power plants has had an impact on voters' support. Coal energy – even though most of the public support the decision to replace coal power plants with renewable energy sources – does not provoke such strong emotions. Around 76% of Germans declare support for the coal phase-out.

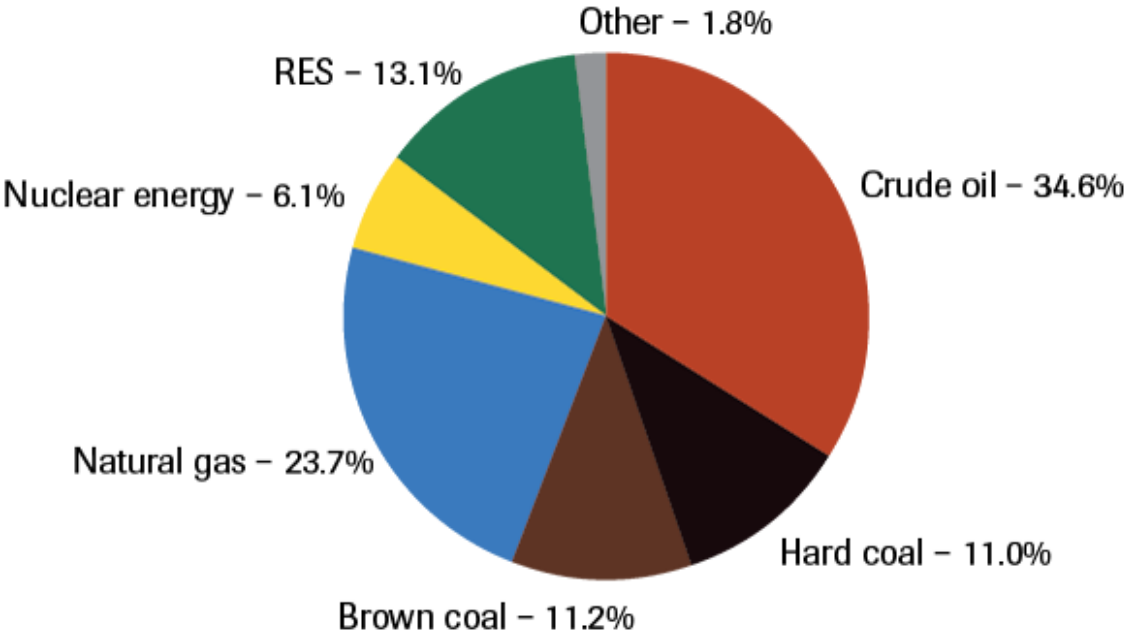
Support levels for decommissioning coal power plants are the highest among the electorate of the Green Party (99%) and the SPD (81%). 75% of voters of the CDU/CSU and the Left Party support this, as do 70% of FDP and AfD voters.

- The nuclear power sector employs around 40,000 people. However, they are employed at power plants and research centres across the country. Most of the workers of this sector will keep their jobs because they will supervise the decommissioning of the power plants and the construction of radioactive waste storage facilities. In turn, around 20,000 workers of the brown coal mining sector are concentrated in two main areas: 9,700 in North Rhine-Westphalia and 8,600 in the Lusatiamining region. Their demands are also backed by other trade unions. The hard coal mining sector also used to employ an additional crew of 8,000 people, but the two last mines will be closed by December this year. The trade union of workers of heavy industry, IG BCE, claims that the brown coal mining sector directly and indirectly in North Rhine-Westphalia alone employs around 50,000 people.
- It became necessary to decommission coal power plants when it turned out that Germany had failed to implement the greenhouse gas emission reduction plan. In 2017, Germany's CO_2 emissions reached 904.7 million tonnes, and they had been reduced by 27.7% when compared to 1990 levels. The German government views this result as a failure of the climate policy because Germany's official goal is to reduce the emissions level by 40% by 2020. The gradual decommissioning of coal power plants is for Germany the cheapest and technically the simplest way of achieving the reduction goal by 2030. In 2017, the energy sector was the largest source of emissions (43%), half of which were generated by the combustion of brown coal alone.
- In 2015, in exchange for compensation, energy companies undertook to disconnect brown coal power plants from the network which had a capacity of 2.7 GW. This was a compromise solution, after trade unions had protested against major decommissions. During the election campaign in 2017, the phasing out of coal was already a manifesto promise of all the political parties. This was also one of the key subjects of the coalition talks between the CDU/CSU, the Green Party and the FDP in October 2017. At that time it was disputed whether ten or twenty power plants with a total capacity of between 5 and 10 GW were to be decommissioned. The coal phase-out was no longer discussed so intensely during the coalition talks between the Christian Democrats and the SPD. It was stated in the coalition agreement that the issue of discontinuing the use of coal would be dealt with by a specially appointed commission to this effect. This was a useful compromise for both parties.
- The establishment of the coal commission was a politically difficult move. As a consequence of the phase-out, the Social Democrats may face resistance from the trade unions which they back, while the Christian Democrats fear reactions not only from the trade unions but also from German industry representatives. The make-up of the commission has been criticised by both the Green Party and the Left Party, since the participation of representatives of the parliamentary opposition has not been taken into account. The most important lobby of the renewable energy sector, the Renewable Energy Federation (BEE), has no representatives in the commission, while not so long ago German political parties, with the exception of the Greens, treated coal energy as a

necessary interim technology on the way to building an energy system 100% based on renewable energy sources.

- Regardless of the declaration that the commission is equally tasked with climate protection and creating new, the document concerning the establishment of the commission shows that less attention has been paid to achieving the emission reduction goals. The document determines six priorities of the programme the commission is to prepare by the end of this year: two points concern reducing emissions, and four are focused on supporting the economic transformation of the regions affected by the closures of coal mines and power plants and on creating new jobs. As regards supporting the structural transformation of the regions, the commission is expected to indicate new investments that will be financed using funds from the federal budget, EU funds, and from a specially established fund to support structural transformation. The government will want to use the coal phase-out to trigger the economic development of the largest possible area of Germany. The closures of mines and power plants will most affect the Lusatia region and North Rhine-Westphalia. However, the list of the federal states affected by the liquidation of the coal energy sector includes: Brandenburg, Lower Saxony, North Rhine-Westphalia, the Saarland, Saxony, and Saxony-Anhalt.
- The process of decommissioning all coal power plants may continue even until 2050. The most radical proposal put forward by the Green Party and German ecological organisations stipulates that all power plants and mines should be closed by 2030, but politicians from the largest parties, the CDU and the SPD, have ruled out such scenarios in their statement concerning the coal phase-out. During the summit of the Council of the European Union on 11 June 2018, Berlin protested against raising the goal of energy production using renewable energy sources above 30% by 2030 because, as was stated by the Minister for the Economy, Peter Altmaier, Germany would not be ready to achieve this. 2040 seems to be the most likely date for the closure of all German coal power plants. The coal commission is expected to present the end date for decommissioning coal power plants in December this year.

Primary energy consumption in Germany in 2016, 13,500 PJ in total


Other – 1.8%
RES – 13.1%
Nuclear energy – 6.1%
Crude oil – 34.6%
Natural gas – 23.7%
Hard coal – 11.0%
Brown coal – 11.2%