

Germany: the crisis is driving a renaissance for coal

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With the start of the heating season, Germany has taken a number of measures to increase the energy production of coal-fired power plants. On 28 September, the German government passed two regulations to return reserve power plants to full market operation. The first covers five lignite units with a total capacity of 1.9 GW, which have so far remained in the so-called safety reserve (*Sicherheitsbereitschaft*). Until 30 June 2023, they can again produce and sell energy on the exchange. The second regulation concerns coal-fired power plants in the grid reserve (*Netzreserve*); the possibility to restart them entered into force in July (see *'Niemcy: przejściowy renesans węgla w energetyce'*). The new regulations mean they will be able to remain on the market until 31 March 2024, which is 11 months longer than the previously stipulated rules. Furthermore, the requirement for them to provide coal stocks at power plants for at least 30 days before they resume operation has been removed.

In addition, on 4 October, the Federal Ministry for Economic Affairs and Climate Action (BMWK), the Ministry for Economic Affairs, Industry, Climate Protection and Energy of North Rhine-Westphalia and the energy company RWE announced an agreement on the continued use of the company's lignite power plants in the Rhineland Basin. Units D and E of the Neurath power plant (which have a combined capacity of 1.2 GW) are scheduled to be shut down by the end of 2022 according to the current law on the phasing out of coal (for more details see *Germany bids farewell to coal. The next stage of the Energiewende*). However, they will be allowed to remain in operation until 31 March 2024. In return, RWE has committed to bring forward the shutdown date of its last lignite power plants (Neurath F and G and Niederaußem K) changing the date from 31 December 2038 (as stipulated by law) to 31 March 2030. The agreement does not imply any additional compensation for the corporation, but RWE is to receive a total of €2.6 billion as part of the 2020 compromise to move Germany away from coal (this compensation has still not been approved by the European Commission).

The implementation of the above provisions requires legislative changes and the approval of the European Commission. When presenting this agreement, RWE declared its readiness to build new wind and photovoltaic power stations with a total capacity of 1 GW and gas units with a capacity of 3 GW on the site of the current lignite mines. According to the group's CEO Markus Krebber, the latter would be capable of co-firing hydrogen and fully convert to hydrogen from 2035.

Commentary

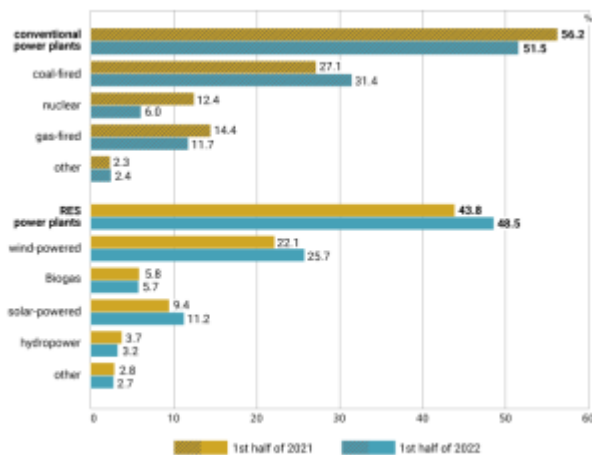
- The decisions to enable an increase in the use of coal-fired power plants in the short term are a response to the current energy crisis, which is primarily due to the reduced availability of gas. Coal-fired power plants are assigned a central role in replacing generation from gas-fired units to reduce gas consumption during the heating season, and in stabilising the electricity system. Coal-fired units are a convenient alternative, as they allow the production of both electricity and district-provided heating and are a stable and controllable supplement to renewable sources. Germany's gas storage facilities are currently at 95% capacity (providing for the average consumption over two winter months). As a result of the complete cut-off of gas supplies from Russia and the impossibility of fully substituting them this winter, Germany will have to rely more on reserves to cover current demand. This could lead to a significant emptying of storage facilities at the end of the heating season. The forecasts in this regard are highly uncertain and depend primarily on the level of gas consumption (which will be partially influenced by the weather or commodity prices). According to the Federal Network Agency, Germany should reduce its consumption by 20% in order to avoid shortages. In the first half of the year, it was 15% lower (relative to the first half of 2021), and 17.9% in the electricity sector. The declining generation from gas-fired and nuclear units was mainly replaced by generation from coal-fired power plants, whose share in the power mix increased by 17%. In the first six months of 2022, they collectively accounted for 31.4% of the electricity generated in Germany. Its generation from renewable energy sources also increased considerably (by 12%) this year (see the Appendix).
- The period which the coal blocks reactivated from the reserve can be used until is in spring 2024 due to the planned commissioning of LNG terminals, which are intended to enable Germany to replace gas supplies from Russia. A total of six Floating Storage Regasification Units are to be commissioned by the end of 2023. They will be used to import a total of 32 bcm of LNG annually (five of these have been leased on behalf of the federal government). Germany hopes that this will help to stabilise the gas market in the medium term, allowing the idea of using it as a transition fuel for the energy transformation (which has been suspended for the duration of the crisis) to be revived. At the same time, due to the planned increase in the scale of the Energiewende itself (80% of the electricity consumed in Germany would already come from renewable sources in 2030), gas is expected to be less important than previously assumed.
- In the longer term, Berlin is not only not abandoning its plan to move away from coal altogether, but intends to bring the process forward as much as is feasible. The provisions of the 2020 law stipulate that the last power plants will be phased out by the end of 2038 (or even by 2035). In the coalition agreement of November 2021, the SPD, Greens and FDP parties said they would aim to complete it "at best" by 2030. The agreement with RWE only brings this announcement closer to fruition in one of the three German coal basins (besides the Rhineland basin, lignite is mined and used in the Central German and Lusatian basins). Accelerating the move away from coal in the rich, industrialised and urbanised Rhineland will be much easier than in the other two, eastern, less prosperous and more peripheral regions. This fits in with RWE's new development strategy ('Growing Green'), which envisages basing generation activities on renewable and low-carbon sources (initially especially gas, in the longer term hydrogen). In turn, the

prime ministers of Saxony, Brandenburg and Saxony-Anhalt have announced that the current date for the decommissioning of lignite mines in their states will be maintained.

- The agreement with RWE to accelerate the phasing out of coal in the Rhineland Basin by 2030 is, from a political perspective, particularly important for the Greens. Indeed, this demand was one of the party's main campaign slogans ahead of both the 2021 Bundestag elections and the 2022 North Rhine-Westphalia Landtag elections (in this state, the Greens are currently part of the governing coalition with the Christian Democrats). At the same time, the agreement is a kind of consolation prize for the Greens' electorate, as Greens politicians (especially Vice-Chancellor Robert Habeck) have had to take a number of difficult and unpopular decisions in recent months, including those regarding the resumption of coal-fired power plants, the start-up of LNG terminals and the extension of nuclear power plants. Furthermore, the agreement allows (besides the numerous legislative changes implemented this year to facilitate investment in renewable energy installations) the Greens to maintain the narrative that the government is not abandoning its climate policy.

APPENDIX

Chart. Share of different types of power plants in electricity generation in Germany



Source: Federal Statistical Office.