

Germany: dark clouds over the mechanism designated to support the construction of new gas power plants

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On 25 November, the Federal Ministry for Economic Affairs and Climate Action (BMWK) submitted an updated bill regarding the mechanism designated to provide financial support for the construction of new dispatchable power plants (Power Plant Safety Act – Kraftwerkssicherheitsgesetz) for final consultations with stakeholders and Germany's federal states. The stakeholders were given until 28 November to present their positions. According to the timetable provided by the BMWK, the final draft of the Power Plant Safety Act is to be adopted by the federal government on 4 December and subsequently submitted to the Bundestag.

The mechanism proposed by the BMWK, which has been preliminarily agreed with the European Commission, is based on two pillars. Under the first pillar, referred to as decarbonisation, provisions are made for financial support for the construction of new hydrogen-ready gas-fired power plants, which are capable of transitioning from natural gas to hydrogen from the outset, with a total capacity of 5 GW, as well as the adaptation of existing gas units with a total capacity of 2 GW to enable future transition to hydrogen. These power plants would be required to switch to hydrogen within eight years of commissioning or modernisation at the latest. This pillar would also include financial support for the construction of new hydrogen power plants (using hydrogen from the outset) with a capacity of 500 MW and long-term energy storage facilities with a capacity of 500 MW. Support would involve subsidies not only for investments (Capex) but also for operational costs (Opex) after the transition to hydrogen, covering the cost difference between natural gas-based and hydrogen-based production for up to 800 hours per year.

Under the second pillar, designed to ensure the security of energy supply, gas-fired power plants with a total capacity of 5 GW would be constructed. In this case, the transition to hydrogen was not explicitly specified but would have to occur no later than 2045. These units would only receive subsidies for investments (Capex). Investors interested in state financial support for individual projects would apply through special auctions starting in 2025.

The BMWK estimates the total cost of the mechanism at nearly €18 billion. Subsidies under the first pillar are projected to reach €14.6 billion between 2029 and 2042 (funded from the governmental Climate and Transformation Fund), while subsidies under the second pillar are estimated to stand at €3.3 billion between 2029 and 2045 (funded from a new charge to be paid by end consumers).

Commentary

- **The construction of new dispatchable power plants, primarily gas-fired, is a crucial component of Germany's energy sector transformation strategy.** These plants are designed to serve as a backup for intermittent renewable energy sources, mainly wind and solar power, which are increasingly central to the German power system. In 2023, renewables accounted for 52.5% of electricity consumption in Germany, with the government aiming to increase this share to 80% by 2030. This expansion of dispatchable capacity is vital for maintaining system stability following the decommissioning of the last nuclear power plants in 2023 and the ongoing coal phase-out process (for more information, see '[Germany bids farewell to coal. The next stage of the Energiewende](#)'), initiated in 2020 and set for completion by 2038 at the latest. The German Federal Network Agency (BNetzA) estimates that 17–21 GW of new capacity will be required by 2031 to support these transitions.
- **Following the collapse of the SPD–Greens–FDP coalition** (see '[Germany: the government coalition breaks up](#)'), **the bill has little prospect of securing majority support in the Bundestag.** The concept, developed by the ministry led by Vice-Chancellor Robert Habeck (Greens), faced criticism from the outset, both from the former coalition partner FDP and the opposition CDU/CSU. Despite appeals from the energy sector and federal states, which have long lobbied in Berlin for the swift implementation of financial support for the construction of new gas-fired units (although regulations setting the terms of the transition to hydrogen continue to raise significant concerns among companies), the Christian Democrats and Liberals have already refused to back the bill, primarily due to high costs and overregulation. Theoretically, a majority could be achieved with the support of the AfD, but this party rejects the Energiewende entirely, and the minority SPD–Greens government has rejected cooperation with it. For Habeck, the project holds significant prestige, and he is likely to leverage it during the campaign for the snap Bundestag elections scheduled for 23 February 2025.
- **Unless the bill is passed before the elections, work on the government's support mechanism for the construction of gas-fired power plants will be suspended until at least mid-2025. Germany's main political forces broadly agree that such financial stimulation is needed.** However, a new government, which is likely to be led by the Christian Democrats, will almost certainly push for major changes to the mechanism to reduce costs and streamline the process. These revisions would require further consultations with the European Commission to ensure compliance with EU state aid rules, which will additionally delay the programme's implementation and the construction of new power plants. Consequently, Germany will need to rely on coal-fired power plants beyond the anticipated timeline, jeopardising the Scholz government's goal of completing the coal phase-out by 2030. Many plants scheduled for decommissioning will instead be moved to reserve status until being replaced with new gas-fired units. The BNetzA has classified over 20 coal-fired power plants, which should have already been decommissioned and withdrawn from the market, as critical for system stability. This includes 14 plants with a total capacity of 5.9 GW, which will remain in reserve at least until 2031.