An assessment of the draft legislation of the “Coal Phase-out law” as well as an outlook on its implications for the German power sector

Agora webinar series

» Germany's long goodbye from coal «

Hauke Hermann
Berlin, 9th June 2020
The German coal phase-out
Legislation

Legislative process is on the way and is expected to be finalized by Summer 2020

Significant shortfalls/changes

• steady decline of lignite capacities was blocked by East German State Prime Ministers

• commissioning of new hard coal plant Datteln 4 (without full compensation of emissions by other measures)

• substantive action on safeguarding the roll-out of renewables is lacking

• questionable decommissioning payments for old lignite plants in the Lusatian region (a significant state aid problem will emerge here)

Remaining controversies

• decommissioning payments for hard coal plants and CHP support

Other implementation measures are more or less in line with the recommendations of the Coal Commission
The German coal phase-out
Results from the recent implementation plans (1)

Additional shut-down of hard coal power plants for
compensation of new hard coal plant Datteln 4

GW (end of year)

2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038

Lignite (Rhineland/West)
Lignite (Central/East)
Lignite (Lusatia/East)
Hard coal
The German coal phase-out
Results from the recent implementation plans (2)

- commissioning of new hard coal power plant Datteln 4
- hard coal (North, West & South Germany, only 500 MW in East Germany)
- lignite (Rhineland/West)
- lignite (Lusatia/East)
- lignite (Central/East)

GW (decommissioning during the year)

2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038
The German coal phase-out
Results from the recent implementation plans (2)

- from 2020: Start of payments to RWE (Rhineland) for 15 years
- from 2025: Start of payments to LEAG (Lusatia) for 15 years
- from 2027: No payments for hard coal power plants

GW (decommissioning during the year)

- Hard coal (North, West & South Germany, only 500 MW in East Germany)
- Lignite (Rhineland/West)
- Lignite (Lusatia/East)
- Lignite (Central/East)
Auctions to decommission hard coal power plants

• Maximum price of 165 € / kW in 2020
• Decreasing to 49 € / kW in 2026 (no payments from 2027 onwards)

Contracts to decommission lignite power plants

• 2.6 bln € for RWE (Rhineland), 6 GW until 2030, 433 € / kW
• 1.75 bln € for LEAG (Lusatia), 2.8 GW until 2030, 625 € / kW
  – payments comparable to the „Sicherheitsbereitschaft“ from 2016
• No payments for the decommissioning of lignite plants after 2030
Outlook for the German power sector

- Very low gas prices (and constant ETS prices) lead to substantial abatement in 2020/2021
- Controversy about the roll out of renewables energies (PV, Onshore)
  - Missing capacity additions lead to a shortfall in emission abatement in 2030
- Reform of surcharges on the way
  - EEG-surcharge will be limited to 6.5 ct / kWh in 2021, 6.0 ct / kWh in 2022 (agreed last week)
  - Network charges partly to be paid from taxes (compensation for increasing electricity prices)
- Discussions about a 50/55%-target for 2030 on EU-level will impact targets in the EU-ETS and will increase prices in the EU ETS
  - Higher prices will reduce operating hours of coal power plants
Thank you very much

The report of the Coal Commission is available in English at:

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The German Coal Phase out law
Further reading

Proposal for the German coal phase out law
Berlin, 24th February 2020 (in German)

Statement from the Federal Council of Germany
Berlin, 08th April 2020 (in German)

Hearing in the German Parliament about the coal phase out law
https://www.youtube.com/watch?v=Tf8H3EhR23o
Berlin, 26th Mai 2020 (in German)

Statement of Felix Matthes (Öko-Institut) during the hearing about the coal phase out law:
https://www.bundestag.de/resource/blob/697412/ff1b408f05f7070851d73affc6797f60/sv-matthes-data.pdf
Berlin, 26th Mai 2020 (in German)
The German Coal Commission
Further reading

Matthes, Felix Chr.: The recommendations of the Commission "Growth, Structural Change and Employment" with regard to climate protection and the energy sector. Berlin, 11th February 2019 (in German)

Öko-Institut: The German coal-based power generation up to 2030. A model-based analysis of the recommendations of the Commission "Growth, Structural Change and Employment". Berlin, 12th March 2019 (in German with English Summary)

Öko-Institut: Electricity price and cost effects of a managed phase-out of power generation from coal. Berlin, 12th March 2019 (in German with English Summary)
Last but not least: The German coal phase-out in the context of other European efforts