Germany's coal exit: Mixed medium to-long term implications

The German coal commission's final recommendations for the gradual phase-out of coal-fired power production in Germany have mixed medium and long-term implications for the business risks of utilities and general industry risks. The impact on the financial profiles of affected utilities will be determined by the design of compensation for missed future cash flows and incurred investment costs.

The core points of the paper relating to utilities are:

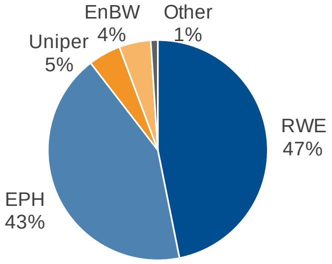
- Proposal to end coal-fired power production by 2038 or earlier.
- Decommissioning of coal-fired power plants by 12.5 GW to 30 GW by 2022 and by another 13 GW to 17 GW by 2030.
- No specific schedule has been provided which power plants should be mothballed first. The targets have been set under the assumption that the decommissioning will be settled by way of negotiation and mutual understanding with the operators of the power plants.
- Provision of compensation payments for operators of coal-fired power plants for their investment and cash flows, but also for employees.
- Potential subsidies for private households and energy-intensive industrials, starting in 2023, to avoid a possible – yet very likely – rise in electricity prices.
- Provisions of a stronger stimulus for new gas-fired power plants and combined heat and power production.
- Phase-out roadmap will be reviewed repeatedly in the 2020s.

Most affected German utilities: RWE; a list of German municipal utilities either through direct exposure or indirect exposure through Trianel and Steag; Czech utility EPH, but also some significant exposure for EnBW, Uniper (rated BBB+/Stable), Sweden's Vattenfall and France's Engie. The decommissioning could also affect Uniper's Datteln IV hard-coal-fired power plant, the only coal-fired power plant currently under construction, which is scheduled to go into production in 2020.

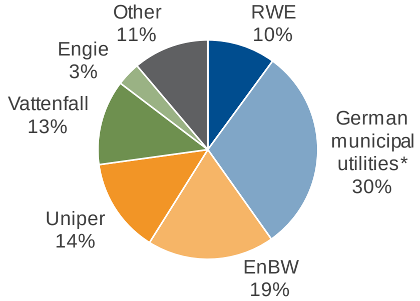
We are sure that affected utilities will use all available opportunities before the government takes measures to incorporate some or all of the coal commission's recommendations into law to oppose sacrificing their assets for the sake of Germany meeting its carbon-reducing climate goals, particularly if potential compensation payments turn out to be unsatisfactory. It should be noted that many coal-fired power plants are operated under long-term contracts with off-takers.

Figure 1: Operators of coal-fired power plants (measured by capacity) in Germany as of Nov 2018

Lignite power plant capacities



Hard coal power plant capacities



* Direct exposure or indirect exposure via Steag or Trianel

Source: Bundesnetzagentur, Scope

Analyst
Sebastian Zank, CFA
+49 30 27891 225
s.zank@scoperatings.com

Media
Matthew Curtin
+33 6 22763078
m.curtin@scoperatings.com

André Fischer
+49 30 27891 147
a.fischer@scoperatings.com

Related Research

European utilities outlook 2019: Political, regulatory risks move centre stage, Dec 2018

European Utilities: Commodity Rebound – Past the Trough, Nov 2017

Deutsche Stadtwerke: Heiter bis wolkig, Oct 2016

European Integrated Utilities: From Headwinds to Tailwinds, Sep 2016

German nuclear provisions: Proposed risk surcharge digestible, May 2016

Deutsche Stadtwerke: Finanzierung auf dem Prüfstand, Oct 2015

Scope Ratings GmbH
Lennéstraße 5
10785 Berlin

Phone +49 30 27891 0
Fax +49 30 27891 100

info@scoperatings.com
www.scoperatings.com

Bloomberg: SCOP

Sector implications

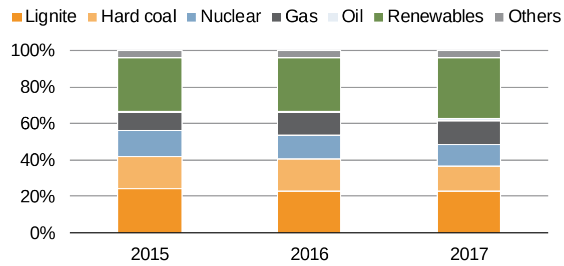
Implications on business and sector risks are mixed

Given the roadmap of the recommended coal phase-out, the implications for the German utilities landscape and beyond are medium to long-term and need to be seen in the context of security of supply, the political wish for a rising share of e-mobility, and affordable energy prices. While the implications on the financial profile of affected utilities will be determined by the design of compensation for missed future cash flows and incurred investment costs, the medium and long-term implications on the business risks of the affected utilities and industry risks in general are mostly negative for operators of coal-fired power plants and mixed for other utilities. Germany already has some of the highest end-customer electricity prices for residential and industrial consumers in Europe.

Up to 40% of generation volumes need to be substituted in addition to the missing volumes from nuclear

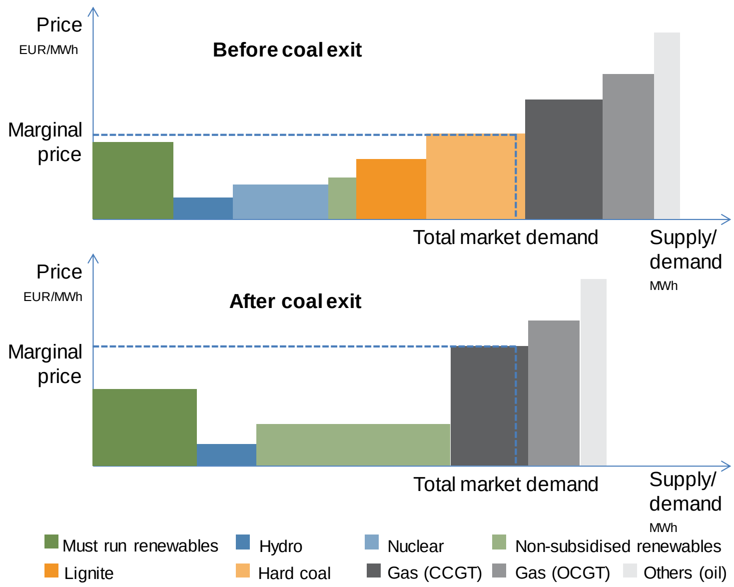
Power generation from coal-fired power plants contribute more than 240 TWh annually, which is between 30% and 40% of Germany annual gross generation. A medium to long-term substitution through renewables and gas-fired power plants will become challenging. While it is estimated that renewables have already covered almost 40% of Germany’s electricity needs in 2018 (according to BDEW), this coverage refers to the annual average, with days where the lack of renewable energy is buffered by thermal generation capacities.

Figure 2: Distribution of power generation in Germany



Source: DESTATIS, Scope

Figure 3: Simplified merit order before and after coal/nuclear exit



Source: Scope illustration

Conclusions

From Scope’s perspective, a gradual coal phase-out has a number of implications on the industry in Germany and beyond:

Generators, traders and suppliers

- Significant shrinkage of business out-reach of operators of affected power plant operators.
- Change of the merit order as missing generation volumes from coal, in addition to missing volumes from nuclear, have to be covered by remaining generation sources which is likely to lead to a different price-setting power plant (see figure 3).
- Accelerated expansion of renewable energy capacities for utilities, IPPs and also industry outsiders such as oil and gas companies with a strengthened position of generators to contract capacities under power purchase agreements (PPAs).

- Better bargaining position for operators of gas-fired power plants but also biomass and pumped-storage, particularly for peak-load power and provision of grid stability.
- Growing importance of inter-connectors with neighbouring power markets, e.g. France, Switzerland, Austria, Scandinavia, and potentially net power imports from these markets (against net power exports in the past).
- Increasing price swings for electricity, particularly for peak-load power as long as large-scale storage remains unfeasible.
- Increasing challenges for energy suppliers and traders to lock in satisfactory margins and increased competition from non-German power suppliers.

Grid operators

- Increased investment pressure on TSOs which need to cope with the increasing fluctuation of electricity generation.
- While the recommendations of the coal commission include potential subsidies on energy prices, e.g. feed-trough tariffs of transmission and distribution system operators, it could also increase pricing pressure on such grid operators in the next regulatory periods as subsidies on energy prices have to be collected by the government to the detriment of other areas.
- Rising importance of gas imports/gas infrastructure, e.g. transport, storage, power-to-gas.

Scope Ratings GmbH

Headquarters Berlin
Lennéstraße 5
D-10785 Berlin

Phone +49 30 27891 0

Frankfurt am Main
Neue Mainzer Straße 66-68
D-60311 Frankfurt am Main

Phone +49 69 66 77 389 0

Paris
1 Cour du Havre
F-75008 Paris

Phone +33 1 8288 5557

London
Suite 301
2 Angel Square
London EC1V 1NY

Phone +44 20 3457 0444

Madrid
Paseo de la Castellana 95
Edificio Torre Europa
E-28046 Madrid

Phone +34 914 186 973

Milan
Via Paleocapa 7
IT-20121 Milan

Phone +39 02 30315 814

Oslo
Haakon VII's gate 6
N-0161 Oslo

Phone +47 21 62 31 42

info@scoperatings.com
www.scoperatings.com

Disclaimer