

Press Release 4/2019

Coal Importers Association: Rigid Coal Phase-out Regime Endangers Security of Supply

- New Deloitte study proves it: Coal-fired power plants are flexible
- The existing coal-fired power plant park in Germany could guarantee security of supply with a 70% increase in the share of renewable energies.
- A decision to cease coal-fired generation must not be at the expense of security of supply
- A rigid phase-out regime with annual targets and very limited access of coal-fired power plants to capacity reserves prevents flexibility services

Hard coal-fired power plants can take over the task of system stabilization. This was shown by the Deloitte study "Assessing the flexibility of coal-fired power plants for the integration of renewable energy in Germany" (Deloitte Finance, November 2019), commissioned by VDKi, with a what-if calculation. From a purely technical point of view, the existing coal-fired power plant park in Germany (2018) could absorb and integrate growing proportions of variable renewable energies of 50%, 60% or 70% without endangering the reliability of the electricity supply. However, the average capacity utilisation of the existing coal-fired power plant park (2018) would fall in the 50% renewable energies scenario to just over 30% and in the 60% and 70% renewable energies scenarios to around 20% and 15%, respectively.

- In "dark doldrum periods", i.e. periods with limited output from wind and solar power plants, lasting one to three days, coal-fired power plants generate twice as much electricity as on an average day if the share of renewable energies is 50%, and three and a half times more electricity if the share of renewable energies is 70%.
- Germany becomes a net importer during the "dark doldrum periods". The scope for compensation through higher imports is limited by the availability of available facilities in Germany's neighbouring countries and the overload of interconnectors.
- Almost three quarters of the installed power plant park generate heat and electricity (CHP) at the same time. Most CHP plants can switch flexibly between heat and electricity as long as the electricity generation is not limited by the heat demand in the cold season. Retrofitting heat storage tanks can improve the operational flexibility of coal-fired power plants.

The study did not rely on very low gas prices for power plants. According to experts, the current price level will not remain so in the long term. According to the current market assessment of the gas industry, there are no suitable framework conditions for existing purely electricity-operated gas-fired power plants to continue operating economically beyond autumn 2020.

The scope of the Deloitte study was limited to a what-if calculation. In addition, it should be noted that only high-efficiency combined cycle gas turbine power plants should be supported under cogeneration. Although open gas turbines and gas engines, in addition to coal-fired power plants, would currently be an option for flanking the further expansion of renewable energy sources in the dark and cold seasons, modern coal-fired power plants are more favourable in terms of emissions than open gas turbines. If one considers the emissions over the entire chain of effects from the borehole/mine to the power plant, hard coal is at least on a par with natural gas, as current studies show.

For this reason, open gas turbines or gas engines should only be built where power plant capacity is required for grid-related reasons that **cannot be** provided by existing coal-fired power plants. The Association of Coal Importers therefore appeals to all political actors to use the capabilities of flexible coal-fired power plants to stabilise the system and thus integrate renewable energies within the framework of the energy system transformation and to put an end to coal-fired power generation accordingly.

We would be pleased to provide you with further information

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Responsible pursuant to the German Press Act:

Verein der Kohlenimporteure e. V., Prof. Dr. Franz-Josef Wodopia, Managing Director



About the Coal Importers Association e. V. (VDKi)

The Coal Importers Association e. V. (VDKi) represents the interests of the imported hard coal market in Germany. The German members and the members from the European neighbouring countries come from the fields of power industry, industry, trade and logistics. The association currently has 59 members, who used about 80 % of the German hard coal requirement of around 47 million tonnes in 2018 in their plants. Imported coal covers 100 % of Germany's hard coal requirements.