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Germany: Coal phase-out must go hand-in-hand with emission permit cancellation to keep CO2 prices up

The German coal commission, tasked with assessing the feasibility of a coal-exit in Germany, published its report at the end of January, setting the country on course to become coal-free by 2038. Through a progressive phase-out approach, the plan would allow Germany to meet its 2030 emissions reductions target in the power sector, after it was officially acknowledged that the country would not meet its 2020 objectives.

Over the next four years, around 12.5GW of capacity (almost 30% of total coal-fired capacity) should be taken off the grid (nearly half of which is already scheduled to go into reserve capacity, i.e. for exceptional use). An additional 13GW of capacity would then be taken off the grid by 2030, and the rest by 2038. With this plan, up to 1.8GtCO2e of Germany's emissions will be avoided compared to a Business As Usual scenario, but this will not set the country on a "below 2C" pathway(1). Nevertheless, it is an important step for one of the most coal-hungry EU countries, which produced 35% of its power from coal in 2018.

Keeping in step

This new step to adopt a clear phase-out timeline raises questions on the effectiveness of existing policies, and whether they could have delivered a similar result. The German power sector is covered by the European Emissions Trading System (EU ETS), which puts a price on carbon through the auctioning of pollution permits to power plants. Following a recent price hike, pollution allowances in the EU are currently hovering slightly above €20 per tonne of CO2e. Higher CO2 prices mean that producing electricity from coal becomes less attractive. In 2018, the profitability of operating coal and gas power installations regularly dipped into negative territory(2), making the continuation of operating such plants either economically unviable or dependent on subsidies.

Despite making coal power plants economically unviable, the downward pressure on coal power may be short lived as it depends on (volatile) energy market parameters and it may even disappear completely if the EU ETS carbon price drops again(3). This shows that no one policy can go it alone. The EU ETS is not a sufficiently stringent instrument to provoke the phase out of coal generation by itself, but it has an important role to play nevertheless. Making polluting activities expensive must remain a priority for Germany, and Europe as a whole, which means that the plan to phase out coal should not negatively impact the EU ETS. For this reason, the Coal Commission's recommendations include the crucial advice to the German government to **cancel ETS permits in line with the closure of coal plants (4)**.

Drain the waterbed

As coal power plants close down, permits from the EU ETS become available for other plants, possibly in other countries, to use, which is often called the "waterbed effect". Imagine you push down on one side of a waterbed; the water will not disappear but instead shift to the other side. To avoid this, you will need to extract some water out of the bed, so that the overall volume decreases. The same goes for the EU ETS, where some permits should be taken out of the market, in line with the quantity of pollution (the volume of GHG emissions), to ensure they are not available for other countries or plants to use. This is a first step towards puncturing the coal bubble.

Of course the coal phase-out must happen in a socially fair way, as climate and social policies should always go hand-in-hand. For this, coal-reliant communities and workers should be supported

financially, and re-trained where needed. The Coal Commission's report foresees such mechanisms for Just Transition funding, and it is rumored that the German government will set aside €40 billion over the next 20 years to achieve this. However, the report advises that this money should come from taxpayers, rather than a price-hike on electricity, let alone making some of the largest polluters foot part of the bill.

RWE, the largest German utility exploiting coal, unsurprisingly criticized the 2038 end date as "too early", yet the company's shares grew by around 5% amid news of the report, and 10% over the past week, hardly indicating a lack of shareholder trust in the company's ability to conform. Moreover, RWE's shareholders even asked the company to take a hard line when negotiating compensations that result from the coal phase-out.

A clear distinction should therefore be made between supporting communities to ensure a Just Transition, as well as avoiding negative financial impacts on public institutions such as cities or municipalities who hold shares in large utilities, and "compensating" large investors who decided to bet on the future of coal. Public funds should be used to compensate and re-skill *people*, not to remunerate private shareholders who lost in their financial gamble.

A higher carbon price in the power sector, through a strong EU ETS, has a role to play indeed, as it makes coal less attractive to future investment. In addition, strengthening the EU ETS by ending practices like free allocation to industrial installations, will also generate significantly more public revenue that can be used to finance further climate action, including support for the Just Transition of affected communities.

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1. According to analysis by CarbonBrief. Under BAU, coal plants would be retired at the average retirement age of already closed German coal plants. The "below 2C" pathway follows the percentage reduction of coal-fired generation in the entire EU according to the International Energy Agency's "below 2C" scenario.

2. See here (slide 9) the clean dark spread and clean spark spread measures which track the profitability of operating coal and gas installations, i.e. the difference between electricity prices and the cost of generating that electricity, including carbon costs.

3. According to Sandbag, even though the Market Stability Reserve is introduced and its design has now been strengthened this will not be enough on its own to adequately strengthen the market against oversupply of emission allowances.

4. As explicitly foreseen in Art 12.4 of the reviewed EU ETS Directive.