FUTURE OF COAL SPECIAL

Germany is experiencing a coal renaissance. Partly thanks to the anticipated nuclear phase out, dozens of coal-fired power plants are in the planning phase or under construction. But there is fierce public opposition.

Revolt against black power

by Stefan Nicola

On 13 September, some 6,000 people gathered in Jänschwalde, Brandenburg and in Staudinger, Hesse at the sites of two planned power plants. The protestors carried large self-made signs, blew whistles, and finally, like a giant team of football referees punishing an atrocious foul, simultaneously pulled out red cards, pointing them towards the sky.

The activists were protesting plans by Sweden's Vattenfall and Germany's Eon to build two new coal-fired power plants. By 2013, Eon in Hesse aims to replace three older hard coal units with a new 1,100 MW plant. The one in Brandenburg, by Vattenfall, is intended to enlarge the area's plant park, which has been a mining centre for decades. The opposition hasn't managed to stop the plans yet, but no one can say with certainty whether the units will be built.

Germany is a coal country. It has its own significant resources and a coal industry that still employs thousands of people. Half of the country's entire electricity consumption is met by the fossil fuel, which has come under fire for being the dirtiest in terms of carbon dioxide emissions.

German Chancellor Angela Merkel and Economy Minister Michael Glos have nevertheless argued for the construction of new coal-fired power plants. Why? First, because the older units are inefficient and must be shut down if Germany wants to reach its climate protection targets. Second, Berlin fears an electricity deficit once it phases out nuclear energy (by 2021), which today is responsible for roughly onethird of Germany's power. The German Energy Agency warned earlier this year of an electricity deficit of up to 21,000 MW by 2020 once the nuclear power plants go offline. Renewable energy sources simply can't yet make up the shortfall.



Coal is cheap and, in contrast to oil and gas, its price is stable – that's why energy companies have not hesitated to plan new coal-fired power plants. As of October 8, some 60 coal-fired plants were either in the planning phase or under construction in Germany, according to a study compiled by the German Association of Energy and Water Industries. Some 14,500 MW worth of generation capacity is currently under construction or has been given the go-ahead. Yet in several cases, plant projects have been delayed or stopped altogether due to protests and legal challenges from citizen groups, environmental organisations and Green Party politicians.

'We can't afford building conventional coal-fired power plants – they hurt the climate, are inefficient and do not fit in our times,' says Rainer Baake, head of Deutsche "Umwelthilfe", one of Germany's largest environmental organizations.

Companies say their new plants are highly efficient; they also point to carbon capture and storage, a technology that could put the CO_2 underground instead of in the atmosphere. Critics, however, are not convinced. They argue that CCS isn't yet available at a reasonable cost, and that plants being built now can't or won't be retrofitted with CCS technology later.

In Hamburg, one of Europe's largest coal plant projects – a $\in 2$ billion, 1,654 MW Vattenfall plant – got a last-minute green light from a state government that swept into power on the promise to stop the project. That doesn't mean the plant will be built, though. The local Green Party only approved it after imposing severe environmental guarantees that may render the entire project uneconomical. If some of the other plants are to be built, then companies will need a bit more support from governments.