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Merkel's Green Shift Forces Germany to Burn More Coal

By Stefan Nicola and Tino Andresen - Aug 20, 2012

Chancellor Angela Merkel's government says [RWE AG \(RWE\)](#)'s new power plant that can supply 3.4 million homes aids her plan to exit nuclear energy and switch to cleaner forms of generation. It's fired with coal.

The startup of the 2,200-megawatt station near Cologne last week shows how [Europe](#)'s largest economy is relying more on the most-polluting fuel. Coal consumption has risen 4.9 percent since Merkel announced a plan to start shutting the country's atomic reactors after last year's Fukushima disaster in [Japan](#).

[Germany](#)'s largest utilities RWE and [EON AG \(EOAN\)](#) are shunning cleaner-burning natural gas because it's more costly, while the collapsing cost of carbon permits means there's little penalty for burning coal. Wind and solar projects, central to Germany's plans to reduce nuclear energy and cut the release of heat-trapping gases, can't produce electricity around the clock.

"[Angela Merkel](#)'s policy has created an incentive structure which has the effect of partially replacing nuclear with coal, the dirtiest fuel that's responsible for much of the growth in the world's greenhouse-gas emissions since 1990," Dieter Helm, an energy policy professor at the University of Oxford, said by phone Aug. 17. Building new coal stations means "locking them in for the next 30 years" as a type of generation, Helm said.

Germany's increasing coal consumption is part of a global return to the [fossil fuel](#) that's cheaper than most alternatives. The amount of coal burned worldwide rose 5.4 percent to account for 30 percent of total energy use last year, the highest proportion since 1969, according to [BP Plc \(BP/\)](#) data.

Clean-Dark Spread

European Union [carbon emissions](#) may rise 43 million metric tons this year because of increased coal burning at power stations, according to Barclays Plc analyst [Trevor Sikorski](#).

The German clean-dark spread, a measure of profit that utilities can earn from selling coal-generated power after accounting for the cost of carbon-emission permits, was about 9.86 euros (\$12.17) a megawatt-hour today for the year ahead, according to broker data compiled by

Bloomberg. At the same time, utilities are set to lose about 10 euros a megawatt-hour from burning gas according to data compiled by Bloomberg.

“Lignite is the lowest-priced type of power generation and thus increasingly stormed the market,” Martin Pack, an RWE spokesman, said by phone from Essen, referring to a type of soft coal that dominates RWE’s consumption of the fuel.

EON generated 10 percent more electricity from burning coal in the first half than in the same period a year ago. RWE’s coal-fired power output in Germany rose by 12 percent in the same period. Reliance on coal may continue to increase after Statkraft SF shuttered its gas-fired plant in Emden in March and EON and RWE warned they may mothball generators that lose money.

Reliance on Coal

EON fell 0.6 percent to 18.15 euros by the Frankfurt close and RWE rose less than 0.1 percent to 33.40 euros.

Coal is being used in part because the prices for permits that allow the emissions of carbon dioxide linked to [climate change](#) are too low to spur other forms of generation. The price of carbon-dioxide permits in the European Union has dropped 43 percent over the past year.

Switching to coal from gas is “a consequence of the low prices” in Europe’s carbon market, Helm said. “Germany needs to exit coal and switch to gas as a transitional fuel, not the other way around, as quickly as possible if it really cares about the climate.”

Merkel’s government wants utilities to build 10,000 megawatts of coal- and gas-fired generators this decade to replace older, dirtier generators and underpin a growing share for [wind turbines](#) and solar panels.

Carbon Market

“The European Commission is on the right track if, as planned, the number of emissions allowances is reduced,” Johannes Teyssen, EON’s chief executive officer, said last week on a conference call with journalists. He also called for long- term binding carbon-reduction targets and said curbing emissions by half is feasible by 2030.

Building new coal generators in Germany isn’t easy. A group of local utilities last month scrapped plans to spend 3.2 billion euros to construct the nation’s biggest hard-coal plant in Schleswig-Holstein after resistance from environment groups and the state government led by the [Social Democratic Party](#) and [Green Party](#).

The Greens, Germany’s second-biggest opposition group, are against building new coal plants and favor gas ahead of Germany’s federal elections scheduled for the fall of 2013, when Merkel seeks to win a third term as chancellor.

“We need to do a lot of things to make the German energy switch a success, but building new coal plants is not among them,” Oliver Krischer, energy spokesman for the Green Party’s parliamentary group, said in a statement last month.

More Efficient

The so-called BoA coal plant near Cologne shows how new fossil fuel plants, which are more efficient than their older models, “not only help to reduce carbon emissions but can also make an outstanding contribution to the success of the energy industry’s transformation,”

Environment Minister Peter Altmaier, who was present at the plant’s opening last week, said in a statement distributed by RWE.

RWE says coal plants are key to ensuring supply security as Germany raises the market share of renewable generation to at least 35 percent by the end of the decade, and to 80 percent by 2050. BoA, which has an efficiency of 43 percent, can raise or lower output by 500 megawatts per unit within 15 minutes, Peter Terium, RWE’s CEO, told reporters in a call on Aug. 14.

It can “step in immediately when the wind is not blowing or the sun is not shining,” Terium said. Like most [power plants](#) in Germany, BoA burns lignite, a soft coal that’s sourced from domestic open-cast strip mines and emits about 29 percent more carbon dioxide than hard coal when burned. Environmental groups are concerned about the growing use of the fuel.

“It’s very alarming that leading German politicians praise a plant run on lignite,” Gerald Neubauer, a Greenpeace campaigner in Germany focusing on energy issues, said by phone on Aug. 16. “Burning lignite spews more carbon dioxide than using most other energy sources, and mining it inflicts major damage on the environment.”

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