

Germany's Utilities Caught in Perfect Storm

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FRANKFURT—Germany's power utilities have been on the back foot since last year's tsunami and atomic reactor disaster in Japan spooked the German government into accelerating a planned exit from nuclear energy.

The move hit profits and has complicated the country's effort to reduce high-carbon power generation, with utilities replacing their nuclear facilities with cheaper coal power plants rather than cleaner but pricier gas.

Now, both issues have been exacerbated by the economic slowdown in the euro zone—which has reduced electricity demand—and the rapid expansion of renewable energies in Germany, which has led to oversupply. The surplus has forced the idling of gas-fired power plants, which become even more expensive when under used, and further increased the appeal of coal, which has become cheaper still.

Such issues came to the fore this week when [E.ON AG](#), [EOAN.XE -0.42%](#) one of Europe's largest utility groups, reported a third-quarter loss and warned that its medium-term profit and dividend targets may no longer be achievable.

The boom in renewable energy, particularly solar power, is partly because of a number of subsidies introduced when Germany decided to exit nuclear power.

The subsidy program grants wind and solar energy preferential treatment in the overall energy mix, which means that gas and coal fired power plants only get a chance to feed electricity into the power grid when renewable energies can't meet demand.

Germany already produces well beyond 20% of its electricity through "green" technologies, substantially reducing the operating hours of modern gas-fired power plants—making them more expensive.

Guaranteed fixed prices for renewable energy have encouraged households to install solar panels on their roofs.

Each new solar-panel site might not produce much power on its own but together they add up. In total, Germany has about 30,000 megawatt of solar power generating capacity, or the same as about 30 large nuclear reactors. The pressure this puts on prices further pushes the big utilities toward cheaper forms of power generation such as coal.

Coal plants have also become more attractive because of record-low prices for CO2 permits on the European carbon market, which has lost any effectiveness in encouraging green investments.

The European Commission, the EU executive body that oversees the market, is aware that it is not working as intended and is expected Wednesday to lay out options on how to solve the issue by boosting the price of carbon.

The German utilities' choice of more coal-fired generation is evidence of the problem. E.ON said Tuesday that 26% of its power generation in the first nine months of the year was produced in hard coal fired power plants, compared with 22% in the same period last year.

But turning to cheap coal generation won't completely reverse the utilities' bad fortune, with E.ON effectively withdrawing its medium-term profit and dividend targets this week.

The company blamed the unresolved euro-zone debt crisis, which has knock-on effects for industrial energy demand in a faltering economy. The profit warning prompted a heavy selloff in E.ON shares Tuesday, sending the stock down as much as 12% by late afternoon.

"Electricity sales volumes in Italy have decreased nearly 10% year-to-date, in Spain demand from industrial customers has fallen around 7%, and even here [in Germany] industrial sales are down noticeably," said E.ON Chief Executive

Johannes Teysen. "Since World War II there has never been such a pronounced drop in sales volumes in such a short period of time."

At the same time, E.ON warned that the unabated expansion of renewable energies has considerably increased electricity supply—particularly in Germany, which promotes wind and solar power through lucrative subsidies.

Combined with muted demand, the ample power generation capacity has put wholesale power prices for next year under severe pressure, sending them nearly 10% lower year-to-date on the Germany-based European Energy Exchange.

"Prices and margins are tumbling on all European [energy] markets," said Mr. Teysen.

The rapid expansion of renewable energies in Germany has also further tarnished power generation margins for the utilities. So far this year, E.ON's 845-megawatt gas power plant Irsching 5 in Bavaria has produced power for fewer than 1,600 hours, Mr. Teysen said. By comparison, the power plant operated for around 4,000 hours last year, around the usual utilization rate for such facilities.

As a result, E.ON is struggling to recoup the capital costs of its relatively modern fleet of gas-fired power plants, said Mr. Teysen. Power generation margins at such power plants are hovering at about €2 a megawatt-hour, while the company would need more than €20 a megawatt-hour for those plants to be profitable. The generating margins only take into account the cost of buying the fuel and operating the plant, not other costs associated including paying interest on borrowed capital to build the plant.

The economic headwind and upheaval on European energy markets caused by the expansion of renewable energies forced E.ON to book impairment charges of €1.2 billion (\$1.5 billion) in the third quarter of the year, mainly on power plant assets across central Europe, the company said Tuesday.

The comments are the latest in a string of recent warnings from major utilities that the recession in vast parts of Europe and the success of renewable energy is increasingly eroding power generation margins. Swedish state-controlled utility Vattenfall late last month also recorded impairment charges of around €1 billion on gas-fired power plants in the Netherlands.

In contrast, utilities that rely more strongly on coal and lignite-fired power plants are faring better than those that have heavier gas exposure.

For instance, [RWE AG RWE.XE -1.08%](#)—Germany's second largest utility by market value behind E.ON—Wednesday is expected to report rising earnings at its power generation unit due in part to its large fleet of lignite-fired power plants.

However, while lower power prices are causing a headache for Germany's utilities today, they are unlikely to boost the competitiveness of German and European businesses in the future, according to the chief economist of a leading global energy organization.

Fatih Birol, chief economist for the International Energy Agency, said Tuesday that energy prices in the EU are set to rise in the coming decades compared with many of the region's main global competitors—such as the United States and China—placing European companies and consumers at a comparative disadvantage with other parts of the world.

"Europe will have to pay significantly higher electricity and gas prices compared to the United States and China, which at the end of the day will mean European industry and European consumers will be in a disadvantaged position vis-à-vis Americans and Chinese," said Mr. Birol.

By the year 2035, electricity costs in the European Union will be 50% higher than those in the U.S. and about 300% higher than in China, Mr. Birol said.