



Germany's Coal Binge

Berlin's "energy revolution" is going great—if you own a coal mine. The German shift to renewable power sources that started in 2000 has brought the green share of German electricity up to around 25%. But the rest of the energy mix has become more heavily concentrated on coal, which now accounts for some 45% of power generation and growing. Embarrassingly for such an eco-conscious country, Germany is on track to miss its carbon emissions reduction goal by 2020.

Greens profess horror at this result, but no one who knows anything about economics will be surprised. It's the result of Chancellor Angela Merkel's *Energiewende*, or energy revolution, a drive to thwart market forces and especially price signals, that might otherwise allocate energy resources. Now the market is striking back.

Take the so-called feed-in tariff, which requires distributors to buy electricity from green generators at fixed prices before buying power from other sources. Greens tout the measure because it has encouraged renewable generation to the point that Germany now sometimes experiences electricity gluts if the weather is particularly sunny or windy.

Yet by diverting de-

mand to renewables, the tariff deprives traditional generators of revenue and makes it harder for them to forecast demand for thermal power plants that require millions of euros of investment and years to build. No wonder utilities favor cheaper coal plants to pick up the slack whenever renewables don't deliver as promised.

Mrs. Merkel's accelerated phase-out of nuclear power after the 2011 Fukushima disaster in Japan has had a similar effect. Shutting profitable nuclear plants deprives utilities of revenue and saddles them with steep decommissioning costs, which makes cheaper coal more appealing.

To top it off, Berlin has imposed a moratorium on fracking. By preventing exploitation of ample shale-gas reserves, the ban leaves Germany more exposed to strategic pressure from gas exporters (read: Russia) and raises the cost of gas relative to coal. This is another reason cheap, local coal is back in favor.

Ordinary Germans foot the bill for these market distortions, having ponied up an estimated €100 billion (\$129 billion) extra on their electricity bills since 2000 to fund the renewable drive. The government estimates this revolution could cost a total of €1 trillion by 2040.

Berlin is scaling back some taxpayer subsidies for green power. But Germans still also pay for the energy revolution when job-creating investment goes to countries with lower power costs, as happened earlier this year when chemical company BASF said it would cut its investments in Germany to one-quarter of its global total from one-third, and when bad incentives skew generation toward dirtier coal instead of cleaner natural gas.

None of this is what environmentalists promise voters when they plug the virtues of a low-carbon future. Germany's coal renaissance is a cautionary tale in what happens when you try to substitute green dreams for economic realities.

Green energy mandates have achieved the opposite of their intent.

