Global Counsel

Germany and energy: black and red but less green

6 December 2013

Summary

Last week's German Coalition agreement produced an agenda which will trim some of the costs and moderate some of the ambition of the Energiewende. What it fails to do is address the fundamental problem that Germany is powered by a mixture of expensive low-carbon renewables and cheap carbon-intensive coal. This policymaking conservatism is the product of a debate on the costs of green energy which cuts across party political lines and is compounded by the politics of the German Grand Coalition. How important are these contradictions? And given Germany's size and importance, how likely is it that they will be exported into European energy policymaking?

Two months after Germans went to the polls, the Christian Democrats and Social Democrats finally last week reached a "Grand Coalition" agreement on governing the country for the next five years. Although there is a chance that SPD party members will vote the agreement down in their ballot, the probability is that the document will be the policy manual for Germany's next government.

The agreement is relatively specific on energy. It points to a change of pace rather than direction in policy and has little or nothing new to say about the role of coal and gas in the country's energy system. As the EU's largest economy this is important in itself. But given Berlin's importance in shaping the next stage of EU energy and climate change, this policy has wider resonance.

The Coalition agreements reaffirms both parties' commitment to the Energiewende. It reaffirms Germany's target for a reduction in greenhouse gas emissions from 1990 levels by 40% by 2020. However, the agreement also promises a "rapid and fundamental" reform of the legislative foundation of the Energiewende - Renewable Energy Sources Act – to be formulated by Easter 2014 and adopted by summer 2014. What is this likely to mean?

Corridors and caps

As elsewhere in Europe – notably in the UK – there is strong attention paid to the costs of the low carbon energy transition. Costs are acknowledged to have become a "problem" for both households and "large parts of the economy". Significantly, the agreement for the first time sets out both a minimum and maximum for the amount of additional renewables in Germany. This takes the form of what are termed 'corridor' targets. Under the Agreement, electricity from renewable sources would be targeted to provide 40-45% of total generation by 2025 and 55-60% by 2035. This compares to current targets of 35% by 2020 and 50% by 2030.

On specific technologies, the 2020 goal for expensive offshore wind would be brought down to 6.5GW from a previous target of 10GW, and the 2030 goal reduced to 15GW from the previous target of 25GW. The support systems for solar PV would remain unchanged, but are to close after Germany reaches an aggregate installation of 52GW from today's base of 35GW of capacity.

Comparing the new targets with the old is not straightforward, but according to the German

Global Counsel

Renewable Energy Federation these targets would lead to a slowing down in the pace of the deployment of renewables. The annual average rate of growth in renewables would fall from 2% to between 1.25%-1.67%. In addition to capping rollout rates, the Coalition agreement would also require renewables installations of 5MW or above to directly market to consumers from 2017, and all renewable technologies would be subject to lowering levels of support over time. This represents a significant new measure of market discipline.

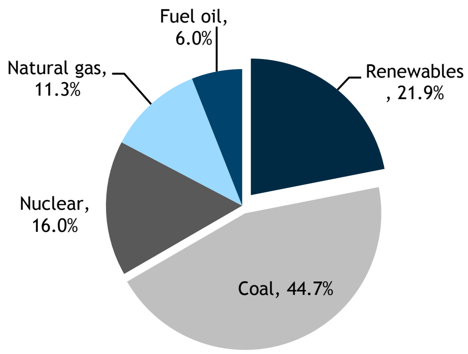

Fig1: Sources of German electricity generation 2012
Source: BDEW

Potentially the most important move, although it has received little attention, is the commitment to examine whether large producers of renewable electricity should themselves have to secure the spare capacity required to offset their own intermittency. This would require them to pay fossil fuel plants to be online for when the wind is not blowing or the sun is not shining. This would mark a significant change from the model today, and could potentially add a significant cost burden to large-scale renewable projects. It also has the potential to provide a model to be copied across Europe, as systems struggle to deal with more intermittent renewable capacity on the grids.

At face value, this is an agenda for a squeeze on German renewables deployment, and a deliberate attempt to roll back state support for them. It has the clear stamp of a German industrial constituency increasingly vocal on rising energy costs – although it will not go far enough for most critics. It represents a retreat from the SPD's pre-election ambition, adopted to chime with its election ally the German Greens, of having 75% of total energy production from renewables by 2030. In this respect it is well adrift from the kind of commitment demanded by the Greens. Indeed, after a decade of the mainstream moving ever closer to the German Greens on these issues, this may now be changing.

Fiddling while coal burns

However, conspicuous by its absence from the agreement is any attempt to address the fundamental problem of the Energiewende. This is that Germany is moving towards a power generation mix comprised largely of expensive low carbon renewables in conjunction with cheap but carbon-intensive coal (Fig 1). German energy prices are now second-highest in Europe, with costs of the Energiewende a significant contributor (Fig 2). However, Germany's carbon emissions actually increased in 2012 (Fig 3).

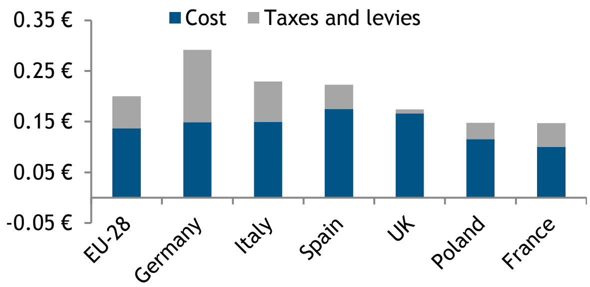

Fig2: Household €/kW, 2500-5000 kWh usage
Source: Eurostat

The Coalition agreement appears to suggest that the German political class is unsure what to do about this. This is largely a product of policymakers being caught between two powerful constituencies. On the one hand exists a German electorate which generally believes that the Energiewende is both desirable and attainable (Fig 4). On the other, there is a politically influential manufacturing sector concerned by rising energy costs which has seen the price of coal fall dramatically in Europe. The sector will also be concerned by the Coalition commitment - under European Commission pressure - to review the current widely-applied exemption of energy-intensive industries from the Energiewende surcharge (EEG).

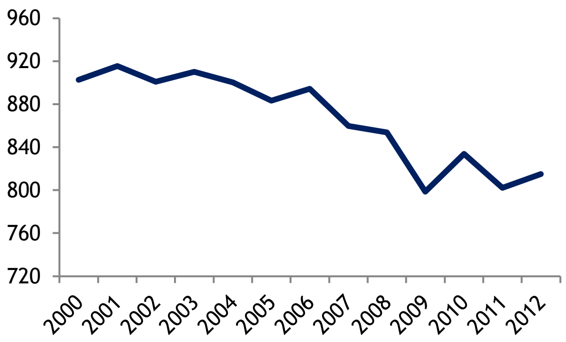

Fig3: German carbon dioxide emissions (mn tonnes)
Source: BP Statistical Review

With the exception of the German Greens, this has been problematic for German political parties. The fault lines on energy policy now cuts across party political lines, pitching representatives of renewables-producing regions, such as Schleswig-Holstein, against representatives of energy-intensive industries, generally located in the industrialised western and southern Länder. The result was a September election campaign which was characterised largely by silence on energy policy as parties sought to avoid widening these internal rifts.

The Coalition agreement is a product of these same trade-offs. Capping rollout rates adapts rather than recasts the country's energy policy. The structure of German political system, with its strong Länder in a powerful upper house, is built to encourage consensus decision-making over radical overhaul. Where the Coalition has landed is likely to be the course of German energy policymaking for some time.

How much relevance will this policy evolution have outside of Germany? The agreement confirms the Coalition's support for an EU-wide target of a 40% carbon reduction by 2030, a figure which is not at the most ambitious level being talked about. The agreement also commits to unspecified targets for both renewable power generation and energy efficiency. Europe is likely to miss its energy efficiency target for 2020 and there appears to be little appetite for another target beyond that.

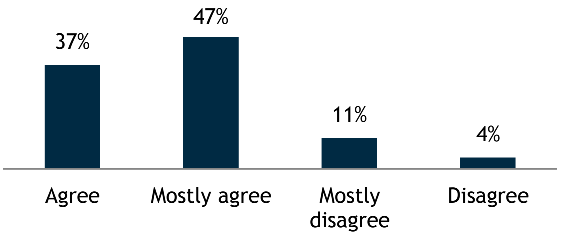

Fig4: Do you agree with the statement: "A 100% renewables system should be achieved safely and as quickly as possible"?
Source: TNS Survey October 2013

The renewables target however looks set to be a battleground in Brussels, with Germany on the side of new targets and the UK against. It is battle Germany is likely to win. It is also a reminder that Germany may be cooling on renewables, but these things are relative. With its strong renewable industry it is still likely to be in the vanguard of those who seek to set a 2030 target, with countries such as the UK and Poland pushing back. Whilst the Coalition does not put a number to its commitment to a renewables target, the agreement's continued basic support for renewable generation adds further evidence that the Germans will be pushing hard for an ambitious figure.

Where Germany is likely to be a brake on European ambition will be on the EU Emissions Trading Scheme - the EU's carbon market. This is a key policy tool which might have addressed the excess of coal being burned in Germany. The ETS has seen prices for carbon allowances plummet from a height of around €30/tonne CO2 and remain around €4-5/tonne CO2 due to a surplus of allowances and weak demand. At the European level this has led to calls for the postponement of the release of 900 million new allowances – the so called 'backloading' proposal – which narrowly passed the European Parliament in July 2013.

The Coalition agreement states that corrective action on the EU-ETS should only be taken if the target for reduction of greenhouse gases is missed – a situation which looks unlikely given Europe's current trajectory. Furthermore, the agreement states that if the backloading plan does go ahead, it should happen only once, and rules out the possibility that the allowances might be permanently removed as some have proposed. Whilst this remains its position, Germany – Europe’s largest carbon emitter - will continue to undermine confidence in the market.

Ultimately, the politics of the Coalition has produced an energy policy which will trim costs, but not address the tensions at the heart of the Energiewende: both its cost and its marriage of renewables and coal at the expense of gas. In an important year for European energy policy, and with a change of European Commission and Parliament, there is a risk that Germany could begin to export those same tensions and contradictions. The resulting mix of expensive, clean renewables and cheap, dirty coal will suggest that European energy policymaking still lacks a long term coherent strategy.

To contact the author of this Global Counsel Insight note email Matthew Duhan (m.duhan@global-counsel.co.uk). The views expressed in this note can be attributed to the named author only.

info@global-counsel.co.uk
+44 (0)207 656 7600