



THE WARREN REPORT February

Thirty years on and still waiting for an answer

Why does Germany expect to cut electricity consumption while the UK foresees demand doubling? It's because the UK still hasn't done the analysis

In 1981 the House of Commons select Committee on Energy posited this specific criticism: 'Why has Government still no idea whether investing £1,300m in a single nuclear plant is as cost-effective as spending a similar sum to promote energy conservation?'

This report was issued at a time when Government had just announced its intention to promote a new generation of nuclear power stations (of which just one was finally built). A generation later Government is still failing to address this most basic question.

Perhaps up until now, it has been considered only of academic interest. But with the Coalition Government seeking to expedite expenditure of upwards of £200bn in new generation sources, it really is high time the question was answered.

Five-fold nuclear increase

It should also be noted that, while the cost of building a new nuclear plant in Europe seems to have increased five-fold, the cost of installing many

conclusion, which if it is wrong, will unnecessarily increase all our costs by a huge amount for decades ahead.

After much probing, and even more prevarication from the civil service, we have reached a conclusion. This analysis simply does not exist.

The sole document upon which this 'doubling, even tripling' case is made in something called the Pathways Analysis. Even though this Analysis, undertaken by the Department's chief scientist, states very clearly that the various scenarios it examines "are not projections".

A wise warning. Because, so far as energy efficiency is concerned, none of these 2050 scenarios assume penetration of basic energy-saving measures like solid wall insulation into more than 1 in 3 homes. Similarly, it is assumed that the commercial sector can only improve its energy efficiency by just 20 per cent over the next 40 years. Or less than a compound 0.5 per cent p.a, so far below historic levels as to be inexplicable.

"It is likely that one amendment to the Energy Bill will seek to ensure that we do have an answer to that original request: how much can an energy-saving programme cut the need for new generation?"

established energy-saving measures has scarcely altered. Recently, the Government published its first energy National Policy Statement. It states unequivocally: "Department of Energy and Climate Change analysis... shows that reductions in electricity consumption resulting from improvements in energy efficiency will be far outweighed by increases in electricity demand, potentially leading to a doubling of electricity demand between now and 2050.... (and because of possible intermittency) total installed capacity might need to treble." (Para 3.3.14)

For many months my association has been seeking sight of this "analysis" which provides such an unequivocal conclusion. A

Some curious omissions, particularly as this Pathways exercise purported to be constrained only by physical limitations, rather than cost. Not much of a ringing endorsement for the flagship Green Deal policy, either.

Paragraph 15 of the Pathways work could not be clearer about its limitations as a policy instrument. It warns plainly that "before setting a long-term course, further detailed analysis of the wider impacts and implications will be needed." These should examine "cost-effectiveness, public acceptability and environmental sustainability."

It is clear that this additional analysis has simply never been undertaken at any stage over the last 30

years by any UK government. In contrast, the German government has undertaken such an exercise. With very different results.

In its Energiekonzept, the German government's ambition for energy efficiency is a reduction in primary energy consumption of 50 per cent between 2008 and 2050. A period during which the German economy is set to reduce carbon emissions by 80 per cent -precisely the same objective as we have in the UK. Electricity consumption is to have fallen by 25 per cent by then, a stark contrast from our 'doubling, even trebling'.

Discrepancies in mixes

Of course, no two countries' starting points or energy mixes are identical. Of course, these top-level figures conceal a lot of differential detail. But the discrepancies between the levels of electricity reduction anticipated in Germany and the vast increases suddenly becoming official expectations in the UK underscores my concern. The strategic thinking regarding the potential from the energy-saving side of the equation seems still to be missing.

This is all the more curious because DECC ministers have been giving frequent statements in Parliament, each making plain that such comparisons are valid. Beginning with Secretary of State Chris Huhne: "the cheapest way of closing the gap between energy demand and supply is to cut energy use." And "there is one over-arching simple truth: the cheapest energy we all have to pay for is the energy we do not use". And "energy efficiency is the most important and the best value-for-money consideration in terms of saving carbon."

The Energy Bill creating the Green Deal is currently being considered in detail by Parliament. It is likely that one amendment will seek to ensure that we do have an official answer to that original Parliamentary request I quoted: how much can a purposeful energy saving programme cut the need for new generation? Thirty years on, we really do deserve an honest answer.

FURTHER INFORMATION

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