

ENERGY AFFORDABILITY

Response to OFGEM Consultation by Calor Gas Ltd.

We are concerned about the potential economic impact of the Government's energy and climate policies on social cohesion within the UK. OFGEM states there were 5.2 million households living in fuel poverty in 2009 in Great Britain. Despite a raft of measures under successive Governments the trend has been remorselessly upwards from 1.2 million in 1994. Whatever measures applied by Government or OFGEM to date, they are clearly ineffective. The going is, if anything, getting tougher. OFGEM has predicted a rise of up to 60% domestic fuel bills (Evidence to Energy and Climate Change Committee 2.12.09). The Renewable Energy Strategy admitted: "Poorer households are likely to spend a higher proportion of their income on energy and so increases in bills will impact more on them".

Professor Hills in his recent Fuel Poverty Review has proposed a new definition of fuel poverty to reduce this embarrassing figure, but redefining it will not lessen the eventual quantum of misery inflicted by a Government beggaring sections of its electorate. As Hills states, "In our central projections, the key fuel poverty gap indicator will rise by more than 50% between 2009 and 2016". Such policies risk social unrest, and run against the Prime Minister's pledge that green energy "must be affordable" (25th April, 2012). Redefinitions may ease political pain, but not the practical experience of people struggling with their energy bills.

DECC's own estimates for the impact on electricity prices in 2010 arising from its energy and climate change policies is +27%. The sticking plaster on this otherwise crippling blow to family finances was the claim by Mr Huhne in 2011 that by 2020 on average households would be paying on average 7% less to heat and power their homes because of policies taken in the round. Unfortunately, this average hides a big variation between households, and using DECC's own questionably optimistic figures - the Renewable Energy Forum calculated that 65% of households would be net losers from the policies i.e. **the few will be gainers at the expense of the many** ("Shortfall, Rebound, Backfire", published by the Renewable Energy Forum, 21st May 2012).

In its January 2012 Research Note, Policy Exchange came to the same conclusions – two thirds of households will be worse off because of DECC policies. Policy Exchange estimated the full impact of renewable energy subsidies on an average household by 2020 (through bills, tax and costs of products and services) to be £400 per year – equivalent to 2.5p on VAT. This

implies that by 2020 the total net cost (not just through energy bills) to the average household of carbon and renewable policies will be *equivalent* to around 15% of the (without policies) energy bill.

OFGEM asks, "What can OFGEM do differently to help address affordability concerns?" First, we need complete transparency about the size of the problem. We do not believe that Government has come clean on the size of the bill needed to underpin its energy and climate policies, and OFGEM should not collude in that opacity.

The most commonly - if rather loosely - used figure for the investment required in the UK's energy infrastructure by 2020 is £200bn (OFGEM repeats this figure in para. 1.4). We believe that that figure is consistent with OFGEM's Project Discovery projections and with the original Draft National Policy Statements for Energy and were based on what we would regard as an optimistic view that grid peak demand would remain flat at 60GW to 2020. But, in the Revised NPS the full implications of a pure electricity play including the electrification of transport and heat were glimpsed for the first time: "Generation capacity will need at least to double to meet this demand and, if a significant proportion of our electricity is supplied from intermittent sources, such as wind, solar, or tidal, then the total installed capacity might need to triple" (para.1.66).

This is an astonishing admission, with no doubt a similarly astonishing, and not yet revealed, cost. We believe that the commonly quoted £200bn figure relates to the original target and not to the doubling or tripling of existing capacity. If energy companies do find the resources to invest in doubling to tripling the generation capacity ultimately they must hope that the consumer of their electricity will pay for the increased cost of their electricity. We should have transparency as to what that will mean for the consumer and taxpayer by way of increased bills and subsidies.

In February 2012, David Clarke, the Chief Executive Officer of the Energy Technologies Institute in giving the Biennial Bridge Lecture to the Worshipful Company of Engineers stated that the country's electricity use was generally between 30GW and 50GW in winter and summer. However, the amount of gas used for heating reaches a peak six times that level in the winter. He said that meant that a switch to electric heating would mean building an electricity distribution network six times larger than the existing one. "That would cost much more than six times the £95 billion cost of replacing the current network," he said.

So, can OFGEM specify the true likely total cost of the requisite energy infrastructure by 2050 under current policies? Is it £200bn, £480bn or more? This is a critical figure to know when addressing the problem of energy affordability. Unless we know how much energy infrastructure is going to cost we are lacking the most basic information.

One of OFGEM's functions is to protect consumers by the promotion of competition. There are two aspects of Government policy being deployed which are by the nature, and by explicit intent, anti-competition – the use of subsidy and the cherry-picking of technologies. We can see a role for limited subsidy, particularly where there is market failure, but subsidies can be so distorting that they can kill true competition. OFGEM should undertake a study of how far Government subsidies, costly in themselves to fuel consumers since they largely fund them, are anti-competitive. The cherry-picking of Government of very expensive technologies such as offshore wind - a report for DECC by Mott MacDonald, "UK Electricity Generation Costs Update" (June 2010) estimated the levelised cost of offshore generation to be £157-186/MWh, roughly twice that for onshore wind (£94/MWh). Offshore wind was by far the most expensive technology that MacDonald compared with gas (£80/MWh), coal with CCS (£104.5/mWh), nuclear (£99/MWh) and onshore wind (£94/MWh). Offshore wind has high and uncertain capital costs, carries high technology risks and high operational and maintenance risks – all admitted by HMG in a recent consultation paper. Why are we subsidising such poor value for money in such a risky and intermittent technology?

Government is indirectly cherry-picking technologies in other ways, such as enforcing changes in the Building Regulations. We fear that in 2016, when the Government is still committed to zero carbon homes in advance of the date set by the underpinning EU Directive, our fuel LPG will effectively be priced out of the market, thus removing a vital force for competition. We calculate that the necessary costs to improve energy efficiency in the home and retain LPG as a heating fuel in new homes would make our market in new build untenable after 2016. Indeed, HMG appear set on a pure electricity play in rural areas, gambling that heat pumps will prove to be sustainable (when all the experimental evidence collected by Government to date indicates they will not for the most part), and that the grid can be decarbonised. Insofar as fuels are removed from the market by Government policy (no more coal or oil power stations are likely to be built; and, LPG may be expelled from the new build market in 2016, for example). OFGEM should also undertake a study of how Government cherry-picking certain technologies, and excluding others indirectly reduce competition and thereby increase prices.

Recommendations

- **OFGEM should produce an estimate of the total cost of the required energy infrastructure under current energy and climate change policies by 2020, 2030, 2040 and 2050, revising its now apparently outdated Project Discovery figures.**
- **OFGEM should undertake a study of how far Government subsidies are anti-competitive and drive up fuel prices; and, a parallel study to assess how far Government cherry picking certain technologies and in effect excluding otherwise viable technologies from the market are having an inflationary effect on fuel pricing.**