

Energy Prices

The only certainty in the energy field is that prices will continue to go up. Already about 6m are living in what is described as fuel poverty – that is, more than 10 per cent of their income is taken by energy bills – and British industry regularly warns that intensive energy users are being priced out of the country. Why is this happening when Britain is deeply in debt with a £150bn budget deficit and the Government is fighting rising unemployment and trying to promote growth?

There is no simple answer. Energy use has fallen from its peak because of the economic slowdown but international prices for fossil fuels remain high. They do, of course, fluctuate – e.g. gas through reduced economic activity and new supplies of ‘unconventional’ gas – but the longer term prospect is rising prices for all fossil fuels. Some would argue the current average energy bill, £1,300, is partly the result of profiteering by energy suppliers, but it should be pointed out that gas and electricity are subject to regulation by Ofgem.

Another – and growing – reason is the use of energy policy to combat global warming. At present, this probably – and again there is no independent, authoritative figure – adds £100 to the average household heating and lighting bill, but it is projected to rise substantially in future.

Political consensus

This is because of the remarkable political consensus in the UK on the way to combat global warming – by discouraging fossil fuel consumption, or de-carbonising the economy, as it is called. The Government could do this and obtain greater security of supply at competitive cost by urgently re-developing nuclear power, which emits next to no carbon dioxide. It has

administratively facilitated nuclear's renewal while decreeing that no new nuclear power stations will be built unless the unsubsidised private investor decides to invest his money in this way.

At the same time it requires the consumer heavily to subsidise renewable sources of energy in a variety of ways – through direct supplements to the price paid for “green” power, preferential use of “clean” energy and a carbon tax which could also incidentally advantage nuclear.

The price paid by the consumer for wind power ranges from at least double the market price for that generated onshore to at least three times for that generated more expensively offshore. The impact of these subsidies on the overall price is limited by the amount of renewables’ power generated – only about 5% of the total. But the Government has statutorily committed itself within the EU to securing seven times more – 35% of UK electricity from renewables by 2020 – mostly from the most expensive offshore form.

The Energy Secretary says that up to another 10,000 wind turbines may need to be erected but admits the total could be as many as 32,000 under different scenarios.

Prospect of bigger bills

There is a widespread view that these targets are simply unattainable, but they demonstrate the extent to which the consumer could be liable for bigger bills. The Government estimates that £200bn investment is needed over the next decade to re-equip the UK power generating system, with the consumer expected to finance it.

It will clearly not achieve any of its energy policy objectives – security of low carbon supply at affordable cost – if renewables – effectively wind – remain the focus. Wind is both intermittent and unpredictable and has to be backed up by reliably flexible generating plant – notably fossil-fuelled – thereby reducing its CO₂ savings.

The Government's standby is gas-fired power stations. But they will have to import gas in increasing quantities as North Sea gas declines at unknown but probably rising prices. And gas will only reduce carbon emissions if it substitutes for coal. It emits 100 times more CO₂ than nuclear.

Comparative prices

The relative advantage of nuclear power is demonstrated by the Department for Energy and Climate Change's own cost projections. These give the following figures: nuclear £66 MWh-£74MWh, depending on whether the station is the first of its kind or one of a series; onshore wind £90MWh; supercritical coal with flue gas desulphurisation £95MWh; coal with carbon capture and storage (CCS) £110-137MWh; offshore wind £135MWh.

The Government makes little of the limitations of renewables or the advantages of nuclear power. Renewables would not be developed without massive subsidy and are very dilute sources compared with coal, oil, gas and, the most concentrated of all, nuclear. Where they are proven, they remain unreliable, require back up, are marginal or, in the case of biomass, would have to be imported because of Britain's land area limitations.

The Government has also decreed that coal can no longer be used as a power generator without being fitted with CCS. But nobody knows whether this system can be vastly scaled up to bury up to 200m tonnes of CO₂ a year for all time in the strata below the North Sea. But if it can it is likely to double the cost of coal-fired power.

By contrast nuclear is not only the cheapest source of power, but, on the basis of 55 years' UK experience, is safe, reliable, emits the least CO₂ of any power source, is the most economical in terms of land use, puts the UK on the leading edge of high technology and is a prospective major source of highly qualified employment.

You might reasonably have thought that a nation forced by circumstances to practice austerity, seeks to protect the less well off and tries to stimulate growth to provide jobs and a secure base for industry, would go hard for the most effective and economical source of power.

The Centre for Policy Studies says the Government should so. Otherwise, a third of all households will be in a state of fuel poverty by 2030. There are also serious doubts whether Britain will then still be an industrial economy.