

Greg Clark's energy agenda

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Greg Clark the Secretary of State for Business, Energy and Industrial Strategy (BEIS) starts with a number of distinct advantages. He knows about energy, having been shadow Secretary of State for DECC in the run up to the 2010 General Election and having written the Conservative energy policy. He has a broader departmental canvass in which to nest the energy portfolio– as part of business and industrial strategy. And he has a very powerful team of ministers, including Nick Hurd and Jesse Norman. Together they make a formidable team, and are well placed to build on the reforms Amber Rudd put in place.

He needs all of these advantages, for the energy sector is not in good shape. It is not fit for the purposes of a major industrial economy, and especially for one doing BREXIT. British industry and services are going ever more digital (robots, 3D printing, AI and so on), and digital means electric. Digital smart technologies may make it easier to control electricity systems, but the key point is that the combination of the growing premium on security of electricity supply and the growing demand from an increasing share of electricity in energy demand will make the current capacity margin of roughly zero even more alarming than it is now.

Sorting out the electricity market

Like broadband, electricity supply needs to be secure and reliable. The cost of too much is insignificant compared with the cost of too little. The *patch-mend-and-make-do* approach is hampering the economy in broadband, reliant as it is on BT's copper wires (and in turn BT's pension deficit and dividends reliant on the copper wires). In electricity, there is lots of anecdotal evidence that reliable

supplies are not always available, and the possibility of insufficient supply (and the prices that go with tighter margins) has a chilling impact on investment. The core of any industrial strategy is the provision of good quality infrastructure – something largely noticeable by its absence in Britain. A list of a few expensive prestige projects does not make a proper infrastructure policy, whatever their merits and costs. For Greg Clark, the problem is that infrastructure lies with the Treasury, not BEIS.

In electricity, it could have been even worse. But for the economic crisis in 2007/08 and the subsequent low economic growth, the capacity margin would have gone negative. Even more companies would be being paid to turn off. Whilst such demand side measures have an appeal in the short run, they don't make a lot of sense for a country aspiring to world competitive advantage.

Greg Clark's problem is that it is all about to get worse – much worse. The years of investment neglect are being played out just when all the coal is closing, the existing nuclear fleet is aging, existing gas power stations have taken a severe bath, and new nuclear is getting later and later. Amber Rudd's brave decision to announce that Britain would be the first industrial nation to exit coal was a good and efficient environmental decision, of much greater benefit than all the targets and costs of the existing renewables. But she has left it to Greg Clark to deal with the consequences.

At least Greg Clark has the tools at his disposal. Remarkably, *the government is now the central buyer of all new power stations*. He has the power and the responsibility to keep the lights on and get a sufficient capacity market cushion in place. He just has to auction enough capacity – or rather get the system operator to do so.

Auctions have two advantages: they allow the market to find the cheapest costs; and they are technologically neutral. Yet these very advantages throw up big challenges. For the one thing that British electricity policy is not is technologically neutral. A genuinely technologically neutral auction would

probably produce no offshore wind, and no Hinkley. It would produce lots of small scale OCGs and small diesel generators. And if it were a genuine auction, it would incorporate transmission and distributions costs, and therefore produce little or no further renewables in Scotland. It would also require “firm power” bids on a level playing field, including locational costs. The intermittent renewables would have to sub-contract for back-up and pay their full costs to the system.

Instead, we have a banded system, with FiTs for each type of renewable, and separately for nuclear, and within nuclear, probably a separate FiT for each new nuclear project. As well as a separate contract for each type of renewables, there are also the capacity contracts, designed to patch up the system for gas. Now these have delivered OCGs and small diesels, they are being doctored again to try to produce the “right” answer – i.e. more CCGTs.

Politicians have discovered that when it comes to intervention in energy markets, it is hard to be a little bit pregnant. Each intervention creates unintended other distortions, which require yet more interventions, and in turn create more unintended distortions. This is indeed what happened. In the end government ended up intervening in a piecemeal fashion in response to each problem: onshore wind has had to be capped; offshore wind propped up; nuclear has required a special deal; and now gas needed a capacity market. Next come the special problems of storage, tidal barrages, demand side measures, and energy efficiency. It is a lobbyist’s paradise: this is the one energy area that is booming.

Greg Clark’s has a clear choice in these early months: he can try to do more patching up of what he has inherited, or he can try to reset the balance between the market and the state. If he follows the former, he will be dragged into annual doctoring of the capacity auctions, and continuous interventions to choose new “winners”. If he instead decides to make his mark by creating a longer term and more sustainable electricity industry, he needs to make some big moves. The

most obvious is to merge FiTs and capacity markets into a single unified auction for firm power, incorporating full locational costs.

The latter is brave – and is in the league of Amber Rudd’s decision to exit coal. Lobbyists for all the “winners” picked for subsidies would scream. Look what happened when Amber Rudd did a bit of streamlining and pruning of the renewables subsidies. The pressures on him would be considerable. He would need the determination that Nigel Lawson once showed in facing down the nationalised industries in the early 1980s.

There would still be the need to make sure the carbon budgets are met. The obvious market approach is to allow the carbon price to go to whatever level necessary to meet the targets. This may be a step too brave to take. Confronting business and consumers with the cost of their pollution is politically hard to do. If this is just too much, then the unified auction could be two stage: stage one unconstrained by carbon (other than existing carbon prices) and stage two taking account, in the light of stage one bids, of the carbon constraints.

Oil and gas

Sorting out electricity is not conceptually difficult. It can be done. It is all about the politics, and facing down the vested interests. Less easy are the challenges posed by the North Sea and the decline of the UK offshore industries. The great fossil fuel bonuses, which helped to rescue Britain’s balance of payments from 1980 onwards, and gave sterling a petro-currency bonus, are over. So too are the jobs, and the industrial skills required. The North Sea has been largely pumped out, and there is virtually nothing to show for it. Britain has no sovereign wealth fund, like Norway.

The timing is in one sense pretty good: the decline comes when oil and gas prices have fallen back to normal. The higher oil prices of the last 15 years have been a big extra bonus. Coincidental with the fact that most of the economically accessible oil has been pumped out, the oil price has fallen back. It makes for a

more sudden hard landing for the industry, but at least the money was had when the prices were high.

One of the many paradoxes of British energy policy is that on the one hand Britain (and especially Scotland) proclaims its “greenness” and its “leadership” on decarbonisation, and on the other it wants to pump as much oil and gas as possible. (Indeed “green” Scotland’s independence case rests on North Sea revenues). In addition to trying to get every last drop of oil out of the North Sea, the latest enthusiasm is for onshore shale gas. Few ask the obvious question: *what is the point of building wind farms, and low carbon new nuclear, both at high costs, to reduce Britain’s emissions, and on the other hand trying to pump as much as possible from the North Sea and develop onshore shale gas?*

To be fair, Britain is not alone in this. Carbon hypocrisy is even more apparent in Germany, which has been busily boosting of its coal industry. (13GWs of new coal fired power stations since 2000, and new lignite fields opened).

Yet Greg Clark cannot avoid the question, and his climate minister Nick Hurd will need to face off against the pro-shale and pro-oil parts of BEIS. There is nothing new here, but trying to ride both horses simultaneously looks a harder and harder balancing act.

What is in any event apparent is that the tax take in the North Sea is going down. Indeed, there may be more and more costs, especially now the industry is confronted with decommissioning. There is a tricky problem: after Brent Spar and the Ospar rules, simply abandoning redundant platforms in the North Sea is not an option if the government wants to hold to its environmental commitments – and even more so to the principle that at the end of platform life the environment must be reinstated. There are important arguments about the merits of leaving the platforms as they are to rot slowly, versus full decommissioning, but there are also the consequences of not acting on the principle. Why then should nuclear power stations not be left? Dounreay too? Once the principles are breached in one area, credibility goes and this has real

costs too, not least in public credibility. It is not enough to treat the North Sea as a special case. Is it really surprising that many people are sceptical about the environmental promises in respect of shale gas, or noise at Heathrow? Or indeed, about nuclear decommissioning?

Greg Clark has yet another clear choice: to put in place an orderly run down of the North Sea, with full environmental restoration, closing this chapter on our energy history, just as Amber Rudd has done on coal; or to cave in to the industry pleading for special treatment, exemptions from pre-agreed pollution rules and subsidies. If he wants people to have any faith in the government statements about onshore shale, he needs to show offshore credibility.

Industrial strategy for energy

Electricity and the oil and gas industries are core parts of any economic strategy. They are core infrastructures. Britain needs these. It needs broadband, energy, transport and water systems, which underpin and support businesses and services. An industrial policy is in large measure an infrastructure policy.

Energy infrastructure is about more than transmission and distribution lines, and gas pipes – though these clearly matter. It is about having networks capable of accommodating the big shifts being driven by technical progress. The energy sector is undergoing radical change. Whilst the lobbies focus on the subsidies for the existing renewables, the technological ground is shifting underneath them – and the rest of the fossil fuels too. In the long drawn out endgame for the fossil fuels, a host of new ways of generating, storing and using electricity are being developed. Opening up the light spectrum, and new materials to convert light into electricity are changing the solar game. The new information technologies – and digitalisation of almost everything – open up the possibilities of smart systems. Batteries are becoming not just ways of powering cars, but also storing electricity in households.

Greg Clark needs to be wary of picking yet another crop of winners. For each “breakthrough” the lobbyists for subsidies will be banging on his door, and the visitors book in BEIS will no doubt be full of them. The trick is to build in more robustness into the networks, creating the space for the new technologies to evolve, whilst keeping the lights on. To make this happen, we are back to the full chain of energy infrastructure. Faster technical change requires a bigger capacity margin, and a more robust set of networks – not less. We may not need so many big power stations in the future and we may not need a high voltage electricity grid. We may no longer need to import so much gas, and we may not need lots of interconnectors. But we might, and the insurance is (very) cheap compared to the damage done by tacking close to the wind. Tight margins, and systems stretched to their limits, result in higher prices and higher costs. There is always a price at which the supply of electricity is sufficient to meet demand. But it is not necessarily the price that should be paid in a modern energy system, and especially one facing BREXIT.

Industry also needs the government to have a strategy and a policy on R&D and skills. In the nationalised industries, R&D played a prominent part, but it went out of fashion with privatisation for two reasons: a higher cost of capital; and the pursuit of private rather than the public good (and R&D is a public good). Skills are a public good too, and government industrial strategy is about universities, training, and apprenticeships. Since 2010 the government has made considerable progress on the skills side. R&D is not so positive a story. After BREXIT it will become even more important.

There is much written about new institutions and ways of doing R&D and innovation. But there is one unavoidable fundamental: it needs money, lots of money. Greg Clark’s task here is one very familiar to all the previous attempts to have an economics ministry separate from the Treasury. He doesn’t hold the purse strings. If he (and the PM) wants a proper business strategy, then the Treasury will have to cough up. Past experience – from George Brown’s Department of Economic Affairs, to Heseltine’s Department of Trade and Industry (with him as President of the Board of Trade) – is not littered with

success in creating an economic ministry alongside the Treasury. There is a good reason for this: in economic crises the Treasury has to be in control. Greg Clark's industrial strategy ambitions rest on the shaky assumption that there will be no major economic crisis in his term in office.

BREXIT for energy

If all this were not enough, Greg Clark also has to deal with BREXIT. In the energy sector the issues are multiple. There is the Internal Energy Market (IEM), very much a British creation. There is the new Energy Union. There are the infrastructure issues, and in particular the interconnectors. Then there is State Aids.

The IEM has been created and developed in Britain's image. At its heart is the ambition of open liberalised competitive energy markets. Britain led the way with privatisation, liberalising customers from monopoly suppliers and the development of spot markets. The grid was rendered passive, responding to the connection requirements of new power station entrants.

The supreme irony of this is that having led the liberalisation and competition charge in Europe, Britain then led the comprehensive retreat. Britain once stood out against the single buyer model advanced by the French, and now has comprehensively adopted it. The scale of this U turn is both extraordinary and grossly under-appreciated. From market-driven investment, Britain has moved to almost total state-driven investment. The single buyer determines every investment.

Given that the Lisbon Treaty reserves the determination of the energy mix to the national member states, there is little that Brussels can do about this. Britain has comprehensively re-nationalised its energy policy. In many respects, Greg Clark has as much control as the CEGB once had.

In leaving the EU, the IEM is not the central organising policy framework it was intended to be (by the British in particular). The action has moved from wholesale markets to national capacity markets. Lots of the rest, which is in national legislation, can stay. Britain has its own unilateral carbon targets, and it has its own coal policies. Britain can avoid further renewables targets, and it will not have to worry about the batch of new energy directives coming – on market design, on the governance of the Energy Union, renewables, energy efficiency and the 2030 carbon targets.

And yet there are problems aplenty on the European front. There are the interconnectors. There is the problem of Russia, and the wider purposes of the Energy Union. There is the European and global climate change negotiations. There is the EUETS.

One option (which will be explored in my next energy paper) is to move onto the front foot by advancing the European Energy Union as a separate framework alongside the European Union, following on from the approach to nuclear matters and the earlier Coal and Steel Community. It would be outside, parallel to, and closely associated with, the EU.

A comprehensive energy policy

Greg Clark has the many choices identified above, and he has to make decisions fast. The current state of the energy sector is sufficiently serious to merit rapid action. He cannot engage in the luxury of reviews and reports. He needs to act.

He can do this in a piecemeal fashion. That after all is what his predecessors over the last 20 years have done. His predecessors have typically lasted about a year, before moving on. This time, the chances of getting away with another set of short-term fixes are not good.

The companies shout a lot about the need for certainty – as if markets are ever certain. They shout when their subsidies are under threat. What the government

should do is set out the principles, the overarching policies and the direction of travel. The many individual decisions that need to be made need to be set in a framework that all the participants understand. This is what Nigel Lawson did back in 1982, and he followed his core principles, as did most of his successors in the 1990s.

What are Greg Clark's principles? Where is he heading? What are his policies? Is he going to stick with the central buyer, and try to make this more market driven? Or is he going to keep picking winners (even if he – like his predecessors – claims that he is not)? Is he going to keep micro-managing, or is he going to retreat? What is he going to do about the IEM? Does he have a plan for the Energy Union?

Trying to set out a clear sense of direction is not easy when there are immediate issues piling up on his desk. He has nuclear, the immediate capacity crunch, coal closures and interconnectors to decide about pretty quickly. The critical challenge is to clear these off his desk without drawing him into lots of unintended consequences, leading to more piecemeal interventions. Crises – like the current energy crises – bring big risks, but also big opportunities. The risk is that short-term crisis management leaves a legacy of hasty interventions, which the government gets locked into. The opportunity is that crises create the room for manoeuvre. Major reforms always follow crises. Whether the current crises are big enough to motivate serious reform remains to be seen. It is very much in Greg Clark's court.