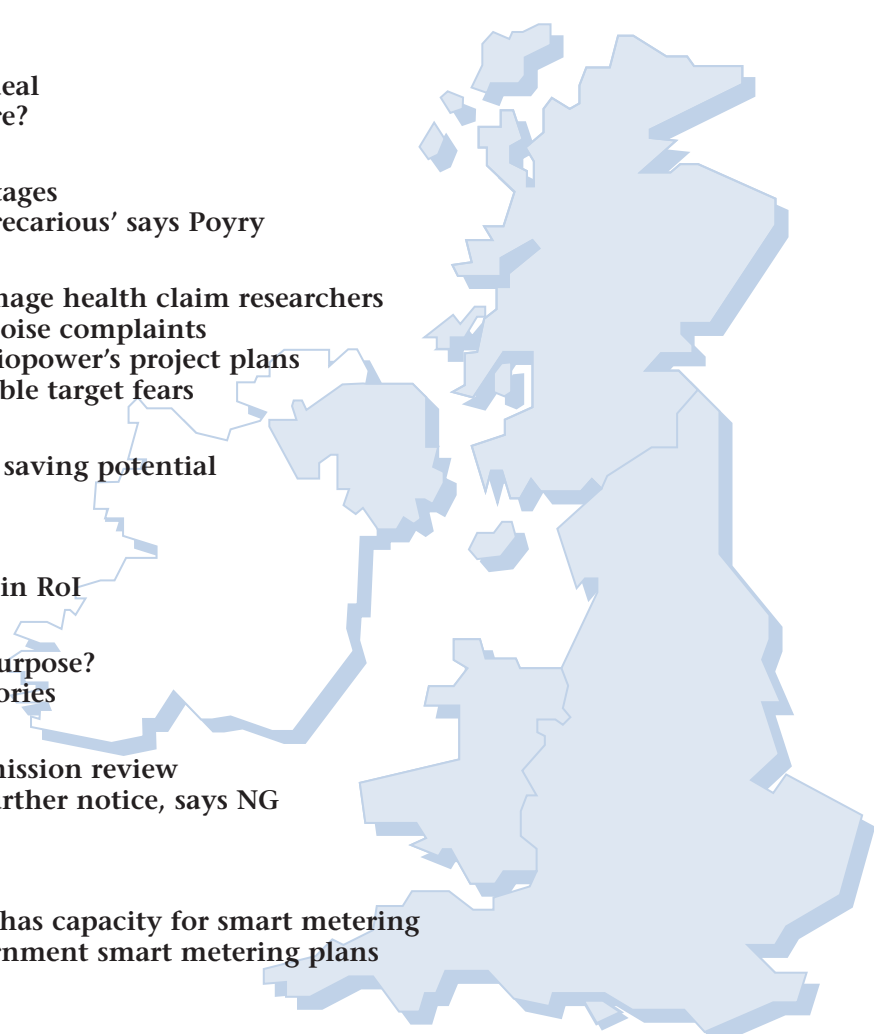


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# Climate change policy: fit for purpose?

In his foreword to the recent Energy White Paper<sup>(1)</sup>, Alistair Darling, the then Secretary of State for Trade and Industry, said: 'The evidence supporting urgent action on climate change continues to mount. Sir Nicholas Stern's report last autumn underlined the importance of acting now and in concert with other countries.' A year on there seems to be consensus for change. But what is actually changing? Certainly the European Union has taken some significant steps. And in the UK, a new Energy White Paper and a draft Climate Change Bill<sup>(2)</sup> have been put forward. But will these policy measures lead to businesses and consumers taking the urgent action required? In the following article **Simon Skillings\*** sets out a simple framework called 'Smart Policy'<sup>(3)</sup> and applies its principles to assess climate change policy in the UK and, in particular, how it affects the energy sector.

It is not difficult to see the scope for tension between government and businesses operating in the energy market.

Businesses see the ongoing round of energy reviews as an indication of future interventions in the market that are difficult to predict or control. In an uncertain world, there is value in keeping options open and clear risks in betting the future of the company on the durability of a particular government intervention. The constant pressures on delivering this year's financial targets in competitive and volatile markets make it difficult to focus on significant strategic shifts in corporate positioning. This tends to result in strategic actions which change little from year to year and which are similar across the competing companies.

Governments on the other hand find it difficult to understand if the correct actions are being taken to deliver the outcomes that they desire. They recognise the need to be cautious about making a substantive intervention since any such move would inevitably affect the position of some market participants adversely. This in turn can increase costs of capital, perhaps even to the extent that investors are effectively unprepared to participate in the market until confidence is restored. In addition, political priority resides with those issues that are significant in the current electoral cycle. It can therefore be tempting to defer action where the desired outcomes are far into the future.

It is easy to see how we find ourselves in the situation where energy markets continue to function in broadly similar ways from one year to the next. It is difficult to reconcile the calls for action with the evidence we see in the market. Do we have a problem? And, if we do, what can be done about it? We need to think differently about the policy setting process and the extent to which it is leveraging the business imperative and delivering the necessary actions in the market. We need 'smart policy'.

## Smart policy

The objective of smart policy is to help people understand how policy goals can be delivered through tapping into the business imperative so creating a self-reinforcing system between the market and political objectives and avoiding the risk that they undermine and ultimately destroy each other. It involves a simple step-by-step analysis.

### Step 1: Basic market conditions

The pre-requisite for businesses taking action is that the basic market conditions exist which allow businesses to focus on the future and consider the relevant strategic issues.

In practice, this means a number of things. It is essential that government interventions should not undermine the ability of businesses to hit reasonable financial targets. Clearly retrospective actions that alter the ability to gain a reasonable return on historic investments should be avoided.

However, it is particularly important that business targets have been set on the basis of a reasonable expectation of Government and regulatory action. This requires a stable economic and competition regulatory regime<sup>(4)</sup> and that any significant changes to the market are confirmed before short term financial targets and resource plans are established.

Finally, it is important that businesses can actually take the actions required and that they are not excluded onerous and asymmetric regulation.

### Step 2: Outcomes

Governments need to be very clear what they need from the energy market so that policy can be focused on achieving these goals. Conversely, they must recognise that this is a market and markets are very good at finding the best outcomes. Unless there is a clear political imperative, and a reasonable likelihood the market will not achieve the desired outcomes, then the market should be left alone to find its own way forward.

So, the government needs to be very clear what outcomes it desires and over what timescales<sup>(5)</sup>. The challenge is then to demonstrate that there is a clear policy in place to make these outcomes happen.

### Step 3: Short term necessary actions

The next stage is to identify which actions must be taken in the short term<sup>(6)</sup> to enable the outcome to arise.

For outcomes in the very short term, hopefully the necessary actions have been taken to deliver what is required. Similarly, for the very long term, it is likely that no clear action is yet required (other than perhaps in the fields of research and development). However, there may be a timescale over which significant actions are still required to deliver the necessary outcomes – this is important to understand.

An important and difficult aspect of this exercise is to understand the delivery chain that is involved. It may take a matter of months to build a wind farm, but if it takes a number of years to pass through the planning processes and all suppliers of wind turbines have full order books then overall lead times will be several years.

Finally, it is equally important to recognise that if no new action is required, then no intervention is necessary – let the market evolve and review the circumstances when actions are required.

### Step 4: Incentivize actions

With the correct market conditions in place, it is necessary to ensure that businesses are incentivized to take the actions necessary to enable future outcomes to be achieved. This is important since private energy companies have the choice of when and where to invest.

If the required actions involve significant financial investments, then ideally warning should be given to allow their inclusion in the business plan relevant to the year in which investment is required. Also, it is important that businesses have the delivery capability to take the necessary actions. If this is not the case then it is likely that the short term necessary actions in Step 2 have been identified too late and incorrectly.

The task is then simply to structure the incentive such that it is only possible for market participants to preserve or improve their market position if the relevant actions are taken. There are many ways in which this can be done – however, the relationship between the action and the market position must be clear. We then need to trust the market and the business imperative for growth to ensure that the appropriate action is taken.

These steps provide the framework for creating a complete energy policy that will be delivered by businesses operating in a competitive market place. It does suggest the need for a more routine and holistic

government process that regularly reviews the policy measures against the desired outcomes. However the regularity of such a process should improve predictability and avoid the need for energy reviews that readdress all issues from first principals.

### Assessment of climate change policy

So, how does the current government policy on addressing climate change stand up against the ‘smart policy’ framework described above?

The basic market conditions relate to all policy issues and are not restricted to tackling climate change. Much has been done since the introduction of the new electricity trading arrangements in 2002 to improve the climate for investment and government and Ofgem appear well aware of the need to create the appropriate basic market conditions. It is not apparent that there are any major problems in this area.

So, let us consider the outcomes. We have the 2020 targets set out in the Draft Climate Change Bill and the EU Council Presidency Conclusions (or, at least, we will have them once the various steps have been taken to enact them into legislation). We also have the declared ambition to reduce greenhouse gas emissions by at least 60% by 2050.

Finally, the Draft Climate Change Bill indicates that a new independent panel will advise government on the levels of interim targets, set on five yearly cycles, and progress towards achieving them. The extent to which these targets might be shared amongst the energy and other sectors (or, in the case of the EU targets, between greenhouse gases) has yet to be defined. Also, it is not clear on the extent to which the carbon reduction burden may be reduced by the purchase of tradable permits or emission credits if they are cheaper than taking local action to abate emissions.

Therefore, we can conclude that, as yet, the target setting process is incomplete. This is a simple but important conclusion. It is critical that there is clarity over the targets for greenhouse gas emissions. Without this, it difficult to assess what actions may, or may not, be required.

### Applying the smart policy framework

However, it is possible to make some observations about the application of smart policy principles through steps three and four of the framework.

Firstly, it is clear that there is no guarantee that reductions in CO<sub>2</sub> will be delivered without significant market intervention that effectively imposes a cost or constraint on emitting CO<sub>2</sub>. There are many plausible scenarios for the future development of the market that would maintain, or even increase, levels of CO<sub>2</sub> emissions. Therefore, at some point, business will be required to take actions that avoid these higher emission scenarios arising.

Secondly, there are many plausible routes to deliver the necessary emission reductions involving a variety of demand or supply side measures. Governments are not best positioned to identify the right actions and make the investment choices – where possible these decisions should be left with companies and policy measures should not stray onto this ground.

One might conclude that there are no specific actions that need to be promoted or inhibited and policy should instead seek to deliver a strong alignment between business growth and the need to reduce overall emissions. This can be achieved through the application of a broad ranging economic incentive which caps or prices CO<sub>2</sub> emissions and which applies as far into the future as possible. This will maximise the options available and minimise the costs of compliance.

These considerations highlight the benefits of a mechanism that generates a long lasting cost of carbon emissions and which can be applied across business decisions. The EU Emissions Trading Scheme (EU ETS)<sup>(7)</sup> is such a measure and this indeed sits at the heart of current energy policy and sets a clear direction for the future.

### Is this enough?

But is this enough to drive all the necessary actions? Can governments credibly deliver a long lasting carbon cap or cost that is immune to revision as events unfold? Will businesses actually be exploring all opportunities with equal resource to deliver paybacks that might not emerge until many years into the future?

Putting aside the fact that the coverage of the EU ETS is limited and other measures are required, for example, in the heat and transports sectors, a range of measures are probably required to augment the EU ETS even in the sectors to which it applies. This is not just because empirical evidence to-date suggests that the process of cap setting is unlikely to provide the certainty over long enough periods of time to drive significant changes in commercial behaviour. It also appears to have little or no downsides, provided that the additional measures are implemented prudently.

Steps three and four of the smart policy framework invite us to consider those actions that are being taken now and which are relevant to delivering the policy outcome in question and how these might be influenced. The strategic agenda of organisations involves a constant search for growth opportunities and tackling the competitive threats. What are these issues and how can they be aligned to deliver the policy objectives?

### Important areas

There are a number of issues that are worth highlighting. For instance, the UK fleet of power stations is about to enter a significant renewal phase and any energy

company wanting to maintain or build scale will be developing options for new plant build. These decisions will significantly affect UK greenhouse gas emissions going forward. Constraining the technical options available by progressively reducing the levels of CO<sub>2</sub> that new power stations will be allowed to emit will eliminate lower cost but higher emission options and directly affect the power station supply chain that is being put in place.

For example, a regulation that effectively mandated that all new fossil fired power plant should be fitted with carbon capture and storage capability by, say, 2020 would create a definite market opportunity which would in turn drive the power plant purchase process that is happening now in manufacturers and power generation companies<sup>(8)</sup>.

In the retail market, suppliers are constantly seeking the products that will allow growth at sustainable margin. This is extremely challenging in a market in which customers are either reluctant to switch, or if they do switch, generally do so because of price or customer service considerations. We need to explore ways to constrain customer choice towards more energy efficient products. Existing policy measures are already pursuing this agenda with the introduction and improvement in building or appliance standards that will force the application of new technology on the part of the relevant producers looking to develop their market position.

However, a more radical intervention into the switching process would be required to significantly affect the business of energy suppliers. For example, energy prices could be re-regulated leading to supplier competition being based on customer service levels and products to reduce energy consumption since this would be the only means by which customers could reduce their costs.

### Political clarity needed

This last example reinforces the need for clarity in the political objective. If we really do want to create significant change then we must be prepared to embrace radical policy action. However, such fundamental reform may not be deemed necessary.

So, in summary, this analysis suggests that UK government policy on climate change is lacking clear targets for reductions in greenhouse gas emissions that can be used to assess the adequacy of the current suite of policy mechanisms. However, it seems sensible that the EU ETS should remain at the centre of the policy albeit augmented by targeted regulations that drive the delivery capability in key parts of the value chain.

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<sup>(1)</sup> 'Meeting the Energy Challenge', A White Paper on Energy, May 2007.

<sup>(2)</sup> Draft Climate Change Bill, March 2007, HMG Cm 7040.

<sup>(3)</sup> 'Paper providing complete description of the Smart Policy approach can be found at [http://www2.warwick.ac.uk/fac/soc/wbs/research/cmur/pubs/research\\_papers/2007/](http://www2.warwick.ac.uk/fac/soc/wbs/research/cmur/pubs/research_papers/2007/) or <http://www.trilemma-uk.co.uk>'.

<sup>(4)</sup> This leads me to the conclusion that stability in Ofgem's statutory objectives is more helpful in tackling the climate change issue than reforming them.

<sup>(5)</sup> Dieter Helm has highlighted the need for clarity of objectives in his pamphlet: 'From Review to Reality: The search for a credible energy policy', October 2006.

<sup>(6)</sup> The 'short term' must relate to typical business planning cycles – therefore, we should be looking at actions necessary in the next, say, 2-3 years.

<sup>(7)</sup> More correctly, it is the carbon cap that is the relevant policy measure. The Emission Trading Scheme merely allows this to be met at least cost.

<sup>(8)</sup> Clearly, this would be much more effective if the regulation applied internationally.

## Ease the way for nuclear urge Tories

A Conservative Party think tank has recommended that the party adopt policies that will ease the way for new nuclear station build.

The report\*, by the Shadow Cabinet Economic Competitiveness Policy Group, recommends that a future Conservative government should offer the following framework:

- Expedition of planning permission for new replacement nuclear stations in the existing locations of such nuclear plants. There should be a clear process for making existing sites available to potential developers. Only in the event that commercial arrangements cannot be agreed between investors and site owners should the government intervene in this process;
- The expedited granting of safety certificates to the three or four best technologies currently available in the world for new civil nuclear facilities. A pre-licensing process would establish suitable designs from the UK perspective such that all acceptable designs can be considered by investors when they look at specific sites.
- The setting out of standards of waste treatment and decommissioning that the government will expect from anyone undertaking the investment in a nuclear facility as well as a requirement that provision be made over the life of the asset by the owners.
- The invitation to the private sector to bid and to place a cash value on any guarantees or requirements for any type of carbon-reducing technology. During this process, it says, it would be

possible to seek bids from other generator types, such as renewable and clean coal schemes, to allow cost comparison.

Other recommendations include:

- Making a clear statement of long term commitment to renewable electricity sources. The group notes that the government is likely to miss its 10% goal for renewable energy in 2010 but says that the Tories should support the goal of 20% renewable electricity by 2020 and 60% (or at least 50%) by 2050. However, the group warns that renewables are expensive and says that an electricity system based on 20% renewable electricity would incur an economic penalty equivalent to at least 1% of Gross Domestic Product. However, the group notes the possible benefits of a global growth in renewables to UK businesses.
- Encourage local government to give planning permission to projects that add to the UK's diversity of energy supply and increase the proportion of non-carbon fuels.

The energy advisors for the policy group include Barry Neville, head of public affairs at Centrica, Bruno Prior, boss of Summerleaze Regeneration and Toby Allen, energy policy manager at EDF Energy. The latter company is known to be keen to build new nuclear plant in the UK.

\* "Freeing Britain to Compete: Equipping the UK for Globalisation" a submission to the Shadow Cabinet Economic Competitiveness Policy Group by John Redwood MP and Simon Wolfson