

Sustainability *first*

Submission to the Energy and Climate Change Committee Inquiry into investor confidence

October 2015

1. Introduction

This submission addresses the questions:

- How well does DECC consider the needs of investors in its policy making process?
- What steps could DECC take to reduce policy uncertainty and increase investor confidence?

2. Executive summary

Sustainability First published earlier this year an investigation of the effectiveness of recent low-carbon interventions by government - both demand-side and supply-side - with the aim of drawing lessons for future energy policy¹. This submission is a shortened version of that paper.

Our review found that the implementation by government of these interventions is affected by three broad areas of concern:

- **Desire of the investment community for stability of policy - while Government needs to retain flexibility to ensure that customer and tax-payer costs are minimised.** Investors do not expect total stability, but rapid and unforeseen changes to intervention-policy can deter investors and raise cost of capital. Our suggestion for more predictability is to introduce, from the outset, clear specific 'review-points'. Investors would then understand the risks they face - and Government would have a clear structure for ensuring value for money.
- **Government inevitably relies on external information by which to set targets.** It may be hard for policy-makers to assess what information is effectively non-partisan and what may reflect 'special interests'. Government needs to maintain a sufficient technical and commercial capability to deal with this. Faced with inevitable resource constraints, the answer may lie in 'fewer but better' initiatives.
- **De-politicisation of energy policy is central given that the impact of long-term investment may not be felt for several parliaments.** This is a significant challenge - especially with the trend towards smaller, more local, renewable generation and the need to engage people more actively on their energy. Greater emphasis on explaining policy to the public and seeking cross-party consensus, where possible, will help.

We capture our main findings in a set of proposed Principles, which we put forward, along the lines of the Better Regulation guidelines, as a guide for policy-makers in reviewing or devising new low-carbon interventions. They would also provide a useful starting point for any ECCC scrutiny of future interventions.

Of the twelve principles we identify, many have already been applied piecemeal to particular policy interventions – but in our view have not been applied consistently across the board.

The principles are:

1. **No retrospection.**
2. **Stability of intervention policy with well-defined and pre-determined break points.**
3. **Underpinned by well-understood cost curve predictability and development of a competitive supply-chain.**

¹ "Let's Get It Right - A Suggested Framework for Low Carbon Interventions", available at <http://www.sustainabilityfirst.org.uk/publications.htm>

- 4. Use of economic modelling only where it adds value, with the assumptions and methodology behind the projections made explicit.**
- 5. Dialogue with Brussels to ensure long term consistency with State Aids regime.**
- 6. Be clear on the impact on different user groups (eg fuel poor, all-electric households, and intensive energy users).**
- 7. Contracts may be preferable to legislation.**
- 8. Price-based intervention often preferable to quantitative target.**
- 9. Long term nature of investment requires a cross-party approach.**
- 10. Learn from previous experience in UK and elsewhere and try to avoid conflicts with the single European energy market.**
- 11. Progression from even-handed support for new technologies over a clear trajectory to a technology-neutral approach with a common price for carbon.**
- 12. Keep number and amount of new interventions to a minimum and reduce complexity.**

1. Has government low-carbon intervention successfully delivered the investment needed?

Our paper reviewed a number of recent government low carbon interventions, including the small-scale Feed in Tariff (FIT), the Energy Companies Obligation (ECO), the Renewables Obligation, Electricity Market Reform (EMR), the Levy Control Framework (LCF) and the Green Deal Home Improvement Fund. The picture is one of frequent unheralded changes. The position has continued with the policy changes announced since the General Election.

It must be said that, in some other countries, the situation has been even worse:

- In February 2014, the Spanish Government reduced dramatically and retrospectively its support structure for wind power. As a consequence, less than 0.1MW of wind capacity was added in Spain during the first half of 2014, according to research published by industry association AEE on 29 July 2014.
- In Portugal, tariffs for micro-producers reduced drastically for 2014.
- In Victoria, Australia, a major energy retailer has imposed a \$51 a year levy on customers who have installed solar panels, to meet the cost of the extra strain on the grid that the use of panels is causing. The move, which is supported by the Victoria State Government, is likely to be followed by other suppliers.
- Similar retrospective actions have occurred in other countries (eg Italy) and led to those affected commencing legal action through the courts.

2. Why has government low-carbon intervention been so problematic?

The dilemma at the heart of the issue is the need to balance a satisfactory incentive for private sector investors to commit expenditure (often long-term) with the need to control the cost of such intervention and avoid wasting money. There are a number of interlinked issues that arise:

- **The need for adjustment:** Setting targets, either for physical amounts or in terms of price, implies the need for forecasts, which inevitably turn out in practice to have been wrong. The result is that the targets subsequently need changing and if the possibility of change was not made clear when the intervention was announced, investors can be left wrong-footed. Moreover, having been caught out once, they become more reluctant to invest in future.
- **Shortage of resource and understanding:** The need for adjustment is made worse by poor information in setting the targets in the first place. Problems arise from a shortage and depth of capacity in relation to the subject area by the officials who are tasked with developing the policies, the time pressure under which officials are often working and the long-standing practice of both ministers and officials moving jobs frequently². There are four key consequences:

² See DECC's [independent review](#) of lessons to be learned from the FIT scheme, which identified lack of resource, time pressure and lack of strong leadership as contributing to the problem.

- **The need to rely on external sources of data:** It is impossible to set targets without adequate sources of external data. But many of those data sources will originate from individuals, companies, academics or trade associations that have an active interest in the outcome of the target set. Without adequate resources it is difficult for officials to assess whether, and to what extent, there is an element of negotiation, and hence a lack of objectivity, in the data put forward.
- **Lack of understanding of technology-driven cost curves:** One key reason why intervention is needed is that most low carbon technologies are immature and need assistance to bring their prices down. But policy makers have continually been caught out by the pace, or lack of it, at which costs have changed. There is a great deal of academic literature on the topic, summarised in one of the working papers³ issued by UKERC as part of its Energy Strategies under Uncertainty project. This literature could be put to better use by policy makers, and provide a counter to special pleading and lobbying.
- **Over-dependence on economic modelling:** Because of the complexity of the issues involved, officials have come to depend increasingly on the input of external economic consultants. This, together with the need to complete regulatory impact assessments, has meant a greater reliance on deriving results from economic models. Because the models provide apparent quantification, the outputs are often treated as if they provide a higher level of accuracy than may be warranted. In fact, the answers frequently depend crucially on the assumptions and models they are based on.
- **Lack of experience of effective intervention:** From 1990 to about 2010, the approach to energy policy was largely market-driven and, except at comparatively small scale, non-interventionist. When more recently intervention became larger scale, there was little experience to fall back on and no guidelines on how to do it successfully. This has resulted in a piecemeal introduction of a large number of interventionist measures, many of which overlap, with widely different costs of carbon emissions saved, and, all prone to the problems identified above.
- **Influencing the policy makers:** It is not just those with a direct financial interest in the outcome of target-setting who may be lobbying the government. The more that energy policy moves towards small-scale and local interventions, the more the interventions impact increasing numbers of voters, many of whom may focus on the negative aspects, which are often local, such as visual amenity, inconvenience, impact on local resources, rather than on the wider and more positive aspects, such as energy security and curbing carbon emissions, which tend to be national or global. There is a similar dichotomy on timescales between short term issues, such as costs and the electoral cycle, and longer term benefits such as avoiding climate change.

Our conclusion is that policy makers would benefit from a set of basic principles that can be used, alongside the Better Regulation framework⁴ (where this applies), to guide those tasked

³ Technology Assessment Methods and Uncertainty http://www.ukerc.ac.uk/support/tiki-download_file.php?fileId=3627

⁴ <https://www.gov.uk/government/publications/better-regulation-framework-manual>

with setting up new low carbon interventions or revising existing interventions in order to help them to avoid the problems of the past. If these principles were systematically applied, the costs of intervention would be reduced and the cost of capital kept low as investors would be less concerned about the risk to their investment from policy changes.

3. A suggested framework for government low-carbon intervention

It would be naïve to argue simply for stability in intervention policy. Facts and situations change and political acceptability depends on ensuring policies remain cost-effective for customers and the tax payer. But it would be equally naïve of policy makers to continue to set policies for intervention that fail to take account of lessons that should already have been learnt from experience to date. In some areas, improvements have already been made. Examples are the commitment to a periodic banding review for the Renewables Obligation and the introduction of auctions for more mature renewables technologies and the capacity market in the Electricity Market Reform framework. But these improvements have been piecemeal and there needs to be a common and consistent approach.

A suggested framework for the design of any new intervention should therefore include the following:

1. No retrospection

The action that would have the most destabilising impact on investors would be a retrospective change to a support regime that undermined the business case for investment already undertaken on a particular project. As well as no retrospection within a particular intervention scheme, support that has been awarded to a project under a previous scheme (“grandfathering”) should not be curtailed. Care also needs to be taken with lead times for changes as, for larger projects in particular, investment may have to be committed well in advance of seeking support from the intervention.

2. Stability of policy with well-defined and pre-determined break points

The biggest concern of investors is unanticipated changes to intervention policy. In order to balance the needs of investors and the public purse, any new intervention should, at the time it is announced, include information about break-points at which the direction of policy and the level of targets is to be reviewed. Although this may appear to add to the risk that investors face, in practice the likelihood of change is always present whether or not announced and this approach would allow investors to factor this risk into their initial investment decisions. The break-points can be set in relation to date (ie after x months or years) or, if this appears to be too risky, in relation to target achievements or expenditure (eg after x MW of installations or £y m of support).

3. Underpinned by well-understood cost curve predictability and development of supply chain

While surprises can always happen, better use can be made of expert knowledge and experience overseas to understand the likely future trend of prices, particularly if there is global demand for the technology. Care, of course, needs to be taken to guard against advice which is little more than veiled lobbying, either for or against the technology.

4. Use economic modelling only where it adds value and explain the assumptions and methodology behind the projections

Economic modelling, particularly if the issue is complex or full of uncertainties, cannot substitute for rigorous economic analysis. Where quantification is needed, for instance for an impact assessment, the uncertainties need to be fully and publicly set out. Any policy conclusion based on economic modelling must also be accompanied by a full and transparent set of assumptions and access to the underlying model for interested parties to make their own calculations.

5. Dialogue with Brussels to ensure long term consistency with State Aids regime

Increasing numbers of UK policy interventions have meant that more dialogue has been needed with Brussels on state aid issues. The European Commission adopted in April 2014 new rules on public support for projects in the field of environmental protection and energy⁵. It will be important to understand how the Commission's approach to interpreting its new rules is developing as new decisions emerge and, at the very least, it will be necessary to factor in sufficient time for this process.

6. Be clear on the impact on different user groups (eg fuel poor, all-electric households, intensive energy users)

Where policies have costs on customers (rather than on tax-payers), how the costs are distributed to different user groups is important. When establishing a new intervention or when reviewing existing policies, the impact, not just of the single intervention itself but of the totality of interventions on a particular class of customers, needs to be examined so that the political objective for that group is fully understood and achieved. Key groups to be considered are the fuel poor, all-electric domestic households⁶ and intensive energy users. But greater consideration also needs to be given to the fact that energy, and electricity in particular, is not a single commodity with a single cost, but its cost and value vary by time of day and year and location. The extent to which these different costs feed through into prices for customers, to provide incentives or protection, needs to be the result of positive decision-making rather than by accident.

7. Contracts may be preferable to legislation

With very few exceptions over the years, it has always been the case that a government contract can be relied on by the signatory. On the other hand, commitments based on legislation or regulations can be changed by ministers / parliament with comparative ease. Investors are therefore more likely to feel their investment is safe if it relies on a contract with government rather than on legislation.

8. Price-based intervention often preferable to quantitative targets

In circumstances where there is uncertainty about the precise annual targets to be achieved and the costs of doing so, there are theoretical arguments for preferring price-based interventions. Moreover, where investments have a substantial lead time, the volatility in the

⁵ http://europa.eu/rapid/press-release_IP-14-400_en.htm

⁶ The cost of interventions has gone largely on electricity bills, whereas households relying on electric heating tend to have lower incomes: <http://www.consumerfutures.org.uk/files/2013/05/The-hardest-hit.pdf>

price resulting from quantitative targets, together with the possibility that the price will go to zero in the event of over-supply, is likely to increase the cost of capital and deter investors.

Although a price-based intervention can lead to uncertainty about the total level of support and thus the cost, such an approach is likely to prove more palatable to investors.

9. Long term nature of investment requires a cross-party approach

Given the size, long-term nature and importance of the investment needed to achieve the low-carbon transition, politically-driven changes in approach need to be avoided if possible. The uncertainties caused by possible changes to interventions driven by the prospect of political change affect the climate for investment. While there will undoubtedly remain differences, the political parties should, for the sake of investment stability, seek to establish the degree of consensus that can be achieved on low carbon energy policy.

10. Learn from previous experience in UK and elsewhere and try to avoid conflicts with the single European energy market

The problems and solutions implied by low-carbon interventions are far from unique to the UK. We can learn a great deal from the successes and problems that others have faced from the introduction of interventions, and from the technology innovations that have been developed elsewhere. No new intervention should be introduced without a detailed study of similar experience abroad. With very few exceptions, a bespoke solution unique to the UK is likely to be less successful.

11. Progression from even-handed support for new technologies over a clear trajectory to a technology-neutral approach with a common price for carbon

In the long term, it is clear that the most economically efficient approach to support a low carbon economy is to adopt a single technology-neutral support mechanism based on a common carbon price or quantitative emissions targets. But, many low carbon technologies are still immature and are not yet ready to compete on this basis. However, technology-specific support is particularly prone to special pleading and rent-seeking.

DECC has indicated an intention to move towards technology-neutral auctions as EMR develops in the 2020s⁷. All technology-specific interventions need a well-defined exit strategy, leading to a single technology-neutral approach.

12. Keep number of interventions to a minimum and reduce complexity

Whilst a degree of complexity is to be expected, given the immaturity of low carbon technology and the need to create incentives appropriate to a wide range of agents, this must be kept to a minimum and time-limited. There also needs to be better coordination and consistency between interventions introduced by different government departments.

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https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/324176/Implementing_Electricity_Market_Reform.pdf

About Sustainability First

Sustainability First is small environment think-tank with a focus on practical policy development in the areas of sustainable energy, waste and water.