IPPR

EVIDENCE

DRAFT ENERGY BILL

IPPR SUBMISSION TO THE ENERGY AND CLIMATE CHANGE COMMITTEE

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Institute for Public Policy Research

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SMART IDEAS
for CHANGE

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On 19 June 2012 the energy and climate change committee held public evidence sessions on the draft Energy Bill. IPPR submitted the following evidence.

This submission is from IPPR (the Institute for Public Policy Research). We are the UK's leading progressive thinktank and produce rigorous research and innovative policy ideas for a fair, democratic and sustainable world. This submission has been written by Will Straw, associate director for globalisation and climate change, and Reg Platt, research fellow, with input from a number of other staff.

Summary

- IPPR is concerned that the Energy Bill reduces the government's ambition on carbon emissions reduction by the power sector. To address this, we believe the government should set out explicitly on the face of the bill that unabated gas will only be permitted to run at low load factors beyond 2030.
- IPPR is concerned that the proposed contract for difference (CFD) arrangements are complex, could undermine investment levels in new generation and could worsen competition in the energy supply market.
- A new impact assessment is urgently needed to gauge whether the newly proposed contracting arrangements remain the most cost effective revenue support mechanism. The government should fundamentally rethink the administration of the CFD mechanism and challenge the European Commission if their rules prevent a less bureaucratic set of proposals for British industry. If the government does continue with the CFD mechanism as proposed, absolute transparency must be provided on the agreed strike price and the interim 'letters for comfort'.
- The Energy Bill misses an opportunity to improve Britain's unilateral carbon price floor (CPF). It should also do more to improve energy efficiency for homes and businesses.

Principles

1. IPPR's submission examining the Energy Bill is based on three principles. First, the carbon budgets set out in the Climate Change Act 2008 are sacrosanct. That act requires the UK to achieve a reduction in greenhouse gas (GHG) emissions of at least 80 per cent by 2050 and 34 per cent by 2020, against a 1990 baseline. Achieving these commitments should be done at the lowest cost to consumers while ensuring security of supply.
2. Second, in delivering its goals, the government should be neutral towards low-carbon technologies and ensure that different technologies have the opportunity to flourish. But Britain should be mindful of where its present and future comparative advantages lie and look to benefit from growing global markets in clean technologies. Recent research from Pew shows that the market for clean energy has expanded 600 per cent since 2004 (Pew Charitable Trusts 2012).
3. Third, it is vital that government provides long-term certainty, is insulated from the political cycle, to investors and industry. The government has laid out a very ambitious timetable for the bill yet there are still many details to be finalised. Given the long-term significance, it is vital that the process is not rushed. EDF's decision to explore the possibility of extending the lifetime of its existing plants with the Office for Nuclear Regulation could result in less urgency for bringing forward new generation. The government should factor this in to its timetable.

Meeting the carbon budgets

4. The level of ambition in the bill does not appear to be commensurate with the advice laid out by the Committee on Climate Change (CCC) for achieving the carbon budgets. The CCC has stated that meeting the 2050 emissions reduction target 'will only be achievable if electricity generation is almost completely decarbonised by 2030' (CCC 2008: 197). More specifically, the CCC has stated that 'the carbon intensity of power will need to fall from around 500g/kWh today to 50g/kWh in 2030' (CCC 2010: 293). Worryingly, the Energy Bill includes a change of tone and timeline. It states that 'power sector emissions need to be largely decarbonised by the 2030s' (HM Government 2012: 10).The impact assessment for the emissions performance standard (EPS), meanwhile, outlines that carbon emissions intensity from the power sector will effectively be double in 2030, at 100gCO_2/kWh (DECC 2012a: 12). We are particularly concerned that the grandfathering clause in the EPS does not include sufficient safeguards to ensure UK emissions will not exceed the carbon budgets.
5. The bill should be explicitly tied to the carbon budgets by setting a target to reduce the carbon intensity of the grid to 50gCO_2/kWh by 2030. This is the most important step the government can take to provide certainty to industry about the direction for the energy market. This would mean placing a legal requirement on government to demonstrate at specific intervals, for example every five years, that the implemented revenue support mechanism would result in a scale and mix of new generation that is consistent with a pathway to 50g CO_2/kWh carbon intensity in 2030. The CCC should play an integral role supporting the government to determine potential decarbonisation pathways, based on criteria such as cost-effectiveness and risk, and evaluating the government's eventual decisions.

Emissions performance standard with grandfathering

6. As set out above, meeting the carbon budgets in line with the CCC's recommendations requires an 'almost completely decarbonised' power sector by 2030. The government has stated that it wants to introduce emissions performance

standard (EPS) grandfathering for new power stations at 450g CO_2/kWh until 2045. The effect of this policy will be to allow new gas plants to operate unabated throughout this period The only way IPPR can conceive that unabated gas could play a role beyond 2030 is if it is to run at very low load factors and provide capacity only at times of low renewable generation or peaking demand.

7. The emission level and grandfathering rights in the EPS must be set on a pathway which is consistent with the near decarbonisation of power generation *by* 2030 rather than the far vaguer '*by the* 2030s'. The government should set out explicitly on the face of the bill that unabated gas will only be permitted to run at low load factors beyond 2030. The government should provide revenue support through the proposed capacity mechanism to ensure that investors in gas plants get sufficient and predictable returns.
8. If the government proceeds with EPS grandfathering to 2045 as proposed then it must retain the power to change the emissions level and time period without recourse to primary legislation.

Feed-in tariffs with contracts for difference

9. IPPR believes that a well-designed mechanism of feed-in tariffs with contracts for difference (CFD) could be a viable option for bringing forward investment in a range of low-carbon generation technologies. The problem with the government's proposal is that the design is flawed. The proposed arrangements are complex, could undermine investment levels in new generation, and could worsen competition in the energy supply market.
10. The July 2011 electricity market reform (EMR) impact assessment implied that the government would be the contracting or counter party and that all price risk would be 'borne by government balance sheets' (DECC 2011: 9). Contrary to these earlier proposals, annex B to the May 2012 'EMR Overview Document' specifies that the CFD mechanism will not involve a single counterparty, such as the government, and will instead place 'obligations on suppliers and generators' (DECC 2012b).
11. Evidence given by MP Charles Hendry to the energy and climate change committee on Tuesday 15 May, when questioned as part of the 'Building new nuclear: the challenges ahead' inquiry, appeared to suggest the new approach had been adopted in order to conform with EU state aid rules. Specifically he said:

> **'We have put forward the proposal that we think is most likely to deliver the investment and also be comfortable with European state aid rules … What we need to be clear of is the system that we put in place is one that will satisfy the European Commission. We believe that the approach we are taking is most likely to be acceptable under the rules on state aid.'**
>
> House of Commons 2012

12. This change in contractual liabilities is a major alteration to the design of the CFD. As a result, the impact assessment on which the government based its decision in favour of the CFD is now outdated. A new impact assessment must urgently be carried out to examine whether the CFD remains more cost effective than the premium feed-in tariffs (PFIT) in light of the newly proposed arrangements. There are reasons to believe the proposed change will be detrimental to the government's ambitions.
13. The new approach is likely to add huge complexity to the CFD system. It is vital that the arrangements are simple and robust if they are to provide confidence to industry

and to work as intended by reducing financing costs for new low-carbon generation. Industry is understandably concerned.

14. The proposed arrangements will also place greater pressure on the balance sheets of the major utility companies, which will restrict the level of investments in new generation capacity they are able to make.
15. The arrangements may also be detrimental to the competitive operation of the supply market. The level of exposure that smaller suppliers are likely to face could result in a negative impact on their credit rating and is likely to raise the cost of capital. Without a strong balance sheet to stand behind, smaller operators may find the survival of their business at stake.
16. This would run contrary to the action that Ofgem is taking to improve competition, remove barriers for smaller suppliers, and encourage new entry to the supply market. These concerns are similar to those set out in IPPR's report *The True Cost of Energy* (Platt 2012), which concluded that measures to remove barriers for smaller suppliers and new entrants to the market were needed.
17. The government should fundamentally rethink the administration of the CFD mechanism and challenge the European Commission if their rules prevent a less bureaucratic set of proposals for British industry. The CFD mechanism should not be specified in the title of the bill to ensure parliament is able to engage in full and proper debate on alternative options, including a system of PFIT.
18. If the government does continue with the CFD mechanism as proposed, absolute transparency must be provided on the agreed strike price and the interim 'letters for comfort'. It is important that these arrangements retain the principle of technology neutrality and ensure that intermittent sources are not unduly penalised. Government must be wary that its policy regime is not skewed by the desire to achieve 18GW of new nuclear generation despite recent events which have left the possibility of a single supplier.

Carbon price floor

19. The carbon price floor (CPF) has already been enacted but the Energy Bill presents an opportunity to amend this flawed scheme. IPPR's report *Hot Air* (Maxwell 2011) details how unilaterally introducing a CPF in Britain will undermine the economic efficiency of the EU emissions trading scheme (ETS)and could waste up to £1 billion. Because the market is EU-wide, a higher price in the UK due to the CPF will lead to a lower price elsewhere and to the same amount of carbon being emitted.
20. The government's own data shows that the CPF will push up to 60,000 more UK households into fuel poverty as energy companies pass on the additional costs of paying the tax to consumers. By 2020, the number of households in fuel poverty is likely to be rising by 50,000–90,000 per year as a result of the CPF.
21. IPPR's report *Europe's next economy* (Straw et al 2012) outlines how a superior approach to meeting low-carbon industry concerns for a higher and less volatile carbon price, without disadvantaging British business, can be delivered through the creation of a European central carbon bank to regulate the price of carbon in a symmetrical fashion. If prices were seen as too low to achieve EU-wide emissions reduction targets, the carbon bank could hold back allowances. By contrast, it could issue allowances if prices rose too high.

Energy efficiency

22. As well as missing the boat on improving the CPF, the Energy Bill contains no new measures on energy efficiency. This should be a central aspect of any decarbonisation policy, with emissions from buildings accounting for over a third of UK carbon emissions. Improved energy efficiency and increased deployment of renewable heat will be vital for the UK to meet its legally binding commitments for 2020 and 2050 as well as improving security of supply and the affordability of energy bills.
23. There are concerns about whether the government's green deal initiative, the energy company obligation (ECO) – which replaces two energy efficiency policies: the carbon emissions reduction target (CERT) and community energy savings programme (CESP) – and the 'Warm Front' fuel poverty programme, will be sufficient to meet statutory carbon and fuel poverty targets. If the government is to achieve its policy goals, it is likely that the green deal and ECO will need to be enhanced by additional schemes.
24. Not withstanding IPPR's concerns, if the CPF is introduced in 2013, it will generate significant additional revenues. HM Treasury estimates that it will generate £740 million in 2013/14, £1.07 billion in 2014/15 and £1.41 billion by 2014/16. Phase III of the EU ETS will increase revenues from £700 million this year to over £2 billion. These new revenues should be used for additional spending on energy efficiency, prioritising the homes of the fuel-poor and vulnerable.
25. A targeted green deal should also be introduced for manufacturers. At present, there are few positive incentives for conventional manufacturers to reduce process emissions or to retrofit their plants and premises. Those that have done so tend to be large multinational firms with strong balance sheets and the ability to raise capital. The secretary of state, Ed Davey, has expressed a desire to expand the green deal to businesses but few details are currently available. He should do so initially by targeting small and medium-sized manufacturing businesses with the highest energy costs relative to total costs, with a view to rolling out the scheme on a wider basis if it is successful.[1] In addition, 100 per cent capital allowances for two years should be made available to manufacturers looking to invest in a broader array of clean-energy-supply technologies and more energy-efficient production equipment and processes. The additional costs could be funded by a small allocation of ETS revenues.

1 Since the upfront costs of any green deal measure would be paid by the finance sector and paid back by the recipient over time through the savings on their energy bills, the scheme would not require public funding. However, the government may wish to introduce limited, time-bound incentives to encourage take-up. One option would be to set aside funds for early adopter incentives, perhaps offered in the form of a temporary cut to business rates for firms that sign up during an initial introductory period. This approach would mirror proposals for the current green deal scheme for homeowners, for which the Treasury has set aside £200 million for early-adopter incentives

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