

Energy UK response to the Fourth Carbon Budget review – call for evidence

20 August 2013

Energy UK is the trade association for the energy industry. We have over 80 companies as members that together cover the broad range of energy providers and suppliers and include companies of all sizes working in all forms of gas and electricity supply and energy networks. Energy UK members generate more than 90% of UK electricity, provide light and heat to some 26 million homes and invested £10 billion in the British economy in 2011.

This paper sets out Energy UK's response to the Committee on Climate Change's (CCC) call for evidence on the review of the fourth carbon budget. The proposed budget is 1950MtCO₂e for the period 2023 to 2027. This is in line with an 80% reduction in greenhouse gas (GHG) emissions by 2050 and 60% by 2030. The paper includes key points below and then summarises our views on each of the question areas.

Key points

- ▶ The scale of the challenge in delivering a decarbonised economy and the scale of carbon reduction implied by the fourth carbon budget should not be underestimated.
- ▶ It is a matter for Government, taking independent advice as appropriate, to set the level of aspiration on decarbonisation and to define the expected costs and benefits of this vision. Industry will play a vital role in turning the aspiration into reality.
- ▶ It is critical that the low carbon vision is set against Government's other priorities of affordability and energy security which have risen up the political agenda. Carbon budgets set must be deliverable by the sectors involved and at a cost that consumers are willing to bear. Government needs to better explain to the public the rationale for its policies and the associated costs.
- ▶ The major change in circumstance since the fourth carbon budget was set has been the prolonged recession which has led to reduced emissions and an increased focus on the cost of living and the affordability of policy.
- ▶ Developments in global energy markets including the impact of unconventional gas in North America and challenges in providing an effective carbon pricing signal in Europe could impact on the competitiveness of UK energy policy relative to other regions.
- ▶ The power sector has an important role to play in decarbonising the economy. Electricity Market Reform (EMR) policy has been designed to support further low carbon investment. However, recent policy uncertainty has led to a slow down in investment.
- ▶ This review of the Fourth Carbon Budget is not well timed, because judging whether to adjust the budget will depend on critical decisions yet to be taken including: an international agreement post-2015; the EU 2030 climate and energy package; and structural reform of the EU Emissions Trading System (EU ETS).

- ▶ A change to the budget at this time could be disruptive, especially if it has to be adjusted again based on future developments. We recommend that the CCC set out a predictable way to adjust budget based on the critical decisions yet to be made and if circumstances were to change significantly in future.
- ▶ The UK has a strong history of grandfathering policies and no retrospective changes, it is important that this is maintained, so that investments made in good faith are not impacted by future changes in policy or the scale of ambition.

We would be happy to discuss the issues raised in this paper with CCC and others as appropriate.

Section A: Climate Science and international circumstances

1. Scientific evidence

Energy UK supports the principle that the UK's climate objective is guided by scientific evidence and is consistent with the objectives of the UNFCCC and EU. We are not best placed to comment on the latest developments in climate science. It will be important to take into account the upcoming IPCC Fifth Assessment Report (AR5) on the scientific, technical and socio-economic aspects of climate change which is due September 2013.

2. Changes to emissions pathways

Given that the IPCC is expected to publish AR5 this year, it would be premature to comment on whether there is new evidence on climate sensitivity to emissions until this report is published.

3. International action

Achieving a strong international agreement is critical to level of UK ambition and international competitiveness. Flexibility mechanisms will help ensure that GHG emissions are abated in the most cost-effective way.

Uncertainty remains as to whether an agreement will be reached at UNFCCC Paris 2015. Some notable developments in the international context include: positive progress by China and the US on meeting voluntary obligations, initial EU steps to agree an ambitious 2030 package; impacts of Fukushima on nuclear development and global gas markets; and impact of shale gas on the US gas price and international coal prices.

4. EU 2030 package

Energy UK supports a strong GHG target for the EU in 2030. We suggest that a 40% reduction target for 2030 package is sensible. This must be an economy-wide target to provide flexibility to deliver emissions reduction in the most efficient way. Nation states should be able to design policies which fit with national need and objectives, whilst remaining consistent with the internal market. In the current economic climate, a focus on the cost effectiveness of policy is critical.

The EU ETS should be the central instrument. It has been effective in terms of meeting an emissions cap. However, it has not provided a reliable or sufficient signal to underpin new investment. It was also not designed to withstand recession. Back-loading of EU ETS allowances is an important first step but, structural reform is urgently needed. With the EU elections in 2014 this is unlikely that changes to the EU ETS will take place until 2015. The EU ETS should also be extended to other sectors.

5. Flexibilities to reflect future change

The CCC should set out a predictable ex-ante way to adjust future carbon budgets if circumstances change significantly. The UK has a strong history of grandfathering policies and no retrospective changes, it is important that this is maintained, so that investments made in good faith are not impacted by future changes in policy or the scale of ambition.

This flexibility must allow for both changes in the level of the EU ETS cap (and how it is distributed between Member States) and also the implications of future expansion of the EU ETS to cover sectors that are currently accounted for by the 'non-traded' part of the UK carbon budgets (in particular heating and transport).

Section B: Technology and economics

6. Changes to scenarios

There are a number of changes to the underlying circumstances which could affect the achievability of scenarios, whether they are perceived as sensible or affordable and the potential impacts on security of supply.

- ▶ **Recession** – this has resulted in demand destruction and reduced emissions. Whether this will have lasting effect and how quickly the economy will recover are uncertain. The recession has also led to an increased focus on cost of living and the affordability of policy to consumers.
- ▶ **Investment slow down** – in the power sector there has been a slow down in investment as a result of policy uncertainty. It will take time for the EMR package to bed down and to build confidence in the new instruments, for example as we make the transition from the Renewable Obligation to Contracts for Difference (CFD). Without a significant step up in the rate and scale of low carbon investment, achieving the reductions implied by the National Grid 'Gone Green' scenario¹ by 2050 is at risk, and some Energy UK members have warned that a 'Slow Progression' scenario may now be more likely. In the CCC's review, it would be helpful to assess the rate and scale of investment/deployment needed to achieve Government's targets and what EMR is likely to deliver.
- ▶ **EU ETS price** – the carbon price resulting from the EU ETS has not been sufficient to base investments on. The UK has introduced a Carbon Price Floor (CPF), which is significantly higher than the EU ETS. Reform of the EU ETS remains critical to ensure its credibility, otherwise differentials that may arise between the EU ETS price and carbon price floor in the GB electricity sector could be problematic.
- ▶ **Uptake of measures** – uptake of measures under the Green Deal has been lower than the Government anticipated, whilst uptake of micro-generation under the Feed in Tariff has been high.
- ▶ **Future uncertainties** – there are a number of uncertainties that will impact on decarbonisation of the power sector, including future gas prices and how quickly technology costs come down.

The question is whether any of these changes will endure. The economy is likely to recover, policies can be changed to make them more effective, and scenarios can and have been tested for sensitivities to future gas prices and technology costs. So these changes are unlikely to give grounds for a change in the carbon budget.

As emissions from the traded sector are capped through the EU ETS, changes to the UK carbon budget are likely to have a most material impact on the non-traded sectors and the perception of the UK as a place to invest in low carbon.

7. Role of shale gas

It is not yet clear what impact shale will have in the UK. The Government has recognised that gas will continue to play a role as we decarbonise our economy. As our North Sea reserves deplete, shale gas has the potential to offer an indigenous fossil fuel source which is beneficial in terms of security of supply. The volume of UK shale available and the proportion that can be extracted has yet to be accurately verified. It is critical that the environmental impact is fully assessed and local communities properly consulted.

¹ <http://www.nationalgrid.com/uk/Gas/OperationalInfo/TBE/Future+Energy+Scenarios>

Although there is considerable political attention on shale gas, companies believe that UK shale production is unlikely to have the degree of ‘game changer’ effect seen in the US. US shale is, however, having a significant impact on global gas prices. As we do not yet know the potential for UK shale, this debate should not have too major a bearing on the setting of carbon budgets at present.

8. Tightening the budget to reflect headroom

Emissions have been lower as a result of slower than expected economic growth. The extent to which changes will be enduring is uncertain. We believe it would be premature to tighten the overall level of the budget at this stage. Particularly as the current fourth carbon budget reflects a tightening of the EU ETS cap, which has not yet been agreed.

Section C: Other issues

9. New evidence of impacts of Fourth Carbon Budget

The impacts of the Fourth Carbon Budget need to be fully understood in order to manage them

- ▶ **Security of supply** – existing plants have been closing or reducing hours because of environmental directives, but the new build programme has been delayed due to policy uncertainty. As a result projections of future capacity show a potential shortfall in 2015/16. Government and Ofgem are seeking to address capacity issues through the introduction of a capacity market and proposals for additional balancing services.
- ▶ **Competitiveness** – the CCC produced a helpful analysis of carbon leakage and potential competitiveness impacts. There is clearly a competitiveness risk for industries as the UK passes through increased policy costs to consumer bills, whilst other countries such as the US have benefited from domestic shale. However, Government has developed a compensation package for energy intensive industries with the potential for an exemption from CFD costs. These measures will, of course, place a greater burden on other consumers.
- ▶ **Fuel poverty** – with increasing costs of policy passing through consumer bills rather than collected through general taxation, together with the recession, changes to welfare benefits and declining levels of tax funded assistance for fuel poor households, there is an increased risk that more households may find themselves in fuel poverty and the Fuel Poverty Gap may widen. This is a serious impact that needs to be addressed by Government. DECC² and CCC³ analysis suggests that overall energy costs could reduce as a result of Government policies in the long-term. But if policies continue to be paid for through energy bills this will have a disproportionate impact on households that cannot (or do not) reduce consumption. The focus of meeting carbon budgets needs to shift to behavioural changes and to targeted policies to improve the housing stock for homes occupied by vulnerable customers. Effective implementation of these policies could help mitigate rising energy costs.

10. Devolved administrations

Implications of the Scottish Independence Referendum need to be considered. For example, what would happen if the vote were to go in favour in terms of interconnection between energy markets, financing of low carbon projects and how carbon is accounted.

² [https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/172923/130326 - Price and Bill Impacts Report Final.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/172923/130326_-_Price_and_Bill_Impacts_Report_Final.pdf)

³ http://hmccc.s3.amazonaws.com/ENERGYbill12/1672_CCC_Energy-Bills_bookmarked.pdf