

Guidance on the treatment of carbon costs under the current industry code objectives

1. Introduction

- 1.1 The clarification and guidance contained in this document relate to the following codes: the Balancing and Settlement Code, the Connection and Use of System Code, the Uniform Network Code, the Distribution Connection and Use of System Agreement, the System Operator Transmission Owner Code, the Uniform Network Code for Independent Gas Transporters, the Grid Code and the Distribution Code.
- 1.2 These codes govern many aspects of the electricity and gas markets arrangements. It is a feature of all of these codes that they are capable of being modified in accordance with industry led modification procedures. Under these modification procedures code panels and/or other industry parties need to assess proposed modifications against certain objectives. While the precise objectives vary from code to code, they all contain an objective relating, broadly, to the efficient and economic operation of the relevant network system.
- 1.3 This document sets out our position on the scope for considering carbon costs within the existing code governance framework. It also contains some guidance to code panels, administrators and industry participants as to how they could take account of this clarification in practice.

2. Relevant, recent developments

- 2.1 The introduction of policy instruments such as the EU Emissions Trading Scheme (ETS) in 2005 has facilitated the emergence of a market value for carbon dioxide emissions in the sectors covered under the ETS. In addition, the Government has issued revised guidance on valuing greenhouse gas emissions¹. The revised approach to carbon valuation in the non-traded sector is based on estimates of the abatement costs that need to be incurred to meet specific emissions reduction targets.
- 2.2 These developments mean that it is possible to place a quantifiable value on carbon dioxide and other greenhouse gas emissions and that this value can be used when assessing the impact on these emissions of proposed code modifications.

3. Significance of developments within existing code arrangements

- 3.1 We consider that it is possible to take account of these environmental costs and benefits, in the same way that we (and the code panels and industry) would consider other economic costs and benefits, when assessing a modification proposal against the relevant code objective governing efficient and economic network operation.
- 3.2 In view of this, we would expect that such costs and benefits should be taken into account (where relevant) by the code panels and industry participants when assessing a modification proposal against the relevant code objective governing efficient and economic network operation.
- 3.3 In practical terms, therefore, we expect that industry and/or code panels (as appropriate) should take the following steps:
 - (a) When assessing a modification proposal against the relevant code objective governing efficient and economic network operation, if the relevant industry

¹ The guidance, entitled 'Carbon Valuation in UK Policy Appraisal: A Revised Approach' (dated July 2009), has been issued by DECC and is available at:
http://www.decc.gov.uk/en/content/cms/what_we_do/lc_uk/valuation/valuation.aspx

participant and/or code panel consider that the impact of a modification will or may be to reduce or increase greenhouse gas emissions (and that this impact is likely to be material) then, to the extent that this impact will or might affect their assessment of the modification against the code objectives, the quantifiable environmental costs and benefits associated with the greenhouse gas emissions should be assessed (using the methods described in paragraph 3.4). The likely level of impact (materiality) will no doubt influence how the industry participant and/or the code panel go about this assessment. They may, for example, consider it appropriate to make enquiries of the relevant network operator. In addition, or alternatively, the relevant industry participant and/or code panel may decide it would be appropriate to employ the relevant expertise to undertake such assessment.

- (b) Where they have evaluated the environmental costs and benefits of greenhouse gas emissions, the relevant industry participant and/or code panel should use the results of this analysis to inform its assessment of the relevant modification against the efficient and economic network operation objective of the relevant industry codes.

3.4 Where an industry participant and/or code panel undertake an assessment of greenhouse gas emissions, the relevant industry participant and/or code panel undertaking the analysis should, where that assessment is of a level that would warrant it:

- (a) quantify the impact on carbon dioxide and/or other greenhouse gas emissions in terms of tonnes of carbon dioxide using the updated guidance provided by DECC². This guidance includes traded and non-traded prices for carbon for each year up to 2100 for the purpose of policy appraisal. The guidance also includes greenhouse gas global warming potentials which can be used to convert emissions of other greenhouse gases into tonnes of carbon dioxide equivalent in order to value these emissions using a 'non-traded price of carbon'³. Emissions of other greenhouse gases should, where relevant, include any effects on methane leakage from the gas transmission and distribution systems and sulphur hexafluoride leakage from electricity transmission and distribution;
- (b) develop a range of cost scenarios for changes (increases or decreases) in emissions in sectors covered by the EU ETS generally valued at the 'traded price of carbon' and changes in emissions for sectors not covered by the EU ETS generally valued at a 'non-traded price of carbon'. We recognise that going forward, other mechanisms to measure the market value of greenhouse gases may be developed and this clarification and guidance should not be interpreted as precluding the use of any such mechanisms. Any assessment should therefore clearly state the source of values used. If the assessment uses values which differ from the prevailing DECC guidance, these should be robust and justifiable in the context of the analysis; and
- (c) include scenarios using both a social discount rate and a commercial discount rate. In calculating the social discount rate, the relevant industry code participant and/or code panels should have regard to the guidance in the Treasury Green Book⁴.

² Carbon values are expected to be updated every year. The latest carbon values can be found in 'Updated short term traded carbon values for UK public policy appraisal (June 2010)' at: www.decc.gov.uk/assets/decc/what%20we%20do/a%20low%20carbon%20uk/carbon%20valuation/1_20100610_131858_e_@@_carbonvalues.pdf

³ The DECC guidance (see footnote 1) provides details regarding conversion.

⁴ http://www.hm-treasury.gov.uk/data_greenbook_index.htm