Note 01b: Why a non-linear target is appropriate for the sector

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We proposed that a non-linear series of targets for efficiency improvements in data centres would be most appropriate for the sector. We suggested that the series was loaded so that the most ambitious targets occurred in the second and third target periods rather than the first and fourth. This approach would give the sector time to implement efficiency measures but will still deliver approximately the same net carbon reductions as a linear target. Our proposal was illustrated in the chart and our reasoning is explained below. The proposal was accepted by DECC. DECC has now been superseded by BEIS (Department for Business, Energy and Industrial Strategy).

Chart of Proposed Target Profile

Our proposal
First target period: 1% (previously 5%)
Second target period: 8.333% (unchanged)
Third target period: 13.75% (previously 11.67%)
Fourth target period: 15% (unchanged)
Our rationale for a relatively low first target
We sought a low first target – 1% rather than 5% for the end of the first target period for the following reasons:

1. The data centre sector was joining the CCA scheme over three quarters of the way through the first target period. Companies registering as participants even at the earliest possible opportunity would only start being eligible for rebate in the latter half of 2014, towards the end of this first target period. Although many of these companies were already implementing measures that were cost effective, their obligations under CRC and CCL essentially tie up funding that could be used to make further investments in energy efficiency. Once they obtained the CCL discount the business case for implementing energy efficiency measures was strengthened and that money can be reinvested. The outcome of that reinvestment would only just start being realised by the end of the first target period. Anything other than a low target for the first period was considered unrealistic.

2. From an implementation point of view, major changes do not just need budget provision, they also rely on customer engagement and agreement, and this takes time, especially for retail colocation providers who may have many customers all with different service level agreements and expectations.

3. A low target for the first period also reduced the risk that companies could have to buy out carbon against this first target even though they ultimately meet their 2020 scheme targets.

4. A relatively low first target also avoided the risk of reputational damage for the sector and for the scheme: a lack of familiarity with the facts does not necessarily prevent third parties making observations and an unreasonable target in the first period may lead to comments either about the sector having failed at the first post or the scheme being ineffective in delivering its policy objectives. We would much rather avoid the possibility of its function being misunderstood and misrepresented in this way.

5. The data centre sector was new to the CCA scheme and there was a shortage of relevant data. There was a possibility that the true average 2011 PUE for the sector was higher than the baseline PUE chosen and there was a consequent risk that the targets could prove punitive. A cautious approach to the first target would provide the “least regrets” option all round.

Our rationale for stepping up the targets in the second and third periods
Rather than simply back-loading the targets we proposed stepping up the targets in the second and third periods. We proposed to stay as close as possible to the second target at 8.33% but the third target we propose at 13.75% - above the 11.67% that would result from a linear target. This was to ensure that the total energy saved under the scheme is as close as possible to the total energy that would have been saved under a linear target (see chart). Our rationale for this is that:

a) A challenging target in the second period would focus minds in the sector and would accelerate the deployment of efficiency measures.

b) From a reputational point of view we ensure that the sector cannot be accused of weakening its obligations or reducing the requirements of the scheme by delaying its targets.

c) The carbon objectives of the scheme are not compromised.

Further information
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