

Consultation on the Draft Order to Implement the CRC

Intellect final response

June 2009

Intellect is the UK trade association for the IT, telecoms and electronics industries including the consumer electronics industry and the fixed, mobile and satellite telecommunications industries. Its members account for over 80 per cent of these markets and include blue-chip multinationals as well as early stage technology companies. These industries together generate around 10 per cent of UK GDP and 15 per cent of UK trade.

Intellect welcomes the opportunity to respond to DECC's consultation on the draft order to implement the Carbon Reduction Commitment (CRC). Intellect welcomes the purpose of the CRC scheme, which is to reduce absolute carbon dioxide emissions from large non-energy intensive organisations in both the public and the private sector. The ultimate goal of the scheme is not questioned in this document. Rather, this response examines the current design of the scheme and its ability to deliver these goals.

We have been working closely with the CBI and fully endorse their response to the consultation. The main recommendations from the CBI response are attached as **Annex 1**. In our response we have highlighted the areas of particular concern to our membership.

In summary, Intellect believes that:

1. The current design of the scheme will encourage transfers of carbon liability, rather than a net overall reduction in emissions across the UK.
2. The current design of the scheme will only encourage energy efficiency in a context of stunted growth. At the heart of this problem lies the proposed design of the league table, and the suggested metric to be used for ranking and recycling purposes.

The importance of technology in tackling climate change

The technology industry's role in enabling the move to a lower carbon economy has been well espoused, not least by The European Commission in its March 2009 Communication to the Parliament¹. The technology industry enables many other industries to operate efficiently in today's economy, including:

- financial services
- creative industries
- retail
- transport and logistics
- manufacturing
- defence and aerospace
- pharmaceuticals

¹ Communication from the European Commission to the European Parliament on mobilizing Information and Communication technologies to facilitate the transition to an energy-efficient low-carbon economy
http://ec.europa.eu/information_society/activities/sustainable_growth/docs/com_2009_111/com2009-111-en.pdf

Climate change presents a mixture of challenges and opportunities to the technology sector, which is in a unique position. On the one hand our products and services have an energy requirement, and are therefore responsible for a proportion of global emissions (around 2% according to Gartner), which we must do our best to minimise. On the other hand, our offerings help other sectors work more efficiently and reduce their emissions – for example, IT infrastructure and services are often the most energy-hungry part of organisations; yet they are also the most significant sources of energy savings in other parts of the economy. Logistics software optimises fleet movements, electronic communications reduce paper use and travel.

In the short term this means cutting emissions associated with everyday processes and providing virtualised substitutes for high impact activities. In the longer term, technology will be a critical enabler of the transition to a genuine low-carbon economy. Smart buildings, intelligent transport and a distributed, smart grid are all ICT-enabled – and therefore ICT dependent. This view is supported by a number of independent bodies. A report from the WWF identifies ten uses of ICT that could together save at least a billion tonnes of carbon dioxide by 2020. Analysts McKinsey estimate that 7.8 billion tonnes could be saved by the use of ICT in buildings, power, transport, manufacturing and teleworking, and GeSI, the Global eSustainability Initiative, estimate that the intelligent use of ICT could reduce overall emissions by 15%, dwarfing the 2% emissions directly attributable to ICT. There is no other sector that offers anything like this capability.

Any carbon-related measures need to take great care not to offset this positive development.

Please note: this response should be read alongside [High Tech: Low Carbon – The role of technology in tackling climate change](#) and Data Centres: The Backbone of the UK Economy (to be published in June 2009), which provide a more detailed description of the vital role of the technology industry in reducing emissions and enhancing the economy.

Transferring rather than reducing emissions

The purpose of the CRC scheme is to reduce absolute emission levels; the most effective way to achieve this goal is to encourage energy users responsible for emissions to reduce their energy consumption on the one hand, and adopt efficiency measures on the other. Yet the current proposals allocate the entire carbon liability to the utility bill payer, irrespective of whether the bill payer is in fact using the energy, or a key player in the decision to use this energy. In some instances, the utility bill payer is not using or creating the demand for the products and services responsible for those emissions. As a result, the onus to reduce emissions is placed at the wrong level.

IT infrastructure and services including data centres, as one of the most important sources of energy use, are therefore likely to be one of the first processes to be outsourced, in order to transfer out the bill paying function, and therefore the carbon liability. This could result in the following:

1. Large companies will be rewarded by outsourcing their data centres to third parties in order not to incur the CRC costs associated with the data centres' energy usage. This method would be a quick fix to the reputational damage a poor standing in the league table could cause. If done on a large enough scale, organisations and service providers would in turn outsource their data centres to a small number of operators.
2. The proposals could encourage organisations to consider outsourcing, as a means of reducing an organisation's carbon footprint—i.e. transfer of carbon, instead of genuine carbon-saving initiatives, such as virtualisation. While clear 'carbon dumping' could otherwise lead to reputational damage, data centre outsourcing is a common practice; there would be no way of determining whether the outsourcing that might take place post CRC implementation was driven by genuine business reasons, or a desire to shift the carbon liability.
3. As energy costs in the UK are currently less competitive than in continental Europe, the additional carbon costs could encourage businesses to offshore. Data centres are by nature geographically flexible. Offshoring to the continent is a realistic possibility, and the cost of running a data centre in the UK may tip the scales in its favour. This in turn will have wider implications for jobs in the UK, and data and application security.

Data centre operators do have the ability to reduce the carbon footprint in newer more modern data centres, and could contract out the liability of the utility bill back to the customer, who then would be incentivised to alter its behaviour and chose more energy-efficient criteria in the data centre. However, for pre-existing legacy data centres, the opportunities for energy efficiency are less widespread, as is the possibility of transferring the carbon liability back to the customer. Furthermore, the high price of energy is already an incentive for operators to encourage their customers to embrace more environmentally-friendly solutions.

The CRC's impact on growth

If organisations outsource the bulk of their energy-consuming activities to more efficient third parties, the overall net emissions for the UK will reduce, and the CRC will have proved fit for purpose. However, the current design of the performance league table inhibits this from being the case.

Indeed, the current proposals suggest that rankings in the table will be determined by two metrics: absolute growth in emissions, and relative growth in emissions. After the initial phase of the scheme, the former metric is expected to be weighted at 75%, and the latter at 25% (though it is unclear how DECC reached these figures). As a result, any business growth, even if accompanied by increased overall energy efficiency, could result in an organisation dropping down the league table, and contending with the resulting financial and reputational effects. This is an unwelcome barrier to business growth, particularly given the current economic climate.

For example, if work moves from company A to more energy efficient company B, the league table will show company A as having improved its efficiency (an inaccuracy, given that the liability would only have been transferred, leaving the same carbon inefficient practices in company A), while company B will be penalised, despite enabling an overall decrease in emissions, as the footprint of the transferred activity has been reduced. While company B may be gaining business, the effect of its decline in the league table may cause it to lose business it might have won elsewhere, alongside the added financial penalty of having to buy an increasing amount of allowances at an increasing cost once the cap is in place. Please see **Annex 2** where a more detailed illustrative example is provided

While we understand the importance of creating a reputational incentive for organisations to adopt energy efficient measures, and a form of reputational (as well as financial) punishment for those who pursue energy efficiency with less vigour, we feel that the incentive mechanism is neither targeted nor powerful enough to ensure the desired end result is reached.

We recommend that in order to achieve the desired outcome – a decrease in absolute emissions – an incentive should be created for an inefficient company to outsource to a more efficient one – but also for an efficient company to accept business from an inefficient one (without the penalty of lower ranking). In order to achieve this, the relative emissions metric should have a more significant impact on rankings in the league table. Indeed, promoting relative emissions decline will lead to absolute emissions decline, as it would enable efficient businesses to rate highly in the table, thus attracting the business of those less efficient organisations, and reducing the absolute level of emissions as a result.

The alternative scenario is precarious. The current design would leave the IT sector at the bottom of the league table; as the industry is hit by financial and reputational damage, other sectors' uptake of IT services would decrease. As the cost of purchasing allowances increases for IT providers, these costs will be passed onto customers. The small number of players left in the market (due to the consolidation in the market as described above) could have damaging effects on competition, and may result in escalating IT services costs for UK plc and the public sector. This could prove a deterrent to investment in IT, damaging UK competitiveness on the one hand, and the energy savings from IT use on the other. The CRC scheme could therefore lead to a decrease in the uptake of IT, and an increase (certainly relative and possibly absolute) in carbon emissions as a result.

Conclusions

In order to deal with both the carbon transfer issue and the penalising of growth Intellect recommends that the relative growth metric be attributed more significant weight in determining organisations' ranking in the performance league table. This will allow those truly energy efficient companies to rise in the table, boosting their financial and reputational positions, and encouraging other companies to either outsource their most energy-intensive processes (such as data centres) to those companies most able to reduce the emissions resulting from these processes. This will also deal with the issue of carbon dumping, which could otherwise result in the simple transfer, rather than reduction, of emissions. This would also encourage growing organisations to maintain investment in energy efficiency, rather than be deterred by the prospect of an inevitable slide down the league table as a result of their growth.

Contacts

Laurence Harrison
020 7331 2043

laurence.harrison@intellectuk.org

Scarlett Graham
020 7331 2173

scarlett.graham@intellectuk.org

Annex 1 – CBI recommendations

Intellect fully endorses the CBI response to the CRC consultation. The following summarises the CBI's recommendations:

This is a challenging time for UK businesses, and therefore it is imperative that this regulation is as simple as possible, achieving its environmental objectives with minimal administrative costs. For this regulation to prove successful, Government must:

- **Address companies' concern about the impact on cash-flow**
- **Explore the option of using sector specific metrics and bench-marks to measure good performance in the capped phase**
- **Incentivise companies to invest in renewable energy generation within the CRC**
- **Allow businesses flexibility in determining CRC administration most relevant to their operations, and therefore allow large subsidiaries to operate in the CRC in their own right**
- **Expand the Early Action metric to include other accredited carbon management**
- **Recognise the burden that the CRC will place on landlords, and provide sufficient guidance and support**
- **Ensure consistency between the CRC and carbon reporting requirements to make it easier for companies to administer**
- **Minimise the regulatory burden of multiple climate change policies.**

Annex 2 – The CRC’s impact on growth

A company is consistently energy efficient during the CRC initial phase. It is then very successful and its revenue goes up by 50% and its emissions by 10% compared to the preceding five year average. A basic increase of carbon efficiency = plus 36.4% of revenue/emissions efficiency (ie $1.5/1.1 \times 100$).

So:

'Absolute metric'

pp106 Consultation on the Draft Order to Implement the Carbon Reduction Commitment
March 2009

A participant's score in this metric will be based on the percentage of absolute emissions reductions relative to the organisation's average annual emissions over the preceding five years.

We have a 10% increase in emissions over the average so score is minus 10%.

'Growth metric'

pp113 Consultation on the Draft Order to Implement the Carbon Reduction Commitment
March 2009

The change in emissions per unit turnover (or revenue expenditure for organisations that do not have a turnover figure) relative to the annual average emissions per unit turnover over the preceding five years.

We have (average - (emissions/turnover)) or $(1 - (1.1/1.5)) \times 100 = \text{plus } 26.7\%$

The calculation of the combined metric is actually impossible to illustrate according to the consultation document as it is a weighted aggregate of tables based on the growth and absolute metric. It is achieved by combining league table outcomes in a 75:25 proportion. Therefore you'd need the result of every participant to accurately calculate a final score.

However it is basically that the -10% is taken as three times more important than the +26.7% so for the purposes of this illustration:

A 36.4% increase in carbon efficiency is turned into a 0.8% reduction in your final score for the CRC metrics.

A 10% increase in emissions versus a revenue growth of 60% works out at:

- 45% increase in carbon efficiency
- -10% absolute metric
- +31% growth metric
- net weighted metric 0.25%

In other words, in this example, you need to earn about 6 times more than any emissions increase to just stay still. The actual method of aggregation proposed means the higher the growth ranking the lower relative effect it has on ones aggregate score and therefore as emissions grow the levels of revenue growth needed to offset them climb ever steeper.

Therefore taking on high carbon activity from either a client or competitor is strongly discouraged even though that may be the best solution to realise energy efficiency improvements over time.