HMT Consultation 2015: Reforming the business energy efficiency tax landscape: techUK response.

Key Messages
- Simplification is essential: under the current regime, UK businesses are forced to devote intellectual and fiscal resources to compliance at the expense of progressive action.
- Policy lags behind technology development: policy processes and thinking are focused on manufacturing rather than services.
- Government must continue to negotiate internationally to level the playing field on carbon pricing and must desist from gold plating EU policy measures.
- The technology sector is unique: while it is energy dependent and in some cases, energy intensive, it underpins our move to a low carbon economy by improving the efficiency of existing processes, by enabling dematerialisation and by delivering the transformative technologies that will enable it to become a reality.

Introduction
This consultation is very welcome and we strongly support Treasury objectives to simplify compliance and reduce administration costs, to protect energy intensive businesses at risk of carbon leakage and to support productivity through improved incentives for energy efficiency. The current energy tax landscape is complicated, volatile, duplicative, burdensome and not particularly effective at delivering intended policy outcomes. The result is that businesses, especially energy intensive ones, suffer competitive disadvantage compared to counterparts overseas and spend too much resource on compliance rather than on implementing efficiency measures that would actually improve productivity.

While there is no doubt that the UK climate change taxation and policy landscape needs simplification, our businesses have suffered significantly because of policy volatility and uncertainty: investors and operators need to know that their facilities can be competitive in five or ten years’ time and their customers need to know that the UK will continue to provide a policy environment in which they can thrive. Businesses need plenty of notice about changes that will affect their bottom line so the inevitable uncertainty generated by this review must be kept to a minimum, both in terms of the scale of changes and the cycle of decision making.

While this response reflects the views of the technology sector as a whole, we have highlighted the perspectives of the more energy intensive cohort of our membership when answering questions of specific relevance to them, such as those relating to CCAs. While this response discusses energy efficiency, for this growing and energy intensive cohort, the critical measure regarding energy is not how demand can be reduced but the effectiveness with which energy is used: how productively carbon is being spent.
Answers to consultation questions

1. Do you agree with the principle of moving away from the current system of overlapping policies towards a system where a single business/organisation faces one tax and one reporting scheme? Please provide evidence on level and types of benefits of an approach like this.

We accept that incentives are needed at point of generation to encourage energy suppliers to produce energy more cleanly and efficiently and at the point of demand to motivate energy users to consume that energy more wisely.

Our members agree that a single tax would be less burdensome than multiple instruments and that a single reporting framework is more attractive than multiple reporting frameworks. A proliferation of complex policy tools currently requires the same energy to be reported multiple times for different purposes, with different reporting timescales, different schemes, different administrative processes and fees and different prices for CO₂. We have a number of large corporate members who are obliged under EUETS, CRC, CCL, GHG reporting and ESOS. One of the smallest companies obliged under all the schemes reports compliance costs (excluding any allowance costs, actual taxes paid, or costs of investment in efficiency measures) in excess of €0.5M. In other words the €0.5M covers the staffing and consultancy resource needed to complete data collection, paperwork, auditing and record keeping. Many companies report that demands of this magnitude erode the resource available to invest in or implement the very efficiency measures that the schemes are designed to encourage. The simplification of this landscape is not just welcome; it is essential.

Data centre operators, for whom energy use represents a very high proportion of operating costs, make the point that energy is expensive enough to drive the right behaviour without the need for additional non-commodity charges and taxes. Making energy more expensive does not, therefore, augment existing incentives for efficiency.

2. Do you agree that mandatory reporting should remain as an important element of the landscape in driving the uptake of low carbon and energy efficiency measures? If not, why not?

Yes. Our members accept that not all policy tools have reporting mechanisms, so if the CRC were abolished, only a relatively small cohort of businesses would be obliged to report energy and carbon (those large entities listed on the stock exchange, many of whom are reporting voluntarily anyway). It does not seem unreasonable to us to require regular reporting from a larger cohort of companies.

However, careful thought needs to be applied to the size of that cohort and reporting must avoid the risk of introducing inappropriate comparisons: we have frequently found that as soon as figures are published, even in good faith, third parties apply interpretations to those figures that are either simplistic or draw inferences or conclusions from them that are simply not supported by data. The consequences range from misinformation to undeserved reputational damage.

We understand that a single reporting framework might help to provide consistency for investors and other interested parties.
3 Should such reports require board level sign-off and should reported data be made publicly available? Please give your reasons.

In theory it makes good sense for corporate energy performance to be escalated within a company, so that those at senior level are made aware of, and encouraged to be engaged in, energy management decisions. However we would suggest a proportionate approach: there are cases when energy use is too trivial to merit board attention, even in organisations with relatively large turnover. So we would suggest that a pragmatic de minimus is applied; an energy consumption threshold below which it is deemed that energy use is too small for obligatory board level reporting.

This should be a case of keeping policy objectives in mind: if corporate energy use should be a matter of Board attention then that energy use needs to be significant enough to merit it.

While we believe that there should be a clear line of sight on energy use within businesses, any requirement should be clear on who and where that board is (i.e. UK board for an international company headquartered elsewhere). Moreover, there is an important distinction between information for internal corporate use and information disseminated externally. Large corporates are already obliged to publish reporting data externally and we do not believe that further public disclosure from companies is necessary or desirable because of the likelihood of the information being used inappropriately.

4 Do you agree that government should develop a single reporting scheme requiring all ESOS participants (and potentially the public sector (see paragraphs 4.21 - 4.23) to report regularly at board level? If so, what data should be included in such a report?

We interpret this proposal to mean that CRC is removed from the policy landscape and ESOS is augmented to include a regular reporting function. This we would support in principle because measurement and monitoring are essential precursors to good energy management. However we would propose that elements of ESOS that are burdensome but unproductive in terms of achieving policy objective are reviewed. We agree with annual reporting in principle but do not believe that the frequency of auditing needs to increase above once every four years.

In terms of the information that is reported at Board level, the following should be considered:

- Total energy use
- Total energy cost
- Opportunities for energy saving (for instance in the form of abatement curves)
- Actions taken
- Actions planned
- Any Board level intervention needed to realise those savings.

We also think it worth encouraging (whilst not obliging) the inclusion of the following additional information:

- Total energy tax being paid by the company
• Information on compliance costs related to that tax
• Information on exemptions and reliefs on that tax

In case our reasoning seems obscure, we have found that board members are sometimes surprisingly unaware of energy tax liabilities, associated costs, and reliefs either claimed or available, even when these are significant.

The reporting function should be limited to UK Boards for multinational companies. It should be made explicit that no overseas activity is to be included in this ESOS reporting (which would be a change from GHG reporting). Again, we feel that there should be a clear distinction between information reported internally and that reported externally. While we support internal reporting, external reporting should be limited to high level information such as CO₂e emissions. There is no need for a regulatory requirement on external reporting. The application of globally recognised standards such as ISO 50001 can provide an auditable reporting route.

For the purpose of external communication we take the view that it is sufficient for companies to confirm that they are compliant and continue to be subject to random audit. We do not believe that it will add value to provide information publicly because of the tendency for third parties to use this data inappropriately to draw meaningless or misleading comparisons.

Government needs to make it clear that this would represent a change in ESOS objectives from an audit function to a reporting function. ESOS could also be made more forward looking in its implementation (more emphasis on implementation than review). We would also propose that ISO 50001 (BS EN ISO 50001 2011: Energy Management Systems) continues to provide exemption for an expanded scheme.

As mentioned above, an expanded ESOS should also accommodate improvements to the scheme. Many companies complain that Lead Assessors frequently lack sufficient understanding of their sector to be able to conduct the audit satisfactorily. A central register of lead assessors, where each assessor could identify their specialist areas of expertise, would benefit everybody. There are other shortcomings of the existing ESOS arrangements, including significant differences in implementation across the member states, that also need to be addressed.

5 The government recognises the importance of ensuring market actors have access to transparent, reliable and comparable information to support financing and investment in energy efficiency and low carbon measures. How best can a streamlined report achieve this? To what extent does your response apply to other large companies (as defined in the Companies Act) that are not listed companies?

We understand the term “market actors” to mean investor, and possibly procurement, communities.

We take the view that companies already disclose information to market actors through voluntary approaches like the CDP (Carbon Disclosure Project). The CDP moreover is an intelligent enough mechanism to accommodate more qualitative factors such as actions taken and the way risk is managed. CDP is open to anyone so we are not sure that a gap needs to be filled here.
We do not believe that streamlined reporting can provide reliable and comparable information to market actors. Market actors are fully capable of working this out for themselves and do not need help from government. Those who believe that summarised, purely quantitative figures based on simplistic metrics can perform such a function are delusional.

6 Do you agree that moving to a single tax would simplify the tax system for business? Should we abolish the CRC and move towards a new tax based on the CCL? Please give reasons.

Yes. We agree. Moving from multiple taxes to a single tax will simplify things.

Yes, the CRC should be abolished. Because those obliged to handle CRC compliance tend to stay in post longer than those who design and implement such schemes, the former may choose to remind Treasury that the CRC was originally intended to be revenue neutral, in case there has been an issue of institutional amnesia on this point within government. However, if the revenue shortfall from abolishing the CRC scheme has to be made up temporarily, then an expansion of the CCL would seem the obvious choice.

Our reasons for adopting the CCL route are that it would be simple to effect and simple to comply with.

Our reasons for supporting the abolition of the CRC would be difficult to capture adequately in a document of this length and we refer to the 11 policy responses we submitted on this matter during the life of the scheme. In short, however:

- Although originally intended as a cap and trade, revenue neutral, scheme that can encourage reductions to be made at least possible cost, CRC is just an unnecessarily complex tax – a Watt-hour surcharge like CCL.
- It is costly and burdensome for participants to administer and adds a significant non commodity cost to energy prices that makes energy intensive businesses uncompetitive compared to counterparts overseas. Moreover it has been continually tinkered with so participants have had to accommodate repeated changes.
- It fails to accommodate modern business structures, where outsourcing and global operations are now the norm. As a result CRC encourages offshoring of carbon intensive activities and carbon leakage.
- CRC does not differentiate between displacing carbon intensive activities through outsourcing and delivering overall reductions, so it is not possible to measure policy outcomes objectively.
- CRC, as a polluter-pays mechanism, requires operators to set aside money to pay the tax and tie up funding that could be used to make investments in energy efficiency – a frustrating paradox.
- CRC effectively discourages growth because it is based on absolute emissions.
- The CRC is a shamefully poor piece of policy and the sooner it is excised from memory the better.

It is worth observing that, should the CCL increase, then it might be appropriate to expand the percentage discount available to CCA participants so that they do not lose out.
7 How should a single tax be designed to improve its effectiveness in incentivising energy efficiency and carbon reduction?

As we understand it, to incentivise energy efficiency, policy tools must encourage businesses to implement improvements as opposed to paying a tax or penalty. This has the potential to create conflict with revenue balancing objectives because a truly successful environmental tax generates no revenue. It also runs the risk that the tax has to be punitive to be effective. It is therefore a matter for Treasury to decide the direction of travel for such a tax.

Genuine incentives are not cost neutral, so the cost must either be borne by general taxation or by increased costs on other energy users. From our perspective, the most important requirement regarding incentives is stability: companies will not invest in efficiency measures with long payback periods if policy direction is constantly flip-flopping. They need to have confidence that supporting measures will be in place for the long term.

However, several ideas were presented by members and are listed below.

**Sliding scale of relief:** introduce a sliding scale of relief depending on the level of adoption of efficiency measures or on the energy intensity of operation or production. However, to some extent a sliding scale of reliefs already exists for energy intensive sectors through the CCA target and buy-out process. Moreover, there is the risk that in some cases ineffective or inappropriate measures may be adopted simply in order to comply. Not all efficiency measures are applicable in all situations all of the time. It should be noted that most felt that such an approach could add unwelcome complexity.

**Accruing CCL:** Instead of listing CCL as an item on the energy bill, companies could be asked to accrue CCL liability and then pay it at the end of the year in one sum. The objective would be to escalate the visibility of the tax: such an obligation is likely to attract board level attention in proportion to the size of that payment.

8 Should all participants pay the same rates (before any incentives/reliefs are applied) or should the rates vary across different businesses? For example, do you think that smaller consumers and at risk Energy Intensive Industries (EIIs) should pay lower rates?

We believe that it would be simpler for all participants to pay the same rates prior to reliefs. While this means amortising the revenue that would be lost if CRC were abolished across all non domestic energy consumers, the negative effect of an increase of between 25% and 50% on CCL will not be related to the size of company but by the energy intensity of that company. While we understand that different rates might be desirable we do not see how they could be administered simply and fairly.

It will also be important to ensure that reliefs available to energy intensive businesses are not restricted to larger entities, either on grounds of eligibility or because the resource needed to participate in a relief scheme would exceed the benefits for a small company. This will need some thought.
9 Do we currently have the right balance between gas and electricity tax rates? What are the implications of rebalancing the tax rate ratio between electricity and gas? What is the right ratio between gas and electricity rates?

The answer to this question depends on the policy objectives. We can only observe that if government wants to encourage more electricity use so that gas can be directed to power stations, then the tax ratio should reflect this.

10 Do you believe that the CCA scheme (or any new scheme giving a discount on the CCL or on any new tax based on the model of the CCL) eligibility should only focus on industries needing protection from competitive disadvantage? If so, how should government determine which sectors are in need of protection?

We believe that discounts should continue to be sector-specific because the effects of energy taxes vary by sector. Discounts should be focused on industries that are negatively impacted by energy taxes. These should include:

- Those where energy costs represent a high proportion of cost of operations
- Those where there is international competition so higher energy costs would discourage inward investment or lead to offshoring and carbon leakage.
- Those where the sector is an important part of the supply chain for customers vulnerable to overseas competition.
- Those sectors that are of strategic importance to the UK economy

11 Do you believe that the CCA scheme (or new scheme) eligibility should focus only on providing protection to those EIIs exposed to international competition and at risk of carbon leakage? If so, how should the government assess which CCA sectors are at risk of carbon leakage?

We are concerned by the overuse of the term EII. EIIs were originally identified as sectors at risk from the EUETS with respect to their ability to compete with counterparts elsewhere in the world. The list of EIIs therefore excludes energy intensive industries that are not large scope 1 emitters and it also excludes those at risk from competition within Europe. We think that it is unhelpful to use or reference an outdated list that does not reflect sector vulnerabilities.

We believe that industries at risk of overseas competition include those that are themselves energy intensive but also those with vulnerable customers (see above). So price increases for industrial gases used for the steel industry would increase the cost of steel which in turn would make the steel industry uncompetitive. In the technology sector, data centre operators charging high prices for a highly commoditised product cannot attract customers, and their customers in turn struggle to compete.

We take the view that industries that are of strategic importance to the UK economy should be protected. The data centre sector underpins the digital economy and the existence of this sector will also be critical in enabling the delivery of a large number of government policy priorities.
Sector specific comments

Assessing eligibility is tricky and has been particularly problematic for the technology sector. This is probably due to the relatively slow speed of policy development, which has not kept pace with technology development. On the one hand disruptive technologies change business models and markets before policy has time to catch up and in other instances, technological advances render the criteria and conditions set out by policy tools completely inappropriate.

For instance, when assessing tradeability for the data centre sector, vulnerability to overseas competition is measured by the level of imports and this boils down to a comparison of physical products. This criterion is inapplicable to digital data and an attempt to prove the tradeability of data and data services will be deemed to have “failed” because the required criteria have not been met - when in fact the criteria are unfit for purpose and the underlying metrics unsuitable. Similarly the sector is not described by a single SIC code and this too causes problems. We would always be very happy to discuss ways to improve the means of describing and categorising the sector to aid the development of more appropriate criteria.

Our members report that the UK is harder to operate in and presents more barriers to entry than other European markets. Relocation is easy because data is highly mobile and the UK is much easier to exit from than other European markets.

12 Do you believe that the targets set by the current CCA scheme are effective at incentivising energy efficiency? Do you believe that the current CCA scheme is at least as effective, or more effective, at incentivising energy efficiency than if participants paid the full current rates of CCL?

CCAs were originally designed primarily to protect UK businesses from overseas competition and prevent carbon leakage, so the energy efficiency requirement has strengthened over recent years. Nevertheless the CCA, unusually for a policy instrument, successfully fulfils both functions. In addition the data centre CCA is providing invaluable data about energy use within the sector.

Although the CCA targets are not perfect, we have evidence that they are successfully incentivising energy efficiency within the data centre sector. Feedback from the first reporting period shows that there has clearly been a step-change in the level of activity undertaken to improve energy stewardship. This appears to be driven by a combination of the target itself, which provides a financial and reputational incentive, and the tax rebate which improves the business case for investment in energy saving measures by extending the viable payback period.

However, it is not just the targets that are mobilising a response. It can genuinely be said that the CCA reaches the parts of the sector that other policy tools can’t reach. Entry pre-requisites have improved the level of energy monitoring within the sector and the requirement to report regularly has provided us with the opportunity to collate energy use and energy management data at sector level for the very first time. As the administering association we took further advantage of the reporting requirement to include a request for more qualitative information and this provided us with invaluable information on things like the level of adoption of existing industry standards and the reasons why seemingly sensible efficiency measures are not being implemented. The latter has
been instructive in identifying barriers to realising energy savings and addressing these barriers will form an important part of our sector level programme looking ahead.

The ways in which the CCA scheme has incentivised efficiency in the data centre sector include:

- Greater consistency in measuring energy productivity in the sector.
- A stronger business case for investment
- A stimulus for the adoption and development of energy saving technologies
- Greater collaboration, innovation and best practice
- Greater flexibility in addressing sector specific issues.
- Fewer perverse incentives

In addition, the CCA also presents advantages such as

- Greater reach for the policy instrument
- Greater certainty of meeting policy objectives
- Reduced carbon leakage

**How could CCAs be improved? Are there alternative mechanisms that may be more effective?**

**Imperfect targets:** CCAs are inevitably throughput dependent and so the targets are not perfect because a truly fair target is dependent on stable throughput over baseload. In other words failing a target may not be due to poor energy stewardship and indeed this has been borne out by evidence; for instance a number of operators who brought new space online but did not occupy it subsequently had to pay buyout costs, so there is room for improvement. The broader view, however, is that the targets are best available compromise at the current time.

**Better Board Engagement:** Although the CCA scheme does engage senior management we believe that in some cases a company’s participation in the CCA could benefit from board level engagement. We believe that the Board should be aware that the business participates in the scheme and be cognisant of the benefits received under the scheme.

** Longer term targets:** businesses need stability and predictability. Targets need to be set and buyout costs need to be clear. We would like to see longer term targets in place so that the industry can consider its longer term energy management strategy.

**Additional complementary measures to assist with major capex items:** CCAs are excellent at increasing the viable payback period for investments and therefore provide important incentives for speeding up the introduction of new, energy saving technologies. However, the incentive they provide is not enough to tip the balance for many really big ticket items, for instance where the payback is over three years. ECAs (Enhanced Capital Allowances) should help here but could be more effectively deployed (see our comments below in our answer to Q14).

**13 Do you believe that incentives could help drive additional investment in energy efficiency and carbon reduction? Please explain your reasons.**
We believe that incentives are necessary to drive investment. We are new to the CCA scheme but we have found that the scheme provides compelling incentives to improve efficiency through a simultaneous carrot and stick – tough targets while providing companies with the means to invest in efficiency measures.

14 What is the best mechanism to deliver incentives for investment in energy efficiency and carbon reduction (e.g. tax reliefs, supplier obligations, grants, funding based on competitive bidding)? Are different approaches needed for different types of business? If so, which approaches work for which business types? What approaches should be avoided?

**ECA:** In line with our comments above we believe that the Enhanced Capital Allowance (ECA) scheme could be more effective. At the moment the Energy Technologies List and the availability of ECAs are neither well promoted, nor well understood. We hear anecdotally that those with eligible technologies find the process of getting on the list cumbersome and as a result many tried and tested technologies that should be included are not. Moreover, it is often difficult for businesses, particularly those with more complex operational structures, to recognise the relevance of these incentives and to materialise them. We would like to see better use made of this existing tool.

**Electricity Demand Reduction Pilot:** Similarly the current auction system for funding is described by applicants as cumbersome and costly for companies. Different types of business are having to compete for the same technology which some say is unfair. We are therefore not convinced that this approach is closing the funding gap as cost effectively as it could.

**Postscript**

On 6th November 2015, we attended the CCA sector meeting organised by BIS and attended by DECC. At this meeting, findings from a paper on ‘The impacts of the Climate Change Levy on business: evidence from microdata’ were presented. (Ralf Martin, Laure B. de Preux and Ulrich J. Wagner, August 2009). It was suggested that the conclusions from this research indicated that companies affected by the Climate Change Levy reduced their energy consumption more than companies who had Climate Change Agreements in place. The data used for this study was based on publically available information for the period 2000 to 2004 (not sector specific throughput information).

We, like many other organisations, are extremely concerned at the apparent belief that government officials have in the validity of the conclusions from this report and relevance of applying its conclusions to the modern policy landscape.

- **Validity:** The CCL was introduced in April 2001. The CCAs were introduced at the same time for two reasons: firstly to negate some of the impact of introducing a new tax, and secondly to incentivise improvement in energy efficiency and carbon emissions. In April 2001, the two populations examined in this report; the ‘CCL only’ population and the ‘with CCAs’ population will have been impacted very differently. The ‘CCL only’ population saw an increase in their energy bill due to the tax, and the ‘with CCA’ population will have seen a smaller
For the ‘with CCA’ population the value of the CCA and hence CCL discount will have been at its most visible, and have the greatest impact, when the ‘with CCA’ population reported their first milestone performance in early 2003 and the discount was ‘at risk’. The report showed an improvement in the performance of the ‘with CCA’ population between 2003 and 2004. The impact of the first milestone reporting was not explored as part of this report.

- **Relevance**: CCAs are now a very well established mechanism, especially considering their interaction with other policies. The conclusions drawn from the report cannot be valid in today’s environment considering that (1) losing the CCL discount now has a greater financial significance, (2) results are published for CCA companies thus bringing in another driver that was not around between 2001 and 2004, (3) CCA targets are tougher and the cost of ‘buying out’ if the target is missed is greater. In addition, data centres were not even in a CCA during the period examine hence the conclusions cannot automatically be applied.

*We do not believe the conclusions from this report are applicable to the present day. New evidence needs to be created to establish the current effectiveness of CCAs.*

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**Further reading**
CCA for Data Centres: First findings report (November 2014)  
CCA for Data Centres: Target Period One – Report on Findings, November 2015 (attached)

**Explanatory material about data centres**
Data Centres: Engines of Growth  
Data Centres: A Day in YOUR Life  
Er, What IS a Data Centre?  
Other data centre publications including our series “Data Centres for Tiny Tots”

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