Communication:

Heads-Up for UK Data Centre Operators
Climate Change Agreement: Closure to New Participants

March 2018

Climate Change Agreement
A Climate Change Agreement (CCA) is a voluntary scheme with the dual purpose of protecting energy intensive sectors subject to overseas competition and driving improvements in energy efficiency. Participants are eligible for reductions in, or exemption from, some carbon taxes in return for meeting efficiency targets. The scheme is broken down into four target period with a reporting milestone at the end of each period. The CCA scheme has been in place since 2001, its second phase running from 2013 to 2023. The data centre sector CCA started in July 2014 and there are currently over 130 participating sites[i].

Benefits of the CCA
The scheme provides much needed relief from some of the more punitive non-commodity costs currently added to the price of electricity. Participants get a 90% discount on the Climate Change Levy, which reduces their electricity costs by 0.525 pence per KWh. They are also exempt from CRC which saves a further 0.95 pence per KWh. The total saving is just under 1.5 pence per KWh. Across the sector this relief adds up to just ove £21M per year (£12.1M attributable to CCL discount and £8.9M to CRC exemption). It is hard to overstate the value of the CCA; aside from the obvious bottom-line benefit of a reduction on electricity costs, it helps level the playing field for UK operators trying to compete with overseas counterparts, it improves the business case for investment in efficiency measures and releases funding that would previously have been allocated to paying carbon taxes and redirects it at implementing improvements. Critically, it gives a positive signal to investors and operators that the UK government values the sector and recognises the importance of state-of-the-art digital infrastructure.

But the benefits of the CCA are reputational as well as financial: the requirement to measure and report energy consumption in a robust, consistent and auditable way, including the obligation for all sites to implement sub-metering, has set a higher standard for energy monitoring, improving transparency and energy stewardship. The aggregate data has been invaluable in setting the record straight on sector energy consumption and debunking many ill-informed and exaggerated third party claims.

The future of the data centre CCA
Barring dramatic change in policy, the CCL discount that the CCA enables will continue beyond the fourth target period and participants will enjoy CCL discount up until 2023 (CRC will be abolished in 2019 and the resultant increase in CCL will be offset by an increase in the discount, in the case of electricity, from 90% to 93%). However, the scheme closes to new entrants from October 31st 2018 which effectively imposes a June or July deadline for new applications because they can take several months to process. Under current proposals, there will be almost a five year period when new facilities will not have access to the CCL rebate.

We are lobbying Government to reconsider the current approach and asking BEIS to extend the period when new sites can join until 2020. However, there is no guarantee that we will be successful and our initial approaches have met resistance. **We therefore strongly suggest that if you have a site that is eligible[ii] then you should take steps to enrol on the scheme. While established sites need to provide baseline data for energy to the facility and to the IT, new sites can apply without the need to wait.**

Further information
CCA eligibility and how to apply please contact the techUK CCA Helpdesk
Email: techUK@slrconsulting.com Tel: **+44 (0)844 800 1880**

For more information about techUK's data centre programme please contact Emma Fryer, Associate Director, techUK, T: +44 (0) 1609 772 137 M: +44 (0)7595 410 653 e: emma.fryer@techuk.org

Notes and information sources

CCA web pages: https://www.techuk.org/focus/programmes/data-centres/cca

What is a CCA? : https://www.techuk.org/images/Note_01_What_is_a_CCA.pdf

Decision tree: https://www.techuk.org/images/documents/Data_Centres_-_CCA/Note_03a_CCA_Decision_Tree.pdf

CCA: interim report 2014: Data Centre CCA First Findings Report

Report on sector progress against first target https://www.techuk.org/images/CCA_First_Target_Report_final.pdf

Report on progress against second target: https://www.techuk.org/images/CCA_Second_Target_Report_04.pdf

Definition of the eligible facility:

> The business activity is the leasing or licensing of a data facility which is being used as a data centre.
>
> "data facility" means a room, or rooms sharing the same electricity supply circuit, occupied *mainly or exclusively by computer equipment which is enabled to transfer data electronically, and where in respect of the room or rooms—*
>
> *(a) the temperature and humidity is regulated in connection with the operation of the computer equipment;*
>
> *(b) the electricity supply is at least 200kW; and*
>
> *(c) electricity is supplied by a back-up electricity supply when the mains supply is interrupted.*

Sample benefits vs risks under the scheme

The table illustrates the financial benefit for CCA participants on the basis of a site using 10,000MWh during each two year period (this equates to a modest facility). This table does not include any deductions made if an operator misses their targets. These are shown in the second table, underneath.

		2017 and 2018 - CCA Target Period 3				2019 and 2020 - CCA Target Period 4			
Energy use Per Annum and % target PUE reduction	Tonnes CO_2 emitted over 2 year period	CRC avoided 2017 and 2018 if in CRC but not in EUETS	CCL rebate 2017 and 2018	Benefit / 2 year target period 3 If not in CRC and not in EUETS	Benefit / 2 year target period 3 if in CRC but not in EUETS	CRC avoided 2019/2020	CCL rebate 2019/2020	Benefit / 2 year target period 4 If not in CRC and not in EUETS	Benefit / 2 year target period 4 if in CRC but not in EUETS
10,000 MWh	10,410	£187,387	£103,590	£103,590	£290,977	£0	£157,542	£157,542	£157,542

This table (to the right) illustrates the potential penalties that operators could pay for failing to meet their target. Operators can choose to "buy-out" the carbon they need to meet their target and then continue to enjoy the benefits of the scheme. This buy out should be seen as a potential deduction from the totals above (i.e. If an operator meets their target then they receive the full benefit. If they miss their target they have to make up the difference: they do not lose that benefit). Here we present three scenarios where operators with different targets make zero progress in terms of efficiency. Again the figure is based on 10,000MWh energy consumption over the same periods.

How change in energy efficiency affects CCA performance			
Energy use Per Annum and % target PUE reduction	Scenario	Total buy out costs Target Period 3 (end 2018)	Total buy out costs Target Period 4 (end 2020)
Target 10% (10,000 MWh)	Zero improvement	£13,370	£14,588
Target 15% (10,000MWh)	Zero improvement	£20,048	£21,868
Target 20% (10,000MWh)	Zero improvement	£26,726	£29,162

About techUK: techUK is the trade association representing the digital technology sector in the UK. The tech industry is creating jobs and growth across the UK. In 2015 the internet economy contributed 10% of the UK's GDP. 900 companies are members of techUK. Collectively they employ more than 800,000 people, about half of all tech sector jobs in the UK. These companies range from leading FTSE 100 companies to new innovative start-ups. The majority of our members are small and medium sized businesses. www.techuk.org

[i] See our publications reporting on the scheme (first findings, target P1 and Target P2).

[ii] See our decision tree, but broadly speaking to be eligible a facility should provide data centre services to third parties (e.g. colocation or colocation-style), as opposed to supporting corporate IT function (i.e. enterprise, in-house)