Data Centres and Electricity Rates Reform

Position Statement, March 2022

The UK's data centre sector quietly underpins our economy. Our strength as leader and net exporter of digital services depends on state-of-the-art digital infrastructure (data centres and telecommunications networks) that is secure, efficient, reliable and competitive. It also depends, now and in the future, on adequate digital infrastructure capacity. UK Government's policy ambitions for growth and recovery rely on world-class data infrastructure both at national and local level.

Data centres process, manage, store, receive and transmit digital data. By definition a data centre consolidates IT functions into secure, resilient and highly efficient facilities. The UK's commercial sector is one of the largest in the world and houses IT functions for hundreds of thousands of business and government customers, who in turn provide services for hundreds of millions of their own customers, including consumers, all over the world.

Although consolidating digital activity into purpose-built facilities is massively more efficient than traditional operational models with IT housed on office premises in server rooms, data centres are very electro-intensive. Energy costs therefore represent a very significant proportion of turnover. The sector already has a Climate Change Agreement through which electricity and primary energy consumption are reported publicly. However, the discount on CCL (Climate Change Levy) only partially addresses the growing disparity in electricity costs between the UK and competing markets, especially in Europe.

Electricity prices are artificially inflated in the UK by the application of tariffs, levies and other non-commodity charges. High electricity prices are threatening the ability of our data centre operators to compete with their counterparts, are undermining the UK's attractiveness as a place to invest, and are eroding our ability to deliver the digital infrastructure capacity that the UK needs to succeed as a globally important digital economy.

We believe that a combination of long-term and short-term actions are urgently needed: in the first instance to improve the business and operating environment from data centres and in the longer term to address some of the more dysfunctional elements of the UK's broader electricity market.

In the short term, data centres should be formally categorised as Energy Intensive Industries and the EII scheme should be extended to include the sector.

In the long term, more radical reform of how the UK funds renewables is needed to encourage electrification across the wider economy. More importantly, making electricity a more expensive choice by funding renewables via levies disincentivises electrification and fuel switching. In many cases, Government carbon accounting mechanisms also add a carbon penalty to conversion. Removing renewables tariffs and levies from electricity bills would help address the perverse incentives currently blocking electrification and fuel switching, and would also reduce the need for multiple, complex, compensation schemes.

Policymakers should review the current approach, which places the burden of renewables funding on electricity consumers and should align the funding model more closely to other infrastructure projects (HS2 for instance) or allocate ETS revenues like some competing EU markets (e.g. Germany).

Further detail on both proposals is provided below.

Short-term changes to the EII Scheme to support data centre competitiveness

Like several other European countries, the UK has put in place initiatives to ensure that high clean energy levies do not adversely impact the competitiveness of British industry. The Energy Intensive Industries (EII) scheme grants a partial exemption from these charges for certain electricity-intensive industries whose competitiveness depends on affordable electricity prices.

However, this scheme is currently limited to a small subset of traditional manufacturing industries identified within the EU's State Aid Guidelines on Energy & Environment. As a result, it excludes several strategically important electricity-intensive industries, including data centres. This makes the UK a less attractive market for investment in these industries, for whom electricity costs are a major determinant of site selection.

The UK has the flexibility to expand the EII scheme to encompass other sectors in order to ensure the international competitiveness of those industries. Extending the scheme to these electricity intensive industries would significantly improve the UK's attractiveness as a place to invest, enabling billions of investment in infrastructure and creating hundreds of thousands of UK jobs.

In the short-term, to unlock investment in digital infrastructure, **the UK should expand the scope of the EII scheme to encompass data centres** (more specifically, it should include NACE code J63.1.1 - Data processing, hosting and related activities). As outlined above, the longer-term goal should be to completely remove these three levies for *all* consumers. The expansion of the EII represents a good interim step to unlock investment in digital infrastructure in the short-term.

How this would work in practice:

- The scheme is designed and administered by the Department for Business, Energy and Industrial Strategy. The Minister can recommend that the scheme is reviewed and updated.
- The 'Sector Level Test' should be updated to encompass NACE code J63.1.1, given that data centres can clearly satisfy the two criteria (namely that they are both electricity intensive and subject to international competition).
- For the 'Business Level Test' it is essential that this uses actual invoice data on the electricity rates paid by operators, rather than a default assumption for the average electricity rate as has been applied in the past.
- Once the amended scheme is in place, data centres would be entitled to the same reductions in levies as other electricity-intensive UK industries

Lasting reforms to electricity charges to support decarbonisation and competitiveness

It is widely acknowledged by climate policy experts that electrification represents one of the fastest routes to decarbonization. Electrifying road transport (via electric vehicles), heating (via heat pumps) and industry will deliver rapid and cost-effective reductions in carbon emissions.

One of the most effective steps governments can take to encourage electrification is to implement measures that reduce the costs of electricity for consumers. As well as making electrification more affordable, this can bring the added benefit of making industry more competitive, with electricity representing an increasing share of operational costs for UK businesses.

In October 2021, in response to surging wholesale electricity prices across Europe, the European Commission published a toolbox of measures that governments should consider implementing to tackle rising energy prices. In the long-term, this communication identifies continued investment in renewable energy and energy efficiency as the lasting solution to reducing electricity costs, and efforts here should be renewed. The communication identifies one policy measure that many in the climate policy community have been advocating for for several years - namely '**shifting the financing of renewable support schemes away from levies to sources outside the electricity bill**' (section 3.1.2). In the UK context this would encompass the RO, CfD and FIT levies.

Support for clean energy projects in the form of revenue stabilization mechanisms are important to help enable more renewable and carbon-free generation in the UK and should continue. However, the structure by which they are financed (i.e. via electricity levies) increases electricity costs and deters investment from electricity-intensive industries.

Steps to remove these levies and finance renewables via other means are already underway in other European countries. For example, the new coalition government in Germany has announced that it will remove its renewable energy levy (the EEG levy) from consumers' bills and instead will finance renewables through revenues from emissions trading, a policy which has political support from all parties and has been welcomed by climate, consumer and industry groups. This will considerably improve the affordability of electric heating and transport, and improve the competitiveness of industry in Germany.

To support the UK's net-zero goal and simultaneously boost industrial competitiveness, **the UK should also remove clean energy levies for all electricity consumers and instead finance clean energy through auction revenues from the UK Emissions Trading Scheme**

How this would work in practice:

- Delivering this will likely require an amendment to the UK's legislative framework for energy, in particular the Electricity Act (1989), to amend the means by which the contracts currently financed via the RO, CfD and FIT levies are funded.
- After adoption, consumers would no longer pay these three charges, and the contracts would instead be financed via auction revenues from the UK ETS.

Next Steps

The sector is keen to reopen this dialogue with relevant policy makers in BEIS as a matter of urgency. We are of course happy to provide data or more detailed material to facilitate the discussion. In the meantime, further information about the UK data centre sector can be found below.

Further Information

techUK Data Centre Programme Directory of Publications and Resources

2021: Securing Our Digital Future: Construction Challenges and Opportunities.

2020: The UK Data Centre Sector: The Most Important Industry You've Never Heard Of

2021: Data Centres, Animal, Vegetable or Mineral? FAQ for Planners

2018: The Data Economy Report: https://www.digitalrealty.co.uk/data-economy

Contacts

Emma Fryer
Associate Director
Mob: 07595 410 653
emma.fryer@techuk.org

Adam Young
Programme Manager, Environment
Adam.young@techuk.org

Lucas Banach
Programme Assistant
Tel: 020 7331 2006
Lucas.banach@techuk.org

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