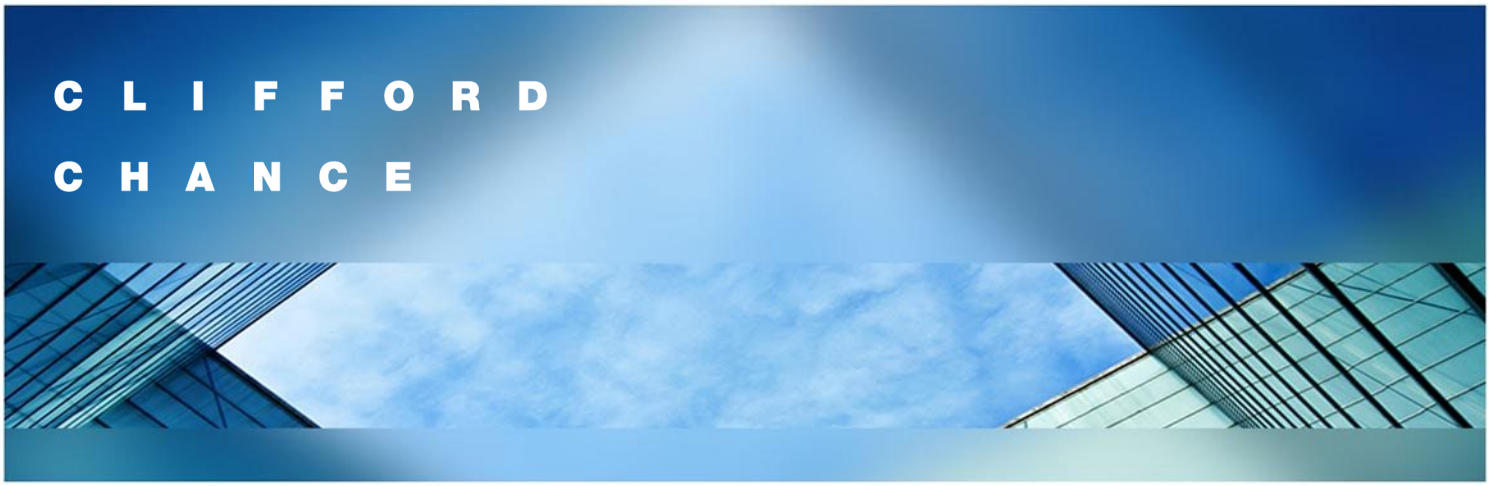

INDUSTRIAL DECARBONISATION STRATEGY: THE PATH TO NET ZERO

The Department for Business, Energy & Industrial Strategy (BEIS) has published its strategy setting out the path to decarbonising industry, aiding the goal of a net zero economy by 2050. This is the first strategy of its kind and sets out a series of actions across the next three decades, which will deeply decarbonise the UK economy, whilst still placing an emphasis on remaining competitive, creating jobs and avoiding pushing emissions abroad (carbon leakage).

Key issues

- The Industrial Decarbonisation Strategy sets out how the industrial sector will play its role in helping the UK to achieve a net zero economy by 2050
- The strategy emphasises the role of the changing investor and consumer attitudes, whilst also proposing measures to transform industrial processes to increase efficiency and encourage innovation
- The government hopes that the proposed path will also play its part in creating skilled 'green' jobs across the country and contribute to the UK's status as a global climate leader

The strategy outlines the timeline of processes that will be needed to successfully decarbonise the UK economy, beginning with setting up necessary policy and framework in the 2020s, followed by deep decarbonisation in the 2030s and 2040s. While many of the actions proposed are not new as they have been articulated in previous consultations and policy statements, the strategy does go into detail about how the industrial sector can remain relevant in a net zero economy, while remaining competitive.

Getting investors to choose low carbon

BEIS supports a move to greater investment in low carbon industry through a market focused approach, with changes to the policy landscape being implemented to allow for this. Key actions include:

- Using carbon pricing as a cost-effective tool, allowing industry to take account of its emissions. The introduction, and further fine-tuning (including in relation to the cap and free allowances), of the UK Emissions Trading Scheme and the Climate Change Levy are key examples of carbon pricing.
- Greater funding to support the deployment of Carbon Capture, Usage and Storage (CCUS) and low carbon hydrogen. CCUS and low carbon hydrogen are in early stages of development, and therefore the government must play an active role in overcoming market failures and sharing the risk and costs of scaling up deployment of both. This support includes a £1 billion Carbon Capture and Storage Infrastructure Fund and £240 million Net Zero Hydrogen Fund.
- Implementing a targeted approach to mitigating carbon leakage.

Other actions will include establishing key policies to encourage fuel switching, helping to create a market for negative emission technologies (e.g. afforestation) and working with stakeholders to understand how an EU Carbon Border Adjustment Mechanism could affect the UK.

Getting consumers to choose low carbon

The introduction of low carbon technologies is likely to mean that low carbon products will be more expensive to manufacture, with these costs likely to be passed (to some extent) to consumers. Therefore, the government will support low carbon manufacturers by implementing policies that aim to increase the demand for low carbon products by improving the availability of low carbon data, developing proposals for voluntary low carbon product labelling/certification and direct public procurement support.

Transforming industrial processes

Further to supporting investors and consumers to choose low carbon options, the government has set out a number of strategies to transform the industrial process itself.

Adopting low-regret technology – in order to align the UK's carbon emissions with the goal of net zero it is necessary to support the adoption of low carbon technologies that will be needed (low regret action), whilst simultaneously avoiding locking in high carbon production methods. This is particularly relevant for the UK's six cluster sites (being places where related industries are co-located) which are the major carbon emitters. Key actions include:

- Supporting the deployment of CCUS onto industrial cluster sites to help capture and store carbon.
- Supporting fuel switching within industrial sites, with a particular focus on the use of hydrogen (especially for high temperature firing), electrification and bioenergy. A further Hydrogen Strategy and Bioenergy Strategy will be published in 2021 and 2022 respectively.
- Working with industrial sites to ensure that any equipment that is required to be purchased before low carbon technology is available, is capable of being retrofitted. The Industrial Energy Transformation Fund (IETF) will support this transition through the provision of grant funding towards fuel switching technologies.

Improving efficiency – currently, barriers to improve efficiency include a lack of awareness and capacity, access to expertise and advice, access to finance, reliable measurement and data and incentives to adopt circular solutions. Key actions to address these barriers include:

- Supporting sites to implement energy management systems such as those laid out by ISO Standards.
- Improving heat recovery and reuse across industrial sites, particularly where high temperature processes are used.
- Helping less energy-intensive, dispersed industrial sites improve energy efficiency through measures including audit programmes, efficiency standards, expert advice and training for SMEs, expanded funding schemes and finance options.
- Supporting a transition towards a circular economy model, with increased reuse, repair and remanufacturing e.g. through launching of a consultation on a waste prevention programme and supporting a new £30 million UKRI Circular Economy Research Programme.
- Developing a communications plan to help make the industry aware of the support that is already available to increase efficiency.

Investing in accelerating innovation – including a Net Zero Innovation Portfolio, which will run from 2021-2025 offering a total of £1 billion. This funding will be dedicated towards key areas of industrial decarbonisation including hydrogen, CCUS, bioenergy and disruptive technologies (e.g. energy management artificial intelligence).

Maximising the UK's potential

The strategy further outlines how the government hopes to decarbonise whilst stimulating the UK's economy, creating jobs and becoming a world leader in the global low carbon market. The intention is that as part of the Build Back Better model following the COVID19 pandemic the strategies outlined will allow the UK to deeply decarbonise and provide new opportunities for economic growth.

Final Comment

The strategy provides an ambitious outline for tackling the equally ambitious task of deep decarbonisation in the UK. The suggested approaches and policies provide many solutions to key problem areas, with a particular emphasis on using CCUS and low carbon hydrogen. Nonetheless, despite touching on many critical areas, a significant amount of detail is omitted, albeit with a plan to provide more in-depth considerations in due course (for example the planned Hydrogen Strategy and Bioenergy Strategy). Furthermore, details on difficult to decarbonise industries (such as steel) remain problematically brief. Additionally, it is key to note that the proposed policies rely heavily on technological and scientific advances that are not yet mature and therefore in order for the essential strategy to succeed, the government's emphasis on innovation must continue unabated.

CONTACTS

Nigel Howorth
Partner, Environment & Planning

T +20 7006 4076
E nigel.howorth@cliffordchance.com

Elizabeth Hardacre
Senior Associate, Environment & Planning

T +20 7006 1356
E elizabeth.hardacre@cliffordchance.com

Michael Coxall
Knowledge Director, Environment & Planning

T +20 7006 4315
E michael.coxall@cliffordchance.com