

DELIVERING NET ZERO

Balancing Security and Sustainability: Does the UK Energy Bill 2022 measure up?

The long-awaited [Energy Security Bill \(the Bill\)](#) was laid before Parliament on 6 July. The Bill is a crucial piece of legislation for the UK's energy transition ambitions and energy security, including powers to support technologies such as low carbon hydrogen, carbon capture and storage (CCS) and nuclear fusion, as well as laying the foundations for structural regulatory reforms to electricity networks and new regulation of heat networks.

Despite the introduction of the Bill being overshadowed by other political events, the Bill is very important as it foretells the significant shifts underway in the UK's energy market. Needless to say it will be subject to significant scrutiny as UK energy market participants and investors assess the implications of the changes proposed.

We set out below an initial overview of the key proposals. More detailed insights on specific aspects of the Bill will be available on our [Infrastructure and Energy](#) webpage in the coming weeks.

Powers to fund CCS networks

The Bill provides a basis for the economic regulatory regime for CO₂ transport and storage (T&S) in the UK. In particular, it appoints Ofgem as the regulator for T&S networks, and empowers the Secretary of State to provide financial assistance to network operators and to designate the body to enter into additional revenue support arrangements which underpin the economic model for the early projects. It also lays the foundation for the wider regulatory framework, including the decommissioning and insolvency regimes applicable to T&S networks. For more information on CCS in the UK, listen to our recent [podcast](#).

Recognition of the role of greenhouse gas removals (GGRs) in the UK

Recognition of negative emissions within the UK's carbon budgets is an essential building block for enabling engineered GGRs in the UK. The Bill proposes to broaden the definition of "UK removals" in the Climate Change Act 2008 to allow for removal methods, beyond just removals through land use, to count towards the UK carbon budgets. Alongside this, a consultation on [business models for GGRs](#) will consider proposals to introduce a contract-based business model for early GGR projects, with a view to providing certainty of revenue for negative emissions projects. As updated, the definition of "UK removals" would be sufficiently wide to capture a range of GGR technologies, including bioenergy with CCS (BECCS). A consultation on the Power BECCS business model is expected later this year.

Financial support for hydrogen and industrial carbon capture (ICC)

The Bill provides the enabling powers underpinning the business models for low carbon hydrogen and ICC, including powers to offer hydrogen and carbon capture "revenue contracts" to projects, to designate a contract counterparty, to organise allocation rounds and to establish a hydrogen levy that is expected to fund the financial support for hydrogen production from 2025. For further information on the business models, please visit our dedicated [webpage](#).

Enabling trials of hydrogen heating

To deliver the UK's plan to trial a hydrogen village by 2025, the Bill amends current legislation to provide the powers required for full gas grid conversion to 100% hydrogen. These amendments include powers of entry for gas distribution network operators to conduct the requisite home alterations (which are to be used only as a last resort), and enabling powers to introduce specific regulations to protect consumers affected by the trial.

New energy market arrangements

The Bill extends the UK energy price cap beyond 2023. Its intention is to ensure protections applying to around 22 million UK household consumers—including many in vulnerable situations—are not prematurely removed. In addition, the Bill introduces a measure to include smaller suppliers in the energy company obligation (ECO) scheme. The government considers this would help achieve a fairer and more equal energy supply market, as well as spread ECO costs across a wider range of domestic consumers.

Another long-anticipated measure, introduced through the draft legislation, establishes an Independent System Operator and Planner (ISOP). Firstly, this new public body would consolidate operation and planning functions across the electricity, gas, and potentially even the hydrogen and carbon capture and storage systems, into a single institution with operational independence from government. The ISOP is obliged to discharge its functions in a way that facilitates the

net zero transition. Secondly, the ISOP will promote security of gas and electricity supplies to UK consumers. The body's third objective will be to promote efficiency and reduced costs for energy consumers, including by way of increased competition and innovation.

Furthermore, UK energy codes contain detailed rules governing electricity and gas systems. They are currently governed and administered by industry-led bodies. The increasingly complex and fragmented nature of these energy codes have become barriers to innovation and competition. New powers, conferred under the Bill, shift responsibility for energy code governance to newly-created code managers, which will be directly accountable to Ofgem. The Competition and Markets Authority will also have expanded powers to assess whether a merger between energy network companies would substantially prejudice Ofgem's price control-setting functions.

Competition in onshore electricity networks

Significant investment in electricity networks will be needed to support the level of electrification which is forecast to be required in order to reach the UK's 2050 net zero target. Following Ofgem's [decision](#) in March 2022, the ISOP is expected to tender certain network projects identified under a new Centralised Strategic Network Plan for delivery by third parties, beyond the existing network owners. The Bill introduces the enabling powers to do so. Further detail is expected when the government publishes its response to the [Consultation on competition in onshore electricity networks](#).

Enabling multi-purpose interconnectors (MPIs)

Given the UK's ambitions for 50GW of offshore wind capacity by 2050, a new approach is needed to offshore electricity networks. As part of a wider review known as the [Offshore Transmission Network Review](#), the government is bringing forward a new definition and licensable activity under the Electricity Act 1989, allowing for the operation of MPIs. MPIs are proposed to be defined as the interconnectors that convey electricity between Great Britain and another country or territory, and between an offshore generation station and a substation, or between two or more substations.

Delivering a smarter electricity system

The Bill amends the Electricity Act 1989 to clarify that electricity storage is a distinct sub-set of generation, delivering a commitment made in the [Smart Systems and Flexibility Plan 2021](#) by providing a legislative basis for different treatment of electricity storage assets, which is already reflected in the licensing regime. It also extends the powers of the Secretary of State under the Energy Act 2008 to modify energy licences and codes for the purposes of smart meter roll-out until 2028, and provides powers to set requirements for energy smart appliances, including electric heating and electric vehicle charge points. These

requirements are needed to ensure that a minimum level of cyber security and interoperability is met and are now subject to a [consultation](#) launched alongside the Bill.

Ensuring fuel resilience

Fuel supply resilience is the ability to protect against, react to, and recover from [disruptions](#). While independent experts [describe](#) the UK's core fuel resilience as "efficient, flexible and effective", risks arising from sudden operational or financial disruptions remain. The Bill updates measures in the Downstream Oil Resilience Bill, which was published in June 2021, now giving the government enhanced oversight and powers to protect supplies from critical fuel infrastructure sites. Such sites comprise all parts of the supply chain, from the point that crude oil arrives at a terminal or refinery, through the refining process, until the point of sale to a final customer. The Bill seeks to achieve this by way of three main powers:

1. *Power of direction*: could require industry participants to take measures to improve fuel resilience (such as by prioritising the production of particular fuels), reduce supply risks, or remedy disruptions to the continuity of fuel supplies;
2. *Information power*: could require industry participants to report incidents that pose potential threats or disruptions to fuel supply continuity; and
3. *Financial assistance power*: could provide financial assistance for the sector to improve resilience or maintain continuity of supply.

Promoting responsible oil and gas investments

The Bill will expand the powers of the North Sea Transitional Authority (NSTA) to identify and prevent undesirable changes of ownership and control, which could undermine investor confidence in the industry, before such changes occur. The government considers that this will help ensure oil and gas, as well as carbon storage infrastructure is operated by companies most able to operate it.

Draft legislation also provides for an expansion of the powers of the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) to make secondary legislation that would ensure that the offshore oil and gas environmental regime remains effective. For example, the government envisions that OPRED could make the following legislative changes:

- Extending the Offshore Petroleum Activities (Conservation of Habitats) Regulations 2001 to cover offshore hydrogen operations.
- Extending the Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Convention) Regulations 1998 to cover offshore gas unloading and storage, CO2 storage, as well as hydrogen production and

storage operations. Further measures may include allowing Oil Pollution Emergency Plans to cover multiple installations or wells, in addition to adjusting fees to reflect OPRED's rates and new regulatory aspects that may be chargeable.

Separately, in line with the "polluter pays principle" under international environmental law, the Bill introduces measures for the government to recover a higher proportion of costs associated with regulating offshore oil and gas decommissioning activities from the industry.

Incentivising nuclear energy infrastructure

The Bill will simplify the nuclear decommissioning and third-party liability regime to align with international standards, which allow nuclear sites to be delicensed earlier than at present in the UK. In particular, the Bill will allow disposal facilities that present very low levels of risk to exit nuclear third-party liability, reducing operational costs.

Similarly, the government recognises that a UK-based geological disposal facility (GDF) would help support the civil nuclear industry. The Bill will clarify the regulatory regimes applicable to such a GDF. Specifically, it will ensure that a GDF located in or under the territorial sea adjacent to the UK will require a licence, and be subject to regulatory oversight, by the Office for Nuclear Regulation (ONR). This will help to offer certainty to parties engaging with the process of finding suitable locations for a GDF.

Regarded by some as an "ultimate clean power solution", fusion power is also accorded prominence in the Bill. Fusion energy facilities are less hazardous than traditional nuclear sites, as they do not require fissile materials. Following this, the Bill would amend existing legislation to exempt fusion energy facilities from nuclear site licensing requirements, which were designed for fission sites. UK fusion facilities will continue to be regulated by the Health and Safety Executive and environmental regulators (rather than by the ONR). Through this Bill, the UK will be the first country in the world to legislate for fusion energy.

Heat networks

Heat networks are highly-efficient and reliable means of providing low-carbon heat. They are distribution systems - comprising insulated pipes - that can deliver heat from

central sources to homes and businesses. These could significantly lower costs of living, while supporting local regeneration efforts. Despite this, sector-specific consumer protections are still lacking. In response, the Bill will give Ofgem powers to monitor, and intervene in, the market. The government will also have powers to introduce heat network zoning as well as price regulations (including price caps). In addition, measures allowing developers to access powers equivalent to other utilities such as electricity and gas (e.g. such as powers to excavate roadways) will help to scale up heat network infrastructure.

Moreover, the Bill introduces a new Low-Carbon Heat Scheme. This scheme will obligate manufacturers of fossil fuel heating appliances to meet incrementally rising standards for low-carbon heat pump sales as a proportion of their total sales of appliances. This will operate through a market mechanism, whereby manufacturers will be able to meet the new standard through either sales of their own heat pumps, or by purchasing credits from other heat pump manufacturers.

Improving the energy performance of buildings

Energy certificates (including energy performance certificates) help to support decisions about improving the energy efficiency of buildings by providing transparency. The Bill will provide the government with a power to amend the assessment, certification, and publication of the energy certificates regime. It replaces a power that was lost following Brexit.

Conclusion

As well as structural changes to the UK electricity market to prepare for significant electrification and changes in the generation mix, policy focus is now firmly shifting to the decarbonisation of industry and heating. The introduction of the Bill represents an important milestone in the development of the regulatory frameworks needed to deliver net zero in the UK. The Bill also includes broad powers for the government to assure sufficient energy supplies. Work now begins to ensure that the Bill is fit for purpose and to ensure its entry into force by early 2023.

Contacts



Hywel Davies
Partner
T +44 (0)20 7090 3102
E hywel.davies@slaughterandmay.com



Kathryn Emmett
Senior Professional Support Lawyer
T +44 (0)20 7090 4640
E kathryn.emmett@slaughterandmay.com



Michael Corbett
Partner
T +44 (0)20 7090 3476
E michael.corbett@slaughterandmay.com



Aaron Wu
Senior Professional Support Lawyer
T +44 (0)20 7090 3328
E aaron.wu@slaughterandmay.com



Azadeh Nassiri
Partner
T +44 (0)20 7090 5294
E azadeh.nassiri@slaughterandmay.com



Richard Todd
Partner
T +44 (0)20 7090 3782
E Richard.toddi@slaughterandmay.com



Oly Moir
Partner
T +44 (0)20 7090 3307
E oliver.moir@slaughterandmay.com