SHEPHERD+ WEDDERBURN

# ENERGY BILL 2022: CCUS AND HYDROGEN

## 1. Introduction

This note provides a brief overview of the Energy Bill 2022[1] as it relates to CCUS and hydrogen.

## 2. Context

2.1 The Government is committed to supporting hydrogen production and CCUS. The BEIS "Energy Security Bill" overview factsheet[2] describes the policy context as follows.

*"• Accelerate the growth of low carbon technologies. We will introduce state of the art business models for carbon capture usage and storage (CCUS) and hydrogen, attracting private investment by providing long-term revenue certainty. Together with the measures on CO2 transport and storage, this will put the country on a path to seize market share and grow the economy.*

*• Enable the set up and scale up of the first of a kind CO2 transport and storage networks. The Bill will establish the economic regulation and licensing framework to ensure successful deployment.*

*• Taking further steps to explore the role for hydrogen to heat our homes and workplaces. We will enable the delivery of a large village hydrogen heating trial by 2025, providing crucial evidence to inform strategic decisions in in 2026 on the role of hydrogen in heat decarbonisation."*

2.2 The Energy Bill is a key part of this.[3]

### Hydrogen initiatives

2.3 Support is aimed at increasing the production of "blue" hydrogen, produced from natural gas with carbon capture and "electrolytic" or "green" hydrogen, using low carbon electricity to split water into hydrogen and oxygen.

2.4 The government has put in place grant funding arrangements for hydrogen projects, under the Net Zero Hydrogen Fund, as well as a revenue support contract, the hydrogen business model. The government also proposes a hydrogen production levy from 2025, to be funded by electricity and/or gas consumers.[4]

2.5 The Energy Bill provides the legislative framework for these steps.

### CCUS initiatives

2.6 The government is also working to promote CCUS.

2.7 $CO_2$ transportation and storage infrastructure, (**T&S**), is critical. It enables transportation and storage of $CO_2$ at scale from industry, power generation, and blue hydrogen production. Key BEIS activity includes developing an economic regulatory and funding framework for CCUS transportation and storage, (**T&S**) based on the electricity and gas networks price control model.

2.8 BEIS' has also developed an Industrial Carbon Capture Contract, targeted at assisting industry with $CO_2$ capture.

2.9 The Bill provides a framework for this, for other financial assistance, along with a wider licensing framework for T&S.

---

1 The note covers the Bill as introduced, on 6 July 2022. Link

2 Energy Security Bill Factsheet Overarching. BEIS July 2022. Link

3 The Energy Bill is available on the Parliament website, which also provides details about the Bill's progress and the Explanatory Notes. Link

4 See Energy Security Bill Factsheet Hydrogen and Industrial Carbon Capture Business Models, BEIS, June 2022. Link

## 3. Licensing of $CO_2$ transport and storage

3.1 The Bill provides for the licensing of $CO_2$ T&S to regulate T&S operators, (**T&SCo**). This is modelled on the electricity and downstream gas regimes. Consistent with this approach, the Bill makes provision for Ofgem to become the regulator.

3.2 The regime will focus on determination of the revenues that a T&SCo licensee can recover and charges.[5] However, it is clear that licences could cover much broader issues, (like electricity and gas network licences).

**Ofgem's and Secretary of State's (SoS) duties (clause 1)**

3.3 Ofgem and the SoS are to carry out their T&S licensing/economic regulation functions with the following objectives:

3.3.1 Protecting current and future users of the networks.

3.3.2 Protect the interests of any consumers who the SoS or Ofgem consider may be affected.

3.3.3 *"promote the efficient and economic development and operation of transport and storage networks, having regard to the need for licence holders to be able to finance their licensable activities"* (clause 1.(1)(c)).

3.4 There is no absolute obligation for Ofgem to secure that licence holders can finance their licensed activities. Rather the approach will be that a "notionally efficient" licence holder can finance its activities. This is the longstanding approach for energy network price controls.

**Licensing (clauses 2-19)**

3.5 Clause 2 provides that it is a criminal offence to operate a site for disposal of $CO_2$ by way of geological storage and provide a transportation service by pipes without a licence.

3.6 The SoS has a power to broaden the scope of the requirement to hold a licence beyond pipeline transport. This is a potentially significant power as it could enable the SoS to extend the regulatory regime to e.g. shipping of $CO_2$.

3.7 The SoS may provide exemptions from the requirement to hold a licence.

3.8 Ofgem has the power to grant a licence. The SoS and Ofgem, with the SoS' approval may make regulations about how licences are to be applied for, and the Bill makes provision about the grant of licences. There is provision to allow for competitive tenders for licences. Given the issues that have arisen from the lax approach to issuing energy supply licences, the basis on which licences are issued may be a real focus.

3.9 Ofgem has considerable flexibility as to what a licence may include, (clause 11).[6] The SoS may determine standard conditions.

3.10 Ofgem can modify licence conditions. They have a broad and flexible power to do so, and this could materially expand the scope of regulation. It may also terminate licences. Licences can be transferred.

3.11 Clause 16 and schedule 1 contains provisions which allow the SoS to grant licences for a period to be defined. This reflects government policy that initial T&S licences will be granted by the SoS.

**Appeal against licence modifications to the Competition and Markets Authority, (CMA) (clauses 20-25 and schedule 2)**

3.12 Clause 20 provides for a right of appeal against licence modifications. The provisions are modelled on the downstream gas and electricity licence appeals regimes. This is a well understood regime. There have been a number of appeals under this regime.

---

5 See also BEIS' July 2022 Energy Security Bill Factsheet Carbon Dioxide Transport and Storage Regulatory Investment Model. Link

6 The scope of analogous legislative provisions under the Electricity Act 1989 and the Gas Act 1986 were explored in the 2021 RIIO-2 licence appeals at the Competition and Markets Authority.

3.13 Appeals can be brought by transport and storage licence holders and network users. The most likely area for appeals will be about the price controls for the T&SCos. The focus of appeals to date in electricity and downstream gas have been on price controls.

3.14 T&SCos are most likely to appeal if they consider that Ofgem has not allowed them sufficient funds to conduct their businesses, or allowed a sufficient return to their investors.

3.15 The right for users to appeal is most likely to be exercised when users consider that Ofgem has been "too generous" to T&SCos. In the gas and electricity context, there has been one such appeal, *British Gas Trading* in 2015. In that appeal British Gas argued, (mainly without succeeding), that Ofgem had been too generous in various ways to electricity distribution network operators.

3.16 The CMA can only allow an appeal where it is satisfied that the decision was "wrong". Whilst this allows for greater scrutiny of decisions than judicial review, it is clear that this is a high bar, and that challenging Ofgem decisions can be difficult. Nevertheless, successful challenge is possible, as is seen by the successes of various appellants in the 2021 energy licence modification appeals.

3.17 The Bill provides for the process to be followed by the CMA, and, strict deadlines for determination. The result, in our experience of these appeals, is that the appeals process involves very intense periods of activity to meet the deadlines. Schedule 2 of the Bill provides more detail about the procedure.

**Enforcement by the regulator (clause 32)**

3.18 The Bill permits the SoS to make regulations about enforcement. The intention appears to be to adopt a regime similar to the electricity regime, with e.g. Ofgem having the ability to require licence holders to comply with licences, and fine licence holders.

3.19 Ofgem is a very active regulator when it comes to using enforcement powers, and has levied significant fines in the past. In 2020 it imposed fines of almost £27 million.

**Competition law (clauses 36 to 38)**

3.20 Ofgem will be able to exercise a concurrent jurisdiction with the CMA under the Competition Act 1998. Competition law breaches can lead to significant powers. The Competition Act powers act as a "backstop", enabling Ofgem to carry out enforcement action against conduct that is not expressly prohibited by licences but none the less has an adverse effect on competition.

3.21 Against this enforcement background, T&SCo boards will need to ensure there are robust processes in place to ensure compliance. Such processes will need to go well beyond assessment of compliance with the T&S licence.

**Insolvency (clauses 42 to 45)**

3.22 The Bill provides for a "special administration regime" for T&SCos. The objective of this regime is to ensure that insolvency does not lead to the shutdown of the T&S network. The Bill also provides for the SoS to step in to the operation of a T&S network.

## 4. Revenue support contracts

4.1 The Bill makes provision for "revenue support contracts". These are as follows:

4.1.1 The T&S revenue support contract, between a T&SCo licence holder and a "transport and storage counterparty";

4.1.2 The hydrogen production revenue support contract which is between a hydrogen production counterparty and a low carbon hydrogen producer. The Hydrogen Business Model is the current proposed contract in this regard; and

4.1.3 The carbon capture revenue support contract between a carbon capture counterparty and an eligible carbon capture entity. Development of the CCUS contracts, including the Industrial Carbon Capture Contract is already well underway.

**Detail to be set out in regulations**

4.2 The SoS has very broad powers to legislate about revenue support contracts, by secondary legislation, known as "revenue support regulations", (clause 57). This means the SoS has considerable flexibility to develop and amend the regime.

**Revenue support counterparty**

4.3 Revenue support contracts are with the "revenue support counterparty". This is a body akin to the Low Carbon Contracts Company for electricity. Detail about the party and its duties are to be specified in regulations.

4.4 The SoS has the power to designate a revenue support counterparty for each of the contracts, as well as a power to direct the counterparty to enter into the revenue support contracts, and direct the terms of the contracts.

**Insolvency risk and the revenue support counterparty**

4.5 It is critical to investors that the revenue support counterparty is able to pay sums due under the relevant agreements. Funders will scrutinise the credit risk inherent in any arrangements.

4.6 This is addressed, to an extent, in the Bill, but the detailed arrangements will follow. Some points to note are as follows:

4.6.1 The counterparty will have a general duty: *"A revenue support counterparty must exercise the functions conferred by or by virtue of this Chapter so as to ensure that it can meet its liabilities under any revenue support contract to which it is a party."* (clause 58(4)).

4.6.2 Provisions enable the SoS to restructure arrangements, with the transfer of liabilities etc to new revenue support counterparties.

4.6.3 The hydrogen levy arrangements (on which see below) will also address these issues in part. Revenue support regulations may make provision for provision of collateral by energy suppliers and gas shippers who pay the hydrogen production levy and for the hydrogen levy administrator to hold sums in reserve. It is likely that these arrangements will draw on the arrangements applicable to the renewable contract for difference regime.

4.6.4 Revenue support regulations may make provision for how sums are apportioned if the revenue support counterparty for hydrogen has a shortfall.

**Eligibility for hydrogen and carbon capture revenue support contracts**

4.7 The regulations must make provision about eligibility for the contracts. Presumably, this will be linked to the Low Carbon Hydrogen Standard for hydrogen contracts, and factors such as capture rates for carbon capture projects.

**Competitive allocation of contracts**

4.8 The first carbon capture and hydrogen support contracts will be allocated by the SoS. However, the plan is to move to a competitive model, akin to the renewable CfD model as soon as practicable.

4.9 An allocation body can be appointed to carry out functions, (presumably akin to the role NGESO carries out for the renewable CfD). The SoS can designate standard terms, (clause 69). Various provisions allow the SoS to make regulations to put in place a system for allocation, including an allocation framework.

## 5. Hydrogen levy (clauses 65 to 67)

5.1 The Bill sets out a scheme under which, ultimately, gas or electricity consumers will be required to pay a levy to support low carbon hydrogen production.

5.2 Payments will be made by electricity or gas suppliers or gas shippers to the "hydrogen levy administrator".

5.3 BEIS do not appear to be able to quantify the impact of the levy at present. They say:[7]

[7] Energy Security Bill: Hydrogen and Industrial Carbon Capture Business Models Factsheet, page 5.

*"The levy is not expected to be implemented until 2025 (subject to legislation being in place) and so we do not expect it to have impacts on consumer bills before then. Once introduced, we expect its impacts will ramp up as we look to deliver our 2030 hydrogen ambitions to improve energy security. As policy development on the levy is ongoing, with a number of key decisions still pending,* ***there is uncertainty regarding the precise impact of the levy on consumer bills****."*

5.4 Given the focus on energy bills this is likely to be controversial. Investors will also need to consider the risks in this arrangement, in particular given the number of energy supplier insolvencies over the last three years.

## 6. Decommissioning of carbon capture installations (clauses 82-83)

6.1 The bill will enable the SoS to make regulations about the financing of, and provision of security in relation to, decommissioning and legacy costs that arise in relation to carbon storage installations. The regulations may require the provision of decommissioning security, by way of a fund, held under specified arrangements, and for payments into the fund.

## 7. The relationship between Ofgem and the SoS (clauses 88-91)

7.1 Whilst the intention is that Ofgem will act independently of the SoS, on a day to day basis the Bill makes clear that policy direction for CCUS will continue to be directed by Government.

7.2 The SoS' policy will be set out in a *"a strategy and policy statement for CCUS".* This could cover: strategic priorities for policy; outcomes to be achieved; and roles and responsibilities of those implementing that policy.

7.3 Ofgem will have to act consistently with the statement.

## 8. Access to infrastructure (clause 96)

8.1 The SoS will be able to make provision about access to T&S systems by third parties. T&S networks are monopolies and it is essential that this clearly regulated. The current regulatory framework is out of date and it is sensible that this is reviewed.

## 9. Financial assistance for T&S, carbon capture and hydrogen (clause 97)

9.1 The SoS will be able to provide support to T&S, carbon capture facilities, low carbon hydrogen production and hydrogen transport and storage, out of money provided by Parliament. This provision enables grants etc. to be provided.

## 10. Hydrogen village trials (clauses 108 to 109)

10.1 One of the most critical decisions to be taken about net zero is whether to switch from natural gas to hydrogen for domestic heating. The Bill makes provision to allow gas distributors to undertake trials. The powers are focussed on widening powers of entry to consumers' premises and consumer protection.

10.2 The trials are to be conducted in order to help ensure that any decision to switch from gas to hydrogen, (planned for 2026) is informed by a neighbourhood trial in 2023 in Fife and a large village trial in 2025.[8]

## 11. Change of control (clauses 92-95)

11.1 The North Sea Transition Authority, (**NSTA**)[9] will have increased powers to:

*"prevent undesirable changes of ownership and control of petroleum and carbon storage Licensees before they happen".*[10]

---

[8] For background see BEIS : Energy Security Bill Factsheet Enabling the Hydrogen Village Trial, July 2022. Link

[9] Formerly the Oil and Gas Authority, (**OGA**).

[10] Energy Security Bill Factsheet OGA Change of Control Powers Prior to a Change of Control Event, BEIS, June 2022. Link

11.2 This will be backed up with a licence revocation power.

11.3 There is no doubt that transactions in respect of UK oil, gas and CCUS assets will attract BEIS attention in particular under the National Security and Investment Act 2021 regime.

## 12. Regulation of decommissioning (clauses 82-83)

12.1 The Bill also puts in place a framework to enable BEIS[11] to put in place a charging scheme to recover the costs of regulation of offshore oil and gas decommissioning.

**Shepherd and Wedderburn LLP**

**12 July 2022**

[11] Energy Security Bill Factsheet Offshore Oil and Gas Decommissioning Cost Recovery, BEIS, July 2022. Link