Department for Energy Security & Net Zero

Exemptions from the requirement to hold a Carbon Dioxide Transport and Storage Licence

Call for Evidence

Closing date: 11 October 2023

August 2023

Any enquiries regarding this publication should be sent to us at:
ccustandsconsultations@energysecurity.gov.uk

Introduction

Carbon Capture, Usage and Storage (CCUS) is the process of capturing carbon dioxide and permanently storing it, deep underground, where it cannot enter the atmosphere. Carbon dioxide (CO_2) transport and storage networks will act as the enabling infrastructure for carbon capture and storage from a range of sources, including power plants, industrial facilities, low carbon hydrogen production and potentially direct air capture.

The Energy Bill which was first introduced in the House of Lords in 2022 ("the Bill") establishes a framework of economic licensing and regulation for the transport and storage of CO_2, following consultation on commercial models to pull through the investment needed to deploy CCUS at scale. This economic licensing framework will help overcome market barriers to private investment in establishing and scaling-up first-of-a-kind carbon dioxide transport and storage infrastructure by providing long-term revenue certainty. Independent regulatory oversight is designed to protect network users from anti-competitive behaviour including monopolistic pricing. The Bill establishes Ofgem as the regulator of carbon dioxide transport and storage, and Clause 1 of the Bill sets out the general duties and principal objectives of the Secretary of State and the economic regulator in carrying out their respective functions.

Making an activity licensable makes the carrying out of that activity unlawful, unless done in pursuance of (and in accordance with) a licence. Licensing of activities enables regulatory oversight and monitoring. The Energy Bill establishes a prohibition on providing a service of transporting carbon dioxide by pipeline and operating a geological storage site without an economic licence under Part 1, Clause 2 of the Bill. As carbon dioxide pipelines and storage site infrastructure are likely to be operated as regional monopolies, a framework of economic licensing and regulation is designed to prevent anti-competitive behaviours. Regulation by Ofgem will ensure that user charges reflect economic and efficient costs and a reasonable return on capital investment. A licence will also impose certain obligations on the network operator in the conduct of its activities. This regulatory model is based on a range of precedents, including economically regulated utilities.

To ensure that the prohibition applied to operating a CO_2 transport and storage network without a licence doesn't impact activities which it is not considered necessary or appropriate to economically regulate, Part 1, Clause 5 of the Bill allows the Secretary of State to make regulations to grant exemptions from this prohibition. The proposed regulations will set out such exemptions which will be available generally or to such extent as specified, or available to certain persons or classes of activity. It is also important to note that under Part 1, Clause 6 provides for the Secretary of State – by way of regulations - to be able to vary, withdraw or revoke exemptions from the licensing requirements which have been granted under the provisions in Clause 5. As market circumstances change, it is conceivable that certain activities, or categories or classes of activity, which are appropriately exempt from economic regulation in the early years of CCUS deployment, may, as the sector matures, be considered more appropriate for licensing and regulation and so be brought within scope of the licensing requirements of Clause 2.

This call for evidence supports the policy development of a CO_2 Transport and Storage Licence Exemption regime to ensure it is fit for purpose in this emerging landscape and protects user and consumers' interests, while also promoting the efficient and economic development and operation of transport and storage networks.

It will be used to help the Government to gain a fuller and better picture of how an exemptions regime may operate, with a view to understanding how it will interact with changes and developments in the CCUS market. The evidence obtained by this exercise is expected to inform proposals for an exemptions regime.

We are therefore launching a call for evidence, with the aim of establishing an effective exemptions regime whilst enabling the respective duties of the Secretary of State and the economic regulator under the Energy Bill to be met. Once concluded, the Department will collate and analyse returns with a view to developing proposals for an exemptions regime on which we will consult.

Contents

Introduction 3
General information 6
Why we are issuing a Call for Evidence 6
Call for Evidence details 6
How to respond 7
Confidentiality and data protection 7
Quality assurance 7
Background 8
Licensable activities 8
Non-pipeline methods of transport: 9
The proposal 10
Class Exemptions 10
Named Exemptions 13
Future Individual Exemptions 13
Call for Evidence Questions 15
Next steps 16

General information

Why we are issuing a Call for Evidence

As part of the policy development of an exemptions regime, we are issuing a call for evidence to increase the Department's understanding of the way in which an exempt sector may operate, with a view to consulting on a more developed exemptions regime to be established in secondary legislation, subject to Parliamentary approval of the relevant powers in the Energy Bill 2022.

Call for Evidence details

Issued: 16 August 2023

Respond by: 11 October 2023

Enquiries to:

Carbon Capture, Usage and Storage: Transport and Storage Legislation Team
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1 Victoria Street
London
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Call for Evidence reference: Exemptions to hold a Transport and Storage Licence CfE

Audiences:

Those with an interest in the exemptions regime, including:

- Those who may benefit from an exemption from the requirement for a CO_2 Transport and Storage economic licence.
- Any other stakeholders, including (but not limited to) those who are developing proposals for CO_2 transport and storage networks; those who intend to seek to use transport and storage networks; relevant consumers; and trade bodies.

Territorial extent:

England, Wales, Northern Ireland and Scotland.

How to respond

Respond online at: beisgovuk.citizenspace.com/clean-growth/exemptions-for-co2-transport-storage-licence-cfe

Confidentiality and data protection

Information you provide in response to this call for evidence, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018, and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential please tell us, but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable data protection laws. See our privacy policy.

We will summarise all responses and publish this summary on GOV.UK. The summary will include a list of names or organisations that responded, but not people's personal names, addresses or other contact details.

Quality assurance

This call for evidence has been carried out in accordance with the government's call for evidence principles.

If you have any complaints about the way this call for evidence has been conducted, please email: bru@energysecurity.gov.uk.

Background

Carbon dioxide (CO_2) transport and storage (T&S) networks are essential for the development of a CCUS sector. Government is building on the UK's global reputation for regulatory stability and transparency by establishing independent economic regulation for T&S networks. The T&S Regulatory Investment (TRI) Model is being developed with three key objectives: to attract investment in the T&S network to establish a new CCUS sector; enable low-cost decarbonisation in multiple sectors; and develop a market for carbon capture.

CO_2 pipelines and storage site infrastructure currently have monopolistic characteristics, and are expected to encompass a range of different network users and emitters, operating under different commercial models. A framework of economic licensing and regulation is designed to prevent anti-competitive behaviours and provide protections to users of the networks; the majority of users, for initial deployment and for the foreseeable future, will be funded by the public purse or through consumer levies. The licence will grant a carbon dioxide transport and storage company (T&SCo) the right to charge users in exchange for delivering and operating the transport and storage network. The Department recently published an update to our proposals for the TRI model, including the economic licence[1].

Subject to Royal Assent of the Energy Bill, Ofgem will be the economic regulator for CO_2 transport and storage, with powers to grant and enforce licences, although the first licences will be granted by the Secretary of State during an interim period. This interim period will end on a date set by the Secretary of State in regulations. The first licences are expected to be granted by the Secretary of State through the UK Government's CCUS Cluster Sequencing Process.

Licensable activities

Activities for which a licence is required are set out in Part 1, Clause 2 of the Energy Bill as:

a. operating a site for the disposal of carbon dioxide by way of geological storage; AND/OR
b. providing a service of transporting carbon dioxide by a licensable means of transportation.

Licensable means of transportation is defined to mean:

a. a pipe or system of pipes OR
b. any other means of transportation that may be specified by regulations made by the Secretary of State

AND it is used (with or without other means of transportation) for transporting CO_2 all or part of the way to a site for the geological storage of CO_2.

[1] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1164735/ccus-ts-business-model-update.pdf

Non-pipeline methods of transport:

Subclause 3(b) of Part 1, Clause 2 of the Bill enables other methods of transportation of carbon dioxide to become licensable activities should that be considered appropriate as the carbon capture and storage market evolves.

Non-pipeline methods of transportation - shipping, road, or rail – are expected to form part of the wider carbon dioxide transport and storage networks and are particularly important for ‘dispersed sites’ where there are emitters who wish to have their carbon dioxide captured and transported for permanent storage but who are not suitably located to join a transport and storage network by pipeline.

While non-pipeline methods will have an important role in the development of carbon capture and storage networks, Government considers there is currently insufficient evidence to justify economically regulating non-pipeline methods of carbon dioxide transport.

Non-pipeline transport does not share the same monopolistic characteristics of pipeline transportation and the potentially lower costs of entry for non-pipeline transportation and ability for multiple assets running in parallel suggests competitive regional markets may emerge.

However, should competitive markets not emerge as anticipated, this may be a rationale for future regulatory intervention, and it is important that the Secretary of State is able to act swiftly to bring activities within scope of the licensing framework, for example to respond to any concerns about anti-competitive behaviours in the sector which may arise. This is particularly important given the financial support provided by the Exchequer to support carbon capture facilities, and to ensure appropriate and effective protections can be put in place for users of the network.

The proposal

Presently, Part 1, Clause 5 of the Energy Bill provides for the Secretary of State, by regulations, to grant exemptions from the requirement to hold a carbon dioxide transport and storage licence. This provision is important to ensure that the prohibition established by Part 1, Clause 2 of the Bill operates effectively and as intended, and does not, for example, impact or inhibit activities which are not considered either technically or economically necessary nor appropriate to regulate. Exemptions can be granted indefinitely or for a specific period of time.

There is a risk that the barriers to entry of the T&S market would be too high, deterring firms from entering. The Department's aim is to encourage investment into the emerging CCUS T&S network; exemptions allow easier market entry, encouraging investment. At the same time, exemptions should not deprive network users and consumers of the protections afforded to them by the regulatory regime, nor should they provide firms with a competitive advantage against licensed network operators.

The exemptions in this regulation will allow operators' entry into the market while still providing the security required for larger firms to invest into the network. Without these exemptions there is a risk of harm to investment. The purpose of providing for exemptions from the requirement to hold an economic licence is to reduce the regulatory burden for those persons for whom holding a licence would be excessive, or onerous. Part 1, Clause 2 of the Bill sets out that exemptions may be granted subject to conditions. Such conditions could, for example, provide for regulatory approval of any charging schemes associated with the activity.

We recognise the nascency of the sector and intend to continue to review the policy framework we have set out, working collaboratively with the sector as it matures. The Department is committed to ensuring policies enable the regulatory regime to operate effectively. The Department's priority is ensuring the regime operates effectively at the outset, and responses received to this call for evidence will help inform this, as well as the continued development of the policy framework for the sector.

The Department is currently considering three categories of exemptions: class exemptions, named exemptions and future individual exemptions.

Class Exemptions

A class exemption would provide an exemption from the requirement to hold a licence to anyone falling within specified classes. Two possible class exemptions are set out below that might be required at the outset of the regulatory regime, to ensure it operates effectively; these are potential exemptions for spur pipelines of a specified type connecting emitters to a licensed CO_2 T&S network, and for research and development activities.

Exemptions for spur pipelines of a specified type connecting emitters to a licenced CO_2 T&S network:

The CO_2 transport and storage business model adopts a Regulated Asset Base (RAB) model approach, a tried and tested model for funding infrastructure. A regulated asset model is structured to incentivise private investment in network infrastructure which requires significant upfront capital expenditure, a significant construction period and a long asset life. It does this by providing a regulated return on investment for developers and other investors.

In the economic regulation model for CO_2 transport and storage, operators of CO_2 transport and storage networks will be required to hold a licence in order to operate and charge for the use of CO_2 transport and storage networks. This model for delivering CO_2 transport and storage was identified as the preferred option following the Government's 2019 consultation on 'Business models for carbon capture, usage and storage'[2]. Along with targeted Government support, this model provides investors with long-term revenue certainty needed to establish and scale-up first-of-a-kind networks in the UK. Given the natural monopolistic characteristics of the pipeline and storage networks, oversight by an independent economic regulator will ensure user charges reflect economic and efficient costs and a reasonable return on capital investment.

CO_2 transport and storage networks comprise onshore pipelines, offshore pipelines, and an associated geological storage site (such as in depleted oil and gas reservoirs or saline aquifers). Pipelines connecting the delivery point (from where the captured carbon dioxide is transported and stored), to another part of the network, or the store, will be the T&SCo's responsibility and will likely form part of their Regulated Asset Base (RAB), and therefore will be subject to a licence following commencement of the relevant powers in the Energy Bill upon Royal Assent.

However, there may be circumstances where there are sections of pipeline connecting to the licensed transport network, but which are not owned and operated by the T&SCo, which could fall within the definitions of licensable activities under Clause 2 of the Bill. For example, spur pipelines connecting point sources of CO_2 (emitters, or other relevant facilities in the case of Direct Air Capture of CO_2) to a delivery point in the licenced network. Therefore, one class exemption could be for spur pipelines of a specified type connecting emitters to the network. This proposed exemption would exempt a person from the requirement to hold a licence when conveying CO_2 by pipelines of a specified type (perhaps not exceeding a specified length) for delivery onto a transport and storage network operated by a licensed T&SCo. Without the exemption, the person owning and operating that section of the pipeline (which may be an emitter facility itself) would be required to hold a licence. The requirement to hold a licence could be unduly onerous in respect of such connecting pipelines.

[2] https://www.gov.uk/government/consultations/carbon-capture-usage-and-storage-ccus-business-models#full-publication-update-history

1. **Do you think there should be a class exemption for spur pipelines of a specified type connecting emitters to the network? If so, what should be the specified characteristics? This can include length and/or diameter of such pipelines, or alternatively this could be defined in terms of the purpose of the pipeline.**

Research and Development (R&D)

The UK is ideally positioned to lead the global development of CCUS technology and infrastructure. The UK has the industrial ecosystems and wider investment landscape to enable innovation, development, and growth across the fast-developing CCUS economy. The Department is committed to fostering growth within the sector and further R&D.

R&D activities will be caught under the licensing regime if they involve operating a site for the disposal of carbon dioxide by way of geological storage, despite not providing a service of transporting carbon dioxide by a licensable means of transportation.

An exemption in this category would allow entities to undertake R&D activities that do not involve charges to other parties. Activities under this exemption may include testing infrastructure and pipelines that inject small amounts of CO_2 into the geological storage site. The Department recognises that the CCUS R&D sector will likely develop beyond the cluster sequencing programme.

2. **The Department is keen to understand whether there are any R&D activities/projects that are being considered by the sector that could fall within the definitions of licensable activity within the primary legislation. Please provide a comprehensive outline of the types of activities, for the purpose of R&D, that may require an exemption.**

As set out above, the Department has identified these two potential class exemptions which may be required at the outset of the regulatory regime to ensure it operates effectively. We would also welcome views from across the sector on other class exemptions which may be appropriate, where it may not be technically or economically necessary to licence activities otherwise in scope of the licensing requirements.

3. **Are there any other class exemptions you deem suitable and necessary to support CCUS? Please provide reasoning and evidence. This should include evidence of economic considerations where relevant and implications of the class exemption not being in place.**

Named Exemptions

Named exemptions would apply for specified persons named in the regulations. The call for evidence process may identify specific existing CCUS-related arrangements which are considered to be appropriate to make them licence exempt, and these would be named in the regulations. This is taken from precedent in the gas and electricity sector where they will name specific operators to exempt from a licensing regime (one such example is in the 'The Gas (Exemptions) Order 2011, Part 2, 10). These will be identified via this call for evidence and/or engagement with the sector.

These should be distinguished from class exemptions which would apply to future, unspecified projects, provided they meet the required definitions that are established in regulations for class exemptions.

We would note that even if a very small T&S network (or just the pipeline) is licence exempt, it could still be subject to a requirement to offer third party access. Licence exemptions may also be subject to compliance with certain directions or conditions. This call for evidence therefore seeks responses from existing projects that may be caught by the licensing regime once the Energy Bill receives Royal Assent, and where such projects consider that there are reasons why requiring the project to obtain a licence would impose an unnecessary and onerous burden on the project.

4. **Would the sector like the Department to consider any specific named exemptions? Please provide reasoning and evidence for any proposed named exemptions, including the implications of not being granted an exemption.**

5. **For any named exemptions the Department would need to consider the evidence in support of an exemption as well as any impacts the exemption may have on the sector more broadly. This would inform both the appropriateness of granting an exemption as well as any conditions which it may be appropriate to attach to an exemption. Please let us know if you have views on this.**

Future Individual Exemptions

As requirements for named exemptions may also be identified in the future as the CCUS market develops, the Department proposes that the Secretary of State could consider applications for future individual, named, exemptions on a case-by-case basis, which would (if the application is successful) be granted by way of an order. Under Part 1, Clause 5(5) of the Bill, the notice of an exemption to be granted should be served on the person and published in such a manner as the Secretary of State considers appropriate for bringing it to the attention of those likely to be affected. The Secretary of State is obliged to consider any representations made in respect of such proposed exemptions.

The Department would set and agree information required within an application for an individual exemption. This is likely to include applicants being broadly asked to outline:

i. Why they believe it is not appropriate to transport and/or store CO_2 under the normal licensing regime.
ii. Why the Secretary of State should exempt the network from licensing requirements.

Any application will need to demonstrate that the exemption does not pose a threat to the interests of users and why it would be disproportionate for the applicant to meet the costs and obligations of a licence. Again, exemptions may be granted subject to certain conditions and exempt operators may still be subject to certain requirements, for example relating to third party access.

6. **Would you see benefit in an application system for future individual exemptions granted by way of an order? What are the implications if no exemptions are granted?**

As with named exemptions, for future individual exemptions the Department would need to consider the evidence in support of an exemption as well as any impacts the exemption may have on the sector more broadly. Any views shared in response to question 5 will help inform our approach to this.

7. **Are there any other exemptions that are not captured within the three categories (class, named, and future individual exemptions) that you deem necessary to be considered by the Department? Please provide reasoning and evidence. This should include evidence of economic considerations where relevant.**

Call for Evidence Questions

1. Do you think there should be a class exemption for spur pipelines of a specified type connecting emitters to the network? If so, what should be the specified characteristics? This can include length and/or diameter of such pipelines, or alternatively this could be defined in terms of the purpose of the pipeline.

2. The Department is keen to understand whether there are any R&D activities/projects that are being considered by the sector that could fall within the definitions of licensable activity within the primary legislation. Please provide a comprehensive outline of the types of activities, for the purpose of R&D, that may require an exemption.

3. Are there any other class exemptions you deem suitable and necessary to support CCUS? Please provide reasoning and evidence. This should include evidence of economic considerations where relevant and implications of the class exemption not being in place.

4. Would the sector like the Department to consider any specific named exemptions? Please provide reasoning and evidence for any proposed named exemptions, including the implications of not being granted an exemption.

5. For any named exemptions the Department would need to consider the evidence in support of an exemption as well as any impacts the exemption may have on the sector more broadly. This would inform both the appropriateness of granting an exemption as well as any conditions which it may be appropriate to attach to an exemption. Please let us know if you have views on this.

6. Would you see benefit in an application system for future individual exemptions granted by way of an order? What are the implications if no exemptions are granted?

7. Are there any other exemptions that are not captured within the three categories (class, named, and future individual exemptions) that you deem necessary to be considered by the Department? Please provide reasoning and evidence. This should include evidence of economic considerations where relevant.

Next steps

Responses to the call for evidence will be collated and analysed. The Department will then consider developing and consulting on proposals for an exemptions regime.

This call for evidence is available from: www.gov.uk/government/calls-for-evidence/exemptions-from-the-requirement-to-hold-a-carbon-dioxide-transport-and-storage-licence

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