

Call for evidence: Exemptions from the requirement to hold a Carbon Dioxide Transport and Storage Licence

Initial Draft: 25 August 2023

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Deadline: 11 October 2023

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.

A class exemption for spur pipelines would be beneficial. The characteristics could include, amongst others:

- For the purposes of research and development. The SoS might wish to compare the R&D characteristics of any projects being considered for exemption, against the government's definitions of R&D. For example, this might include definitions used for the purposes of claiming tax relief for R&D activities.
- Spurs should also be considered exempt where they provide a CO₂ offtake from a licensed infrastructure, as well as where they provide a feeder to a licensed infrastructure. CO₂ offtake might be needed, for example, for the purposes of R&D at other facilities, including CO₂ storage research facilities.
- Distances and diameters are difficult to determine but distances might be expected to be less than 15 km.
- Spurs may be onshore or offshore.

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.

- UKRI is currently scoping several options for a new CO₂ storage research programme. Although at an early stage of development, one option being considered is a research facility involving the deep injection of CO₂. Initial discussions with NSTA indicate that this would, under current legislation, require a storage permit. If this option progresses, UKRI expects its development to follow the good practice as defined in the legislation. For clarity, UKRI does not seek to avoid undertaking any of the site appraisal activities required for a permit application. However, a storage permit, designed for the injection and permanent containment of commercial CO₂ storage may impose conditions required by the legislation, that inadvertently prevent flexible, innovative R&D for which the facility is designed.
- Furthermore, independent monitoring of regional geological, geomechanical and fluid responses may be beneficial to the sector. This monitoring might be a combination of passive and active on- and offshore technologies that are either mobile or semi-permanently installed in dedicated facilities. Whilst not necessarily

requiring a Storage Licence (as they are not injection activities), considering a class exemption may be required for the avoidance of doubt.

- Other types of activities that an R&D project might undertake include:
 - Construction and testing of infrastructure for pipeline transport of CO₂,
 - CO₂ compression and injection,
 - temporary (buffer) storage for testing push-pull experiments and to test relative contributions of different trapping mechanisms,
 - construction of boreholes, their subsequent 'logging' and use for monitoring.
- Injection of CO₂ which is part of a research project, may lead to the permanent storage of CO₂, but it is assumed that without a Storage Permit this CO₂ would not be eligible for carbon accounting purposes. We propose that exempted storage should not be allowed to claim carbon credits.
- Associated research activities might also include:
 - Co-injection of other minor components
 - Associated monitoring including sampling and analysis of fluids and rocks,
 - monitoring technologies in wells, or at surface, permanently installed or temporary/mobile
 - Back-production of CO₂
- Under EC Storage Directive, injection of up to a total of 100, 000 tonnes is permissible where this is research or demonstration. The UK could adopt a similar threshold.
- For clarity, licensable activities would be exploration and appraisal (including test injection) activities that are considered part of exploration for subsequent licensable activities, and which should continue to fall within the exploration term of a licence.

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.

It is our current understanding that CO₂ that is supplied via an exempted offtake spur for an exempted storage research project, could not be included in the total mass of CO₂ that has been stored in the licenced CO₂ store (at the end of the "licensed trunk pipe"). This would therefore mean an economic loss for the T&SCo. Where this CO₂ is used for the purposes of research, it would be beneficial to consider this CO₂ to be eligible for permanent storage on a case-by-case basis – see also our response to Q5. Clearly, we do not propose that CO₂ eventually emitted to the atmosphere should be considered eligible in this way.

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.

The UKRI CO₂ storage programme described in response to Q2 is currently being developed. Although at an early stage of conceptual screening, one option might include the injection and storage of CO₂ for the purpose of R&D for the public good. If progressed, this would benefit from an R&D exemption.

- If an injection option is selected, UKRI would still follow the principles and safety assessments as required by regulations.

- Exemption would offer the following benefits:
 - Reduces costs to public purse
 - Reduces delivery time
 - Reduces burden on regulator
- Not being granted an exemption could:
 - Increase cost in preparing the license application
 - May cause delays unless “out of round” application is possible (requiring SoS direction)
 - Cause delays due to regulatory process (may take 2-3 years) impacting development of the full business case.

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.

If CO₂ is supplied to an R&D activity from a Licensed pipeline that is otherwise destined for permanent storage in a licensed storage site, the following implications are highlighted:

- Exemption for storage would impact on the carbon allowances associated with the captured CO₂. Without a storage licence the CO₂ may not be classed as removed from the atmosphere and therefore could not be included in the T&SCo’s stored CO₂ and therefore this CO₂ would not be eligible for payment.
- This might be best solved by developing a mechanism with DESNZ that the CO₂ is supplied to the exempted research facility at zero cost to the T&SCo.

3rd party access may not be appropriate for R&D activities.

Providing exemptions for research should not set precedents for small-scale unlicensed storage under an R&D pretext.

Whilst research might be inherently riskier (e.g. testing new techniques, technologies, or pushing to failure etc) than commercial operations using standard procedures and technologies, a risk is that exemptions might increase the chance of either unplanned failures or undermine public perceptions of the safety of CO₂ storage.

In addition, some form of check that planned research won’t negatively impact other licensable activities, operational or planned, might be necessary when deciding on whether an exemption is merited.

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?

Yes.

No exemptions may reduce UK R&D capability, skills, expertise and capacity in CO₂ transport and storage.

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.

No response