



Department for
Energy Security
& Net Zero

Carbon Capture Utilisation and Storage Transport and Storage Business Model

Consultation on revenue support regulations
relating to directions of counterparty and
publication of information

Closing date: 25 October 2023

September 2023



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Introduction

Carbon capture, utilisation and storage (CCUS) has a key role in the UK's Net Zero Strategy¹ by helping meet our legally binding commitment to achieve net zero by 2050.

CCUS is important for the decarbonisation of industries such as the chemicals, refining, and cement sectors. As CCUS will also provide flexible energy deployment across power, it has the potential to strengthen our energy security and reduce reliance on unabated fossil fuels as well as enabling greenhouse gas removals.

The 2023 Powering up Britain Energy Security Plan² re-stated UK Government's ambition to deliver CCUS in four industrial clusters and capture and store 20-30 megatonnes of carbon dioxide (MtCO₂) by 2030, where industrial emissions make up 6 MtCO₂ by 2030, increasing to 9 MtCO₂ by 2035.

Central to deploying CCUS is establishing the infrastructure to transport and permanently store the captured CO₂. Developing transport and storage (T&S) infrastructure for carbon dioxide will require large upfront capital expenditure, to construct carbon dioxide offshore and onshore pipelines and develop carbon dioxide storage sites and wells, alongside associated infrastructure including compressor stations and injection equipment.

For CCUS to be a key technology in supporting the government to achieve its net zero target and energy security goal, Government announced £20 billion of funding for early deployment of CCUS to unlock private investment and jobs to construct and deliver the early phases of the CCUS T&S assets and capture technologies.³ The introduction of CCUS business models to support private investment and scale up deployment of these technologies will play a key role in delivering the government's ambitions. This consultation focuses on legislation that facilitates the T&S Regulatory Investment (TRI) model, which will be a primary driver of private investment into First of a Kind (FOAK) CCUS Transport and Storage infrastructure.

¹ UK Government, Net Zero Strategy (2022) <https://www.gov.uk/government/publications/net-zero-strategy>

² UK Government, Powering up Britain (2023) <https://www.gov.uk/government/publications/powering-up-britain>

³ Ibid

Consultation details

Issued: 13 September 2023

Respond by: 25 October 2023

Enquiries to:

CCUS Transport and Storage Business Model Team
Department for Energy Security and Net Zero
3-8 Whitehall Place
London
SW1A 2EG

Email: ccustandsconsultations@energysecurity.gov.uk

Consultation reference: Transport and Storage business model: Revenue support regulations relating to directions to a counterparty, publication of information

Audiences:

Clause 81 of the Bill provides for the devolved administrations to be consulted if the regulations contain provision that would be within their legislative competence, and any other persons as the Secretary of State considers appropriate.

The proposals in this consultation cover areas within devolved competence and we continue to engage with devolved administrations on these. Given the technical nature of the revenue support regulations and the questions set out in the consultation document, the Secretary of State considers it appropriate to consult more widely than the statutory consultees specified in clause 81. It is expected that the consultation will be of particular interest to Transport and Storage developers and other stakeholders who would be directly affected by the proposals for the revenue support regulations. It is expected that these persons will be well placed to input on the technical aspects associated with the Transport and Storage business model. We also welcome responses from any person with an interest in this policy area.

Territorial extent:

In accordance with the territorial extent of Chapter 1, Part 2 of the Bill, these revenue support regulations are intended to extend to England, Wales, Scotland and Northern Ireland. This consultation is therefore relevant UK-wide.

How to respond

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

When responding, please state whether you are responding as an individual or representing the views of an organisation.

Respond online at: beisgovuk.citizenspace.com/clean-electricity/ccus-ts-revenue-support-agreement (preferred option)

Or email to: ccustandsconsultations@energysecurity.gov.uk

Or write to: CCUS Transport and Storage Business Model Team
Department for Energy Security and Net Zero
3-8 Whitehall Place
London
SW1A 2EG

Confidentiality and data protection

Information you provide in response to this consultation, 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 DESNZ 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.

DESNZ will process your personal data in accordance with all applicable data protection laws. See our [privacy policy](#).

DESNZ intends to 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 consultation has been carried out in accordance with the government's [consultation principles](#).

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

Revenue Support regulations relating to directing the counterparty

Transport and Storage Business Model

As Transport and Storage (T&S) networks have natural monopolistic characteristics, Government will build on the UK's global reputation for regulatory stability and transparency by establishing independent economic regulation for T&S networks. The Transport and Storage 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.

Elements of the TRI model:

The proposed TRI model is being designed to attract investment into FOAK T&S networks whilst protecting users of the network (and by extension taxpayers and consumers that support the funding of T&S networks).⁴ The TRI model has adopted the regulated asset value (RAV) based approach to deliver private investment in T&S networks. RAV-based models have been highly successful in the UK and around the world in delivering network infrastructure which balances risk and while providing a fair return on the capital invested.

The three core elements of the TRI Model are:

Economic Regulatory Regime: under the TRI model, the Economic Regulatory Regime (ERR) determines the level of allowed revenue that the T&S companies (T&SCo) can earn every year, reflecting its efficient costs and a reasonable rate of return. Within the ERR, for the first regulatory period, the allowed revenue will be calculated by reference to the initial regulatory settlement determined by Secretary of State and administered by the economic regulator (Ofgem), and in subsequent regulatory periods the regulatory settlement will be determined and administered by Ofgem. The terms and conditions of the regulatory settlement are to be set out in the economic licence and will include agreement of allowed capital expenditure ("capex"), allowed operating expenditure ("opex") and the allowed rate of return, as well as construction and operational performance targets and associated incentives.

The economic licence is granted by the Secretary of State for the first regulatory period. The licence is then administered by the economic regulator (Ofgem) during that first regulatory period. Ofgem must then determine the economic licence pursuant to its statutory duties and principal objectives, including protecting the interests of current and future users and the interests of any class of consumers (where relevant), the financial sustainability of the T&S networks, and the need for efficient and economic T&S networks. The powers in the Energy Bill

⁴ We have published a series of updates on the development of the Transport and Storage business model which can be found within this [link](#) and its enabling legislation, found within the Energy Bill, as found [here](#). The final Transport and Storage business model will be confirmed once the first licenses are granted.

2022 (which is subject to Royal Assent) will enable Ofgem to enforce the conditions of the licence.

T&S charges: T&SCo would then be entitled to charge its userbase in order to recover its allowed revenue, as set by the conditions of the economic licence. T&S charges will be determined using a methodology which is set out in the CCUS Network Code. T&S charges will be set annually and there will be an annual reconciliation process to address any over or under recovery of allowed revenue. The allowed revenue will be increased/decreased through an annual adjustment process in order to return any over-recovery/collect any under recovery of revenue two years after the charging year in question. This adjustment influences fees and charges for all users of the network in the year the fees apply (they are not directly returned to or collected from specific users).

Revenue model: if T&SCo earns less revenue than the allowed revenue for a charging year from charging its users T&S charges, then it will be exposed to a 'revenue gap'. The purpose of the revenue model is therefore to mitigate T&SCo's exposure to revenue gaps during the early stages of development of the CCUS sector, when the market will not be sufficiently mature for T&SCo to mitigate this risk. Within the revenue model, Risk Mitigation Mechanisms (RMMs), which are primarily user funded, including mutualisation,⁵ are designed to enable T&SCo to recover its allowed revenue from network users.

However, if RMMs are insufficient to achieve this, then we are proposing that T&SCo will be entitled to Revenue Support as a last resort mechanism to enable T&SCo to recover any shortfall in Allowed Revenue allocated to T&SCo under the licence. For a T&SCo to receive Revenue Support, the T&SCo must enter into a Revenue Support Agreement (RSA) with the designated RSA counterparty, subject to satisfying certain initial conditions precedent. If Revenue Support is triggered, then the RSA counterparty would draw on funds from UK Government (and potentially energy consumers) to allow the RSA Counterparty to make a direct payment to T&SCo.

The offering of the RSA will be kept under review. Government's objective is to move to a more market-based revenue model for T&SCos over time. As this sector evolves and the market matures, the need to offer the RSA is anticipated to diminish.

Similar to the Contracts for Difference (CfD) scheme, UK Government's main mechanism for supporting low carbon electricity generation, revenue support will be delivered through a private law contract between a T&SCo and the RSA counterparty. The following section will provide information on the legislation that requires amendment to administer these contracts.

⁵ Mutualisation involves increasing T&S fees across the network user base in order to enable T&SCo to collect more of its allowed revenue than it would be able to if T&S fees were only charged in proportion to users' expected utilisation of the network and booked capacity.

Revenue Support Legislation

The Energy Bill (“the Bill”), introduced to Parliament on 6 July 2022, contains provisions to underpin delivery of the TRI Model. References in this consultation to a numbered “Clause” or “Part” of the Bill or a “Schedule” to the Bill are references to that Clause, Part or Schedule as amended in Committee and as published on 23 April 2023,⁶ unless otherwise specified.

Clause 57 of the Bill confers a power on the Secretary of State to make regulations about revenue support contracts (‘revenue support regulations’), which includes the Transport and Storage (T&S) Revenue Support Agreement (RSA). These contracts are intended to underpin delivery of the Transport and Storage business model. Clause 60 (2) of the Energy Bill allows for the Secretary of State (SoS), to direct a counterparty to offer a contract to a licenced T&SCo on terms specified in the direction (subject to revenue support regulations).

This consultation considers provisions needed to enter into the RSA, in line with the UK Government’s stated ambitions. The Energy Security Plan sets out our aim to establish 4 CCUS Transport and Storage clusters by 2030. The first revenue RSAs are expected to be entered into in 2024.

It is anticipated that related emitter revenue support regulations will be laid in draft before Parliament later this year in accordance with the affirmative resolution procedure.

Scope of consultation

This consultation sets out proposals on the following matters relating to the Transport and Storage business model.

- **Direction to offer to contract:** the process by which the Secretary of State may direct a counterparty to offer to contract.
- **Information publication:** requirements that certain information about contracts and projects must be published.

⁶ Energy Bill 2022 (2023) <https://bills.parliament.uk/bills/3311/publications>

Background on business model legislation

The Bill makes provision for the implementation of the Transport and Storage business model:

- **Financial assistance:** providing the Secretary of State with UK-wide powers to incur expenditure and provide financial assistance to support the establishment of CCUS T&S networks, including revenue support through a contractual mechanism.
- **Counterparty:** The contractual nature of the T&S business model requires a counterparty to manage the contracts and act as a conduit for funding. The Bill provides the Secretary of State with powers to designate and direct a counterparty.
- **Eligible person:** The Bill states that a person or entity must hold a T&S licence to be eligible for the RSA Counterparty to offer to contract. This licence will be assessed and issued by Ofgem, the economic regulator.

For Track 1 of the CCUS deployment, two clusters have been chosen to establish the initial T&S networks. Under clause 60 of the Bill, the Secretary of State can direct a counterparty to offer an eligible T&SCo to enter into a 'revenue support contract' or RSA.

Once negotiations are completed and licenses are granted, it is anticipated that licensed T&SCos would receive an offer to contract from the designated RSA counterparty, following a direction to do so by the Secretary of State. In line with clause 58 of the Bill, the relevant counterparty will be under a duty to offer to contract in accordance with any such direction.

Subject to royal assent of the Energy Bill, Government will appoint the Low Carbon Contracts Company Ltd (LCCC)⁷ to be the counterparty to the RSA (subject to the successful completion of administrative and legislative arrangements). LCCC is the existing counterparty for Contracts for Difference (CfD) for low carbon electricity and the planned counterparty for the revenue support contracts that will be offered to projects connecting to T&S networks. LCCC was created specifically to be the counterparty to low carbon electricity generation CfDs as part of Electricity Market Reform (EMR) and has carried out this role since the scheme's introduction in 2014. As LCCC have been administering low carbon electricity CfDs, it is the resource efficient and cost-effective option to act as the RSA Counterparty. Moreover, given LCCC's skills and capabilities to administer the CfDs for low carbon electricity, demonstrated by its proven track record, stakeholders can be confident in LCCC's ability to carry out the counterparty functions required under the TRI model.

This consultation sets out proposals for making provisions in revenue support regulations regarding the following matters:

- the process that will govern how the Secretary of State can direct a counterparty to offer to contract.

⁷ <https://www.lowcarboncontracts.uk>

- counterparty requirements to publish the revenue support contracts (the Revenue Support Agreement) and establish a register of information.
- the ability of a counterparty to carry out its functions in relation to an RSA.

Secretary of State direction to offer to contract

It is proposed that the RSA will be developed by the Secretary of State.⁸ Once the terms of each RSA are confirmed, the Secretary of State will direct the designated RSA counterparty to offer to contract with the eligible T&SCo using the direction powers in clauses 60 of the Bill using those terms.

Proposal

We propose to follow a similar approach to regulations 57 to 59 of the Contracts for Difference (Allocation) Regulations 2014 (as amended) and regulations 37 and 39 of the Nuclear Regulated Asset Base Model (Revenue Collection) Regulations 2023. It is proposed that revenue support regulations would provide for the following:

1. Require a direction given by the Secretary of State to
 - a. be in writing and be dated;
 - b. specify a date by when the counterparty must comply with the direction;
 - c. specify the period for which the counterparty must keep the offer of a contract on the terms specified in the direction ('the specified terms') open for acceptance.
2. The date by which the counterparty must comply with the direction must be no earlier than the number of working days defined in the direction, from and including the date on which the direction is given.
3. That the Secretary of State must give a copy of the direction to the person who the counterparty has been directed to contract with ('the specified person'), no later than 5 working days after the date on which the direction is given.
4. That a direction would cease to have effect if the specified person:
 - a. rejects the offer to contract on the specified terms; or
 - b. does not accept the offer to contract on the specified terms before the expiry of the period specified in the direction.
5. That the counterparty must immediately withdraw any offer to contract that it has made in compliance with a direction that has ceased to have effect.

⁸ Indicative Heads of Terms

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1123427/ccs_network_code_draft_HoT_December_2022.pdf

6. That the counterparty would not be permitted to modify the specified terms when making an offer to contract unless it has received the prior written consent of the Secretary of State.
7. That the Secretary of State can revoke a direction to offer to contract at any point before the specified person accepts an offer to contract on the specified terms made by the counterparty in compliance with the direction (if revoked, the RSA counterparty would be under an obligation to immediately withdraw its offer to contract).
8. “working day” means a day that is not a Saturday or Sunday, Christmas Day, Good Friday or any day that is a bank holiday in England and Wales under the Banking and Financial Dealings Act 1971.

Question 1: Do you agree with the proposals relating to the Secretary of State’s power to direct a counterparty to offer to contract? Please provide reasons for your response.

Publication of information

Under the CfD regime, LCCC is required to publish the full terms and conditions of any CfD that is entered into following a direction to offer to contract given by the Secretary of State,⁹ subject to redactions of confidential information. LCCC also maintains a “CfD Register”¹⁰ which includes key information for all investment contracts and CfDs to which LCCC is a party, including the strike price, target commissioning date and the generation technology.

Given the emergent stage of T&S networks in the UK, with no commercial scale projects in operation, it is important that information about their deployment is made available publicly. Sharing information and data on RSAs in an open way will help ensure the T&S business model is better understood and creates transparency for T&SCos, existing and future users, and wider stakeholders.

Contract publication proposal

It is proposed that revenue support regulations mandate a counterparty to publish each T&S RSA once the contract is entered into, ensuring that any confidential information and personal data is excluded.

We propose that confidential information will be defined to mean:

1. information which is identified in the direction, in the opinion of the Secretary of State at the time the relevant direction is given, it is information—
 - a. which constitutes a trade secret;
 - b. the disclosure of which would or would be likely to prejudice the commercial interests of any person; or
 - c. the disclosure of which would constitute a breach of confidence actionable by any person.

or

2. in relation to which it is an initial term of the revenue support contract that it must not be disclosed.

Register of contracts proposal

To ensure important information is readily accessible, we also propose that revenue support regulations place an obligation on a counterparty to establish and maintain a public register that would capture key project information. The information we propose a counterparty must

⁹ LCCC is not responsible for publishing allocated CfDs. Allocated CfDs and their terms are published by DESNZ.

¹⁰ <https://www.lowcarboncontracts.uk/cfd-register/>

publish in a register, where applicable to the project, is set out in Table 1. We are considering whether and how T&S fees may be included in the Register.

Table 1: Information to be published in a Revenue Support Contract Register

General details	<ul style="list-style-type: none"> • Unique identifier of the contract to be assigned by the counterparty. • Description of the T&S network, including the geographical coordinates • T&SCo name, registered address, and registration number (where applicable) • Date last updated
Contract milestone dates	<ul style="list-style-type: none"> • Commencement date • Expiry date
Transport and Storage Cluster Information	<ul style="list-style-type: none"> • Further details of the T&S network

A counterparty would have the flexibility to choose to enter into the register any other information they consider would facilitate the administration of revenue support contracts within the bounds of the confidentiality provisions of the T&S RSAs.

A counterparty must give the other party the opportunity to make representations before deciding what information to exclude from publication.

This approach would be equivalent to regulation 12 of the Contracts for Difference (Standard Terms) Regulations 2014 (as amended).

A counterparty must also, so far as it is reasonably practicable, ensure that entries in the register are accurate.

UK Government will continue to keep provision on the publication of data under review to ensure appropriate transparency and scrutiny of the T&S business model.

Question 2: Is there any information not listed in Table 1 you think should be published in a contract register?

Question 3: Is there any information in the contracts you think should not be published?

Please provide reasons to support your responses.

Revenue support counterparty's ability to carry out its functions

Fundamental to the successful implementation of the TRI model is a robust revenue stream that ensures a secure and consistent flow of revenues between a counterparty, network users and T&SCos for the duration of the contracts.

The role of a RSA counterparty is to manage the RSA, including the administration of payment.

In the event that, for example, the RSA counterparty cannot satisfactorily carry out its functions, the Secretary of State may need to appoint another counterparty to take over. Powers for the Secretary of State to revoke a notice by a specified date are established under clause 75(1)(a) of the Bill.

Clause 75(1)(b) of the Bill makes provision for a revenue support counterparty to withdraw its consent to remain designated as a counterparty by giving no less than 3-months' notice in writing to the Secretary of State (which mirrors the position under the CfD regime).

However, in addition to the requirement to give no less than 3-months' written notice, it is considered appropriate that the revenue support counterparty should flag issues to the Secretary of State before giving notice. This is for the following reasons:

- Sufficient time would be needed for UK Government to undertake selection processes to find a replacement revenue support counterparty and carry out various assessments and due diligence on the transferee's suitability for the role.
- A revenue support contract would be specific to each T&S network. This means that should the revenue support counterparty's role need to be transferred to another body, that body would need to familiarise itself with each revenue support contract and begin the process of ensuring that it has the resources and systems in place to carry out the required functions for the role. This would involve a handover from the existing revenue support counterparty, implementation of customised systems to carry out their functions in respect of, for example, calculating and collecting payments etc, for each revenue support contract.
- The role of the revenue support counterparty is a specialist role which requires significant expertise so would involve a great deal of planning and resourcing by a new body, which would likely take longer than 3-months.

Proposals

Clause 75(4) allows the Secretary of State to make provision in regulations about the period of time for which a person who has ceased to be a counterparty is to continue in that role to support such a transition.

To align with regulatory proposals for other CCUS business models and for the reasons above, it is proposed that in addition to the 3-months' notice period in the Bill and the powers in clause 75(1)(b), revenue support regulations include a requirement on the relevant counterparty to promptly notify (i.e. potentially before any written notice is given) the Secretary of State if it considers it may be, or become, unable to fulfil its functions as revenue support counterparty, including its duties and obligations under the revenue support contracts. It would be required to provide any further details requested by the Secretary of State. This is so that the Secretary of State can start making arrangements for a replacement where appropriate.

Question 4: Do you agree with the proposal for including a requirement in regulations on a revenue support counterparty to promptly notify the Secretary of State at the point that it considers that it may become unable to carry out its functions (in addition to the formal 3-months' notice period in the Bill)? Please provide reasons for your response.

Consultation questions

Revenue Support regulations relating to directing the RSA counterparty:

1. **Do you agree with the proposals relating to the Secretary of State's power to direct a counterparty to offer to contract?**
2. **Is there any information not listed in Table 1 you think should be published in the RSA register?**
3. **Is there any information in the contracts you think should not be published?**
4. **Do you agree with the proposal for including a requirement in regulations on the counterparty to promptly notify the Secretary of State at the point that it considers that it may become unable to carry out its functions (in addition to the formal 3-months' notice period in the Act)?**

Next steps

The consultation period will last for 6 weeks and close on 25 October 2023.

Stakeholders should respond to the consultation questions during the 6 week consultation period so that we can capture a range of views on our proposals in relation to the Transport and Storage revenue support regulations.

Following our analysis of responses, we intend to publish a government response on the outcome of the consultation and how we will take the responses into account in drafting the revenue support regulations ahead of laying them before Parliament.

This consultation is available from: www.gov.uk/government/consultations/ccus-transport-and-storage-revenue-support-agreement-counterparty

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