



Department for
Energy Security
& Net Zero

Greenhouse Gas Removals and Power Bioenergy with Carbon Capture and Storage Business Models

Consultation on amending revenue support regulations relating to directions to a counterparty, publication of information, counterparty's ability to carry out its functions, and eligibility.

Closing date: 9 June 2025



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

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Introduction

We are seeking your views on proposed amendments to, and application of, the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024 (the “Regulations”)¹ to enable the Greenhouse Gas Removals (GGRs) and Power Bioenergy with Carbon Capture and Storage (Power BECCS) business models. This consultation covers four areas of provisions: directions to a counterparty; publication of information; the counterparty’s ability to carry out its functions; and eligibility.

Engineered GGRs have the potential to play a key role in the UK’s acceleration towards Net Zero and the Clean Energy Superpower Mission. As well as counterbalancing residual emissions from hard-to-decarbonise sectors, commercialising innovative technologies such as Direct Air Carbon Capture and Storage (DACCS) and Bioenergy with Carbon Capture and Storage (BECCS) can play an important role in the UK’s Growth Mission, creating new investment opportunities and good jobs in Britain’s industrial heartlands, supporting a just transition to a zero-carbon economy.

The Government is taking steps to build a sustainable, long-term market for GGRs. We have announced our intention to integrate GGRs into the UK Emissions Trading Scheme (UK ETS), and in 2024 consulted on how we can deliver this ambition. We will publish the Government’s response to the consultation in 2025.

In the near-term, revenue support will be necessary to overcome commercial barriers and leverage investment in novel technologies in a new and emerging market. The GGR business model and the Power BECCS business model aim to provide revenue certainty under private law contracts, providing revenue stability and risk-sharing between government and the private sector as the market for GGRs develops. The business models aim to harness the Voluntary Carbon Market (VCM), as well as potential future demand in the UK ETS, to crowd-in private finance toward GGR efforts.

On 10 February 2025, government announced an independent review to consider how respective GGRs², including large-scale Power BECCS and DACCS, can assist the UK in meeting our net zero targets and ensuring security of supply, out to 2050. The Terms of Reference of the review were published on 31 March 2025³. The review will not seek to replicate the existing significant policy programme to support cost-effective deployment of GGRs and Power BECCS but may be informed by existing work and outputs. As with this consultation, we will continue to develop and deliver policy relevant to GGRs and Power BECCS. No decisions around the deployment of large-scale Power BECCS have been made. Further decisions for continued Carbon Capture Usage and Storage (CCUS) deployment will be taken in due course. The scale of the challenge we face to reach net zero means we need to invest in multiple technologies, in different sectors of the economy. This is why government is also actively investing in other sectors, alongside GGRs.

¹Where we refer in this document to Regulation 1, 2, 3 etc., this is a reference to the relevant regulation in The Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024, <https://www.legislation.gov.uk/uksi/2024/688/contents/made>

²Statement by the Secretary of State for Energy Security and Net Zer, Statement made on 10 February 2025, <https://questions-statements.parliament.uk/written-statements/detail/2025-02-10/hcws424>

³Independent Review of Greenhouse Gas Removals: terms of reference, <https://www.gov.uk/government/publications/greenhouse-gas-removals-ggrs-independent-review/independent-review-of-greenhouse-gas-removals-terms-of-reference>

GGR and Power BECCS Business Models

The term “engineered greenhouse gas removal” or “GGR” refers to a variety of technologies that remove carbon dioxide (CO₂) from the atmosphere with a view to permanently storing that CO₂, resulting in an overall net removal of greenhouse gases from the atmosphere. This encompasses DACCS and BECCS technologies, as well as other technologies that provide permanent removal of CO₂.

The government has two distinct business models in development: the GGR business model, with the potential of supporting a diversity of GGR technologies, and the Power BECCS business model, supporting large-scale Power BECCS projects with a minimum abated generating capacity of 100MWe. The development of a standalone Power BECCS business model is in recognition of the substantial power generation that large-scale Power BECCS projects can provide, alongside the delivery of GGRs.

In a 2023 policy update on the design of the GGR and Power BECCS business models⁴, the Government set out an intention to use a Contract for Difference (CfD) approach to support engineered GGRs. The CfD approach is one which has successfully supported the deployment of renewable technologies whilst accelerating cost reductions, and which has more recently been adapted to support investment in Carbon Capture, Usage and Storage (CCUS) and Hydrogen technologies. Using this approach to provide greater revenue stability, the GGR business model could support the commercialisation of a variety of GGR technologies to incentivise the growth of a balanced and resilient GGR market.

While the GGR and Power BECCS business models are being developed in parallel, the key difference is that the core aim of the Power BECCS business model is to incentivise large-scale negative emissions in addition to the co-benefit of producing low-carbon electricity, which contributes to the UK’s energy security. The Power BECCS business model is therefore being designed as a ‘dual CfD’ consisting of a Contract for Difference for electricity generation (CfDe) and a Contract for Difference for carbon (CfDc). The CfDc will provide revenue support for the production of negative emissions via the capture and permanent storage of biogenic CO₂.

Both business models are intended to incentivise support for negative emissions and the government is committed to aligning the CfDc component of the Power BECCS business model and the GGR business model where practical, whilst recognising that divergences may be required to reflect differences in project scale and other relevant factors.

The GGR business model and CfDc component of the Power BECCS business model provide revenue stability in the form of a difference payment designed to bridge the gap between the costs of constructing and operating the project, including a rate of return (strike price) and the market price for the produced GGR credits⁵ sold on approved carbon markets (reference price). If developers sell their GGR credits for prices below their strike price, they receive a difference payment from a government counterparty up to the strike price. If they sell credits above their strike price, they must pay back to the government counterparty the amount they received above the strike price. This mechanism ensures revenue certainty and thus generates the confidence needed to incentivise private investment into projects while protecting taxpayers.

⁴Greenhouse gas removals (GGR) business model: Updates on the proposed commercial frameworks for the greenhouse gas removals (GGR) business model and related policy,

<https://www.gov.uk/government/publications/greenhouse-gas-removals-ggr-business-model>

⁵A GGR credit represents the net removal of one tonne of Greenhouse Gas from the atmosphere.

The Government is progressing work to confirm the full commercial terms of the business models. The above proposals reflect the government's latest views (aligning with proposals set out in the business model update published in December 2023) but do not constitute final positions and may not reflect the final design of the policies. We will continue to engage with interested stakeholders as we refine our proposals ahead of publishing draft contracts.

We welcome stakeholder views on the proposals outlined in this document. Any feedback or enquiries regarding the design of the GGR business model, GGR markets, or GGR standards and methodologies should be sent to GGR.BusinessModels@energysecurity.gov.uk. Any feedback or enquiries regarding the design of the Power BECCS business model should be sent to powerbeccs@energysecurity.gov.uk.

Legislation

The Energy Act 2023 ("the Act") contains provisions that underpin delivery of the GGR business model and the Power BECCS business model. Section 57 of the Act confers a power on the Secretary of State to make regulations in relation to revenue support contracts ('Revenue Support Regulations'), which include carbon capture revenue support contracts. These contracts are intended to mitigate demand-related revenue risks as per the objectives of a number of business models, including the GGR and Power BECCS business models. Such contracts must be offered following a direction from the Secretary of State pursuant to section 68(1) of the Act. A direction may only be given in favour of an "eligible carbon capture entity", as defined in the Act and Regulations.

For the proposals outlined in this consultation, we are proposing to utilise the Carbon Capture Revenue Support (Counterparty, Directions and Eligibility) Regulations 2024⁶ ("the Regulations"). These Regulations make provision for:

- **Direction to offer to contract:** The process by which the Secretary of State may direct a counterparty to offer to contract with an eligible carbon capture entity; the circumstances where a direction given under section 68(1) of the Act ceases to have effect; and conditions for the revocation of a section 68(1) direction by the Secretary of State.
- **Publication of Information:** Requirements of the counterparty to publish carbon capture revenue support contracts to which it is a party subject to exclusions set out in Regulation 8, and to maintain a register of carbon capture revenue support contracts to which it is a party.
- **Notification of defaults:** Requirement of the counterparty to promptly notify the Secretary of State if it is, or it is likely to be, unable to perform one of its statutory or contractual functions. Requirement of the counterparty to provide such assistance as the Secretary of State may require with a view to securing the performance of that function.
- **Eligibility:** The meaning of "eligible" in relation to a carbon capture entity that carries on (or is to carry on) in the UK with a view to the storage of carbon dioxide, activities of capturing carbon dioxide (or any substance consisting primarily of carbon dioxide) that has been produced by commercial or industrial activities. The Regulations do not currently

⁶The Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024, <https://www.legislation.gov.uk/uksi/2024/688/contents/made>

define eligibility in relation to entities capturing carbon dioxide that is in the atmosphere or seawater.

The Regulations in their current form are intended to facilitate the implementation of Industrial Carbon Capture Business Models (i.e. Industrial Carbon Capture and Waste Industrial Carbon Capture, “ICCBMs”). Where necessary, we intend to amend the Regulations to ensure they are appropriate for the GGR and Power BECCS business models. This consultation proposes substantive amendments to the Regulations, which are: amendments to add or remove material requirements to the Regulations for the purposes of the GGR and/or Power BECCS business models, and some minor amendments to clarify the application of certain Regulations to the GGR and Power BECCS business models.

The intention is for the amended Regulations to cover the ICCBMs, the GGR business model, and the Power BECCS business model, applying the same provisions to all of these business models where there is conformity in their requirements and applying different provisions, where appropriate, to reflect the specific requirements of each business model. Given the similarities with the Contracts for Difference (CfD) (Standard Terms) Regulations 2014 (as amended) regime, regard has been given to relevant regulations made in relation to that regime.

The Regulations define eligibility for entities that capture carbon dioxide (or any substance consisting primarily of carbon dioxide) that has been produced by commercial or industrial activities. The Regulations do not define eligibility for the other two kinds of carbon capture entity which section 67(7) of the Act provides for, namely entities capturing carbon dioxide that is in the atmosphere or seawater.

This means that existing Regulations which define eligibility could apply without substantive amendments in the case of some GGR methods, for example Power BECCS, but not GGR methods that do not capture carbon dioxide from commercial or industrial activities (but rather directly from the atmosphere or seawater). Thus, we propose to amend the Regulations to define eligibility for all three elements of a “carbon capture entity” as outlined in section 67(7) of the Act.

It is our view that Regulations 3 and 4 could apply without substantive amendments to enable Power BECCS once a business model is in place for that carbon capture entity activity. Regulation 3 sets out the basic eligibility criteria, namely that an eligible carbon capture entity is one which carries out an activity in the UK of capturing carbon dioxide (with a view to permanently storing it) that has been produced by commercial or industrial activities. However, Regulation 4 provides that certain entities that meet that basic eligibility criteria are nevertheless excluded from being an eligible carbon capture entity for the purposes of Chapter 1 of Part 2 of the Act. These are referred to as “excluded carbon capture entities”.

It is proposed that no substantive amendment is needed to make a Power BECCS entity eligible under the Regulations. This is because an “energy recovery generating station”, which is defined as “a generating station which is fuelled by biomass...”, is not excluded from the scope of the current Regulations. This means that a Power BECCS project is not an “excluded carbon capture entity”.

Scope of Consultation

This consultation sets out proposals on the following matters relating to the GGR business model and the Power BECCS business model:

- **Direction to offer to contract:** The process by which the Secretary of State may direct a counterparty to offer to contract with an eligible carbon capture entity carrying on activities covered by the GGR business model or the Power BECCS business model; the circumstances where a direction given under section 68(1) of the Act ceases to have effect; and conditions for the revocation of a section 68(1) direction by the Secretary of State.
- **Publication of Information:** Requirements of the counterparty to publish carbon capture revenue support contracts to which it is a party subject to certain exclusions, and to maintain a register of carbon capture revenue support contracts to which it is a party.
- **Counterparty's ability to carry out its functions:** Requirement of the counterparty to promptly notify the Secretary of State if it is unable to carry out its functions. Requirement of the counterparty to provide such assistance as the Secretary of State may require with a view to securing the performance of that function.
- **Eligibility:** The meaning of "eligible" in relation to a carbon capture entity carrying on activities covered by the GGR or the Power BECCS business model, to determine the type of projects that could be supported through those business models.

General Information

Why we are Consulting

The purpose of this consultation is to seek your views on proposed amendments to the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024 (“the Regulations”), as well as to consult on the application of those Regulations to engineered GGRs including Power BECCS.

This consultation sets out four main proposals relating to both business models:

- Direction to offer to contract.
- Information Publication.
- Counterparty’s ability to carry out its functions.
- Eligibility.

These proposals are summarised above under the ‘Scope of Consultation’ subheading.

Consultation Details

Issued: 28 April 2025

Closes: 9 June 2025

Consultation reference:

Greenhouse Gas Removals and Power Bioenergy with Carbon Capture and Storage Business Models - Consultation on amending revenue support regulations relating to directions to a counterparty, publication of information, counterparty’s ability to carry out its functions, and eligibility.

Audiences:

Section 85 of the Act provides for the devolved administrations to be consulted if revenue support 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 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 Section 85. It is expected that the consultation will be of particular interest to GGR and Power BECCS project 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 GGR and Power BECCS business models. It is also expected that the consultation will be of particular interest to Voluntary Carbon Market (VCM)

and Emission Trading Scheme (ETS) stakeholders. 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 Act, the scope of the consultation is UK-wide but some of the proposals set out in this consultation are based on electricity market structures which do not currently operate in Northern Ireland. Therefore, for the GGR projects (where there is no electricity generation element) these revenue support regulations are intended to extend to England, Wales, Scotland and Northern Ireland and, to that extent, this consultation is therefore relevant UK-wide.

For Power BECCS projects (and all other GGR projects with an electricity generation element) this consultation and the revenue support regulations will only apply to projects situated in Great Britain and this consultation therefore does not apply to Northern Ireland. Government will continue to work with the devolved administrations as we develop the business models to ensure that our policies take account of devolved responsibilities.

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 by: 9 June 2025

Respond online at: energygovuk.citizenspace.com/energy-strategy-networks-markets/ggr-power-beccs-business-models

or

Email to: GGR.BusinessModels@energysecurity.gov.uk

Write to:

Greenhouse Gas Removals and Power Bioenergy with Carbon Capture and Storage Business Model Teams
Department for Energy Security and Net Zero
2nd Floor
3-8 Whitehall Place
London
SW1A 2AW

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 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 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.

Secretary of State Direction to Offer to Contract

For initial carbon capture aspects of the GGR and Power BECCS business model contracts, it is expected that revenue support contracts will be negotiated between the Secretary of State and the relevant GGR or Power BECCS project. Once this process is completed, the Secretary of State will direct the carbon capture counterparty to offer to contract with the eligible carbon capture entity of a successful project using the direction powers in section 68(1) of the Act.

Section 68(2) of the Act states that revenue support regulations may make further provision about a direction to offer to contract.

Proposal

Apply Regulations 5, 6 and 7, of the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024, without substantive amendment, for directions to offer to contract relating to GGR contracts and the Power BECCS contracts. Regulation 5 makes provision for the form and content of a direction given by the Secretary of State to a carbon capture counterparty under section 68 of the Act, covering requirements such as the date by which the counterparty must comply with the direction and the length of time for which the offer must be open for acceptance by the eligible carbon capture entity. Regulation 6 makes provision as to when a direction ceases to have effect. Regulation 7 confers a power on the Secretary of State to revoke directions and sets out the procedure to be followed in such a case.

The full text of the Regulations can be found here:

<https://www.legislation.gov.uk/ukSI/2024/688/made>.

Minor amendments may be required to clarify the application of these Regulations to directions relating to GGRs and Power BECCS.

This question relates to the GGR and Power BECCS business models:

Question 1: Do you agree with the proposal that Regulations 5, 6 and 7 of the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024 should apply, without substantive amendment, for the purposes of the proposed GGR and Power BECCS business models?

Please provide reasons for your response.

Publication of Information

Under the Energy Act 2013 CfD regime, the Counterparty, (the contract counterparty under that regime, “Low Carbon Contracts Company (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, subject to redactions of confidential information. The Counterparty also maintains a “CfD Register”⁷ which includes key information for all investment contracts and CfDs to which the Counterparty is a party, including the strike price, target commissioning date and the generation technology.

The Energy Act 2013 information publication requirements informed the Regulations information publication requirements, and it is our minded to position to apply the Regulations for information publication requirements to GGRs and the Power BECCS contracts.

Given the emergent stage of CCUS projects in the UK, including GGRs and Power BECCS, with no commercial scale projects in operation, it is important that information about their deployment is made publicly available. Sharing information and data in a transparent and open way will help ensure the business models are better understood and enable potential applicants to plan accordingly.

Contract Publication Proposal

Apply Regulation 8 with minor amendments to GGR and Power BECCS contracts, which mandates a counterparty to publish each carbon capture revenue support contract once the contract is entered into, ensuring that any confidential information and personal data is excluded. Key elements of Regulation 8 are summarised below, and the full text of the Regulations can be found here:

<https://www.legislation.gov.uk/uksi/2024/688/regulation/8/made>

In Regulation 8, confidential information is 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.

⁷Low Carbon Contracts Company, Schemes Register, <https://register.lowcarboncontracts.uk/>

For the avoidance of doubt, Regulation 8 makes clear that the following are not to be treated as confidential information:

- the Strike Price;
- the Capex Payment Rate⁸;
- the Initial Term;
- the Relevant Direction;
- the Reference Price.

The approach taken by Regulation 8 is similar to regulation 60 of the Contracts for Difference (Allocation) Regulations 2014 (as amended).

Register of Contracts Proposal

To ensure important information is readily accessible, we also propose that Regulation 9 (including the Schedule to the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024), which places an obligation on a counterparty to establish and maintain a public register that captures key project information, is applied to GGRs and Power BECCS⁹. The existing contents of Regulation 9 and the Schedule are summarised below, and the full text of the Regulations can be found here:

<https://www.legislation.gov.uk/uksi/2024/688/made>

Minor amendments may be required to clarify the application of this Regulation and Schedule to GGRs and Power BECCS.

Regulation 9 requires a Counterparty to assign a unique identifier to any carbon capture revenue support contract to which it is a party, and to establish and maintain a register in accordance with the requirements of the Schedule to the Regulations (see below).

Table 1: Proposed Information to be published in a register (existing requirements in the Schedule to be applied to GGR and Power BECCS projects without substantive amendments).

General details – contract and carbon capture entity	<ul style="list-style-type: none">• Unique identifier of the contract, to be assigned by the counterparty• Name of the eligible carbon capture entity who is a party to the contract• Address for correspondence with the eligible carbon capture entity
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⁸A minor amendment would be required, with Capex payment rates not included for the GGR business model. Capex payment rates will be included within the Strike Price for the GGR business model, and an additional publication of the Capex payment rate would be inappropriate and duplicitous. Work is ongoing on the Strike Price for Power BECCS, subject to the outcome of which we will continue to consider the case for future alignment with the GGR business model.

⁹To note, we also intend to establish a separate second register for carbon credits generated under the business models, which will also include key project information and track individual carbon credits.

	<ul style="list-style-type: none"> Any unique identifier (for example, a company registration number) assigned to the eligible carbon capture entity
General details – carbon capture facility	<ul style="list-style-type: none"> Name and location of the facility at which the carbon dioxide is, or is to be, captured (including such map grid references as are reasonably necessary to identify the location of the facility) Description of carbon capture revenue support contract to which the entry relates (for example, industrial or waste industrial¹⁰) Description of technology used or to be used to capture carbon dioxide Description of the activity from which carbon dioxide is, or is to be, produced¹¹ Identity of any carbon dioxide transport and storage operator being used by the eligible carbon capture entity Maximum amount of carbon dioxide captured in any one-year period (expressed in tonnes of carbon dioxide) in respect of which the eligible carbon capture entity could receive payments under the carbon capture revenue support contract Estimate of the carbon dioxide capture rate for the facility (expressed as a percentage), as agreed pursuant to the carbon capture revenue support contract
Contract milestone dates	<ul style="list-style-type: none"> Target Commissioning Date Target Commissioning Window Start and End Date Start Date (Expected and Actual) Longstop Date Expiry or Termination Date
Payment	<ul style="list-style-type: none"> Initial Strike Price Current Strike Price Current Reference Price

Under Part 1 of the Schedule, a counterparty has the flexibility to choose to enter into the register any other information they consider would facilitate the administration of revenue

¹⁰A minor amendment would be required to include reference to GGRs and Power BECCS.

¹¹A minor amendment would be required here to address methods which remove carbon dioxide that is in the atmosphere or seawater, as compared to carbon dioxide that has been produced by a commercial or industrial activity.

support contracts within the bounds of the confidentiality provisions of the GGR and Power BECCS contracts.

Under Part 4 of the Schedule, a counterparty may also exclude from publication information on the expected Start Date which the carbon capture entity has requested to exclude, and in its opinion, it would be entitled not to disclose in response to a request for its disclosure under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

The approach taken by the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024 follows Regulation 12 of the Contracts for Difference (Standard Terms) Regulations 2014 (as amended).

For the GGR business model, it is proposed that project information outlined in Table 2 is not required as part of the key project information. The Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024 were drafted for the purpose of specifying provisions for the Industrial Carbon Capture (ICC) and Waste ICC business models, which have unique payment structures. As stated in the December 2023 GGR business model update, the Strike Price for the GGR business model will include Capex and Opex elements, as well as an allowed return on investment. Therefore, Capex payment rates will be included within the Strike Price for the GGR business model, and an additional publication of the Capex payment rate would be inappropriate and duplicitous. Work is ongoing on the Strike Price for Power BECCS, subject to the outcome of which we will continue to consider the case for future alignment with the GGR business model.

Table 2: Proposed information not required to be published in a register for GGR Contracts

Payment	<ul style="list-style-type: none"> • Initial Capex Payment Rate • Current Capex Payment Rate
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For GGRs and Power BECCS, it is proposed that additional project information is required as part of the key project information, outlined in Table 3.

Table 3: Proposed additional information to be published in a register for GGR and Power BECCS Contracts

General details – GGR and Power BECCS project information	<ul style="list-style-type: none"> • Amount of GGR credits the project has generated • Biomass feedstock details, including how it meets sustainability criteria (where applicable) • Details on energy source and its use within the facility to support GGR activities (both DACCS and BECCS) • Full Life-Cycle Analysis (LCA), including project boundaries underpinning the lifecycle analysis • Details of existing government support (where applicable)
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A counterparty must also, so far as it is reasonably practicable, ensure that entries in the register are accurate. The Government will continue to keep provision on the publication of

data under review to ensure appropriate transparency and scrutiny of business models for engineered removals.

The amended Regulations will not include all the information that the government or approved carbon markets could later require for disclosure via carbon credit registries or other mechanisms for the GGR and Power BECCS contracts.

These questions relate to the GGR and Power BECCS business models:

Question 2: Do you agree that provisions set out in Regulations 8, contract publication, of the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024 can and should apply, with minor amendments, for the purpose of the proposed GGR and Power BECCS business models?

Question 3: Do you agree that provisions set out in Regulations 9 of the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024 can and should apply, for the purpose of the GGR and Power BECCS business models with minor amendments and do you agree with the proposed information not required for GGR contracts (Table 2) and additional GGR and Power BECCS project information (Table 3) to be included as part of the key project information?

Question 4: Is there any information on GGR and Power BECCS contracts not listed in Regulation 9 and the Schedule of the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024 that you think should or should not be published in a contract register?

Please provide reasons to support your responses.

Revenue Support Counterparty's Ability to Carry out its Functions

Underpinning the successful implementation of these business models is the secure and consistent scheme payments between a counterparty and GGR and Power BECCS carbon capture entities, respectively, for the duration of the contracts.

The role of a revenue support counterparty is to manage the revenue support contracts, including the administration of payment.

In the event that, for example, a revenue support counterparty cannot satisfactorily carry out its functions, the Secretary of State may need to appoint another counterparty to take over. Section 81(1)(b) of the Act makes provision for a carbon capture entity 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 Energy Act 2013 CfD regime).

Proposal

Building on the requirement to give no less than 3 months' written notice, it is considered appropriate that the revenue support counterparty should raise/indicate/escalate issues to the Secretary of State before giving notice. This is for the following reasons:

- Sufficient time would be needed for the 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 application. 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.

Section 81(4) of the Act 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.

In addition to the 3 months' notice period in the Act and the powers in Section 81(4), Section 83(1) and (2) (a), for the purposes of the GGR and Power BECCS business models, it is proposed to apply the provisions for notification of defaults for carbon capture counterparties as set out in the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024. Regulation 10 contains requirements for a counterparty to notify the Secretary of State if it is, or is likely to be, unable to perform its obligations under or by virtue of

the Act, regulations made under the Act or a carbon capture revenue support contract. Regulation 10 also requires the carbon capture counterparty to provide such assistance as the Secretary of State may require with a view to securing performance of that function, including the provision of such information as the Secretary of State may require.

This question relates to the GGR and Power BECCS business models:

Question 5: Do you agree that provisions set out in Regulation 10 of the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024 can apply, without substantive amendment, for the purposes of the proposed GGR and Power BECCS business models?

Please provide reasons for your response.

Carbon Capture Entity Eligibility

Legislation

Section 67 of the Energy Act 2023 defines a “carbon capture revenue support contract” as a contract between a “carbon capture counterparty” and an “eligible carbon capture entity”. A “carbon capture entity” means a person who carries on (or is to carry on) activities of capturing carbon dioxide (or any substance consisting primarily of carbon dioxide) that has been produced by commercial or industrial activities, is in the atmosphere, or has dissolved in sea water, with a view to the storage of carbon dioxide, where “storage”, in relation to carbon dioxide, means any storage with a view to the permanent containment of carbon dioxide (Section 67(7)).

Section 68(4) of the Energy Act 2023 requires the Secretary of State to make provision for determining the meaning of “eligible” in relation to a carbon capture entity in revenue support regulations. Revenue support regulations thus need to set out the requirements for an entity to be considered an “eligible carbon capture entity” and therefore, to be able to receive revenue support funding through a carbon capture revenue support contract.

The Carbon Capture Revenue Support Regulations 2024 (“the Regulations”) ensure support for ICC projects through either the ICC Contract, or the Waste ICC Contract, and CCS Infrastructure Fund (CIF) grant support through the Grant Funding Agreement. The GGR and the Power BECCS business models will rely on the same Energy Act 2023 provisions in providing support to GGR and Power BECCS projects respectively under carbon capture revenue support contracts.

In the case of Power BECCS, the Regulations already legally enable Power BECCS entities to be considered eligible carbon capture entities.

Note that the Regulations specify eligibility provisions for entities that capture carbon dioxide (or any substance consisting primarily of carbon dioxide) that has been produced by commercial or industrial activities. This means that the provisions can apply in the case of some GGR methods, for example Power BECCS, but not GGR methods that do not capture carbon dioxide from commercial or industrial activities, such as in the case of carbon dioxide captured directly from the atmosphere or seawater.

Therefore, GGRs are not comprehensively defined as legally enabled entities under the Regulations, thus we propose to amend the Regulations to accommodate their usage by the GGR business model. These eligibility criteria will apply exclusively to GGR projects and not to other business models already covered by the Regulations.

For the GGR business model, amendments are proposed to the Regulations to define eligibility for entities which capture carbon dioxide that is in the atmosphere or seawater, in order to cover the full breadth of eligibility criteria outlined in the Act.

To be eligible for a carbon capture revenue support contract, a person must meet the definition of a “carbon capture entity” in the Energy Act 2023 and the eligibility requirements set out in Regulations 3 and 4. Outlined in the subsections below is our proposed approach for what should be added to the Regulations.

In any given allocation round, government may wish to focus on narrower sectors or technologies to ensure GGR and Power BECCS delivery is consistent with wider government policy objectives at the time of such allocation. To that end, additional criteria may be set out in allocation round guidance, as for example, in the published Track-1 HyNet Expansion Application Guidance¹². These additional criteria may include and are not limited to delivery, technical, location or sector specific criteria that entities must also meet in order to be considered for support within a particular allocation round.

Scope of GGR Eligibility Requirements

This section of the consultation sets out our proposals to determine “eligible” in relation to a “carbon capture entity” within the revenue support regulations for GGR business model purposes, in accordance with the requirement in section 68(4) of the Act.

The GGR business model has been designed to attract private investment in a portfolio of large-scale GGR projects by providing revenue support for negative emissions, subject to affordability and value for money. The business model will evolve as the GGR technologies, investor confidence and markets for negative emissions develop. As such, we intend to keep eligibility as broad as possible within the Regulations, to ensure that we do not inadvertently limit the development of new carbon capture technologies and applications.

Eligible Carbon Capture Entity

We propose to amend Regulation 3, with the inclusion of “is in the atmosphere, or has dissolved in sea water”, with reference to an eligible “carbon capture entity” relating to GGR contracts. This addition broadens the scope of eligible carbon capture entities to include those capturing carbon dioxide that is present in the atmosphere or has dissolved in sea water.

This amendment aligns the Regulations with Section 67 of the Energy Act 2023 which defines a “carbon capture revenue support contract” as a contract between a “carbon capture counterparty” and an “eligible carbon capture entity”. A “carbon capture entity” means a person who carries on (or is to carry on) activities of capturing carbon dioxide (or any substance consisting primarily of carbon dioxide) that has been produced by commercial or industrial activities, is in the atmosphere, or has dissolved in sea water, with a view to the storage of carbon dioxide, where “storage”, in relation to carbon dioxide, means any storage with a view to the permanent containment of carbon dioxide (Section 67(7)).

Technology Type

A carbon capture entity (which meets the other requirements of the revenue support regulations) will be eligible whatever the technology type used to capture the carbon dioxide, including but not limited to full-scale carbon capture, modular carbon capture and all carbon capture configurations (including pre- and post-combustion, oxyfuel and emerging technologies). We intend to take a technology neutral approach. As such, we do not intend to include any limits within the Regulations on how an entity captures carbon dioxide.

¹²Cluster sequencing for carbon capture, usage and storage (CCUS) deployment: Phase-2 (closed to applications), <https://www.gov.uk/government/publications/cluster-sequencing-for-carbon-capture-usage-and-storage-ccus-deployment-phase-2>

Entities

We recognise that a variety of different entities with different corporate structures and based in different jurisdictions within the UK may wish to seek support under the revenue support regulations. We consider those seeking support are best placed to decide how to arrange themselves in this regard and so do not propose to include any restrictions in the revenue support regulations as to the class of persons who can be eligible.

Net Negativity

The GGR business model has been designed to support the deployment of technologies that can deliver permanent and verifiable removal of carbon from the atmosphere via biological, chemical or geochemical means. For any GGR technology to be ‘net negative’, it must remove more greenhouse gases from the atmosphere than are generated from the carbon removal process, including the supply chain processes (both domestic and international).

In a 2023 consultation response¹³, we set out GGR project requirements that detailed definitions of eligible carbon dioxide sources, net negativity and permanence of carbon. These are agreed and consulted on as existing project criteria for GGRs and are also set out under the Energy Act 2023. We have outlined our current definition for net negativity in Table 4 below. This definition outlines our direction of travel on net negativity with regards to eligibility. While the GGR Standard is in development, we are minded that at this time net negative is not included in the Regulations, and we are not seeking to amend the Regulations on this matter.

Table 4: Current ‘net negativity’ definition.

Criterion	Description
Net Negativity	The quantity of carbon dioxide removed from the atmosphere and stored permanently, over and above any carbon dioxide emitted through the end-to-end capture process (i.e. ‘net’ removal). Supply chain (end-to-end process) greenhouse gas (including carbon dioxide) emissions must be lower than the total amount of stored carbon.

As above, these eligibility requirements do not include all the information that the Government could later adopt and require for publication via other registries or mechanisms. In particular, the Government has committed to developing a GGR Standard, currently in development in collaboration with BSI¹⁴ and which will be published in due course. The methodologies for demonstrating net negativity as defined in Table 4 will continue to be refined as the GGR Standard is developed, through consultation with a range of domestic and international stakeholders, to ensure it reflects evolving best practice on the quantification of emissions. Future expectations for an eligible entity will include the requirement to be compliant with the GGR Standard.

¹³Greenhouse gas removals (GGR) business model: Updates on the proposed commercial frameworks for the greenhouse gas removals (GGR) business model and related policy, <https://www.gov.uk/government/publications/greenhouse-gas-removals-ggr-business-model>

¹⁴The British Standards Institution, <https://www.bsigroup.com/en-GB/>

These questions relate to the GGR business model:

Question 6: Do you agree with the proposal to amend Regulation 3 of the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024, with the inclusion of “is in the atmosphere, or has dissolved in sea water”, with reference to an eligible “carbon capture entity” relating to GGR contract?

Question 7: Do you agree with the proposal to take a technology neutral approach, and not place restrictions within Regulations on the types of technologies that may be used by a carbon capture entity to capture carbon dioxide?

Question 8: Do you agree with the approach to not limit within Regulations the class of person that may be eligible for a revenue support contract?

Question 9: Do you have any other comments on the proposals for the GGR eligibility Regulations? Please note, we are aware that we have not addressed detailed GGR standards as this policy is still being developed.

Question 10: Considering the nascent nature of the GGR industry, we propose to keep the eligibility criteria for GGR purposes minimal in the Regulations to keep open which technologies and projects we can support in the future. Do you agree with this approach?

Question 11: Do you have any other comments on the proposals for the GGR eligibility Regulations?

Please provide reasons for your responses.

Scope of Power BECCS Eligibility Requirements

This section of the consultation sets out proposals to determine the meaning of “eligible” in relation to a large-scale Power BECCS “carbon capture entity” within the revenue support regulations, in accordance with Section 68(4) of the Energy Act 2023.

The Power BECCS business model is being developed to incentivise the production of negative emissions, with the co-benefit of low-carbon electricity generation. The business model is aimed at large-scale Power BECCS plants, which refers to plants that have a minimum abated power generation capacity of 100MWe. Setting a 100MWe threshold differentiates the Power BECCS business model from wider GGR support by placing the emphasis on the scale of power generation. The business model is currently under development and may need to evolve to meet government objectives in the future. Therefore, it is proposed to keep eligibility as broad as possible within the Regulations. It is intended that the detailed requirements ultimately needed for an entity to be deemed eligible for revenue support will be established outside legislation. In any given allocation round, government may wish to focus on narrower sectors or technologies to ensure GGR and Power BECCS delivery is consistent with wider government policy objectives at the time of such allocation. To that end, additional criteria may be set out in allocation round guidance, as for example, in the published Track-1 HyNet Expansion Application Guidance¹⁵. These additional criteria may

¹⁵Cluster sequencing for carbon capture, usage and storage (CCUS) deployment: Phase-2 (closed to applications), <https://www.gov.uk/government/publications/cluster-sequencing-for-carbon-capture-usage-and-storage-ccus-deployment-phase-2>

include and are not limited to delivery, technical, location or sector specific criteria that entities must also meet in order to be considered for support within a particular allocation round.

Eligible Carbon Capture Entity

Section 68(4) of the Act provides that the Secretary of State must make provision for determining the meaning of “eligible” in relation to a carbon capture entity.

The Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024 (“the Regulations”) were made partly under this power. These Regulations facilitate the implementation of Industrial Carbon Capture Business Models (“ICCBMs”). In addition, it is our view that the provisions of the Regulations can apply to Power BECCS once a business model is in place for that carbon capture activity.

Regulation 3 of the Regulations sets out the basic eligibility criteria, namely that an eligible carbon capture entity is one which carries out an activity in the UK of capturing carbon dioxide (with the intention of storing it) that has been produced by commercial or industrial activities. Power BECCS entities capture carbon dioxide produced by the commercial activity of electricity generation and thus are covered by the Regulations’ eligibility criteria. However, the Regulations also specify that certain entities that meet this basic eligibility criteria are nevertheless excluded from the Regulations. These are referred to as “excluded carbon capture entities”.

It is proposed that no substantive amendment is needed to make a Power BECCS entity eligible under the Regulations. This is because an “energy recovery generating station”, which is defined as “a generating station which is fueled by biomass...”, is not excluded from the scope of the current Regulations. This means that a Power BECCS project is not an “excluded carbon capture entity”. Minimal amendments to eligibility will only be made to make clear that eligibility requirements (described below) apply to a Power BECCS entity rather than other energy recovery generating stations.

Net Negativity

The Power BECCS business model is being designed to incentivise the production of negative emissions and low-carbon electricity generation for security of supply, supporting the deployment of Power BECCS technologies that can deliver permanent and verifiable removal of carbon from the atmosphere. For any Power BECCS technology to be ‘net negative’, it must remove more greenhouse gases from the atmosphere than are generated from the carbon removal process, including supply chain processes (both domestic and international).

We have outlined a current definition for net negativity in Table 5 below. This definition outlines our direction of travel on net negativity with regards to eligibility. While the GGR Standard is in development, we are minded that at this time net negativity is not included in the Regulations and we are not seeking to amend the Regulations on this matter.

Table 5: Current 'net negativity' definition.

Criterion	Description
Net Negativity	The quantity of carbon dioxide removed from the atmosphere and stored permanently, over and above any carbon dioxide emitted through the end-to-end capture process (i.e. 'net' removal). Supply chain (end-to-end process) greenhouse gas (including carbon dioxide) emissions must be lower than the total amount of stored carbon.

As above, these eligibility requirements do not include all the information that the government could later adopt and require for publication via other registries or mechanisms. In particular, the government has committed to developing a GGR Standard, currently in development in collaboration with BSI and which will be published in due course. The methodologies for demonstrating net negativity as defined in Table 5 will continue to be refined as the GGR Standard is developed, through consultation with a range of domestic and international stakeholders, to ensure it reflects evolving best practice on the quantification of emissions. Future expectations for an eligible entity will include the requirement to be compliant with the GGR Standard. This position reflects the approach proposed to be adopted for the GGR business model, ensuring a consistent framework across business models to support engineered GGRs.

These questions relate to the Power BECCS business model:

Question 12: Do you agree with our assessment that Regulations 3 and 4 of the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024 enable Power BECCS projects to be eligible for carbon capture revenue support?

Question 13: Do you agree with the approach to keep the eligibility criteria for Power BECCS as broad as possible within the Regulations?

Question 14: Do you have any other comments on the proposals for the Power BECCS eligibility Regulations? Please note, we are aware that we have not addressed detailed GGR standards as this policy is still being developed.

Please provide reasons for your responses.

Consultation Questions

1. Do you agree with the proposal that Regulations 5, 6 and 7 of the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024 should apply, without substantive amendment, for the purposes of the proposed GGR and Power BECCS business models?
2. Do you agree that provisions set out in Regulations 8, contract publication, of the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024 can and should apply, with minor amendments, for the purpose of the proposed GGR and Power BECCS business models?
3. Do you agree that provisions set out in Regulations 9 of the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024 can and should apply, for the purpose of the GGR and Power BECCS business models with minor amendments and do you agree with the proposed information not required for GGR contracts (Table 2) and additional GGR and Power BECCS project information (Table 3) to be included as part of the key project information?
4. Is there any information on GGR and Power BECCS contracts not listed in Regulation 9 and the Schedule of the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024 that you think should or should not be published in a contract register?
5. Do you agree that provisions set out in regulation 10 of the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024 can apply, without substantive amendment, for the purposes of the proposed GGR and Power BECCS business models?
6. Do you agree with the proposal to amend Regulation 3 of the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024, with the inclusion of “is in the atmosphere, or has dissolved in sea water”, with reference to an eligible “carbon capture entity” relating to GGR contract?
7. Do you agree with the proposal to take a technology neutral approach, and not place restrictions within Regulations on the types of technologies that may be used by a carbon capture entity to capture carbon dioxide?
8. Do you agree with the approach to not limit within Regulations the class of person that may be eligible for a revenue support contract?
9. Do you have any other comments on the proposals for the GGR eligibility Regulations? Please note, we are aware that we have not addressed detailed GGR standards as this policy is still being developed.
10. Considering the nascent nature of the GGR industry, we propose to keep the eligibility criteria for GGR purposes minimal in the Regulations to keep open which technologies and projects we can support in the future. Do you agree with this approach?

- 11. Do you have any other comments on the proposals for the GGR eligibility Regulations?**
- 12. Do you agree with our assessment that Regulations 3 and 4 of the Carbon Capture Revenue Support (Directions, Eligibility and Counterparty) Regulations 2024 enable Power BECCS projects to be eligible for carbon capture revenue support?**
- 13. Do you agree with the approach to keep the eligibility criteria for Power BECCS as broad as possible within the Regulations?**
- 14. Do you have any other comments on the proposals for the Power BECCS eligibility Regulations? Please note, we are aware that we have not addressed detailed GGR standards as this policy is still being developed.**

Next Steps

The consultation period will last for 6 weeks and close on 9 June 2025.

Stakeholders should respond to the consultation questions during the consultation period so that we can capture a range of views on our proposals in relation to the GGR and Power BECCS carbon capture 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/proposals-for-greenhouse-gas-removal-and-power-bioenergy-with-carbon-capture-and-storage-regulations

If you need a version of this document in a more accessible format, please email alt.formats@energysecurity.gov.uk. Please tell us what format you need. It will help us if you say what assistive technology you use.