

Contracts for Difference for Low Carbon Electricity Generation

Government response to consultation on policy considerations for future rounds of the Contracts for Difference scheme



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Context

The Government is committed to strengthening the nation's energy resilience and expanding domestic energy supply, especially considering the recent rises in global energy prices. Moreover, as part of the Government's net zero commitment, it is working towards a fully decarbonised electricity system by 2035, subject to security of supply considerations. Delivering this will require a rapid and sustained scale-up of low carbon electricity deployment.

The Contracts for Difference (CfD) scheme has been hugely successful in progressing the UK's low-carbon ambitions. It is the Government's main mechanism for supporting new low-carbon electricity generation projects in Great Britain (GB), awarding contracts for nearly 27GW of capacity to date. To ensure the continued success of the CfD, it must evolve to better manage the new global challenges faced by the renewables sector. The Government has been working to constantly improve the scheme, including:

- Moving to annual allocation rounds, to provide greater certainty to developers and support supply chain development. The opening of Allocation Round 5 in March marked the beginning of this change.
- Providing ringfenced budgets and minima for key nascent technologies such as tidal stream and floating offshore wind, to ensure they have the opportunity to demonstrate scalability and long-term value potential for consumers.
- Introducing a new more transparent, simple, and precise Supply Chain Plan process to help change attitudes towards supply chains, with a greater focus on collaboration in, and sustainability and resilience of, supply chains.

Beyond this, the GB CfD remains one of the only support schemes in the world where payments are fully linked to inflation (via the Consumer Price Index), providing more certainty to investors in a globally uncertain market. This, and the stability of the scheme, with a proven record of auctions across almost a decade, will further maintain the attractiveness of the scheme and support investment in GB renewables.

The Government will continue to review and adapt the CfD scheme as appropriate. The Government welcomed the independent report of the UK's Offshore Wind Champion,² and is carefully considering its findings, alongside evidence from further consultations on the CfD and the Review of Electricity Market Arrangements respectively.

This consultation response, and the recently published Call for Evidence on the potential introduction of non-price factors into the scheme (a key recommendation of the Offshore Wind Champion's Report),³ set out some of the ways that the Government are considering evolving the scheme in the future. The priority for the sixth Allocation Round (AR6) is to streamline

¹ Including projects that did not sign, or failed, their milestone requirements.

² https://www.gov.uk/government/publications/accelerating-deployment-of-offshore-wind-farms-uk-offshore-wind-champion-recommendations

³ https://www.gov.uk/government/consultations/introducing-non-price-factors-into-the-contracts-for-difference-scheme-call-for-evidence

delivery of annual auctions. Changes for future rounds will be subject to further consultation and will seek to maintain balance between the key objectives of helping to bring forward low cost, low carbon, secure electricity generation.

Overview of consultation proposals

On 14 December 2022, the Government published a consultation on policy considerations for future rounds of the CfD scheme.⁴ The consultation sought views on specific changes proposed for AR6, as well as early views on longer-term policy considerations for rounds beyond this.⁵ The consultation was divided into three sections and included (i) considerations for AR6, (ii) considerations for beyond AR6, and (iii) policy updates on areas that may be of interest to stakeholders. Stakeholder views were only sought for policy proposals discussed in the first two sections of this consultation, which included:

1. Considerations for Allocation Round 6

• Private Network (PN) CfD Agreement: The Government is aware that in AR6 or future allocation rounds some generating projects may seek to apply for a PN CfD Agreement to support the electrification of offshore oil and gas facilities. This could place a new burden on electricity bills. The Government therefore sought views on changes to the PN CfD Agreement to ensure that it continues to offer value for money to consumers and supports other scheme objectives.

2. Considerations for future CfD rounds

- Definition of floating offshore wind: The Government sought views on the potential
 ambiguity within the current definition of floating offshore wind in the CfD (Allocation)
 Regulations 2014, being aware that it may create uncertainty over whether new and
 innovative foundation types seeking to compete in the floating offshore wind category
 will be considered eligible.
- Offshore coordination: The Government's Offshore Transmission Network Review (OTNR)⁶ aims to improve the coordination of the offshore electricity network, which should help reduce project costs and minimise the impact on local coastal communities and the environment. As part of the OTNR, the Government is considering the coordination of offshore windfarms with interconnectors. Although currently ineligible to apply for the CfD, the Government is reviewing, and sought views on, the potential involvement of these types of projects in the CfD scheme.
- Offshore wind phasing: Offshore wind projects within the same Crown Estate lease
 area can be built in up to three phases, with each phase being party to its own CfD
 agreement. Phasing policy was originally designed to provide support for early offshore
 wind projects; however, over the past decade the offshore wind sector has evolved, and

⁴ https://www.gov.uk/government/consultations/considerations-for-future-contracts-for-difference-cfd-rounds

⁵ Full details of the policy background and the proposals consulted on are provided in the original consultation and will not be repeated in this response publication.

⁶ https://www.gov.uk/government/groups/offshore-transmission-network-review

projects are now using fewer, larger turbines with shorter installation times. This suggests that phasing policy has achieved its purpose. As such, the Government is reviewing phasing policy, to either restrict or remove the policy for future allocation rounds and sought views on this proposal.

- CfD appeals system: Currently, the CfD scheme has a two-tiered appeal system,
 which if triggered can delay the outcome of allocation rounds. Following the move from
 allocation rounds every two years to annual auctions, the Government is reviewing the
 current appeals process and sought views to help ensure it is appropriate for annual
 allocation rounds.
- Repowered renewable generation assets: The Government sought views and further
 evidence on whether projects that are derived from the repowering of existing projects
 should be considered in the CfD scheme, balancing maintaining and increasing capacity
 with ensuring value for money and longer-term considerations of these projects in the
 electricity system.

Engagement with consultation proposals

The consultation was published online and ran from 14 December 2022 to 7 February 2023. Responses were submitted through an online response tool (Citizen Space), or by email. The consultation received 67 responses, 43 of which were from companies active in the energy sector (including developers, generators and suppliers) and nine were from trade associations and bodies. The consultation also saw a small number of responses from devolved or local governments, environmental organisations, commercial landowners, investment companies, not-for-profit organisations, as well as an advisory firm, telecommunications company, professional body, renewable energy partnership and research group. Note that not all respondents engaged with every question in the consultation; as such, the number of respondents for each policy topic is indicated in each chapter.

Next steps

Allocation Round 5: The fifth CfD Allocation Round (AR5) was launched on 30 March 2023. AR5 is the first in a series of annual CfD rounds; previously auctions were run approximately every two years. The Government intends to launch AR6 in March 2024 in line with this new annual frequency. The shift to annual auctions will help accelerate the deployment of low carbon electricity in GB, support the United Kingdom's (UK) climate ambitions and strengthen British energy security.

Private Network (PN) CfD Agreement: to implement the proposal to amend the PN CfD Agreement to make renewable generators that directly supply offshore oil and gas facilities ineligible for that Agreement. The specific amendments to the PN CfD Agreement will be consulted on before AR6 opens. Corresponding changes will be made to the Allocation Framework.

Non-price factors: As part of the Government's ongoing review of the CfD in the evolving electricity system, on 17 April 2023 a call for evidence on introducing non-price factors into the CfD scheme was published. This publication is seeking stakeholder views on whether potential reforms to the CfD, to value factors other than price in CfD auctions, could help accelerate renewable energy deployment and address potential energy security issues while being mindful of UK investment attractiveness and costs to consumers.

Responses to the consultation

This Government response outlines the summary of the 67 responses to the 13 questions in the consultation, and the associated policy responses. The Government is grateful to stakeholders for taking the time to engage with the consultation.

In reporting the overall response to each question, the 'majority' indicates the clear view of more than 50% of respondents in response to that question, and 'minority' indicates fewer than 50%. The following terms have been used in summarising additional points raised in the responses: 'most respondents' indicates more than 70% of those answering the particular question; 'a few respondents' means fewer than 30%; and 'some respondents' refers to the range in between 30% and 70%.

1. Considerations for AR6

1.1 Private Network CfD Agreement

Proposals

Question 1 sought views on making a generator that directly supplies offshore oil and gas (O&G) facilities ineligible to apply for a Private Network (PN) CfD Agreement. It also asked what the likely impact of this approach would be and whether any alternative approaches should be considered. This proposal is intended to prevent consumers, who ultimately fund the CfD scheme, from subsidising renewable generators that supply offshore O&G facilities directly.

Responses to consultation

Question 1 received 41 responses. Responses were received from companies active in the energy sector, trade and public bodies, O&G companies, and environmental groups.

Views on proposals and government response

Most respondents (88%) supported the proposal, agreeing that consumers should not subsidise renewable generators that directly supply offshore O&G facilities. A few respondents opposed the proposal or were undecided.

A few respondents stated that the CfD is intended to mitigate financial risk for low-carbon electricity generation projects, and as producers of fossil fuels, O&G companies are not the intended beneficiaries of the scheme. The same respondents suggested that Power Purchase Agreements between windfarms and O&G companies would be more appropriate to support platform electrification.

A few respondents stated that the proposal was fair, particularly in the context of the unprecedented rise in consumer energy bills and submitted that there were existing incentives for the offshore O&G sector to invest in electrification, such as the investment allowance within the Energy Profits Levy (EPL).

In relation to the EPL, a few respondents suggested that this should be used to fund a separate scheme to decarbonise the subsea activities of the offshore O&G sector, which they stated wave technologies would be particularly suited to.

A few respondents suggested that the proposal would lead to truer price discovery and more accurate bid prices in CfD auctions. These respondents also stated that to achieve cost reductions and future deployment targets, offshore wind projects need to be built at scale, and projects eligible for a PN CfD Agreement were unlikely to make a significant contribution to these ambitions.

A few respondents urged that it was not in the public interest for CfD support to further fossil fuel extraction given the significant contribution that such fuels make to climate change.

For the small number of respondents who opposed the proposal or were undecided, the main reason put forward was the challenging economics of electrification, which they stated CfD support could improve.

Opposing respondents considered that not providing CfD support for private wire supply to offshore O&G facilities would ultimately make it more difficult for operators to meet the emissions reduction targets in the North Sea Transition Deal (NSTD).⁷

A few respondents suggested that the proposal could lead to a less coordinated and efficient offshore transmission network, which they stated could increase the cost of electricity for billpayers.

A few respondents questioned why offshore O&G facilities should be treated differently to other industrial facilities that might receive CfD-supported electricity via private wire. In response to the assertion in the original consultation document that other industrial facilities are more likely to be connected to the grid and therefore more exposed to wholesale prices, it was submitted that offshore O&G facilities are also likely to connect to the grid for security of supply reasons. However, it was also submitted that grid connections for offshore O&G facilities are cost-prohibitive, and this is not the case for other industrial facilities that are located onshore.

A few respondents requested clarification on existing CfD projects that may seek to directly supply offshore O&G facilities.

Policy response

The Government intends to implement its proposal to amend the PN CfD Agreement from AR6 onwards.

The Government considers that consumers, who ultimately fund the CfD scheme, should not subsidise renewables generation that directly supplies offshore O&G facilities.

The specific amendments to the PN CfD Agreement will be consulted on before AR6 opens. These amendments will make generators that wish to supply offshore O&G facilities directly ineligible for the PN CfD Agreement. Corresponding changes will be made to the Allocation Framework.

The Government notes the progress the offshore O&G sector has made thus far in working towards its emissions reduction targets as set out in the NSTD. These targets are for the sector to reduce production emissions by 10% by 2025, 25% by 2027 and 50% by 2030 (against a 2018 baseline). The North Sea Transition Authority projects that the sector is on track to meet its 2025 and 2027 targets, but further abatement initiatives, including platform electrification, are required to meet (and surpass) the 2030 target.

⁷ https://www.gov.uk/government/publications/north-sea-transition-deal

The Government recognises the importance of platform electrification to delivering further emission reductions and has introduced an 80% investment allowance within the EPL for investment expenditure on upstream decarbonisation. This measure will support the sector to deliver on its commitments in the NSTD. The Government does not believe that consumers should provide additional support to the sector.

Alongside the consultation response, the Government has published an Impact Assessment⁸ (IA) of implementing the proposal.

There is uncertainty regarding the potential impacts. However, the IA indicates a potential saving to consumers. It also notes that there could be a risk of a reduction in emissions abatement if some O&G platforms choose not to electrify following implementation of the proposal. This would potentially be contrary to the sector's commitments in the NSTD, which were not made subject to the availability of subsidised renewables generation. The sector may also use the investment allowance under the EPL to electrify its platforms (as referenced above).

The IA considers the results of the Innovation and Targeted Oil & Gas (INTOG) offshore wind leasing round. The results suggest that most generating projects (making up most of the capacity) in the 'TOG' category may not be eligible to apply for a PN CfD Agreement, although it is noted these projects have only obtained Exclusivity Agreements at this stage.

To be eligible to apply for a PN CfD Agreement, the applicant must demonstrate that they are a Private Network Generator as defined in the PN CfD Agreement¹⁰ and Allocation Framework.¹¹ The definition of Private Network Generator, among other things, requires that the generator is exempt from the requirement to hold a licence for the generation of electricity pursuant to the Electricity (Class Exemptions from the Requirement for a License) Order 2001. Given the likely applicability of the four generation class exemptions available under the 2001 Order, this effectively requires the generator to provide less than 50MW of power from a generating station with a declared net capacity of up to 100MW (ignoring power supplied to consumers on the same site). Based on the INTOG results, most of the successful generating projects in the TOG category appear to exceed these capacity limits and, consequently, may already be ineligible to apply for a PN CfD Agreement.

Further details on the potential impacts of implementing the proposal are set out in the IA.

⁸ https://www.gov.uk/government/consultations/considerations-for-future-contracts-for-difference-cfd-rounds

⁹ INTOG was established to provide offshore wind developers with the opportunity to apply for rights to build small-scale innovative projects ('IN') and projects seeking to directly supply offshore O&G platforms ('TOG') in Scottish waters. The INTOG results are available here: https://www.crownestatescotland.com/news/intog-13-projects-selected-to-support-green-innovation-and-help-decarbonise-north-sea

¹⁰ https://www.gov.uk/government/publications/contracts-for-difference-cfd-allocation-round-5-standard-terms-and-conditions

 $^{^{11} \, \}underline{\text{https://www.gov.uk/government/publications/contracts-for-difference-cfd-allocation-round-5-allocation-framework}$

Regarding operational CfD generators, capacity contracted under the CfD may not be removed from the scheme to be supplied on a merchant basis, whether to an offshore O&G facility or any other end-user.

2. Considerations for future CfD Allocation Rounds

2.1 Defining Floating Offshore Wind

Proposals

Question 2 sought views on whether respondents support a change to Regulation 27ZA(4) in the CfD (Allocation) Regulations 2014 in relation to the floating offshore wind definition, and if yes what they would suggest.

Questions 3 and 4 sought views on whether respondents support the Government publishing a list of technology types which it considers eligible to compete for a floating offshore wind CfD, and whether there was any further evidence that respondents could provide to support their responses.

Responses to consultation

Thirty-five responses to this consultation chapter were received, answering a combination of questions 2, 3 and/or 4. Most respondents were from companies active in the energy sector (including developers, generators, and suppliers), with responses also received from commercial landowners, trade associations, as well as an environmental organisation, local government, an investment company, and a research group.

Views on proposals and government response

The majority of respondents agreed on the need for a change to the aforementioned Regulation 27ZA(4). However, there was no consensus on what this change should be. A few respondents suggested delaying any change until floating offshore wind has become commercialised and a supply chain established, or at least until after 2030. A few respondents did not express a preference either in support of or against changing the Regulation and said that any change should be to help floating offshore wind technology mature to a level where it can compete with fixed-bottom technology.

A minority of respondents expressed a specific preference for one of the four possible solutions provided in the consultation paper. ¹² In addition to those respondents, a few proposed to only extend the water depth requirement from at least 45m to at least 60m, and a few suggested alternative approaches altogether. Of these, a few suggested the adoption of the principle of 'positive buoyancy' to define a floating offshore wind turbine, while others encouraged the Government to consider a site-specific approach. One respondent suggested continuing with the current definition of floating offshore wind and adding additional

¹² Possible solutions included a different definition for eligible foundations, a new technology category for 'Deep Water Wind' with more stringent depth requirements, a combination of these two, or publication of separate guidance containing a list of eligible technology types.

technologies to Pot 2 at a relevant point in their development should they be judged to meet neither the definition of floating nor fixed offshore wind.

Some responses were expressly against the creation of the proposed new technology category "Deep Water Wind". The most common argument against this was that it could introduce unnecessary additional complexity. Any potential approach which tends to merge fixed/floating foundation types was generally opposed.

A few respondents also recognised the importance of balancing flexibility of definition with protection against the risk of gaming. They suggested that the Government focus on a regulation that will support floating offshore wind technology to mature and to become competitive with fixed offshore wind. To avoid the risk of gaming at water depths where both fixed and floating technologies may be viable, respondents highlighted the importance of maintaining a clear distinction between floating and fixed-bottom offshore wind in eligibility criteria.

A few responses acknowledged significant diversity of opinion within industry and asked the Government to continue engagement with industry and provide further details of any issues it considers may affect the current floating wind definition.

For questions 3 and 4, the consultation received 31 responses. The majority of respondents were in favour of the publication of a list of technology types eligible to compete for a floating offshore wind CfD, while a few listed the pros and cons of doing so, without expressing a preference.

Some respondents raised concern that adopting a list of eligible technology types would be an overly prescriptive approach, with the risk of impeding innovation. A few responses suggested providing a list of ineligible 'standard' technologies, instead of listing eligible ones.

Of those in favour of publishing a list of eligible technology types, a few stated the need for it to be non-exhaustive and/or non-exclusionary, and for a list review process to take place before each allocation round, or every time a new floating design enters the market.

A few responses expressed the preference for the list to be published in addition to a change to Regulation 27ZA(4), while one indicated that the list should be published instead of the change.

Policy response

Considering the diversity of responses received, raising a wide range of relevant considerations, the Government notes the support for a list of technology types as a potential solution, but recognises the concerns raised and the potential difficulties of this approach. The Government has decided to keep this area under review and continue to work with industry and other stakeholders with a view to developing a long-term solution to the question of floating offshore wind definition that avoids precluding CfD support for viable, novel solutions to the deployment of offshore wind in deep waters.

2.2 Facilitating coordinated infrastructure

Proposals

Question 5 sought views on if an offshore wind farm connected to a multipurpose interconnector (an MPI-OFW, see Figure 1) should be eligible to apply for future CfD rounds.

Question 6 sought views on what changes, other than those identified in the consultation, would be required to allow the participation of MPI-OFW in the CfD scheme.

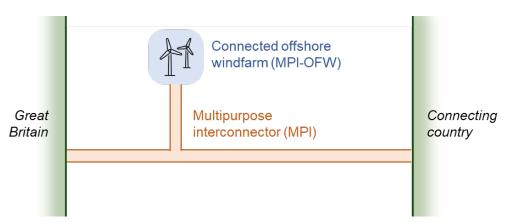


Figure 1: diagrammatic representation of a multipurpose interconnector (MPI, shown in orange) and the connected offshore windfarm (MPI-OFW, shown in blue). Note that this is one of many possible models and arrangements for an MPI and MPI-OFW.

Responses to consultation

Of the total responses received for this consultation, 39 respondents provided an answer to either question 5, question 6 or both questions from this chapter. Responses primarily came from companies active in the energy sector (including developers, generators, and suppliers), with responses also received from commercial landowners, environmental organisations, trade associations, as well as an investment company, devolved government, and an advisory firm.

Views on proposals and government response

Most respondents agreed that MPI-OFW should be eligible for a CfD, with a few commenting that there is no material difference between an MPI-OFW and a radially connected offshore windfarm, ¹³ and it is therefore consistent to treat such projects the same. Additionally, a few respondents noted that the CfD would be a key enabler of MPI-OFW projects, helping to provide investor confidence and bring these projects forward.

¹³ A radial connection is the term used to describe an offshore windfarm that is connected to the GB onshore grid via a single traditional connection, with no coordination.

Responses received to the consultation noted the following benefits of participation of MPI-OFW in the CfD, and MPI projects more generally:¹⁴

- Decarbonisation: Some respondents¹⁵ noted that power generated by an MPI-OFW would be able to contribute towards the UK's decarbonisation. One respondent also noted that multipurpose interconnectors had the potential to help facilitate the decarbonisation of oil and gas platforms by making connection to the transmission network more economical.
- Energy security: Some respondents noted that energy security would be improved.
 Suggested reasons for this were provided by a few respondents, and included increased diversity of energy sources, more connection to other markets and/or more generation capacity.
- A more connected energy system: The ability to create a more connected, integrated, and efficient energy system was noted by a few respondents. Two responses noted the potential for reduced curtailment.
- Connection to neighbours: A few respondents also noted that MPIs would allow for improved integration with neighbouring markets, with a few noting that this could help with exports. One respondent also noted that such connections could help to reduce the overall cost of energy through access to lower cost energy sources from neighbouring countries and a reduction in the amount of energy infrastructure required in the UK.
- Network benefits: Some respondents noted that MPIs would help reduce network
 infrastructure, noting that this has the potential to help reduce cost to consumer and/or
 lower the impact on affected communities and the environment.
- Competition and auction bids: Some respondents noted the cost benefit that could result from MPI-OFW participating in the CfD. Primarily, this was noted as being due to an increase in competition in the auction, which could help drive down auction bids and ultimately improve consumer value for money. One respondent also commented that capex savings gained through coordination of assets could feed down into auction bids.
- Government priorities: A few respondents noted that MPIs align with the Government's priorities, including the aims of the Offshore Transmission Network Review (OTNR), an ambition of 18GW interconnection by 2030, and/or an ambition of 50GW offshore wind by 2030.

However, most respondents also provided comments/suggestions on a wide range of areas that need further clarification, information, or consideration in relation to MPI-OFW; these are summarised in the following section. Indeed, two respondents noted that a full review to assess all implications of multipurpose interconnectors would be required, although one of

¹⁵ A few respondents simply referenced the benefits outlined in the consultation. As such, the count of "some" for "decarbonisation", "security of supply", "network benefits", and "competition and auction bids" includes those who referenced the consultation as well as those that provided specific comments on the topic.

¹⁴ For the benefits outlined in this response summary, there is no differentiation between the specific benefits of an MPI-OFW versus the benefits of MPI projects as a general principle. Instead, the benefits described in the responses received are grouped together for ease of presenting the general themes and will be collectively termed MPIs. Where relevant, specific benefits of just an MPI-OFW are identified separately.

these two did note that the Government had correctly identified the scope of the changes in the consultation.

- Collaboration with neighbouring markets: The importance of alignment with neighbouring jurisdictions was highlighted as important by a few respondents- this included the need to prevent the risk of arbitrage. A few respondents also noted the importance of ensuring that no projects received double subsidy (either in relation to other markets or more generally).
- **Project timing:** The risk of misaligned timings between the development of two large infrastructure projects (i.e., the interconnector and the offshore windfarm), particularly in relation to taking final investment decisions, was noted by a few respondents.
- Interconnector capacity: A few respondents noted the need to consider access of the MPI-OFW to the interconnector. Specifically, two respondents referenced the derogation granted to Kriegers Flak¹⁶ in relation to the interconnector capacity utilised by the windfarm.
- GB priority: A few respondents noted that CfD eligibility (or CfD payments) should be
 on the condition that priority is given to the GB market for the power produced, with one
 respondent noting that an MPI-OFW should have unconstrained access to the GB
 market. Additionally, a few respondents noted that it should be ensured that an MPIOFW cannot change the supplied country during, or at the end of, the supporting period,
 so that the country providing the support will always receive the benefit of the energy
 produced.
- Export of electricity: A few respondents noted concerns around the potential impact
 on GB consumers if they are subsidising exported electricity and that any payments
 made should still be of benefit to the GB consumer, with one respondent noting that only
 electricity supplied to GB should receive CfD payment. Furthermore, two respondents
 noted that the benefits that reduced network infrastructure costs could bring should be
 balanced against the possibility that the majority of electricity generated by the MPIOFW is exported.
- One further respondent believed that UK consumers should not subsidise electricity consumed abroad; however, they also acknowledged that there was no material difference between an MPI-OFW and a radially connected offshore windfarm that has some of its power exported via an interconnector.
- A few other respondents also noted that there was no significant difference between an MPI-OFW exporting its power and a radially connected offshore windfarm whose power is then exported via a traditional interconnector, with one respondent commenting that impact on cost to consumers is the same regardless of where the energy is utilised. Two respondents noted that all power generated by an MPI-OFW should be eligible for CfD payment, and one respondent noted that CfD payments to an MPI-OFW could be as

¹⁶ Kriegers Flak is an offshore windfarm connected to a multipurpose interconnector between Denmark and Germany.

beneficial to GB consumers as payments made to radially connected offshore windfarms.

- Other technologies: Although the specific technology type for the offshore windfarm (i.e., floating vs fixed-bottom) was not defined in the consultation, one respondent specifically referred to floating offshore wind in relation to a multipurpose interconnector. This highlights the need to consider the potential use of different offshore technologies as part of a proposed MPI project.
- **CfD mechanics:** Some respondents provided comment on the interaction of these projects with the dynamics of the CfD auction. Of these respondents, most commented on the need to ensure a level playing field, particularly with other technologies (e.g., radially-connected offshore windfarms), and the majority of these commented on the need to consider the potential impact of differing network/transmission charging on these projects. One respondent noted that network charging would also differ whether an Offshore Transmission Owner-led or interconnector-led setup was followed ¹⁷ and two noted that charging would be impacted by whether the Home Market (HM) or Offshore Bidding Zone (OBZ) business model was followed. ¹⁸
- The different market model/commercial set-up was also noted as a factor that would influence CfD contracts for MPI-OFWs by two respondents and the reference price by one respondent. A few respondents made more general comments on the CfD reference price, either highlighting its importance or seeking further clarification on how it would be determined, given the novel setup of these projects. Additionally, a few respondents noted the need for further clarity on metering arrangements for an MPI-OFW.
- In addition to the connection agreement changes noted in the initial consultation document, more specific changes to the CfD auction, contract and regulations were noted by individual respondents:
 - One respondent noted that the CfD contract should provide protection from unique project delays that result from the development of multipurpose interconnectors.
 - One respondent raised concerns associated with the fact that the definition of a 'Transmission Licensee' as used in the CfD Standard Terms and Conditions, does not include interconnectors.
 - One respondent suggested that due to the differences between an MPI-OFW and a radial offshore windfarm, and the associated amendments that would be required to level the playing field (e.g., earlier CfD access or extended delivery years), a bespoke CfD for such projects may be a more logical solution.

¹⁷ https://www.ofgem.gov.uk/publications/offshore-transmission-network-review-multi-purpose-interconnectors-minded-decision-interim-framework

¹⁸ Note: business models are out of scope of this consultation, but a brief description of the HM and OBZ models was provided in the consultation. Further information on responses that referred to market arrangements is provided below.

- One respondent believed that MPI-OFW should compete in a separate auction pot, and one respondent suggested that MPI-OFW be allocated separately (at least in the short term) to support projects coming forward without impacting the wider auction.
- One respondent noted concerns that a 15-year term of support from the CfD may not be sufficient to provide investment confidence, especially as the Cap and Floor regime for interconnectors provides support for 25 years.
- One respondent noted the need to consider the distribution of revenue via the CfD between the interconnector itself and the MPI-OFW, which would be influenced by the business model chosen.
- Business models: Although out of scope of this consultation, some respondents
 commented on market arrangements and proposed business models (e.g., the Home
 Market model and the Offshore Bidding Zone model). A few responses noted the need
 for further information on the market arrangements and business models, and a few
 other responses noted that the arrangements of a CfD for MPI-OFWs would be
 dependent on the model chosen. A few respondents provided an opinion on their
 market model preference, the majority of which indicated a preference for the HM
 approach.
- Other comments on business models from individual respondents included noting the importance of flexibility as more intelligent market solutions are encouraged; allowing operators the freedom to contract and sell in neighbouring markets; and an acknowledgement that other commercial arrangements feed into decisions, and a holistic approach is required. One respondent also commented that under the OBZ, the MPI-OFW is at a disadvantage whereas the interconnector portion of the MPI would benefit from this model. The respondent goes on to suggest that a compensation of revenues between the interconnector and MPI-OFW could be introduced, an arrangement that would need to be considered in the CfD.
- Anticipatory Investment (AI): A few respondents also provided comment on AI;
 however, as AI is out of scope of this consultation only a very high-level summary is
 provided. One respondent commented that they agreed with Ofgem's approach; two
 commented that the interaction of AI with multipurpose interconnectors will need to be
 considered; and one respondent commented that they did not believe AI alleviated all
 risk sufficiently enough, noting that further guidance and potential changes are required.
- Other: Other notable comments as part of this chapter include:
 - One respondent noted that MPI-OFW support through a CfD was suitable in the short term, but in the future, wider arrangements should be considered, including through the Review of Electricity Markets (REMA) programme.
 - One respondent supported the principle of support for MPI-OFW through the CfD, noting that any methods to increase low-carbon generation would aid energy security and help reduce energy prices, but was cautious about the impact on availability of corporate Power Purchase Agreements.
 - o Three respondents noted the importance of timely progression of this policy work.

- One respondent noted that complications with power flows and trading are generally due to the interconnector not the generator, and that ultimately the CfD scheme is designed to support low-carbon generation. They suggested that these wider considerations could be discussed after the initial question around eligibility.
- Although out of scope for this consultation, a few respondents commented on wider changes to the offshore grid structure. Specifically, individual respondents suggested each of the following: to create high-capacity mesh grids; to include offshore transmission infrastructure as part of the UK transmission system; or to follow a more centrally planned grid structure.

Policy response

The Government is supportive of coordination in line with the aims of the OTNR and recognises that participating projects are exploring ambitious solutions to achieve a more coordinated approach. The Government is keen that the CfD should work alongside the aims of the OTNR and not be a barrier to achieving these objectives. Indeed, it acknowledges the positive sentiment from stakeholder responses surrounding the inclusion of MPI-OFW projects in the CfD.

The CfD, however, is a consumer-funded scheme and therefore the Government must be sure that any potential changes achieve the best value for money for consumers. MPI-OFW projects would be a novel project type and as such there are several key unknowns that need further consideration (as noted in the consultation responses and summarised above) and a stronger evidence base. This includes but is not limited to understanding the implications on current CfD auction mechanics; how an MPI-OFW could compete in an allocation round, and therefore any impacts MPI-OFW projects could have on costs to consumers if included the MPI business model; and project timings and delivery. Due to these factors, and the fact that the Government is unaware of any prospective MPI-OFW projects that intend to participate in AR6, the Government is not currently proposing to make changes to the CfD scheme in relation to MPI-OFWs. If changes were to be made to incorporate MPI-OFWs into the CfD, this would be anticipated to be implemented for future rounds beyond AR6.

Nevertheless, the Government welcomes the continued engagement from stakeholders on this topic and will aim to continue collaborative work with potential MPI-OFW projects to help build an enabling framework to support the building of the first MPI projects, as committed to in the recent Powering Up Britain Energy Security Plan.¹⁹

We would also like to highlight a number of upcoming publications on this policy area expected this summer, including:

A consultation from Ofgem on multipurpose interconnectors, which will cover a number
of topics including charging, licencing, and the regulatory regime, and

¹⁹ https://www.gov.uk/government/publications/powering-up-britain/powering-up-britain-energy-security-plan

 a joint consultation between Ofgem and the Department for Energy Security and Net Zero on MPI market arrangements.

Furthermore, Ofgem is continuing to implement its policy on Anticipatory Investment to protect gaps in investment between offshore coordination projects. Whilst this is not currently directly applicable to MPI-OFWs, Ofgem will be also consulting on the viability of this for this type of project and the benefits it may carry to de-risking investment. Any findings from this consultation could help inform policy in relation to MPI-OFWs and their potential access to the CfD.

Utilising the valuable information gained through stakeholder engagement, and through ongoing review of MPI-OFWs, the Government expects to provide an update on this topic and associated policy development towards the end of 2023.

2.3 Phasing

In the consultation for Allocation Round 4,²⁰ the Government consulted on amending offshore wind phasing policy. As stated in the Allocation Round 4 government response, the Government is committed to keeping offshore wind phasing policy under review as developments in technology are made. Views were invited again on offshore wind phasing policy in this consultation as part of that commitment.

Proposals

Questions 7 and 8 sought views on whether phasing policy for offshore wind units should be restricted or removed for future allocation rounds. There have been indications that offshore wind phasing policy has achieved its purpose of de-risking the construction process and increasing investor confidence. There were also concerns that the use of phasing may have been more about bid optimisation strategies rather than construction risk mitigation.

Responses to consultation

There were 35 responses to the consultation that addressed these questions, most of which came from energy companies and trade bodies.

Views on proposals and government response

The majority of respondents were in favour of keeping offshore wind phasing policy in place for future allocation rounds. The rationale behind this viewpoint stems from concerns that the deployment of an offshore wind farm and its associated transmission assets remain complex. Some respondents also raised concerns about impacts to supply chain infrastructure, as global demand for offshore wind projects increases, which places pressures on international and regional supply chains.

²⁰ https://www.gov.uk/government/consultations/contracts-for-difference-cfd-proposed-amendments-to-the-scheme-2020

Some respondents also proposed that phasing policy should be extended to floating offshore wind projects, to allow the benefits of phasing policy for fixed-bottom offshore wind projects to be similarly achieved by floating offshore wind projects.

Policy response

Considering the responses received, the current Government position is to keep phasing policy for fixed-bottom offshore wind projects in place for now, but t to keep the policy under review. In particular, the concerns raised by respondents around impacts on supply chain infrastructure if phasing policy was removed require further exploration. Furthermore, the implementation of the contract changes for Allocation Round 5 to prevent generators delaying their CfD Start Date for commercial gain²¹ will reduce the ability for phasing policy to be used as a bid optimisation strategy. The Government will also review introducing phasing policy for floating offshore wind projects for future allocation rounds and would consult on any proposed changes to the policy.

2.4 Appeals

Proposals

Questions 9 and 10 sought views on whether the current Tier 1 and 2 appeal process is still appropriate for an annual CfD allocation round. The options available include, but are not limited to:

- A Fixed Timeline instead of publishing five timeline scenarios every year, one fixed timeline is published, including a window for the appeals process.
- Pending Applications instead of running the allocation process once all appeals have concluded, Tier 2 appeals take place during the allocation process. The sealed bid and auction stages would run as usual and if Ofgem rules in favour of appellants, the successful appellants are factored into the allocation process.
- Pre-qualification introduce a new process, where there is a pre-qualification period (similar to the process used in the Capacity Market²²) before starting the allocation process.

Responses to consultation

There were 32 responses to the consultation that addressed these questions, all of which came from energy companies and trade bodies.

Views on proposals and government response

The majority of respondents were in favour of a fixed timeline being published annually that includes a window for the appeals process, on the grounds that this would provide greater certainty for applicants of when key milestones in the CfD allocation process will be reached. A

²¹ https://www.gov.uk/government/consultations/cfd-contract-changes-for-allocation-round-5

²² https://www.emrdeliverybody.com/CM/Prequalification-Process.aspx

few respondents were keen for a pre-qualification process to be explored. The majority of respondents were not in favour of the pending application process, mainly because of the uncertainty this could create for the outcome of an auction, and the concern that it could lengthen the allocation process. One respondent supported retaining the status quo.

Policy response

The Government notes the support to reform the appeals process and will consider how best to streamline the process for future rounds, taking into account the views presented.

2.5 Treatment of repowered projects

Proposals

Question 11 sought views on whether the CfD is an appropriate mechanism through which to support repowered assets, or whether there are other appropriate routes to market. It also sought views on whether, if participating in the CfD, repowered projects should compete alongside new build projects.

Question 12 sought views on how a repowered project should be defined and whether this definition aligns with current CfD eligibility.

Question 13 sought views on the main barriers to repowering projects in relation to the CfD, and whether there are additional factors that were not outlined in the consultation document.

Responses to consultation

There were 48 responses to at least one of the above three repowering questions. The majority of responses received were from generators/developers and trade associations, whilst responses were also received from suppliers, research centres, commercial landowners, investment firms, devolved government, a manufacturer, a charitable organisation, and a social enterprise.

Views on proposals and government response

Of the respondents that answered question 11, the majority thought the CfD is an appropriate mechanism through which to support repowered assets, maintain (or increase) renewable generation capacity and help meet net zero ambitions. However, the majority of those that thought this, however, said this was on the condition that these projects are appropriately defined and aligned more towards genuine/full repowering projects as opposed to partial repowering or life extension. It was also highlighted by a few respondents that eligibility should not be exclusive to a specific technology, innovation should be encouraged, and that any decision and further policy design should be taken in the wider context of REMA.

Respondents were split on how best to incorporate fully repowered projects into the CfD. Some respondents advocated for repowering projects to compete alongside new builds, due to having similar project economics and therefore being cost competitive relative to a new build,

whilst some respondents advocated for a separate repowering auction 'pot' to ensure fair competition due to lower costs of repowering compared to new builds. Views depended on the specific definition of repowering and therefore the costs included, highlighting the need for an agreed definition to help inform further responses. A few respondents suggested that the value of technologies that can provide reliable baseload generation and other environmental services should be recognised in some way and factored into technology-specific auction design, encouraging innovation.

A few respondents did not consider the CfD an appropriate mechanism through which to support repowered assets, arguing that market forces should be left to decide the most efficient use of these sites in the future and, expecting that there will be demand for subsidy-free construction on these sites, because of their existing grid connections and extensive data on potential generation on that site. A few respondents were therefore of the view that exposure to market forces would be the best way of discovering the optimum use of an existing site, with renewed subsidy potentially crowding out innovation.

Whilst a few respondents also highlighted the need for a mechanism to continue to incentivise generators to deliver for the GB energy market as opposed to decommissioning, they did not explicitly support the CfD as this mechanism.

Respondents that answered question 12 replied with differing definitions of full repowering and thoughts on eligibility.

Respondents only submitted specific definitions of onshore and offshore wind technologies. Eligibility criteria for other technologies were raised – in particular, the need to support continuous costs of refurbishment and upgrade under repowering for some technologies.

A few respondents put forward similar ideas for a definition of the repowering of wind farms (specifically onshore, although the definition can be expanded to cover offshore) which captured the following key factors:

- Existing turbine infrastructure is removed and replaced with entirely new turbines,
- layout and number of turbines may change, with new foundations likely to be required,
- existing infrastructure is re-used and utilised where possible, but new network connection infrastructure may be needed, and
- installed capacity and energy generation tends to increase as a result.

Further to the factors in the above definition for repowering wind farms, additional factors, which could apply to any technology, were also put forward by other respondents. These included that the repowered site:

- Description equates to that of a brownfield site,
- no longer receives subsidy and has been generating for at least 20 years previously,
- needs to ensure continuity of power generation through a prescribed maximum period of non-generation,

- must be able to evidence a minimum investment in new assets on the site,
- · costs include decommissioning of the old site, and
- that switching of technology from what was originally used for generation onsite should be viable.

Some respondents disagreed on the extent to which the changes required to the site would trigger the requirement for a new grid connection, planning consent, and/or lease or seabed agreements. Some respondents thought sufficient change would be needed to trigger these requirements whilst some respondents thought that change would be insufficient to trigger these.

A few respondents outlined that they believe repowered projects are already eligible for a CfD due to existing precedent in Allocation Round 4.

Some respondents suggested that any eligibility criteria should focus solely on the core objective of the CfD (to encourage renewable electricity generation), its key considerations (decarbonisation, security of supply and cost to consumers), and the impact of the project upon these. This was put forward as an alternative to over-specifying a definition for each technology-type; perhaps, for example, developing a framework to determine eligible projects which puts the likely cost to consumers at the heart of the decision-making process.

Some respondents also welcomed and requested further discussion on the definition and eligibility of a repowered project.

Of the respondents that answered question 13, some identified the need to enable the eligibility of projects to bid for a repowering CfD whilst they are still operational but intend to decommission and repower – or at least to offer an appropriate signal and certainty to developers as to whether their projects may be eligible in advance of the appropriate allocation round. This would be with the view to reducing waiting times for repowering and therefore time between operational periods – particularly any delays from the point of decommissioning and bidding for and obtaining a CfD.

Some respondents also highlighted the uncertainty around whether repowering projects are or aren't currently eligible for a CfD and therefore suggested clarifying the Government's position on this, including the need to update relevant legislation and non-legislative frameworks where applicable.

A few respondents also reiterated the need for a clear definition of repowering and a technology-specific approach to auction parameters and design.

A few respondents highlighted additional policy measures to facilitate repowering that are not specific to the CfD but still require consideration. This included enabling the timely use of grid connections (and potential re-use of connections), a supportive planning policy framework including a pragmatic approach with local planning authorities and community engagement on the benefits of repowering, and a lack of targeted, proportionate and practical guidance that sets out agreed criteria for assessment of prospective applications.

The impact market conditions are having on business cases for repowering was also referenced by a few respondents. Some examples include:

- The Electricity Generator Levy,
- increased international competition for investment in light of the US Inflation Reduction Action.
- volatile energy markets and negative pricing making it harder to assess potential market revenue for generation without a repowering CfD to offset risk, and
- the current market conditions and increasing cost of capital making the case for life extension of a project more appealing that repowering.

Policy response

Responses to this consultation have reaffirmed the Government's view that the repowering of renewable electricity generation sites could play an important role in the future electricity system and meeting the net zero and energy security objectives.

The Government is also cognisant that a significant portion of renewable assets may be coming to the end of their operational life and end of revenue support during the late 2020s and throughout the 2030s. This is during a period whereby price cannibalisation (resulting from wind and solar output correlation) may push down the average price 'captured' by renewable assets.

The Government recognises the potential for repowering to increase low carbon generation if and where the alternative is for capacity to retire. In reaching a decision on repowering, this, and potential benefits for competition in future CfD auctions, will need to be weighed against potential disbenefits. These include, but are not limited to, increased levy costs for electricity consumers and a potential reduction in the proportion of capacity exposed to market signals.

On balance, this Government sees merit in further exploring the most appropriate revenue support mechanism for repowering of existing renewable sites including the role that the CfD specifically could deliver. This does not apply to unabated coal-to-biomass conversions as the Government is working towards a power bioenergy with carbon capture and storage (BECCS) business model that will look to support these types of technologies in the future, subject to value for money and availability of relevant transport and storage infrastructure.

Any reforms to the CfD would be wholly considered within the context of the proposed REMA reforms, noting the Government will also continue to consider the role of other mechanisms in supporting repowering, as well as the role of other routes to market such as corporate Power Purchase Agreements.

The objective of the CfD scheme (as set out in the Energy Act 2013) is to encourage low carbon electricity generation. The scheme and its legislation are designed to support assets during the earlier stages of development and generation, with the asset expected to become fully exposed to market conditions towards the tail-end of its operational life. Contracts under the current CfD framework have been tendered on this basis.

Accordingly, current CfD legislation (the CfD (Allocation) Regulations 2014) and the Allocation Framework put limitations on sites looking to repower: e.g. (i) no application may be made in respect of a CfD Unit in relation to which a CfD applies (regulation 14(10)), and (ii) no application may be made in respect of a CfD Unit where the CfD Unit is or is part of a Generating Station which has been Commissioned (rule 5 of the Allocation Framework). Each application is considered on a case-by-case basis as per the process outlined in each allocation round's guidance.

The Government will examine what changes could be made for future CfD allocation rounds from AR7 onwards to better enable the application of repowering projects and ensure repowered assets are appropriately valued. However, further work is required before specific decisions can be made.

