

# Establishing the offshore decommissioning regime for CO<sub>2</sub> transport and storage networks

UK government response to consultation



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#### Introduction

The government's Ten Point Plan for a Green Industrial Revolution and Net Zero Strategy set out the government's ambition for establishing a UK carbon capture, utilisation and storage (CCUS) sector. This will look to deliver four CCUS clusters, capturing 20-30 MtCO<sub>2</sub> across the economy, per year, by 2030.

To support this ambition, the government published a consultation on 2 August 2021 on establishing the offshore decommissioning regime for CCUS. This sought views on the government's plans to achieve effective and balanced decommissioning solutions for the infrastructure installed for the transport and storage of CO<sub>2</sub>. These aim to be consistent with international obligations and will have a proper regard for safety, the environment, other legitimate users of the sea, economic and social considerations as well as technical feasibility. In addition, the government's policies recognise the need to protect the taxpayer from the risk of funding decommissioning liabilities in the event of company default.

The implementation and regulation of certain offshore CCUS elements will closely follow existing requirements set out for the oil and gas (O&G) sector. One of these elements will be decommissioning, which means there is already a well-established and understood set of requirements and obligations regarding CCUS decommissioning. This includes the principle of removal of installations and infrastructure to achieve a clear seabed, and the appropriate plugging and abandoning of wells.

In the O&G regime, how decommissioning is funded is left to commercial arrangements, though there are actions the government can take to protect the taxpayer and the environment. The regulated approach being taken for CCUS presents an opportunity to revisit this to ensure it is delivering the right outcomes.

## Engagement with the consultation

The government received 20 responses to the consultation. These were predominantly from industry and trade associations. Responses were also provided by the Scottish Government and the Northern Ireland Executive. During the consultation period, the government also undertook a number of engagement events to discuss the consultation in greater detail.

The government is grateful for the engagement with this consultation and the feedback provided in response, which will be used in the development of the CCUS decommissioning regime in the coming months.

This document sets out a summary of the feedback to the consultation and the government's response to this. Finally, this document also sets out the government's next steps in relation to the development of these policies.

# Scope of a funded CCUS decommissioning regime

#### Overview of the government's proposals

As set out above, there are clear existing decommissioning obligations for offshore installations and infrastructure. Though there is a well-established and understood system for meeting these obligations in the O&G sector, the consultation noted the relative uncertainty around decommissioning and its associated costs for CCUS. This is because it is a new sector, which may present novel challenges when decommissioning. To manage this uncertainty the consultation introduced the government's strongly minded-to position to implement a funded decommissioning regime to support transport and storage companies (T&SCo) who will be responsible for the decommissioning of CCUS assets.

The consultation outlined the government's plans for how the decommissioning regime would be funded, as part of the regulated model intended for the CCUS transport and storage network. The consultation explained that one of the building blocks that will count towards T&SCo's allowed revenue under the Economic Regulatory Regime (ERR) will cover decommissioning liabilities and post-closure obligations associated with their T&S network. It is the government's view that this would help ensure the polluter pays principle is delivered.

The consultation proposed that this funded decommissioning regime would apply to the offshore elements of the T&S network, given their expected scale and uncertainty. For onshore infrastructure, the consultation proposed that T&SCos would still receive funding to cover their decommissioning obligations through the allowed revenue, but T&SCos would be expected to manage this funding separately, in accordance with the specific local requirements.

#### Questions and summaries of responses

Question 1 – Do you agree with the government's proposal to split the onshore and offshore liabilities, placing greater emphasis on managing the risk associated with offshore decommissioning?

There were 14 direct responses to this question, which carried unanimous support for the proposal.

Question 2 – Do you agree with the government's proposal to have all the obligated offshore decommissioning activities be in scope of the funded regime?

There were 12 direct responses to this question, with a very strong majority supporting the proposal.

One respondent noted that greater certainty on the full scope of decommissioning activities would be required by investors.

# Question 3 – Do you agree that the onshore element should be managed separately based on the specific local requirements put in place?

There were 14 direct responses to this question, with a strong majority supporting the proposal.

Despite this strong support, half of respondents sought greater clarity on how this would be managed. Most respondents who requested greater clarity on this issue wanted to know where and how the boundary between onshore and offshore regimes would be established. The other issue respondents sought additional clarity on was which body would have responsibility for the verification of cost estimates for the decommissioning of onshore infrastructure.

# Question 4 - Do you anticipate any issues or unintended consequences that might arise from this split?

There were no direct responses to this question.

#### Government response

Given the strong support, the government will proceed with its proposal to establish a funded decommissioning regime. This will support T&SCos to manage all costs associated with the decommissioning of their offshore infrastructure network and their post-closure obligations. Further clarity on the precise scope of decommissioning activities and post-closure obligations will be set out in regulations and guidance, as appropriate, in due course.

The government noted the current uncertainty regarding onshore decommissioning relative to offshore. To clarify, the efficient costs associated with onshore decommissioning will form part of the decommissioning building block of T&SCo's allowed revenue. In addition, the government believes there is a clear definition of the boundary between the two, set out in regulations and interpreted as the low water mark. However, we will continue to examine the treatment of onshore CCUS decommissioning to ensure clarity and coherence with the rest of the regulated regime.

# Structure of the CCUS decommissioning fund

#### Overview of the government's proposals

The consultation outlined the government's rationale as to why localised decommissioning funds would deliver better outcomes than a centralised fund to cover all decommissioning liabilities associate with CCUS projects across the UK. Specifically, there would be a decommissioning fund for each storage site, as each site would have its own storage licence issued by the Oil and Gas Authority (OGA). Accordingly, where a T&SCo managed multiple storage sites, it would manage a portfolio of separate decommissioning funds, which would cover their entire T&S network.

The consultation also set out the government's view that appropriate safeguards would need to be established to ensure the decommissioning funds are managed effectively so that they carry out their desired function. These included explicit linkage of each decommissioning fund to their associated storage licence, and the establishment of appropriate conditions on access to the decommissioning funds.

#### Questions and summaries of responses

Question 5 – Do you agree that decommissioning liabilities should sit with each T&SCo, rather than being pooled across the whole CCUS landscape?

There were 14 direct responses to this question, with a strong majority supporting the proposal.

Those who disagreed with the proposed approach stated a preference for a centralised fund. There was also a suggestion that funds be pooled at the T&SCo level, as this was thought to be more manageable.

Question 6 – Do you agree that each storage site should have a separate decommissioning fund to better reflect the nature of each site and facilitate future transactions?

There were 18 direct responses to this question, with a majority supporting the proposal.

Respondents again noted their preference for a centralised fund as the reason for their disagreement. Separately, clarity was sought on how shared infrastructure would be treated by each of the decommissioning funds, with the example of a trunkline feeding multiple storage sites.

# Question 7 – Do you agree with the government's proposals for safeguarding the decommissioning funds?

There were 15 direct responses to this question, with majority support for the proposals.

One respondent noted that an independent trustee system would be better placed to provide the necessary safeguards. Other respondents noted that government should prevent duplication of regulations, and that there should be additional safeguards against fraudulent behaviour.

# Question 8 – Are there any other safeguarding mechanisms the government should consider?

There were no direct responses to this question.

#### Government response

Given the strong support for these proposals, the government will proceed with the intention to ensure decommissioning liabilities for the T&S networks sit with each respective T&SCo. The government is strongly of the view that this best delivers the polluter pays principle and ensures fairness and accountability.

For the same reason, the government will proceed with its proposals to require each storage site to have its own decommissioning fund. The government recognises the arguments made by the minority of respondents whose preference is for a pooled approach. However, the majority of respondents agree with the government's view that ensuring the funds remain separate has numerous benefits, not least in ensuring that storage sites and network infrastructure can more easily enable changes of ownership and other future management decisions. Noting that greater clarity was sought on the treatment of shared infrastructure, the government will continue to work through how best this can be achieved within the current proposals and will set out more detail in due course.

The government will also take forward its proposals for the safeguarding of the decommissioning funds by linking them to their associated storage permits, and placing appropriate controls on access to the funds.

# Options for the fund's mechanism and management

#### Overview of the government's proposals

The consultation set out the government's rationale for proposing that the accrual mechanism for decommissioning funds would follow a 'regular funding' approach instead of an upfront payment or a 'just-in-time' approach. This is because it better aligned with the regulated model intended for the CCUS T&S network, while balancing barriers to entry and risk to the taxpayer.

Alongside this, the consultation also proposed that decommissioning funds could additionally accrue through investment, as a means of lessening the burden on network users while also protecting the fund's value over time against inflationary impacts. However, the consultation recognised the risks inherent in investment and was clear that appropriate conditions would need to be adhered to, setting out examples.

The consultation also set out further detail around the management of decommissioning shortfall risk, building on previously published business model updates which set out the government's expectation that T&SCos manage this risk. The consultation made clear that additional mechanisms would need to be put in place to manage this risk, even if it was judged to be remote.

The consultation also outlined the government's rationale for its preference for an operator-managed mechanism for the decommissioning funds. In practice the government envisages this to be T&SCo more broadly, not necessarily the designated operator within the T&SCo. The consultation also noted the role of the economic regulator in overseeing the accrual of decommissioning funds, and of the OPRED who is also likely to need to assure themselves in their capacity as the technical regulator with overall responsibility for decommissioning activity.

#### Questions and summaries of responses

Question 9 – Do you agree with the government's proposal to have a 'regular funding' mechanism for the accrual of the decommissioning fund?

There were 16 direct responses to this question. Of those who provided a view, there was a majority who supported the proposal.

One respondent suggested that we also consider the 'just-in-time' approach for credit-worthy businesses. Another sought clarity around what would happen in the case of early closure of the storage site. A number of respondents sought clarity on the methodology for calculating the accrual, for example, if this will be based on time, stored volumed, booked capacity, etc. Finally, a few respondents sought clarity on the tax treatment of the contributions to the decommissioning funds.

#### Question 10 - Do you agree that the fund should also accrue through investment?

There were 15 direct responses to this question. While there was no opposition to the proposal; only a significant minority of respondents were fully supportive. The majority of respondents qualified their support.

There were two recurring qualifications. The first, proposed by half of these respondents, was that investments should be conservative, that they should only invest for predictable returns or that they should not carry a material risk to investors. The second, proposed by a significant minority of these respondents, was that funds should only be invested to protect the fund's value over time. Separately, there were also some isolated qualifications, included recommending a cap on the proportion of funds available for investment.

Question 11 – Recognising the government will need to balance the incentive to invest against the risk this would carry, do you have any proposals for how this should work in practice? Are there any other issues the government should consider when developing this policy area?

There were 12 direct responses to this open question, setting out their suggestions.

Of these respondents, half highlighted that an investment fund would need to be professionally managed and that a T&SCo may not necessarily carry the requisite level of expertise. To address this, it was suggested that T&SCos be permitted to outsource the management of their investments. Some respondents further recommended including the costs associated with the outsourcing of investment management as part of the allowed revenue paid to T&SCos under the ERR.

Respondents who engaged in both this question and the previous question reiterated their caution about investment decisions: that they should be risk-averse, that they should seek to maintain value at a minimum, but should not carry material risk for T&SCo. Other, isolated recommendations included the suggestion that investment strategies should be socially responsible; and that government should consider establishing a centralised investment fund to support the entire CCUS decommissioning landscape in the UK.

# Question 12 – Do you agree the T&SCo should carry both the windfall and shortfall risk associated with the decommissioning fund?

There were 16 direct responses to this question, with roughly two thirds offering qualified support and a third disagreeing with the proposal.

A significant minority of respondents accepted the proposal on the condition that the estimated costs for decommissioning were finalised and agreed by interested stakeholders, including the regulatory authorities, T&SCo and the emitters. Equally, a number of respondents were prepared to support the proposal if T&SCos would be involved in the decision to adjust user fees during periodic reviews. Other isolated suggestions included limiting T&SCos' exposure to windfall and shortfall risks to within a range; and that emitters should carry the risk because

they would be beneficiaries of upside risks through reduced user fees, so should also carry the downside risks.

The reasons for disagreement included that it could create tension between T&SCo and the regulators, and that shortfall risk should instead be more directly held by the emitters. Finally, there was a suggestion that any windfall should be returned to the state to improve public acceptance of CCUS.

# Question 13 – Do you have any further information that could help inform the government's ongoing review of the management of these risks?

There were no direct responses to this question.

# Question 14 – Do you agree with the government's proposal to have operators manage each of the decommissioning funds?

There were 13 direct responses to this question, with a slight majority support for the proposal. Of those who opposed, there was no clear preference for an alternative.

A number of respondents highlighted that T&SCos would again be unlikely to have the requisite expertise to manage the decommissioning funds, in much the same way as they would likely lack the expertise to invest them. It was again suggested that T&SCos be permitted to outsource this function, with the requisite cost forming part of their allowed revenue under the ERR. Without this, it was suggested that the regime would favour larger organisations who might be more likely to contain this expertise.

#### Government response

Given the level of support, the government will proceed with the 'regular funding' approach to the accrual of the decommissioning funds. However, the government also recognises the calls for flexibility around this model and that this is a pragmatic position to take, especially to incentivise desired outcomes such as early utilisation of the T&S network. More detail about the flexibility around the accrual rate of the decommissioning fund is discussed in the chapter entitled 'Dynamic Funding Arrangements'.

The government will continue to work through the options for the methodology of calculating the contributions to the funds, in part to ensure that this fits in with the wider charging regime proposed for the regulated model. The government is keen to ensure that contributions are fair and proportionate, while ensuring that the decommissioning funds accrue in a timely fashion and to the desired level. More detail on this will be set out in due course.

Alongside this, the government will proceed with its proposal that the decommissioning funds will be managed by T&SCos. The government judges this to be the most appropriate approach, recognising the wider safeguards that will be in place.

The government's proposals around building the decommissioning funds through investment attracted a range of opinions and raised some important considerations. The consultation served to crystalise some key questions which the government will resolve before providing an update on how T&SCos could approach investing capital accrued in their decommissioning funds. The government believes the key questions to resolve are broadly as follows:

- What level of centralisation/localisation would be most suitable for investment funds?
- Where should the upside and downside risks associated with investments sit?
- What level of purpose should these investment funds operate with? Should investment strategies be restricted to maintaining the value of funds over time, or should they strive for more ambitious returns, and, if so, what level of risk is appropriate?
- What should the government recommend as a targeted rate of return for investment strategies?
- What proportion of funds should be made available for investment?

The government will continue to develop its proposals for investing the decommissioning funds, and will set out further details, including positions on the above questions, in due course.

However, the consultation did provide government with two clear proposals which it recognises were pragmatic and valid ideas.

First, government agrees that there may be circumstances where a T&SCo may not have the requisite expertise to manage and/or invest the decommissioning funds. In such instances, outsourcing of these functions will be permissible. The associated costs of doing so will be factored into the allowed revenue of T&SCo under the ERR, though only if T&SCo can demonstrate that these costs are reasonable and proportionate.

Second, government agrees with the suggestion of a minority of respondents that investments should only be made in responsible entities. For example, the government agrees that it would not be appropriate for CCUS decommissioning funds to be supported by returns received from high-carbon-emitting or otherwise polluting sectors, and, equally, to be seen supporting such sectors. The government will look to develop a full set of restrictions which it expects investments to adhere to, which will be overseen by the economic regulator. Further details will be set out in due course.

## Supporting Securities Regime

#### Overview of the government's proposals

As outlined throughout the consultation, the government is seeking to establish a funded decommissioning regime to both support T&SCos to manage their obligations and to mitigate risk to the taxpayer. Part of this will involve taking appropriate steps to ensure the risk of a shortfall in the decommissioning funds is minimised. The consultation set out that the government would seek to deliver this through an adapted version of the OPRED's existing financial securities regime to deliver this.

Currently, the OPRED undertake assessments to determine the level of risk associated with operators and other Section 29 notice holders to determine if any additional security is required. These assessments are ongoing and continue throughout the operational life of a project.

The consultation set out the government's view that the overarching principles of this assessment process should remain in place for CCUS. However, some adaptations would be required to reflect the planned regulated model of delivery for the T&S network.

#### Question and summary of responses

Question 15 – Do you agree with the government's proposal of an enhanced financial securities regime to address early closure risk, but that financial securities will only be sought where judged to be necessary?

There were 15 direct responses to this question, of which there was no clear majority. However, of those who did provide a view either way, there was a small majority who disagreed with the proposal.

Of those who disagreed, the main reason set out was that they thought the Government Support Package (GSP) should manage early closure risk. Other opponents to the proposal suggested limiting the scope of the financial securities regime to incidents where the T&SCo is at fault for the early closure of the network, or ensuring that any financial security regime adheres to the polluter pays principle to protect T&SCo from bad debt or emitter default. Finally, it was also noted that the OPRED's criteria be made available to ensure transparency and fairness in the regime.

#### Government response

The government recognises that this proposal was opposed by a small majority of those who provided a view either way, yet it was not necessarily the view of the majority of overall

respondents. However, the overwhelming reason outlined for their opposition was the belief that the GSP should cover early closure risk.

As set out in the latest CCUS Transport and Storage business models update<sup>1</sup>, the GSP has been structured to cover certain high impact, low probability, risks beyond those which are managed by operation of the ERR and the Revenue Support Agreement (RSA), which investors and/or supply chain, including insurers, of T&SCo cannot take, or cannot price at an efficient level which offers value for money for taxpayers and consumers. The government has been clear that this will not cover shortfalls in the decommissioning funds, as this risk is already managed through existing Petroleum Act 1998 provisions.

Given this position and the absence of strong support against it, the government will continue with its position of utilising the provisions in the Petroleum Act 1998, including taking financial securities. However, the government will ensure that these are only taken where judged to be necessary and will set out further detail on the criteria it will use in these assessments in due course.

The UK is party to a number of international agreements that govern activity in the marine environment and, under these, has obligations in relation to the decommissioning of offshore installations and structures. As a result, in the event that decommissioning is not carried out by industry, any outstanding decommissioning obligations may ultimately fall to government, with the associated costs to be borne by the taxpayer.

<sup>&</sup>lt;sup>1</sup> https://www.gov.uk/government/publications/carbon-capture-usage-and-storage-ccus-business-models

# Estimating the Decommissioning Liability

#### Overview of the government's proposals

The consultation outlined the importance of establishing a robust estimate for decommissioning costs to facilitate the accrual of a decommissioning fund.

The consultation proposed establishing the OPRED as the principal technical regulator with responsibility for offshore CCUS decommissioning to lead on the development of this estimate. To ensure transparency, government proposed that the OPRED would set out the decommissioning expectations which would inform the calculation of the estimate in guidance to industry.

Government's proposals included the requirement for industry to provide the OPRED with the best information to enable their calculation of the estimate. It was envisaged that the OPRED would assure estimates in consultation with the OGA, given their expertise. The government views that an open and transparent process would be to the benefit of both T&SCos and the OPRED.

The consultation also noted the need for this estimate to undergo periodic reviews as knowledge of the T&S network deepens and changes in circumstances, such as the development of new technologies, occur. In practice, this would mean refinement of the estimate over the operational life of the T&S network.

The government recognised the potential for disruption caused by reviews to the decommissioning estimate so proposed aligning this review with the established intention to conduct periodic price control reviews. However, reviews to the estimate might also be required when changes to the T&S network occur, such as when new infrastructure is added, or new technology is deployed.

The consultation outlined the function of the decommissioning estimate, which will be provided to the economic regulator to incorporate into the charging regime for T&SCo. This, in turn, will inform the agreed accrual profile for the decommissioning fund, with the aim that the total expected liability would be met during the operational life of the asset/network and in time for the commencement of decommissioning activities. The consultation also proposed that the economic regulator will have responsibility for adjusting T&SCo's allowed revenue in response to any changes that affect the accrual of the decommissioning fund.

#### Questions and summaries of responses

Question 16 – Given the need to have an estimate of decommissioning liability during the development phase, do you agree with the government's proposal for estimating this liability?

There were 19 direct responses to this question, of which there was unanimous support for the proposal.

# Question 17 – Do you agree with the government's proposal to have the OPRED as the primary regulator for calculating this estimate?

There were 19 direct responses to this question, of which a majority disagreed with the proposal.

The only reason provided by all those who disagreed was that they believed industry should develop the decommissioning estimate, and the OPRED's role would then be to verify and approve it.

Other respondents who did not provide a view either way noted that the OPRED should utilise specialist providers in estimating the liability. It was also noted by these respondents that a clear methodology would be required. Finally, one respondent voiced their concern that the estimates could be inflated to protect T&SCo against shortfall risk.

# Question 18 – Do you agree with the government's proposal for periodic review of this calculated estimate, and in particular the alignment of this with price control periods?

There were 12 direct responses to this question, of which there was a strong majority in agreement with the proposal and no direct disagreement.

One respondent suggested that a transparent mechanism for approving adjustments would be required, while another noted the potential impact these adjustments might have on emitter budgeting. Finally, one respondent suggested that particular review points could be disregarded if there was a consensus view that they were not required.

Question 19 – Do you agree that the economic regulator should have responsibility for including the estimated decommissioning liability in the allowed revenue that the T&SCo is able to collect from user payments, and the wider responsibility of ensuring the decommissioning liability is met through the fund?

There were 5 direct responses to this question, of which there was a strong majority in agreement with the proposal.

One respondent noted that T&SCo should retain the right to appeal any decision taken.

Question 20 – Do you envisage any unintended consequences relating to the government's proposals for calculating the decommissioning liability, and the related regulatory responsibilities?

There were no direct responses to this question.

#### Government response

Given the level of support received, the government can confirm that it will proceed with its proposals for using calculated and agreed decommissioning estimates to facilitate the accrual rate of the decommissioning funds.

These estimates will be the subject of periodic reviews to ensure they remain robust and therefore the decommissioning funds are accruing as intended. These reviews are expected to align with price control periods for T&SCo more generally. Additional reviews may be required when a T&S network undergoes a change, for example when infrastructure is added to a T&S network or if new technology is deployed. The government expects these ad-hoc reviews to align with re-openers, given the wider impact such causes will have on T&SCo's financial position. The government can also confirm that it will be one of the roles of the economic regulator to ensure that any adjustments to the estimated decommissioning liability is reflected in the allowed revenue received by T&SCo under the ERR.

Based on the level of feedback received, the government will ensure that the process for establishing the decommissioning estimate and any subsequent amendments to this which is clearly set out in guidance. Specifically, it will involve T&SCos calculating their own estimates of their decommissioning liabilities, utilising an agreed methodology. These estimates will then be verified and approved by the OPRED, in consultation with the OGA, before the economic regulator can incorporate them into the allowed revenue calculations under the ERR. It is the government's view that this is the best approach for ensuring estimates are calculated by those with the right level of expertise to do so, while also being robust against gaming. This process will also align with established mechanisms in the O&G sector where operators undertake and submit their own programmes for approval.

Alongside this process for calculating the decommissioning liability estimates, the government will also seek to make the necessary legislative changes to facilitate the government's proposal that the OPRED are established as the principal technical regulator for offshore CCUS decommissioning. This should include minor amendments to existing regulations to minimise cross-over in its roles and responsibilities with those of the OGA. For example, The Storage of Carbon Dioxide (Licensing etc) Regulations 2010<sup>2</sup> set out the elements which must be considered as part of both their financial securities regimes. The government believes this is necessary to provide greater clarity to industry and greater efficiency in the regulation of the sector.

<sup>&</sup>lt;sup>2</sup> https://www.legislation.gov.uk/uksi/2010/2221/contents/made

## **Dynamic Funding Arrangements**

#### Overview of the government's proposals

As set out earlier in this document, the government is confirming its position that CCUS decommissioning funds will accrue revenue through a 'regular funding' mechanism. However, the consultation set out further proposals about the rate at which the funding would accrue in the decommissioning funds and over what period of time.

These proposals included aligning the accrual period of the decommissioning fund with the operational life of the storage asset and its supportive infrastructure network. In practice this means that a T&SCo would not be expected to build decommissioning funds during the construction phase of the project; rather, the accrual period would begin at the start of operations when the T&S network first begins to transport and store CO<sub>2</sub> and importantly when users begin paying for the service. The accrual period is expected to end around the same time as when the usable life of the CO<sub>2</sub> store is ended, by which time the decommissioning fund will have reached its target value.

The consultation also outlined the government's rationale for opting for a 'straight-line' accrual profile, as it provides a good balance between the need to sufficiently accrue funds and the desire to not disincentivise early utilisation of the T&S network for emitters. However, the government recognised in the consultation that there may be need for some flexibility around this, depending on the specific circumstances of each T&SCo.

Finally, the consultation noted that the decommissioning liability of a T&S network may change for a number of reasons. The government proposed that the accrual profile should be responsive to wider changes in the T&S network, especially changes that affect the estimated decommissioning liability.

#### Questions and summaries of responses

Question 21 – Do you agree with the government's proposal that the accrual period will align with the operational life of the storage site, from year 1 through to final injection?

There were 16 direct responses to this question. Of those who provided a view either way, there was strong support for the proposals. However, the majority of overall respondents did not set out a preference.

Where there was disagreement with the proposal, it was suggested that the accrual should be based on volume of  $CO_2$  captured and stored. This was also the view of some respondents who did not set out a preference.

Other respondents who did not set out a preference noted that the proposal would require good knowledge of the storage capacity of the site, but that this may not be clear at the start of

operations. A number of respondents suggested that the accrual should aim to complete ahead of the proposed end-of-life, as this would help mitigate uncertainty risk and also late-life emitter drop off risk. One respondent also noted that greater clarity is required regarding temporary closure mid-life.

Question 22 – Do you agree with the government's proposal that the accrual profile will assume a straight-line trend, but that negotiations might allow some flexibility to better reflect the nature of the storage site?

There were 14 direct responses to this question, of which there was strong majority support.

Of those who opposed or suggested an alternative, this was exclusively that the accrual should be based on CO<sub>2</sub> captured and stored. It was also noted that a straight-line accrual is not consistent with the polluter pays principle, as emitters would pay disproportionately more in years where there are lower volumes of CO<sub>2</sub> stored.

Question 23 – Do you have any suggestions on the level of flexibility that should be permitted and what this should be based on, bearing in mind the added risks which this might bring?

There were 3 direct responses to this question.

The suggestions provided included that flexibility be provided to the economic regulator to reflect usage of the network and thereby manage any disproportionate impacts on emitters. Another suggestion was that flexibility should only be provided for material changes to the network, such as asset life, regulation or significant cost changes. Finally, it was suggested that seasonal fluctuations or the uptake of non-pipeline transport may need to be factored in.

Question 24 – Do you agree that the accrual will need to be reactive to wider changes in the network, and therefore changes to the overall decommissioning liability?

There were 9 direct responses to this question, of which there was strong majority support for the proposal.

Where there was disagreement, the reason provided was that accrual should be specific to individual assets.

Question 25 – Are there any other characteristics or circumstances you anticipate emerging which will need to be reflected in the accrual profile of the decommissioning fund?

There were no direct responses to this question.

#### Government response

Whilst a time-oriented regime is likely to be relatively simple, the government recognises that ensuring fees charged to emitters are equitable is an important principle. As such, the

government will consider further the relative merits and disadvantages of each regime to determine the best approach. The government will also consider further the level of flexibility and cases for providing it. Further detail on this area will be set out in due course.

As set out in the CCUS Transport and Storage business models update, the government expects an end-of-life review point to be undertaken towards the end of the operational life of the T&S network. This will consider arrangements for post-operations. The government expects this to also finalise the arrangement for the undertaking of decommissioning activities, and therefore to be factored into the accrual period for the decommissioning funds.

## Drawing on the Fund

#### Overview of the government's proposals

The consultation set out the government's proposed conditions for withdrawal from the decommissioning funds, with the aim of ensuring the accrued funding is appropriately safeguarded and only used for their specific purpose. This included restrictions on the entities who could access the decommissioning funds, what activities these funds could be used for, and the requirement for approval by the OPRED.

As set out elsewhere in the consultation, the government's position is that T&SCo would hold the shortfall risk associated with the decommissioning funds. To balance this risk, the government set out that T&SCo would also hold the windfall risk. However, any windfall would only be released once all decommissioning and post-closure obligations had been carried out to the regulators' satisfaction in accordance with existing requirements.

#### Questions and summaries of responses

Question 26 - Do you agree that the decommissioning funds can only be drawn on by the designated decommissioning entity to pay for decommissioning-related activities, with the approval of the OPRED?

There were 15 direct responses to this question, of which there was strong majority support for the proposals.

It was noted by respondents that approvals for withdrawal would need to be provided in a timely fashion to support the undertaking of decommissioning activities. Other respondents sought greater clarity on the approval process for onshore decommissioning, access during the operational life of the asset/network, and the precise activities which would constitute decommissioning. Some respondents also questioned the proposal that withdrawal be limited to only the designated entity, and suggested this be extended to any entity who carries a decommissioning obligation for the asset/storage site.

Question 27 – Do you anticipate these restrictions to create any blockers in terms of ways that decommissioning activities might be undertaken?

There were 13 direct responses to this question, of which there was a strong majority view in the negative.

Respondents again noted that approvals would need to be provided in a timely fashion, while others sought clarity on the extent to which approval would be required ahead of committing to decommissioning expenditure or entering into contracts for decommissioning activities to be undertaken. One respondent also highlighted that the government should not prevent

opportunities for consolidation of decommissioning activities by specialist providers which might improve efficiency.

# Question 28 – Are there any other restrictions the government should consider in order to adequately ringfence the decommissioning funds?

There were 12 direct responses to this question, of which there was a strong majority view that no additional restrictions were necessary.

Some respondents noted an expectation that a trust or escrow mechanism would be used to ensure appropriate ringfencing. Other suggested that a similar level of safeguarding for regular payments into the fund from users and top-ups made by T&SCo might not be appropriate. Finally, respondents noted that funds should be made available to enable the necessary preparatory work ahead of commencement of decommissioning activities.

#### Government response

Given the strong support, the government will look to take forward the proposals for placing appropriate restrictions on withdrawals from the decommissioning funds. This will include approval of relevant regulators.

The government will continue to refine exactly how these restrictions will be set out and delivered, noting respondents' feedback on who should be able to request withdrawals, the scope of decommissioning activities, and that approvals be provided in a timely fashion. More detail will be set out in the regulations and in guidance. Based on wider feedback provided during the consultation, the government will also ensure access to the funds will be provided to support the proposals for investment and facilitate any decommissioning activities which might be undertaken during the operational life of the asset/network.

# Incorporating Re-used Assets into a Funded CCUS Decommissioning Regime

#### Overview of the government's proposals

As set out in the consultation, the opportunity to re-use O&G assets for the purposes of CCUS presents potentially significant cost savings for T&SCos as well as the chance to avoid the environmental impacts that would be caused by the production and disposal of additional infrastructure. Alongside this, there are likely to be benefits to the existing owners of these assets who look to transfer them over for CCUS usage, such as better management of the associated decommissioning liabilities. The consultation considered how existing decommissioning liabilities could best be accommodated in the regulated model and reflected in the accrual of the CCUS decommissioning funds. In particular, it set out two models for doing so.

The first was making a Change of Use Relief (CoUR) available for an asset on the condition that the CCUS decommissioning fund for that asset was topped-up by an amount reflective of its existing decommissioning liability. Issuance of CoUR would be at the discretion of the Secretary of State, reflecting the existing position in legislation that they would need to designate a particular asset as eligible. Once issued, the CoUR would apply to previous Section 29 notice and Section 34 notice holders, including those who no longer owned the asset. This conditionality on CoUR would broadly strike the right balance between encouraging re-use and mitigating risk to the taxpayer. To support this model, the consultation also set out proposals on how the existing decommissioning liability would be established, and whether an additional contingency should be sought.

The second model would support circumstances where one or more of the selling parties did not want CoUR or were unwilling to agree to the conditionality for the issuance of CoUR. In such a scenario, the consultation proposed that the existing Section 29 chain of liability would remain in place, and the associated CCUS decommissioning fund would accrue as if it were a new build asset.

In addition to these models, the consultation set out proposals for how the quantum of the existing decommissioning liability would be established, and whether an additional contingency to the top-up should be required above the agreed value of the liability.

The consultation did not provide detail on the tax treatment of any top-up to the decommissioning funds, as this is the responsibility of the Chancellor of the Exchequer. However, it did recognise the different tax treatment between O&G and CCUS decommissioning activities, and that this would have implications for the proportion of the existing decommissioning liability that could be expected to be paid into the CCUS decommissioning funds.

#### Questions and summaries of responses

Question 29 – Do you agree with the government's minded-to position of allowing Change of Use Relief to be available for re-used assets, on the condition that the associated CCUS decommissioning fund is topped-up relative to the asset's existing decommissioning liability?

There were 13 direct responses to this question. Of those who provided a clear view either way, respondents were balanced in their views on the proposals. Overall, there was a slight majority in favour.

Of those who disagreed, the reasons provided included that the conditionality was unnecessary as the risk was small, or CoUR should be automatic upon top-up rather than optional and discretionary. Other reasons were that the top-up proposal provides no benefit to the seller, or that it gives too much negotiating power to T&SCo. Finally, it was noted that the differences between tax relief would need to be reflected in the top-up.

In relation to the relative positions of the O&G seller and T&SCo, it was also noted that requiring the top-up to reflect the existing liability may disproportionately affect the O&G operator. This is because it could lead to scenarios where minimal additional contributions to the CCUS decommissioning fund would be required by the CCUS users to meet the overall decommissioning liability. As such, it was argued that the scale of the top-up might not align with the polluter pays principle.

Greater clarity was sought on the calculation of the top-up generally, its tax treatment, and the point at which the optional and discretionary nature would cease. A number of respondents noted that the severance of the Section 29 chain of liability would need to be absolute.

# Question 30 – Do you agree with the government's proposal that the issuance of Change of Use Relief would remain optional and discretionary?

There were 5 direct responses to this question. Of those, there was a small majority who disagreed with the proposal.

Of those who disagreed, the reasons were broadly in line with the previous question. Respondents argued the proposed conditionality on CoUR, that relief should be automatic upon top-up of the decommissioning fund, and that the optional and discretionary nature of the relief should cease at a reasonable point in time.

One respondent also argued that all assets which are re-used should qualify for CoUR, rather than just those outlined in the consultation

Question 31 – Do you agree with the government's proposal that the estimated existing liability would be a matter for commercial negotiations, but that government will need a role in this for assurance purposes?

There were 5 direct responses to this question, all of which agreed.

It was noted that there would need to be a mediator available, such as one of the regulators, for instances where agreement on the liability could not be reached.

Question 32 – Do you agree that an additional contingency should also be required, and what level do you judge to be reasonable in balancing the incentives and risks?

There were 7 direct responses to this question. Of those, there was a majority who disagreed with the proposal.

One respondent noted that a contingency would likely be included in the negotiation, and another suggested that any contingency paid by users of the CCUS network should be held separately to be returned to them if unused.

Though the government did not ask any direct questions on the second model for transferring decommissioning liabilities in the absence of CoUR, discussions during the consultation and further development of the model have identified that would not meet the polluter pays principle, and concerns around intergenerational fairness regarding long-term liabilities.

#### Government response

Despite there being mixed views in terms of direct responses to the question relating to the conditional CoUR, it is clear that there was an overall majority in favour of the proposal, pending further detail on how it would work in practice. As such, the government can confirm it will take forward its proposal for issuing CoUR upon the condition that a top-up is made to the CCUS decommissioning fund, equivalent to the existing liability. To facilitate this, the government intends to make the necessary amendment to the existing legislation when Parliamentary time allows.

To support this, government can also confirm that, when CoUR is issued, it would apply to all existing Section 29 notice and Section 34 notice holders, including those who no longer own the asset. This will mean that there will be no means by which the government can later ask any of these parties to contribute to outstanding liabilities through the Section 29 or 34 process. It is this absolute nature of CoUR which drives the government's proposal for a conditional top-up to the CCUS decommissioning fund, in order to mitigate any risk to the taxpayer. This should provide the certainty sought by respondents, and the government judges this to have potentially significant benefit to the selling party.

The government continues to judge the optional and discretionary nature of CoUR to be a helpful and reasonable safeguard. However, as the Secretary of State discharges this responsibility, in consultation with HM Treasury, through the mechanism of designating each asset eligible for CoUR, the government expects that confirmation of this will be sought and provided before the parties enter negotiation on the value and liability of the asset, and therefore before any top-up to the CCUS decommissioning fund is made. The government does not envisage a scenario whereby eligibility from the Secretary of State was requested in good faith, a top-up to the decommissioning fund has been made, and only then for the government to withhold issuance of CoUR.

As set out in the consultation, the government recognises the difference in tax treatment between O&G and CCUS decommissioning activities, and that any top-up to the CCUS decommissioning fund would need to reflect this. Any top-up which significantly exceeds the expenditure a company would have undertaken had it decommissioned the asset will discourage asset transfer for re-use. The government will continue its work on how the top-up will account for existing tax relief.

As discussed above, for scenarios where CoUR is not sought, the government recognises that the proposed model set out in the consultation creates concerns in relation to the polluter pays principle and intergenerational fairness regarding long-term liabilities. Based on this, the government is considering alternative models which look to deliver a more balanced approach to the treatment of existing decommissioning liabilities. Specifically, this will balance the upfront certainty provided by the top-up of the CoUR model, and the flexibility which was suggested by respondents as a means of further encouraging re-use.

The government recognises that CCUS can provide opportunities for owners of re-usable assets to manage their decommissioning liabilities in more favourable ways. Indeed, this is regarded as one of the potential benefits of re-use. However, the government also recognises that CCUS is viewed through a different lens in terms of its overall objectives, namely that it is first and foremost an environmental policy. As such, the public will expect that the policy seeks to maximise the environmental outcomes it delivers and is not used as a means of avoiding existing obligations. The government must therefore ensure that the polluter pays principle is maintained, and that this is delivered in a transparent manner. Where flexibility is considered, this must be fair and proportionate, while also not carrying significant additional risk. The government will continue discussions with relevant stakeholders as it develops the options, with the aim of striking the right balance.

More generally, the government is considering how re-used infrastructure is being treated overall in the regulated model. The government has been clear that it wants to encourage re-use where practicable and reasonable. But this must be done in a proportionate manner which does not create opportunities for abuse, particularly in circumstances which might leave the taxpayer at a disadvantage. The government will continue to engage stakeholders as it develops its overall approach to re-use, and further detail will be set out in due course.

Finally, the government acknowledges that a number of respondents sought greater clarity on the tax treatment of different proposals in the consultation, such as the CoUR top-up proposals and the regular contributions to the decommissioning funds. As set out in the consultation, responsibility for the tax system falls to the Chancellor of the Exchequer, and the government will continue to consider the interactions and implications of the tax system as part of the wider development of a funded CCUS decommissioning regime.

## Next steps

The government welcomes the engagement received on this consultation, which will inform the development of a funded decommissioning regime for CCUS, and more broadly help deliver the government's ambitions for capturing 20-30 MtCO<sub>2</sub> across the economy, per year, by 2030.

The government notes the broad agreement with the principle of establishing a funded decommissioning regime, and a number of the government's proposals for the design of this. Where the government has confirmed its position, it will look to start making the necessary amendments to the existing legislation to facilitate implementation, when Parliamentary time allows.

Alongside this, as set out in this document, there are a number of design elements of the decommissioning regime which the government will continue to develop, such as the interaction with onshore decommissioning and investment of the decommissioning funds. The government will look to finalise these over the first half of 2022, with a view to publishing its updated policy position in Q3 2022. Once the overall policy has been finalised, the government will then publish detailed guidance which will support industry in meeting the requirements.

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