

# BEIS: Carbon capture, usage and storage: market engagement on cluster sequencing

## Decarbonised Gas Alliance response

March 2021

### 1. Summary

- The DGA welcomes continued support for CCUS, noting that CCUS will be critical to achieving Net Zero. We concur with the CCC analysis of the need for 75-175 million tonnes captured and stored per annum in 2050. CCUS can also be significant creator of jobs.
- We have significant concerns the proposed two-track approach, will lead to stalling of credible projects, a loss of skills and expertise, will inhibit collaboration and knowledge sharing, and could the jeopardise UK Government's ambition of 1GW of Hydrogen Production by 2025, and 5 GW by 2030.
- We would prefer to see a commitment to a flexible and open process to cluster development throughout the 2020s, a willingness to engage with all credible clusters on a timeline that is optimal for development of each cluster, and a commitment to approving anchor projects at the time of phase 1 cluster approval.
- We would encourage BEIS to ensure the application process is as streamlined as possible, to minimise administrative burden on clusters that may have already had to apply to disparate sources of funding and may be delivering ISCF Phase 2 Deployment projects at the time of application.

### 2. Consultation Questions on Overview of Two-Phase Approach

1. Do you have any comments on the two-phase process where provisional sequencing first takes place at the CCUS cluster level, followed by final selection at the individual project level?

We welcome the continued support for CCUS, recognising its critical role in the UK meeting net zero, yet has significant concerns regarding the proposed two-track approach.

It is our view that the proposed 2-track approach will lead to:

- **Stalling of projects and loss of opportunity to outperform emissions targets:** There is a considerable risk to clusters that are ready to meet Track 1 timescales, yet which end up on Track 2. In these clusters it is possible that the delay in project progression will see a loss of skills, experience, and resources. This expertise will be hard, if not impossible, to re-capture. In the case that the cluster ends up on Track 2, this may extend the programme and add cost, should the cluster be able to restart at all.

The delay in funding also risks undermining investor confidence, potentially compromising the ability of the cluster to deliver altogether.

We note that a target of 10 million tonnes of CO<sub>2</sub> captured and stored annually by 2030 (which we consider a minimum) implies a growth of 2 million tonnes of capacity per annum from 2025, assuming 2025 as a reasonable first date for storage. To meet the CCC requirement of 75-175 million tonnes captured and stored per annum in 2050, CCS capacity growth would need to expand to 3.25-8.35 million tonnes per annum after 2030.

An early establishment of CO<sub>2</sub> infrastructure in the clusters will support this growth also enable optimal phasing and timing of subsequent decarbonisation projects in the clusters. The early establishment of CO<sub>2</sub> infrastructure in as many clusters as possible represents to de-risk the 10 Mtpa storage target, and this opportunity will be lost with the two-track approach.

Furthermore, each cluster will be operating under their own 'natural phasing' and hence engagement with BEIS on the fixed timetable described may disadvantage some clusters.

- **Increased risk and complexity of progressing the cluster projects through FEED and into Execution:** While we understand the intent of the two-phase process and support the government's aim to encourage competition and ensure participation by as many emitters as possible, this needs to be balanced with the need to progress projects through FEED and into execution.

The detailed FEED work for the T&S system depends on understanding the amount, location, type and timing of emissions. This is particularly true for the initial anchor emission projects, which form the starting point for the design of the T&S system. The anchor projects are key to the store development strategy, location and sizing of onshore compression and gathering networks and project phasing and may be subject to combined contracting and procurement with T&S systems to enable integration and value for money.

We would also propose that government approves anchor projects as part of the phase 1 selection process to give the certainty to T&S developers to allow them to progress the T&S system and remove the risk that anchor projects could be supplanted by other capture projects considered more favourable by BEIS. Not approving anchor projects alongside T&S systems may also make projects non-compliant under the Industrial Decarbonisation Challenge (IDC) process, putting funding at risk.

The T&S company should be consulted in the phase 2 process to ensure that necessary infrastructure and storage can be provided for any alternative projects that government wishes to support.

- **Risks to other UK Government Hydrogen Ambitions:** The two-track approach also represents a risk to the UK Government's Hydrogen Ambition. With the current plan for two clusters by 2025, even if both had a hydrogen plant, the target of 1GW of hydrogen production by 2025 target may still be challenging. If one of the Track-1 clusters ends up not having a hydrogen plant, then this could further compromise both the 2025 1GW and 2030 5GW targets.

Furthermore, inhibiting the number of operational CO<sub>2</sub> T&S systems risks impeding the progress of viable blue hydrogen projects, which may further compromise our ability to hit the 2025 and 2030 targets, even taking into account to the availability of the £240m Net-Zero hydrogen fund.

Given the synergistic nature of CCS and blue hydrogen systems, we would encourage BEIS to consider a more joined-up approach for development of these systems, and their associated funding routes.

- **Inhibit collaboration and knowledge sharing between clusters:** The two-track approach also creates a competitive tension between clusters which inhibits collaboration and knowledge sharing. It is our firm belief that on first of a kind, innovative developments (such as industrial cluster development), it is collaboration that will drive best value solutions, and reduce risk, not competition.

This competitive tension also runs counter to the ISCF Deployment Phase 2 application criteria, which included a significant emphasis on knowledge sharing.

Given the above considerations we would prefer to see a commitment to a flexible and open process to cluster engagement throughout the 2020s, and a willingness to engage with all credible clusters on a timeline that is optimal for development of each cluster. To support this, government could consider being transparent about the total funding package is for the 2020s, akin to the approach taken with offshore wind through the Levy Control Framework.

Given the strong economic and environmental arguments for CCUS, we would urge BEIS to ensure the proposed funding mechanisms are structured in such a way to allow as many clusters as possible to progress. Whilst we recognise the strain on the public purse, particularly given the impact of the Coronavirus pandemic, CCUS projects can be a great source of job and value creation, particularly with the clusters being located in primarily lower-income areas. A recent Summit Power report also found that developing a network of CCUS projects along the East Coast of the UK, capturing 75 million tonnes of CO<sub>2</sub> per year, would provide £163 billion of economic benefits and 225,000 jobs, cumulatively, through to 2060.<sup>1</sup>

2. **Do you have any comments on the indicative timeline? Specifically, does the 10-week window give enough time for industry to gather and submit information for Phase-1 (further information on application information is included within Section 3)?**

We would encourage the application process to be streamlined as much as possible. Given the disparate nature of decarbonisation funding up until now (requiring separate applications to different funds such as the Industrial Decarbonisation ISCF Challenge, Industrial Energy Transformation Fund), all efforts to minimise administrative burden on clusters would be welcomed. Furthermore, by the time the application window is open, ISCF Phase 2 Deployment projects should be mobilised, and this may strain cluster participant resources.

Therefore, an application process that can be completed within a maximum 10-week window is a necessity.

Also, the detail underpinning the Phase 1 submission depends in part on the maturity of the business models. For example, submitting a view on a fair return would require clarity on the risk allocation in the business model, which may not be available at submission of the cluster plan, and this should be considered in the design of the application process.

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<sup>1</sup> Summit Power, Clean Air – Clean Industry – Clean Growth: How Carbon Capture Will Boost the UK Economy: East Coast UK Carbon Capture and Storage Investment Study, October 2017 <http://www.ccsassociation.org/news-and-events/reports-and-publications/clean-air-clean-industry-clean-growth/>

3. Do you have any concerns about the proposed overlay of Phase-2 (Final Project Selection) and Phase-1 (Provisional Cluster Sequencing)?

No comment at this time.

4. Do you agree that the process should focus on identifying clusters for Track-1? Does the commitment to bring forward details of a process to select clusters for Track-2 mitigate the risks associated with not naming the second Track in 2021?

No comment at this time.

5. What should the allocation process for Track-2 clusters look like? What factors will it be important for government to consider?

No comment at this time.

### 3. Consultation Questions on Entry into Phase-1

6. Do you have any comments on the proposed eligibility criteria?

No comment at this time.

7. Do you have any comments on the proposed requirement that an applicant has to meet the definition of a CCUS cluster to enter the process?

No comment at this time.

8. Do you have any comments on the proposal to relax this requirement when considering Track-2 cluster?

No comment at this time.

9. We are suggesting that the T&SCo take on the role of Cluster Lead. Are there any challenges associated with T&SCo being an effective Lead for the cluster? We state that there should be a level of commitment from a capture project for it to be included on the Cluster Plan. Is an MoU an appropriate and achievable form of commitment?

No comment at this time.

10. What should government be doing to facilitate remote sites and shipping and when should government be doing this?

No comment at this time.

#### 4. Consultation Questions on Phase-1 Cluster Sequencing Process

11. Do you have any comments on the proposed evaluation criteria?

These are generally appropriate.

12. Do you agree with weighting ranges proposed for the evaluation criteria?

Generally, yes, and it is right for deliverability to be a major factor.

13. Do you have any comments on the proposal to consider portfolio factors when selecting the Track 1 clusters? In particular, do you have any comments on the potential portfolio factors that the Government should have regard to?

No comment at this time.

#### 5. Consultation Questions on Phase-2 Final Project Allocation

14. Do you agree with the proposed approach for allocating the first power CCUS contract(s)?

No comment at this time.

15. Do you agree with the proposed approach allocating the first industrial carbon capture contracts?

No comment at this time.

16. If a developer has prepared a capture project bid and then the cluster it was planning to connect to is not sequenced onto Track-1, could it be feasible for the project to submit a revised bid to connect to a different cluster (i.e., one that was sequenced onto Track-1)?

No comment at this time.

17. Do you have any comments on the proposal to swap out a Track 1 cluster, to begin negotiations with a reserve list cluster instead? In particular, do you have any views on the feasibility of a reserve list cluster replacing one of the Track 1 clusters?

No comment at this time

## About the Decarbonised Gas Alliance

The Decarbonised Gas Alliance (DGA) is an alliance of over 50 gas producers, transporters, suppliers and users, hydrogen and carbon capture experts, alongside R&D, supply chain, trade union and local government specialists whose knowledge and expertise will be vital in decarbonising the UK's gas system and improving poor air quality. Our website is found at [www.dgalliance.org](http://www.dgalliance.org)

Our aim is to work with all levels of government and with other expert organisations to use the gas system as a whole to help deliver our emission reduction and air quality goals. We believe that decarbonising gas – including biogases and hydrogen from a variety of low carbon methods – would make best use of our existing infrastructure and lower the overall costs of decarbonisation.

The DGA is a broad-based alliance, established in late 2016, and has now expanded to over 50 signatory organisations, which are listed in full in the diagram below. The DGA secretariat is managed by Costain, the smart infrastructure solutions company, which helps to improve people's lives by providing integrated leading edge, digitally optimised smart infrastructure solutions for clients in the UK's energy, water, transportation and defence markets.

