

Correspondence from Stag Energy Development Co. Ltd

Whilst not active with a specific project in the area of carbon capture and storage, Stag Energy has been involved in reviewing the maturity of technologies with potential to contribute to a low carbon energy sector.

We feel it would be appropriate for the committee to consider Carbon Capture and Utilisation (CCU) as a sustainable solution to the CO₂ question and to suggest government give greater consideration of support to CCU as an avenue which provides a useful product from a dangerous waste, and which would utilize CO₂ as a “societal benefit” by making a major contribution to the challenge of energy storage.

Such an approach would be compatible with several other members of the EU where the European Commission’s encouragement to address adding value to the energy market through the integration of renewables, fossil fuels, and storage appears to be well recognized.

There is already a UK network, CO₂Chem, where the focus of research is on the utilization of Carbon Dioxide as a feedstock for chemical synthesis.

Synthetic Natural Gas (SNG) is one of the cases being considered of how CO₂ can be utilised in helping Government achieve its targets in decarbonisation, security of supply, and integration of the energy system. SNG, which has the same composition as Natural Gas, can be defined as Energy Storage.

Energy Storage enables the intermittent renewables to be matched to demand, making them more effective and preventing curtailment.

The SNG process utilises excess renewable energy to produce hydrogen gas, which then reacts with carbon dioxide to generate SNG. It is a key example of how a valuable, sustainable product can be created which addresses the challenging question of energy storage while at the same time utilising the harmful waste CO₂.

Stag Energy is of the view that shifting focus from CCS to CCU is the appropriate course of action for the UK Government to support with the prospect of making a long term, commercially viable contribution to the low carbon energy challenge.

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