

# Neptune Energy – Energy Bill Written Evidence Submission

### 1. Introduction

Neptune Energy Group Limited is an independent global E&P company with operations across Europe, North Africa and Asia Pacific. Neptune aims to store more carbon than is emitted from its operations and from the use of its sold products by 2030.

The company believes Carbon Capture and Storage (CCS) is vital to meet global climate goals and is progressing projects in the UK, Netherlands and Norway, as it aims to build a portfolio of carbon dioxide (CO<sub>2</sub>) storage linked to core areas of the North Sea and utilising its existing operated infrastructure.

On 18 May 2023, Neptune was awarded three carbon storage and appraisal licences by the North Sea Transition Authority (NSTA) to develop CO<sub>2</sub> storage offshore, in the UK's first licensing round for projects of this kind.

Neptune believes the North Sea has great potential as a hub for carbon storage, given the availability and proximity of existing infrastructure, depleted reservoirs and saline aquifers.

The company is committed to supporting the development of the UK's CCS sector and to helping the UK Government achieve its ambition of capturing and storing 20-30 million tonnes of  $CO_2$  per year by 2030.

#### 2. Merchant model for CCS

Neptune Energy believes that the UK should move beyond the Track system to develop a vibrant CCS sector. Having rounds of subsidy allocation stifles competition rather than strengthening it. The legislative and regulatory system needs to be future proofed by enabling private operators to develop competitive merchant models to transport and store carbon dioxide in the longer-term.

Companies should be able to choose sites with CO<sub>2</sub> and hydrogen infrastructure. Such projects would not require the Cluster Programme Support. Therefore, Neptune sees value in awarding carbon storage permits on a case-by-case basis without the need for an economic licence.

## 3. Bolstering CO<sub>2</sub> transport via vessels with direct injection

Shipping  $CO_2$  via vessels gives flexibility to the CCS market and can speed up its uptake. Developing and constructing offshore  $CO_2$  pipelines can take a long time and limits the options to where the  $CO_2$  can travel.

Vessels can travel to more storage facilities, even across borders, as they are not geographically constrained as pipelines. This provides more flexibility and competition to a nascent CCS market.



Furthermore, with direct injection, vessels can go straight to the offshore storage facility for injecting  $CO_2$  into the reservoir without having to unload its  $CO_2$  into an onshore terminal from where the  $CO_2$  is injected via a pipeline into a storage facility.

## 4. Turning North Sea in global CCS hub

The UK would benefit economically and financially from turning the North Sea into one large carbon storage area where policies and regulations are aligned to facilitate and promote CO<sub>2</sub> trade. It would become an attractive area for European and global emitters to ship their emissions to for permanent storage.

The UK could attract a much larger pool of emitters to its storage facilities by offering the EU much needed storage capacity for its emissions. The European CCS sector has estimated that its emissions will amount to 80 million tonnes per annum (MTPA) in 2030. The EU Net Zero Industry Act aims to build 50 MTPA in the EU leaving a 30 MTPA potential for countries such as the UK.

This would lead to increased revenues for the UK. With current prices ranging between 20-30 GBP per tonne for storage, that would bring 300 – 450 million GBP of taxable income to the UK if the UK would be able to attract half of that 30 MTPA. Furthermore, it would bring jobs to the UK offshore sector and parts of its energy infrastructure can be repurposed for carbon transport and storage.

Creating a well-developed and connected North Sea CCS will require aligning the UK and EU Emissions Trading Systems (ETS). Secondly, a hub will need a regulatory agreement and cooperation on  $CO_2$  liabilities, technical standards, and allocation of risk.

Finally, the UK and EU authorities should discuss developing joint CO<sub>2</sub> transport infrastructure such as pipelines and shipping terminals to facilitate cross-border carbon trade.