

The UK's independent public spending watchdog

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NAO REPORT ON CARBON CAPTURE, USAGE AND STORAGE PROGRAMME

Thank you for your request of 7th August 2024 asking for a list of sources who the National Audit Office (NAO) consulted with for the report on <u>Carbon Capture</u>, <u>Usage and Storage programme</u>. Your request has been handled under the terms of the Environmental Information Regulations (EIR). I can confirm that we hold all the information you requested.

We last wrote to you on the 28th of August and directed you to Appendix One (page 42-44) of the report which provides an overview of the documents the study team reviewed, and interviews conducted. In **Annex A** of this response, we have provided a more detailed breakdown of the documents reviewed during the course of the report, along with names of individual departments and stakeholders that were interviewed and consulted by the study team, and number of times this took place.

Our policy is to respond to requests as helpfully and promptly as possible. I therefore hope you are happy with the information provided and the way we have handled your request. If you are not happy with this response, you can ask for an internal review within 40 working days by writing to the NAO FOI Team at FOI@nao.org.uk.

If you are not content with the outcome of the internal review, you have the right to apply directly to the Information Commissioner for a decision. The primary way of escalating your concerns to the Information Commissioner is at: https://ico.org.uk/foicomplaints.

Yours sincerely,

NAO FOI Team



Annex A

Document review

The study team reviewed a range of documents on CCUS that underpins, and provides context for the report:

- BEIS, Carbon Capture, Usage and Storage: Industrial Carbon Capture business models summary, December 2022
- BEIS, Scoping the environmental impacts of Carbon Capture, Transport and Storage
- Carbon Tracker, Curb your Enthusiasm: Bridging the gap between the UK's CCUS targets and reality, March 2024
- CCSA, Lessons Learned: Lessons and Evidence Derived from UK CCS Programmes, 2008-2015, June 2016
- CCC, The Sixth Carbon Budget: The UK's path to Net Zero, December 2020
- DESNZ, Carbon Capture, Usage and Storage: A Vision to Establish a Competitive Market, December 2023
- DESNZ, Biomass Strategy, August 2023
- DESNZ, Documents relating to CCUS business models which can be found at <u>Carbon capture</u>, <u>usage and storage (CCUS)</u>: <u>business models GOV.UK (www.gov.uk)</u>
- DESNZ, documents relating to CCUs cluster sequencing which can be found at <u>Cluster sequencing for carbon capture</u>, usage and storage (CCUS) deployment: Phase-1 GOV.UK (www.gov.uk)
- Global CCS Institute, GLOBAL STATUS OF CCS 2023: SCALING UP THROUGH 2030, November 2023
- HMG, CCUS Net Zero Investment Roadmap: Capturing carbon and a global opportunity, April 2023
- HMG, Clean Growth: The UK Carbon Capture Usage and Storage deployment pathway, November 2018
- HMG, Powering Up Britain, March 2023
- HMG, UK Net Zero Research and Innovation Framework, October 2021
- HMG, The Ten Point Plan for a Green Industrial Revolution, November 2020
- HMG, Net Zero Strategy: Build Back Greener, October 2021
- HMG, CCUS Net Zero Investment Roadmap, April 2023
- HMT, Spring Budget 2023, March 2023
- HoC Library Briefing paper, Carbon capture usage and storage, March 2020
- MDPI, Uncertainty Quantification of the CO2 Storage Process in the Bunter Closure 36 Model, January 2023
- NAO, Carbon capture and storage: lessons from the competition for the first UK demonstration, March 2012
- NAO, Carbon Capture and Storage: the second competition for government support, January 2017
- NAO, Decarbonising the power sector, March 2023
- NAO, The government's support for biomass, January 2024
- NAO, Lessons learned from Major Programmes, November 2020
- NSTA, UKCS Carbon Storage Licences data
- UKIB, Strategy Update: Carbon capture, usage and storage, September 2023
- BEIS, reviews of bids from individual CCUs projects for Track-1, January to April 2002
- BEIS. Cluster Options Report: Network Optimisation Workshops. May 2022.
- BEIS, Strategic Outline Programme Business Case for the Carbon Capture, Usage and Storage Programme, April 2021
- BEIS, Outline Business Case for Carbon Capture, Usage and Storage (CCUS) Programme, March 2022
- DESNZ, CCUS programme Risks, Assumptions, Issues, and Dependencies log
- DESNZ, Tranche 1 Programme Management Plan for Carbon Capture, Usage and Storage (CCUS) Programme, September 2023 update
- DESNZ, Minutes from various Boards on the CCUS programme
- DESNZ, documents relating to the assessment criteria and actual assessment of bids from clusters and individual projects.
- GIAA, Cluster sequencing for carbon capture usage and storage (CCUS) deployment: Phase-1 (Advisory), July 2021
- GIAA, Carbon Capture Usage and Storage (CCUS): Governance and Stakeholder Management: Final Management Letter, April 2022
- GIAA, Cluster sequencing for carbon capture usage and storage (CCUS) programme: planning and scheduling: Final internal audit report, November 2022
- GIAA, Carbon Capture Use & Storage: Planning and Scheduling (Follow Up): Final Engagement Report, March 2024
- IPA, Government Major Projects Portfolio data
- IPA, Assurance of Action Plan (AAP): Carbon Capture, Usage and Storage (CCUS), November 2022
- IPA, Assurance of Action Plan (AAP) Carbon Capture, Usage and Storage (CCUS) Department for Energy Security and Net Zero, September 2023
- IPA, Gate 0 Review Report: Carbon Capture Usage and Storage, April 2023

In addition to the documents listed, the Department for Energy, Security and Net Zero (DESNZ) prepared a series of written briefings and presentations for the study team on the following subjects:

- Cluster sequencing and project selection;
- Track 1 expansion and Track 2;
- System architecture;
- Governance arrangements;
- Dispersed sites;
- Business models and cross-chain risks;
- Greenhouse Gas Removals policy;
- Hydrogen production;
- Power BECCS ad dispatchable power agreements;
- Transport and storage business model and economic regulation; and
- The waste and industrial carbon capture business models.

Interviews

The study team conducted interviews with a range of organisations and individuals in the public and private sectors, as set out in Annex One of the report. These are listed below, with the numbers of interviews held noted in brackets:

- DESNZ (see below);
- HM Treasury (three times);
- Infrastructure and Projects Authority (twice);
- Office of Gas and Electricity Markets (Ofgem) (once);
- Climate Change Committee (twice);
- National Infrastructure Commission (three times);
- North Sea Transition Authority (twice);
- UK Research & Innovation (once);
- UK Infrastructure Bank (once);
- Low Carbon Contracts Company (once); and
- Carbon Capture and Storage Association (twice).

The team also spoke to four academics and others with an interest in CCUS, and received comments from them on draft version of the report:

- University of Sheffield;
- Cambridge Judge Business School
- (former CEO of RWE npower)
- (former CEO of Ofgem)

The study team had weekly catchups with their study liaison point at DESNZ and also had a series of meetings with other officials at DESNZ who could provide more detailed information on specific aspects of the CCUS programme. These were often linked to the briefings and presentations to documents mentioned in the list above. In total, during fieldwork, the study team conducted 18 meetings with officials from DESNZ outside of the regular catchups with the study liaison point. The study team also spoke to the programme's SROs on several occasions during study planning and clearance. The report was discussed during meetings with the Director General for Energy Infrastructure at DESNZ.

In addition to DESNZ and HM Treasury, the study team also shared relevant extracts with the following bodies to ensure balance and factual accuracy:

- Climate Change Committee
- North Sea Transition Authority
- GIAA
- Ofgem
- Low Carbon Contracts Company
- Environment Agency
- UK Infrastructure Bank