



CCUS Supply Chain Good Practice Guidance



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Foreword

In this document the Carbon Capture, Utilisation and Storage (CCUS) industry has set out its own strategy to build a domestic supply chain and ensure it can support the deployment of the first Track 1 CCUS Clusters as well as shape the direction of subsequent CCUS Clusters.

There is a huge opportunity for the UK to access a multi-billion pound global supply chain requirement in CCUS equipment, manufactured items, and services. By significantly enhancing the capacity and technological capability of our industrial base, we have the opportunity to create a much larger and higher-tech industrial base. We will need to do this through consortia, investment support, contracting strategies and large-scale collaborative arrangements involving both project owners and the supply chains.

Ministers have indicated their support for Government and industry to work together to develop a credible plan to maximise economic benefits and domestic jobs through delivery of CCUS, its supply chains and resulting local low carbon products, in compliance with World Trade Organisation rules.

We are keen to learn from other industries (including offshore wind, nuclear and oil & gas), and this Good Practice Guidance builds on existing commitments and progress towards local content on CCUS within the North Sea Transition Deal (NSTD). It mirrors processes in other sectors, in particular, the successes of the offshore wind Supply Chain Plan and Implementation Statement.

This Guidance is aimed at supporting developers and contractors to build local supply chains by improving supply chain planning and engagement at an early stage and throughout the procurement process. The approach will provide knowledge sharing and information needed for the design of both incentives and levers, which will result in local investment, and an understanding on where interventions could be best placed for the CCUS sector to broaden its supply base. This Guidance allows for this improvement, whilst simultaneously supporting the Track 1 projects that are already underway. We believe that the standardised and comprehensive approach to engagement set out in the guidance will provide the supply chain with the necessary confidence and ability to invest in building UK supply chains.

We commend industry for taking the lead in developing this Guidance and believe that if the projects reflect this voluntary agreement and the Government provides strong support, then a reliable, high quality and secure domestic supply chain can be achieved.



Lord Hutton

Chair CCUS Council Supply Chain Working Group

A handwritten signature in black ink that reads 'John Hutton'.

Ruth Herbert

CEO The Carbon Capture and Storage Association

View the full report here:

www.ccsassociation.org/allnews/ccsa-news/ccsa-launches-new-ccussupply-chain-strategy/

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1. Introduction

As the UK strives towards its ambition of building a domestic CCUS supply chain, the industry must set, measure and benchmark against granular but achievable targets. These are designed to enhance the capacity and technological capability of our industrial base. The ambition of the CCUS sector is an overall UK content target meeting or exceeding 50 per cent by 2030, in line with existing targets set by the NSTD.

In line with the NSTD, **UK Content** is defined as:

Agreed definition that a product (component) or service can be considered as having been delivered within the UK.

- In respect of services, those services provided by a company carrying on business in the UK; and,
- In respect of goods, those goods which are being made, changed or improved in the UK (using the same definition as goods eligible for a UK country of origin certificate).

In order to achieve this percentage UK content target, the CCUS industry needs the Government to provide:

- i. A committed forward allocation programme for capture projects to drive confidence and raise the profile of the sector.
- ii. Flexibility in bilateral negotiations on cost and delivery dates where there is an opportunity to secure higher UK content.
- iii. Targeted financial support for building capacity and transitioning existing supply chain businesses to serve the CCUS programme.

In combination with these industry needs, this Good Practice Guidance Document sets out a mix of qualitative and quantitative targets that, when taken together, create a pathway for an industry UK content ambition to be launched.

The targets cover six key areas of focus, each with unique achievable goals, that set a clear ambition for 2030.

Target an increasing volume of UK content in the CCUS sector

Promote the introduction of UK technology into the CCUS sector

Drive the investment in skills and training to support the CCUS sector

Encourage transparency in the CCUS sector supply chain process

Enhance the quantity and quality of jobs created or protected in the CCUS sector

Create wider economic benefits to the UK as a result of the CCUS sector

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It is important to note that, recognising the infancy of the sector, the industry is focusing on achieving and reporting good practice in our supply chains to allow us to work towards identifying and achieving best practice over time. This needs to be done without constraining the current Track 1 clusters, or disincentivising future development, alongside identifying and developing UK capability and capacity in domestic supply chains and high value opportunities.

Moreover, protecting and embedding existing capacity must be viewed equally important as developing new capacities and capabilities.

The Good Practice Guidance Document covers:

- **Definitions and documentation of stretching targets across the industry-led commitments** - an agreed terminology and set of commitments for defining Supply Chain Good Practice across the CCUS sector.
- **Benchmarking and tracking methodology** - ensuring the commitments are measured and reported in a robust manner and projects report data consistently. This data can be used on a project basis or aggregated across the CCUS sector to incentivise future Good and Best Practice.

Together these will clearly lay out the expectation and level playing field necessary for the sector to work collaboratively in order to develop and improve the UK CCUS supply chain.

In partnership with this work, the Department of Energy Security and Net Zero (DESNZ) have worked with ARUP to develop a **supply chain common taxonomy** - a common standardised nomenclature across

goods, works and services of energy transition supply chains, and the **mapping of high value item opportunities** - the identification of the high value item opportunities across UK equipment and services. These pieces of work have been integrated in to the full report and can also be found separately at:

www.ccsassociation.org/all-news/ccsa-news/ccsa-launches-new-ccus-supply-chain-strategy/

www.gov.uk/government/publications/opportunities-for-economic-growth-in-the-uks-ccus-industry



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2. Document Ambition

Developing the CCUS Supply Chain industry is vital to safeguard the supply of components needed for the UK to continue to lead the world in Carbon Capture as other nations catch up and compete for the necessary apparatus.

The UK already has significant capabilities that could service the CCUS supply chain, and it should be a strong ambition to build in new capacities alongside protecting what is already available and established. Equally as a nation we need to ensure that a significant proportion of our investment in this new technology ends up supporting the capability, skills and education required to run, maintain, and expand this vital industry in the future. This guidance also brings CCUS into alignment with the NSTD and Offshore wind sectors.

A good practice guidance document agreed with industry and Government sets the expectations across the industry-led commitment areas and the publishing of achieved results allows the CCUS projects to self-assess their current situation and drive their ambition to achieve best in class. By having well-defined measures CCUS projects will be able to commit to and achieve stretching targets, whilst knowing that competitors are reflecting the same standards and that their efforts will be recorded and recognised.

These targets will not necessarily remain static but will be reviewed when necessary to ensure they are still relevant and stretching. Currently our ambition for built-in-Britain is greater than what is practically possible due to the infancy of the sector, leading to a lack of capability and capacity, especially in the manufacturing supply chain.

Over the medium term, these targets can be augmented by a single voluntary target, so that the projects have a minimum local UK content across their lifecycle, as has been achieved by the Offshore Wind and Oil and Gas industries. Of paramount importance is that no project or organisation is disadvantaged or held back by the monitoring and reporting process. The Commitments and process has been designed to provide the Sector with the intelligence to make well timed and meaningful interventions. For this reason, it is imperative that the reporting is done in a constructive manner, ensuring anonymity and displaying data in a balanced manner with explanation.



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3. Use and benefits of the Good Practice Guidance

Individual projects will be able to download the input sheet and provide quantitative and qualitative explanations of good practice, with evidence where possible, allowing self-assessment against the provided criteria. Projects are encouraged to use any existing data from other reporting mechanisms (e.g., Dispatchable Power agreement from DESNZ) as a basis for ease and consistency. This will inform and support the intended supply chain ambition and once submitted to the CCSA, will allow industry to gauge the level of attainment across the sector and signal areas where a whole industry improvement effort is required with government backing.

What are the benefits for industry?

- Applying industry good practice will drive positive behaviours throughout the whole supply chain, improving efficiency through use of standard terminology and sharing a level playing field.
- As the number of UK manufacturers increases over time, there will be easier access to suppliers. This will reduce transport time and provide a more secure supply chain.
- A sector standard will improve efficiency of reporting and support the tendering process.
- Use of formal expectations and the issuing/receiving of meaningful feedback ensures all companies improve service and gain repeat business.

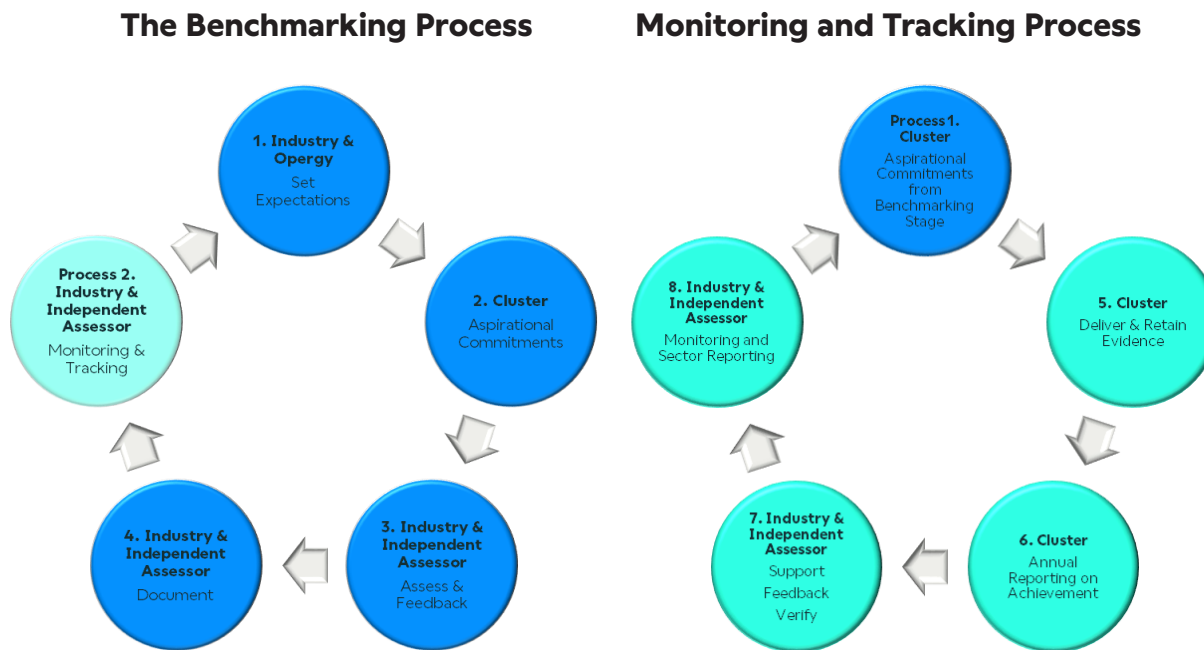
- Sharing envisaged 'Future Workplans' ensures an organised approach to tendering and a greater choice of suppliers.
- Timely payment of invoices, prompt payment of the undisputed part of a disputed invoice and feedback on the quality of invoices all ensure better business performance and working relationships.

The full report can be found at: www.ccsassociation.org/all-news/ccsa-news/ccsa-launches-new-ccus-supply-chain-strategy/



4. Benchmarking and Tracking

The processes for Initial Benchmarking of Project Aspirations and regular Tracking of achievements against those initial aspirations are shown below.



Clearly defining the roles and responsibilities of each of the involved parties is essential to ensure continued confidence in the reporting and monitoring process.

Roles and responsibilities:

- **Industry** - timely and comprehensive reporting of supply chain plans through self-assessment.
- **Independent Assessor** - collection of the data from industry, collation, and anonymization to maintain confidentiality, and feedback to industry on individual progress versus sector-wide trends.
- **CCSA** - responsibility to develop supply chain insights of the collated anonymised data from the Independent Assessor and develop policy and intervention strategies.
- **Government** - where appropriate, respond to the insights from the supply chain reporting rounds as summarised by the CCSA and other complementary work.

Provision to maintain confidentiality

The CCSA in collaboration with the nominated **Independent Assessor** will continue to engage with industry to ensure confidence in the monitoring and tracking process and that all efforts to ensure anonymisation are exhausted. Provision can be made to ensure industry reserves the right to the data that is supplied, and any reports or supply chain insights which are published thereafter will need to have industry agreement prior to publication. Data confidentiality and proprietary information is paramount to ensure industry confidence in this process.

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5. Recommendations

As part of the good practice guidance, it is important to outline next steps in the process and create a roadmap for industry, government, and key stakeholders to work towards. As a result, the following recommendations are noted:

Overarching Recommendations	Owner
1. The processes for making Good Practice Commitments should commence soon after publication of this report by November 2023.	Industry
2. Responsibility for the annual supply chain good practice in CCUS process for measuring and reporting, should be assigned and funds made available for its ongoing management. Agreement to have been gained by August 2023.	Industry
3. A Government Strategy, building on the CCSA Skills Positioning Paper and the first round of the Supply Chain Good Practice reporting as soon as practically possible, to outline meaningful activities that can be made to increase the advantage the UK receives by the ongoing adoption of and investment in the CCUS Industry.	Government
Taxonomy Recommendation	Owner
4. The UK CCUS industry should look to align their equipment purchasing requirements to the Arup Taxonomy, detailed in this document, and subsequently to UNSPSC codes by early 2024.	Industry

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High Value Item Opportunity	Owner
5. A government strategy of targeted support to drive investment to embed high value item opportunities in the UK supply chain should be considered and implemented as soon as practically possible, recognising the window of opportunity for success is narrow.	Government
6. Prompt engagement with UK fabrication yards to establish the possibilities for their expansion in strategic locations. To be completed by end of 2023.	Government
7. Relevant stakeholders could consider proposing a similarly high value investigation to other countries who are developing CCUS supply chains and work collaboratively on this process. A report should be completed by Summer 2024.	CCSA and Industry
Enabling Recommendations	Owner
8. Sector wide targets should be made for Apprenticeships and other educational products so that cross sector initiatives are implemented that join up the independent Cluster efforts, as soon as practicable in 2024.	Government and Devolved Administrations
9. Maximise potential for custom packages on dispersed sites by focusing efforts on developing a suitable policy environment for non-pipeline transport (NPT). Policy Guidance should be published by Spring 2025.	Government and Industry



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