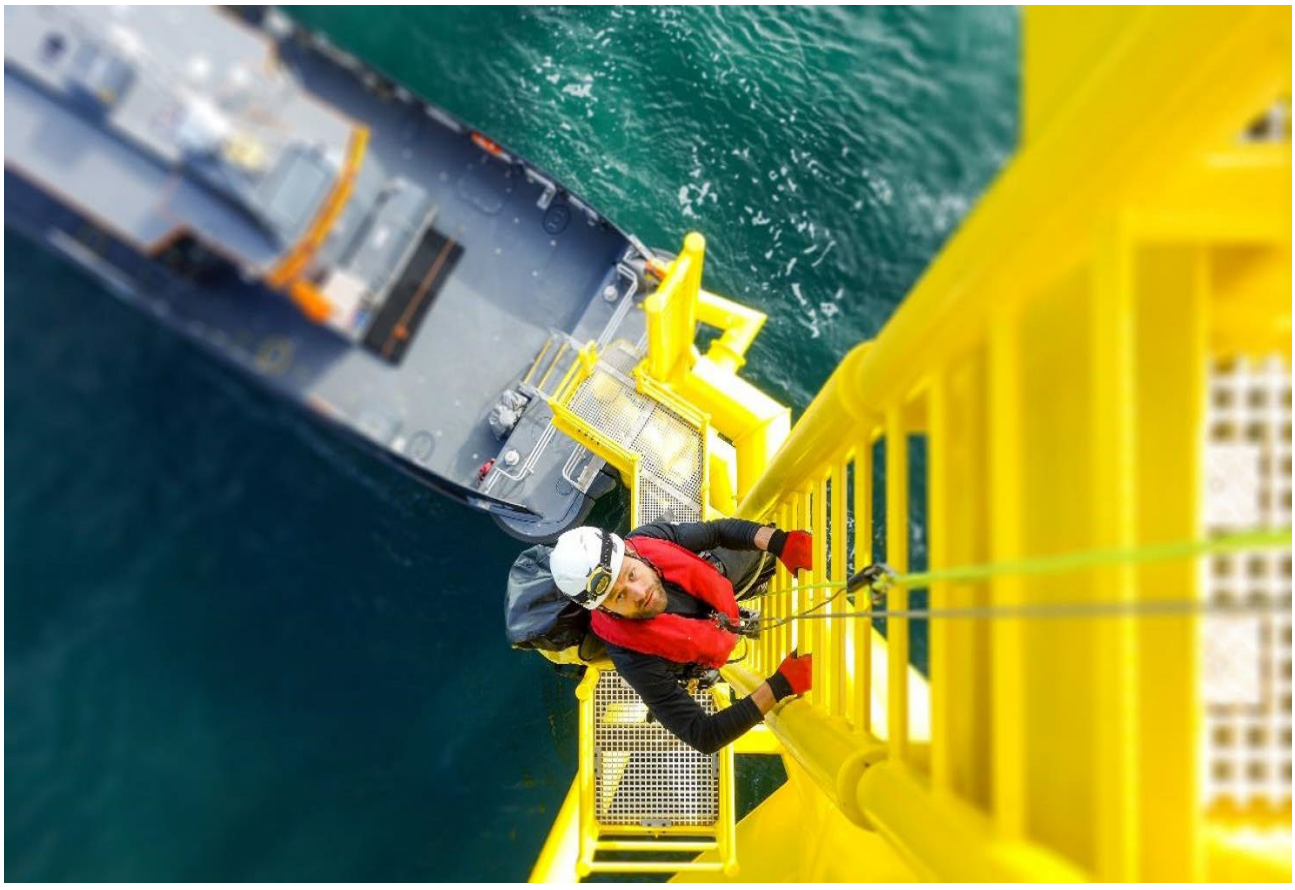
Department for Business, Energy & Industrial Strategy

OEUK

North Sea Transition Deal

One Year On



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Foreword

As the North Sea Transition Deal reaches its first anniversary, we welcome industry's and government's strong commitment to work together to deliver the Deal's objectives. These have never been more relevant. In the year where the UK chaired COP26, the Deal is widely seen as a global exemplar of how a partnership between government and the offshore oil and gas sector can support a key national sector through an ambitious energy transition and drive rapid progress along the road to net zero.

Demand for fossil fuels will decline – but there will continue to be a requirement for oil and gas over the coming years, with fossil fuels continuing to play a role in the UK to 2050, supporting the expansion of renewables and wider low carbon technologies. By working in partnership, the parties to the Deal can address the challenge of maintaining investment and domestic production, while reducing emissions from UK oil and gas supply.

Recent events have brought to the forefront of everyone's minds that a diverse range of supplies is integral to supporting secure home-grown energy to keep us warm, and to keep the lights on, and the government will continue to back the domestic oil and gas sector's work to provide a secure domestic energy supply, minimising the UK's reliance on energy imports, particularly those from unfriendly powers.

We are pleased with the progress being made, and as we continue our collective journey to a net-zero economy, we look forward to the continued success of the offshore energy sector.

Kwasi Kwarteng
Secretary of State, Department for Business, Energy and Industrial Strategy

Deirdre Michie
CEO, Offshore Energies UK

Greg Hands
Minister for Energy, Department for Business, Energy and Industrial Strategy

Background

Agreed in March 2021, the North Sea Transition Deal is a transformative partnership between the UK Government and the UK's offshore oil and gas sector. It will harness the power of the UK offshore oil and gas industry to deliver net-zero by 2050, and in the process, unlock up to £16bn in investment, secure up to 40,000 energy jobs, reduce emissions by up to 60mn metric tons and ensure that local content accounts for half the inputs into new energy projects.

To ensure appropriate recognition of the changing sector, in 2021, industry's representative organisation that committed to the Deal on behalf of the sector, evolved its remit to become Offshore Energies UK (OEUK). As a result, OEUK's scope has extended to include CCUS, hydrogen and offshore floating wind, as well as oil and gas. On 21 March 2022, the Oil and Gas Authority changed its name to the North Sea Transition Authority (NSTA) to reflect its evolving role in the energy transition. The new name reflects the transformative nature of the Deal and the expanding role of the NSTA, including its role as the carbon storage license and permitting authority; the monitoring of emissions; assessing a net zero test for new developments; and stewarding domestic production. The NSTA will continue to play a vital role in ensuring energy security as the body which stewards the oil and gas industry, both on and offshore.

Progress so far

Governance of the Deal

The new North Sea Transition Forum, which keeps Ministers informed of progress of the Deal deliverables, meets twice a year. The Forum is comprised of Ministers and officials from both the UK and Scottish governments, senior industry representatives, trade union spokespeople and regulators. The Deal Delivery Group drives practical delivery of the deal, meets more frequently and Offshore Energies UK (OEUK) provides the programme management office.

The Deal has been backed by up to £2m in government funding, which has supported several industry proposals, and projects led by the NSTA and OEUK. The NSTA is leading work to track emissions and published the first Emissions Monitoring Report in October 2021. Wider developments have been made to strengthen governance across the sector.

The NSTA published its revised Strategy in 2021 which puts net zero at the forefront of their business as it obliges industry to support the government in reaching the 2050 net zero target, whilst optimising the value of UK North Sea reserves.

Supply Decarbonisation

The Deal introduced targets to reduce Green House Gas emissions from upstream oil and gas activities through **Supply Decarbonisation**, against a 2018 baseline, by 10% in 2025, 25% in 2027 and 50% in 2030, while reducing carbon emissions to zero by 2050.

In 2018, upstream oil and gas activities in the UK accounted for four percent of UK greenhouse gas emissions at some 19 million tonnes. Progress has been good, with overall upstream greenhouse gas emissions falling by 11%, since 2018, as reported in the Emissions Monitoring Report. Flaring in the UK North Sea fell by 19% in 2021, building on a 22% decrease the previous year, with venting cut by 24%.

The NSTA Strategy (and Stewardship Expectation) require operations to be consistent with net zero ambitions, as well as introducing full societal carbon cost assessments into the approval process. The NSTA has issued updated flaring and venting guidance, whereby all new developments should be planned on the basis of no routine flaring and venting, with zero routine flaring and venting for all operators by 2030.

Another priority is using electricity to power offshore production (replacing current powering by hydrocarbons). Government has established a Government and Regulators Electrification Network (GREG) which works with industry to explore how barriers to electrification can be addressed, and industry has some well-developed proposals for electrification projects. A new ‘Task and Finish Group’ has been established by industry to bring a collective voice to ongoing discussions with the government and the Government and Regulators Electrification Group

(GREG). This relationship will be critical as we work together to secure the successful delivery of electrification projects across the UKCS.

Scottish Government (Marine Scotland) and Crown Estate Scotland have developed the Innovation and Targeted Oil and Gas (INTOG) planning and leasing round for offshore wind farms powering oil and gas assets in Scottish Waters, working with support from GREG.

To support electrification, government provided some £1m of funding via the NSTA to support the development of technical and commercial studies on three proposed approaches to electrification, with project reports to be published later this year:

- **Orcadian Energy** are leading a project on Innovative concepts for the electrification of offshore installations in the Central Graben,
- **Orsted** are leading a project addressing technical and commercial requirements of wind farm connections with offshore installations, and,
- **Katoni Engineering** are developing an optimised interface for distributed offshore renewable sources supplying existing offshore installations with secure and low-emissions power.

The studies will assess innovative technical and commercial solutions to help decarbonise oil and gas operations.

An expected outcome from the Deal was for OEUK to publish a Methane Action Plan to align the UK Continental Shelf (UKCS) with global methane standards. In June 2021, OEUK delivered the Methane Action Plan which outlines a 50% methane emissions reduction target by 2030, and key industry activities that will cut methane emissions and intensity.

Carbon Capture, Usage and Storage

A key element of the North Sea Transition Deal is the active participation by the oil and gas industry in developing **Carbon Capture, Usage and Storage** (CCUS) as well as the government's commitment to working with key stakeholders to benefit from the opportunity for local places to build back greener. The Deal includes commitments to invest in CCUS to support the net zero strategy commitments to establish at least two industrial clusters by the mid-2020s and four by 2030 at the latest, with a total annual capture rate of 20-30 MtCO2 per year by 2030,[1] to enable greater industrial power sector decarbonisation and low carbon hydrogen production.

[1] https://www.gov.uk/government/publications/net-zero-strategy

In October 2021, HyNet North West and the East Coast Cluster were selected for Track-1 of the cluster sequencing process, with the Acorn Cluster in Scotland as a reserve cluster. We aim to have the key infrastructure for the first two clusters in place by the mid-2020s. Subject to the outcome of negotiations these clusters will be eligible for support under the government's CCUS programme. As set out in the Prime Minister's Ten Point Plan the £1bn CCUS Infrastructure Fund (CIF) will support the capital costs of strategic CCUS infrastructure, primarily Transport and Storage (T&S) networks, and industrial carbon capture projects. Up to £40m of the CIF will support early-stage design work in industrial clusters via the existing Industrial Decarbonisation Challenge Fund, run by UK Research and Innovation. In January 2022 greater detail on CCUS T&S was provided. To ensure accountability and transparency, a reporting structure has been established as part of the Deal Delivery Group for OEUK to report on progress being made on the ground.

The Industrial Decarbonisation and Hydrogen Revenue Support scheme will fund the low carbon hydrogen and industrial carbon capture business models and give long-term certainty to investors and projects. The government will announce the revenue envelope for CCUS-enabled hydrogen and industrial carbon capture in 2022, allowing contracts, from 2023, to be awarded for up to 1GW of CCUS-enabled hydrogen and up to 3MtCO2/yr of industrial carbon capture.

The UK currently has four existing CCS licences. The most recent CCS license was awarded by the NSTA to Harbour Energy covering an area in the South North Sea off the coast of North East Lincolnshire in October 2021. Initial injection rates will be at 3.6 million tonnes per annum, rising to 11 million tonnes per annum by 2030.[2]

Hydrogen

The Deal committed Government and industry to supporting the deployment of **hydrogen** production capacity in the UK. The UK Hydrogen Strategy, launched in August 2021, set out how hydrogen will be an important element of the UK energy supply, including for heavy industry, shipping and aviation sectors, and was positively received by industry.

Nearly £100 million of new government funding was announced in the Hydrogen Strategy as part of the government's Net Zero Innovation Portfolio to support heavy industry to switch to low carbon fuels, including hydrogen. The Portfolio also includes the £60 million Low Carbon Hydrogen Supply 2 Competition to support innovative hydrogen production, transport and storage technologies. As committed to in the Hydrogen Strategy, a Hydrogen Regulators Forum has been established to help determine current and future non-economic regulatory responsibilities across the hydrogen value chain. It will focus on activity required in the 2020s to identify, prioritise and implement any changes to the existing non-economic regulatory framework – including addressing any gaps – to support the growth of a hydrogen economy.

[2] https://www.nstauthority.co.uk/news-publications/news/2021/oga-grants-carbon-storage-licence-to-harbour-energy/

Alongside the Hydrogen Strategy the Government published consultations on the proposed design of the £240 million Net Zero Hydrogen Fund (NZHF), a hydrogen business model and a UK standard for low carbon hydrogen. The NZHF will provide upfront support to enable the development and commercial deployment of new low carbon hydrogen projects during the 2020s, de-risking investment in early projects. The hydrogen business model is designed to provide hydrogen producers with revenue support to overcome the operating cost gap between low carbon hydrogen and fossil fuels to unlock private investment in hydrogen projects. These support programmes will be underpinned by a new UK Low Carbon Hydrogen Standard, which will establish a threshold for the maximum level of carbon emissions allowed in the production of hydrogen for it to be considered 'low carbon'.

Hydrogen production projects are being planned through the CCUS Clusters. The East Coast Cluster may enable up to 3 GW of hydrogen production capacity, while the Hynet and Acorn Clusters are also planning hydrogen projects. Potential for a Southern North Sea Hydrogen Hub is also currently being explored. Electrolytic hydrogen projects have been announced by the UK's offshore oil and gas sector, including by bp and INEOS. The active participation of industry in wind development through Scotwind will provide additional opportunities to develop hydrogen resources, taking advantage of its properties as a versatile energy vector which can also provide large-scale, long duration energy storage.

The Industrial Decarbonisation and Hydrogen Revenue Support scheme, which funds the low carbon hydrogen and industrial carbon capture business models, will be providing up to £100 million to award contracts of up to 250MW of electrolytic hydrogen production capacity in 2023 with further allocation in 2024. This means that 500MW of electrolytic hydrogen production projects will be operational or in construction by 2025. The Government will announce the revenue envelope for CCUS-enabled hydrogen and industrial carbon capture in 2022, allowing contracts for up to 1GW of CCUS-enabled hydrogen to be awarded from 2023.

Supply Chain Transformation

The Deal includes a commitment to diversify the offshore oil and gas sector through a **Supply Chain Transformation** to strengthen the offshore oil and gas sector's ability to serve low carbon energy sectors, at home and abroad. OEUK is working on a Supply Chain Strategy, including early investment support and local content targets. Responsibility for defining "local content" and setting the framework for achieving it at each stage of a project's life rest with the North Sea Transition Forum's Supply Chain and Exports Taskforce.

Sian Lloyd-Rees (UK Managing Director of Aker Offshore Wind) has been appointed Supply Chain Champion and has developed a 100-day plan to provide early line of sight for business

opportunities, develop mechanisms to connect sources of funding, address barriers to success and promote our supply chain capabilities.

Supply Chain mapping is underway, initially mapping CCUS capabilities against future capacity and capability before progressing to other sectors from 2022 onwards. This has been achieved through a series of interviews with industry, regulators, devolved administrations and UK Government, alongside desktop research. This will be published in early 2022.

OEUK is building a unified inventory of prospects for the UK's energy supply chain, which will set the key opportunities for success, and leading work to develop a common value chain classification of Goods, Works and Services; initially for CCUS and subsequently for other offshore sectors. Energy Pathfinder provides an existing recently updated digital platform for ensuring visibility of offshore energy projects. As committed to through the Deal, OEUK is also focusing on embedding the government's Prompt Payment Code with industry behaviours linked to their Supply Chain Principles.

The Global Underwater Hub was formally launched in December 2021, with the ambition to transform the UK's £8bn underwater industry into one of the largest and fastest-growing industries in the country whilst accelerating the drive to net-zero.

People and Skills

People and Skills continue to be at the core of the Deal, which includes a commitment to facilitate the reskilling of existing parts of the oil and gas workforce to ensure that people and skills are transferable across the wider energy sector.

Good progress has been made in aligning cross-sector energy training and standards to facilitate workforce mobility and minimise barriers to movement. The Deal commits industry to produce a People and Skills Plan (P&SP) which is being led by OPITO, a skills body for the energy industry. OPITO is engaging with key stakeholders to develop the P&SP which will be an integrated workforce plan and forecast to consider how the workforce's skills can be redeployed to benefit the UK's decarbonisation campaign. The P&SP is due to be released in early Q2 2022.

Furthermore, on behalf of OEUK, Robert Gordon University has completed initial work on employment planning and opportunities in CCUS, hydrogen and electrification in 2030 and 2035.

The oil and gas sector needs to continue to attract and retain diverse talent. OEUK is developing a greater understanding of the sector's demographics, as well as guides for creating an inclusive culture, and flexible and transparent recruitment and promotion pathways, with a view to encourage reporting on ethnicity pay gaps in 2023. The guides will be used to promote best practices for industry to follow. The next area of focus for the diversity and inclusion activities will include is to address non-visible differences, particularly, and a forthcoming focus on neurodiversity and social mobility.

Building on our success – priority areas

1. **Supporting domestic energy supplies**: Government will provide a stable investment regime for the sector, to encourage continued investment in the UK's offshore oil and gas infrastructure, as well as in CCUS, hydrogen and offshore wind, including floating offshore wind.

2. **Encouraging continued investment**: Government will ensure that the UK will continue to be the best place to invest in, start and grow a business. HM Treasury commit to holding a Fiscal Forum in the coming months.

3. **Minimising production emissions**: Government, regulators and industry will continue to work together to drive progress on electrification of our offshore production infrastructure, as well as wider decarbonisation measures to ensure the UK's impacts remain as low as possible.

4. **Setting a clear path to net zero**: The NSTA set out credible strategies for making operations of new and existing assets net zero at the operator level and apply an effective net zero test to new developments.

5. **Climate compatibility checkpoint**: Building on the recent consultation, government will develop a robust Climate Compatibility Checkpoint, to guide any future Licensing Rounds and which takes into account the responses to the public consultation. Government will put the new Climate Compatibility Checkpoint in place before this summer. Subject to a positive Climate Compatibility Checkpoint test and the Strategic Environmental Assessment being in place, the NSTA will open a new Licensing Round.

6. **Supply Chain Transformation**: Industry will establish a Supply Chain Roadmap, to help sector suppliers diversify into areas including CCUS, hydrogen and floating wind, and spread economic benefits around the UK, including a supply chain taxonomy for new projects. As part of the UK Content activities, updated Supply Chain Action Plans – which will be the primary recording, tracking and reporting mechanism – will be developed and tested with industry.

7. **Enabling carbon capture projects**: Government aims to continue progress on Carbon Storage licences supporting efforts to capture 20-30Mt of carbon dioxide by 2030; announcing shortlisted projects invited to participate in commercial negotiations phase of the Cluster Sequencing process. Government will finalise the Transport and Storage Regulatory investment model and will work closely with stakeholders on licence and code development in 2022.

8. **Enabling low carbon hydrogen projects**: Government will continue to deliver against the 5GW by 2030 ambition and wider commitments in 2022, including by launching the Net Zero Hydrogen Fund and finalising the hydrogen business model later in 2022. The Net Zero Innovation Portfolio will continue to support new low carbon hydrogen technologies across the value chain. A Hydrogen Sector Development Action Plan in 2022 will set out more detail on

how government and industry ensure we have the supply chains, skills and investment to maximise the economic benefits to the UK of developing a low carbon hydrogen economy.

9. **Leveraging innovation and skills**: Our workforce is the innovative and creative force within the sector, and a true national asset. We aim to build on the progress made thus far in the Offshore Wind Sector Deal, the Energy Skills Alliance and through the forthcoming integrated People and Skills Plan to make rapid progress on the transferability of the workforce to ensure that we can facilitate the development of a flexible offshore energy workforce to the benefit of the UK's energy sector.

10. **Supporting the global transition to Net Zero**: Government will ensure that the UK remains a leading centre for the research and development at the heart of the energy transition, developing export capabilities that will deliver domestic prosperity while supporting the global net zero transition. Through DIT's Clean Growth Campaign, Energy Transition Export Capability Guide, a joint government-industry Decommissioning Strategy and UKEF's Climate Strategy, we will build on current export promotion and export finance solutions, harnessing capabilities developed by the UK's oil and gas sector to grow UK market share in export markets.

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