North Sea and the UK energy transition policy / documents

DOCUMENT 1 : William Nicolle, Benedict McAleenan and Ed Birkett, *Policy Exchange, The Future of the North Sea. Maximising the contribution of the Nort Sea to Net Zero and Levelling Up*, 2020

Policy Exchange is the UK's leading think tank. It is an independent, non-partisan educational charity whose mission is to develop and promote new policy ideas that will deliver better public services, a stronger society and a more dynamic economy.

"The North Sea is a hub of economic activity, including oil and gas, offshore wind, shipping, fishing, electricity interconnectors, telecoms and extraction of aggregates. The North Sea was Europe's first offshore oil and gas basin, but it is now on the decline. Offshore wind has the potential to compensate for the North Sea's falling oil and gas production, and the sector has grown rapidly in the last decade. Offshore wind now provides 10% of the UK's electricity, a figure that is expected to double by 2025 and quadruple by 2030.

North Sea ports handle over half of all goods traded through UK ports every year, and shipping lanes in the Southern North Sea are the second busiest in the world. The UK Government's commitment to Net Zero emissions by 2050 is a driving force behind the transformation the North Sea, which will increasingly become the engine of the UK's low-carbon economy. This includes many of the regions along the North Sea's coastline, presenting an opportunity to achieve the Levelling Up agenda through Net Zero.

Regulation of activities in the North Sea is currently siloed between multiple regulatory agencies, which could limit the future economic potential of the North Sea. Individual activities or projects in the UK's seas are assessed against environmental regulations through the marine licensing system. Certain areas of the UK's seas are protected as 'Marine Protected Areas' (MPA). The UK has surpassed its target, with 18% of the North Sea now covered by an MPA. However, our research has found that the North Sea's MPAs are largely a tick-box exercise to meet international targets. Few of the UK's MPAs have management plans in place, and monitoring generally occurs once every five to fifteen years. Increasing development in the North Sea will put greater pressure on the marine environment, but current regulatory approaches do not assess environmental impacts on a basin level."

DOCUMENT 2 : Hilly Hannam-Seymour, *The North Sea's Growing Role in the UK's Energy Transition*, 10/02/2026

BP Consulting is a UK energy management consultancy that assists businesses in optimising their energy usage and reducing costs. They offer energy procurement, management strategies, and renewable energy solutions to various clients, including public sector organisations and SMEs (small and medium-sized companies).

"The North Sea remains a central focus for the UK and European energy landscape, evolving from traditional hydrocarbons into a strategic asset for the energy transition. The region already hosts more offshore wind capacity than any other region globally, making it the focal point for renewable ambitions. Recent project approvals, notably the Berwick Bank offshore wind farm, mark a pivotal moment for the sector. As one of the largest offshore wind projects, Berwick Bank signals long-term commitment to large-scale renewable deployment, strengthening the clean power pipeline and grid resilience.

These efforts are part of wider international goals to supply power to tens of millions of homes while reducing reliance on imported energy. In early 2026, the UK government convened the inaugural North Sea Future Board meeting in Aberdeen to ensure the region becomes a clean energy leader. This board includes industry leaders and trade unions tasked with balancing the interests of coastal communities and workers historically dependent on oil and gas. This reflects a shift where the North Sea is viewed as a platform for energy transition infrastructure.

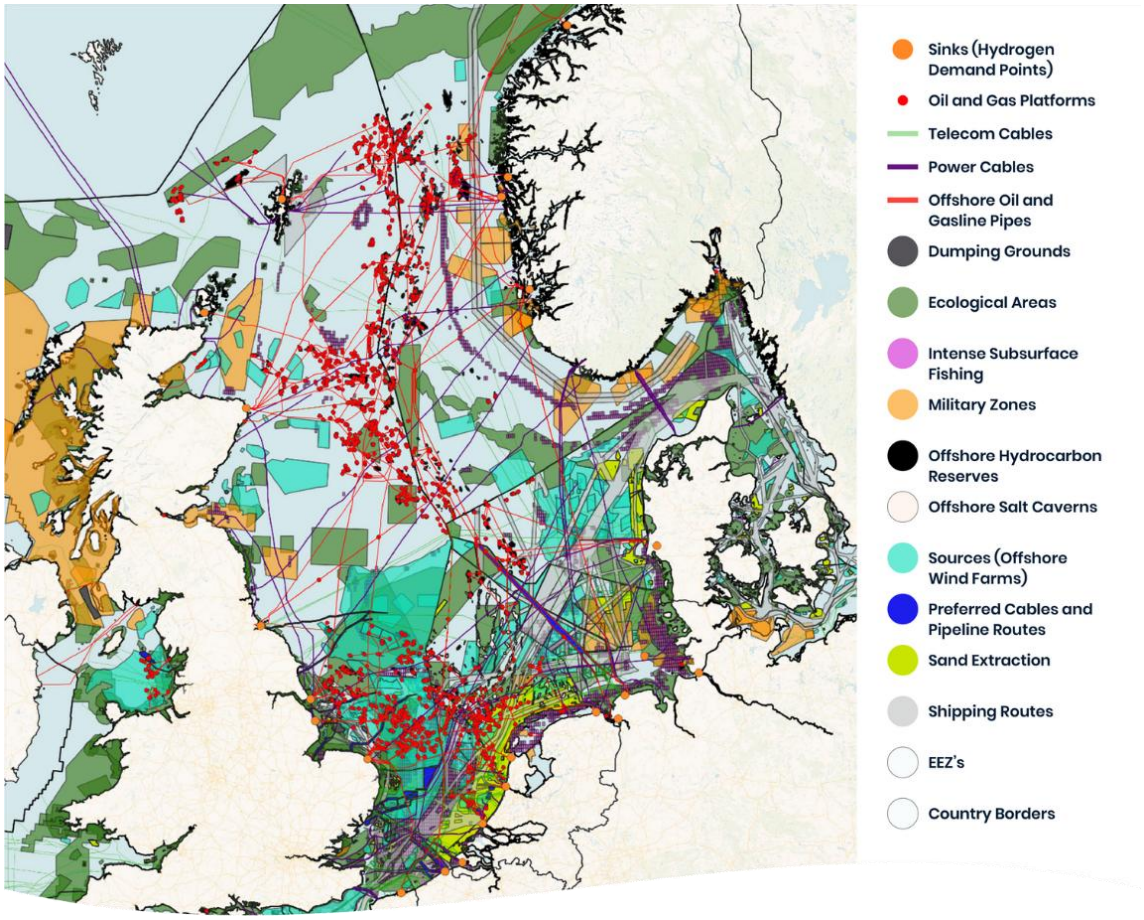
Furthermore, the Hamburg Declaration, signed by the UK and nine partners, aims to deliver 100GW of offshore wind capacity by 2040. This plan transforms the North Sea into a significant clean energy reservoir and a hub for grid interconnections. Such projects are designed to attract multi-billion-pound investment and substantially boost energy security and decarbonisation."

DOCUMENT 3 : Marta Pacheco, "EU energy ministers pledge to boost offshore wind power in North

"Energy ministers from Belgium, Denmark, France, Ireland, Luxembourg, the Netherlands, the United Kingdom, Norway, and Iceland, alongside NATO, recently gathered in Hamburg to pledge a significant increase in offshore wind capacity within the North Sea. The primary objective is to reach 100 GW as part of a broader strategy to massively scale up offshore wind by 2050 and lower energy prices. This commitment follows recent criticism from US President Donald Trump regarding Europe's climate ambitions which British Secretary of State Ed Miliband rejected by stating that clean energy is the "right choice" for national interests.

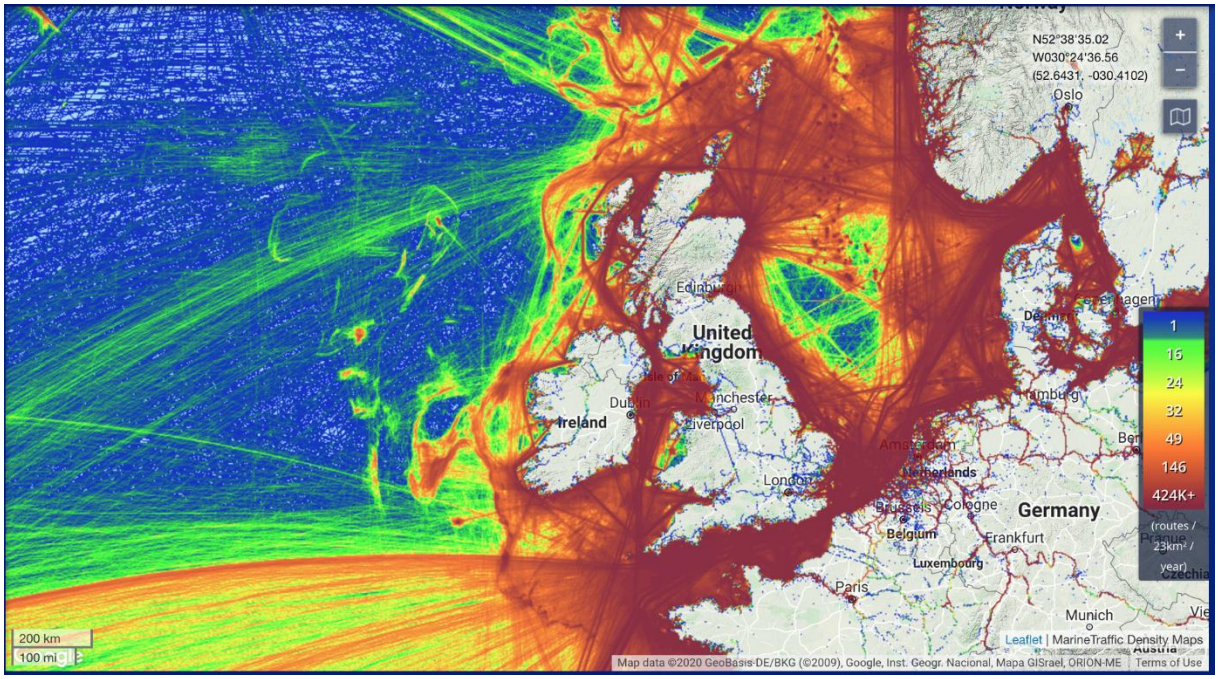
The governments are committed to reaching 300 GW by 2050 to decrease Europe's dependence on Russian gas. This could potentially reduce electricity costs by 30% by 2040 compared to 2025 levels. However, achieving this massive goal requires "major private capital investment" and the development of a specific offshore financing framework for cross-border ventures. German Minister Katherina Reiche indicated that foreign direct investments are now being closely scrutinized under sharpened European and German legislation. German Chancellor Friedrich Merz concluded that collaboration in the North Sea is "critical" for the security and independence of Europe. The unified goal of the participants is to develop the North Sea into the world's largest reservoir of clean energy."

DOCUMENT 4 : Space use in North Sea



source : https://northseaenergyroadmap.nl/use-of-space

DOCUMENT 5 : Maritime traffic around British Isles, october 2020
source :
https://www.esa.int/Applications/Satellite_navigation/Satnav_loss_might_shut_down_sea_warns_ESA-backed_study



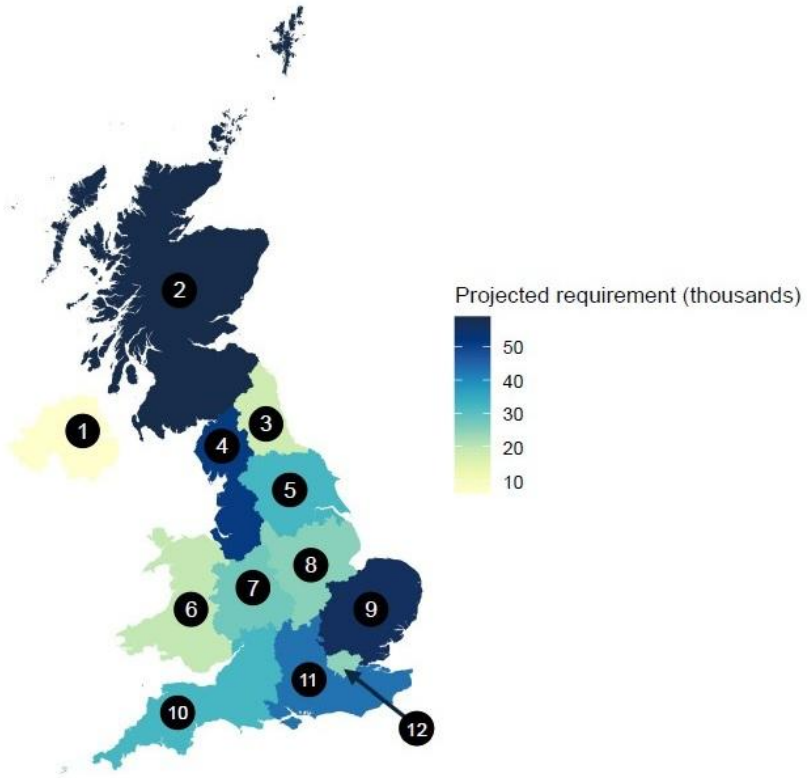
DOCUMENT 6 : Jillian Ambrose, « Offshore windfarm contracts to fuel 12m homes in Great Britain after record auction », *The Guardian*, 14 January 2026

"A record auction for the UK government's goal to create a clean electricity system by 2030 has awarded subsidy contracts to offshore windfarms to power 12 million British homes. Contracts were awarded to eight new offshore farms after ministers doubled funding to help produce projects worth £22 billion, an investment expected to support 7,000 skilled jobs. The German utility RWE was the most successful bidder, securing almost 7GW of projects including Dogger Bank South, while SSE won a contract for its massive 4.1GW Berwick Bank project.
Investing in renewable electricity is intended to lower energy bills for good by limiting the use of expensive gas plants and reducing exposure to volatile global fossil fuel markets. Accelerating investment during a time of higher technology costs, speedy investment is considered key to replacing ageing nuclear and gas plants. As electricity demand is set to increase significantly, these 8.4GW of awarded contracts will be crucial for the UK's economic growth and long-term energy security."

[1] offshore wind auction : companies compete with each other to secure a permit and associated subsidy to build ans operate a wind farm. The company/companies with the lowest bid (in eurocents per kilowatt hour) win(s) the auction
[2] SSE : Scottish and Southern Energy is an energy company headquartered in Scotland. SSE operates in the United Kingdom and Ireland.
[3] RenewableUK is the trade association for wind power, wave power and tidal power industries in the United Kingdom

DOCUMENT 7 : direct clean energy jobs in 2030 by UK region (direct jobs only)

Source : https://assets.publishing.service.gov.uk/media/68f762b324fc2bb7eed11a45/clean-energy-jobs-plan.pdf



DOCUMENT 8 : Helena Horton, "Offshore windfarm projects may be exempted from new UK nature rules", *The Guardian*, 28 october 2025

"Offshore windfarm companies in the UK may be exempted from new nature rules to keep down the costs of renewable energy. Under planning, nationally significant infrastructure projects (Nsips) are expected to enhance nature by 10% through a biodiversity net gain (BNG) requirement. However, offshore windfarms will not have to compensate for destroyed habitat in shallow intertidal waters.

The industry group RenewableUK argued that mandatory BNG could add "disproportionate costs" to this new infrastructure that are essential for climate mitigation. Conversely, environmental advocates like Richard Benwell of Wildlife and Countryside Link describe the decision as a "short-sighted" trade-off between nature protection and climate action.

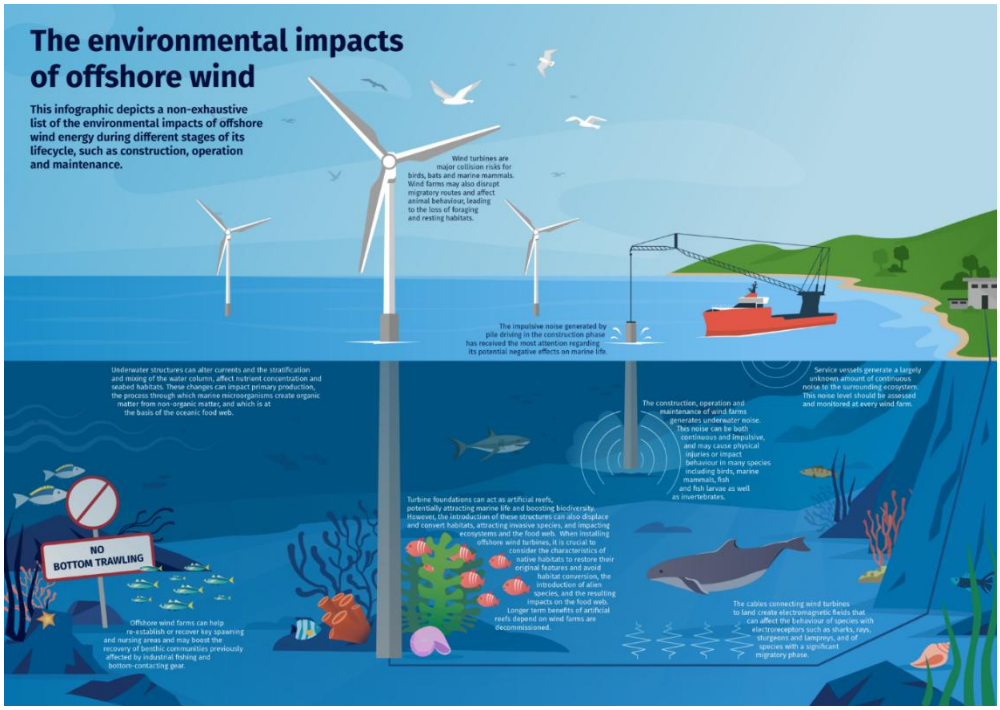
The environmental impact remains a concern: the Berwick Bank windfarm in Scotland is predicted to kill thousands of seabirds, including guillemots and puffins, in its first year of operation. To offset some damage, the government stated that wind projects would pay into a marine recovery fund. Critics maintain that the UK must deliver offshore wind without pursuing "false quick fixes" that cut protections for marine life.

[1] Wildlife and Countryside Link is the largest environment and wildlife coalition in England, bringing together voluntary organisations in the UK to protect wildlife, restore landscapes and the marine environment, and improve access to nature. Link currently has 88 members who collectively employ 9,600 full-time staff, have the help of 174,000 volunteers and the support of over 8 million people in the UK."

DOCUMENT 9 : The environmental impacts of offshore wind

Source : https://seas-at-risk.org/publications/the-environmental-impacts-of-offshore-wind/

Seas At Risk is an association of over 35 environmental organisations from accross Europe whose mission is to promote ambitious policies for marine protection and restoration at European and international level. It is headquartered in Brussels and has strong connections with the European institutions and with the UN and regional bodies responsible for seas and oceans.



DOCUMENT 10 : Jonathan Leake, « The offshore wind turbines destroying Britain's fishing trade », *The Telegraph*, 9 august 2025

"When Ken Bagley led a convoy of fishing boats into battle against the UK's first wind developers two decades ago, his hope was to save something of the fishing industry. Twenty years later, he sees it as a hollow victory: "The wind farms are still stealing our fishing grounds from us". "We can't go into the areas between the turbines," he says. "If we towed our fishing gear through a wind farm we'd be snagging on something in no time".

Around Britain's coast other fishermen tell similar stories of exclusion from fishing grounds where they once reaped rich harvests. Their problem is that the same relatively shallow waters that are ideal for finding fish are also perfect for turbines. Since then, about 3,000 of the giant machines have been installed across nearly 50 wind farms. Dogger Bank is being built across a shallow area of the North Sea once among Europe's richest fishing grounds.

Construction is already destroying the local fishing industry. "The cables being laid from Dogger Bank are hugely disruptive," says James Cole. If wind turbines built on the seabed are a threat, then the floating wind farms now being deployed will be a far bigger disaster. These structures will be anchored to the seabed with subsurface infrastructure, which will make it impossible for mobile fishing gear to fish within the windfarms.

The majority of UK fishermen feel their livelihoods are being threatened by the rapid expansion of offshore wind. RenewableUK rejects such claims, saying offshore developers worked collaboratively with the fishing

industry to ensure fishing could continue. Powerful electrical currents passing through the cables generate strong fields.

One of the least expected problems could turn out to be among the most important. The massive cables laid from wind farms to convey their power back to shore are not just a problem for fishermen, but also for marine species. Scientists have reported some species like crabs becoming mesmerised, while some fish larvae become less active."