appg CLIMATE

Briefing for MPs • Spring 2023

The hidden impacts of oil and gas on the UK's seas

New report In Deep Water provides the first ever systematic review of damage caused by the oil and gas industry to UK seas

- As an island nation, Britain relies on thriving seas, from supporting livelihoods across the UK, to the ability to protect our coasts, and their vital role in locking away carbon.
- Yet our oceans are now under numerous pressures. For the first time, In Deep Water reveals the conflict between protecting the marine habitats and expanding oil and gas extraction.
- Despite the UK's commitments limiting warming to 1.5°C, and protecting 30% seas for nature by 2030, up to 900 locations have been offered as sites for development in the latest offshore oil and gas licencing round. Over a third (352) overlap with Marine Protected Areas.
- Images identified through deep-learning AI model Sky Truth, show oily slicks over 10 km long from the Ninian oil platform off the Shetland coast.
- Substantial harm is also being caused to marine life by oil and gas production through chemical, plastic and noise pollution, habitat destruction, and climate change.
- The UK can and must be ambitious about moving past oil and gas production and allowing our marine environment to flourish, while empowering and supporting workers and communities who rely on the fossil fuel industry for the livelihoods.

The impact of oil and gas production in the UKs Marine Protected Areas

- The UK's waters are networked with Marine Protected Areas (MPAs). Well-protected MPAs enhance biodiversity, boost fisheries and support the restoration of healthy, effectively functioning ecosystems. This in turn, helps the ocean provide its vital climate regulating services and can boost the capacity of marine habitats and species to lock down carbon.
- However, up to 900 locations in the UKs seas have been offered as sites for development in the latest offshore oil and gas licencing round, and more than a third of the locations being offered for new oil and gas licences clash with MPAs.
- If approved by the government, the UKs largest undeveloped oil field, Rosebank, would have a pipeline through the Faroe-Shetland Sponge Belt MPA, potentially harming this fragile ecosystem and the creatures within it, and which is visited by numerous species of dolphin and whales, as well as seabirds; and commercial species such as haddock.

- This habitat is already assessed as in unfavourable condition - and efforts should be underway to recover it. Modelling shows that a major oil spill from Rosebank could risk serious impact to at least 16 UK MPAs.
- Polling by YouGov shows that three quarters of the UK public are opposed to oil and gas developments in protected areas of the sea.
- In 2019, Canada banned oil and gas development in all its protected areas, and the UK is seeking to protect 30% of the ocean by 2030. The UK should follow Canada's lead to further protect MPAs.

Pollution from oil and gas operations in the UK

1. While the risk of a major spill in UK waters remains relatively low, as exploration moves into deeper waters the risk increases, the consequences of a of which would be catastrophic. It will likely take months to clean up Poole Harbour following a comparatively small oil spill in March 2023.

2. The majority of oil spills in UK waters occur through small but routine spills 'chronic oiling' which are often unreported or underreported. Chronic oiling is a major environmental problem, and our growing understanding argues the importance of its reduction.

3. Release of toxic chemicals through exploration, drilling and infrastructure decommissioning have been found to cause skeletal deformities and cancer-causing changes to DNA in various marine species. PCB chemicals released from offshore oil and gas developments have been shown to pass from harbour porpoise mothers to their calves as they feed.

4. It is estimated that in 2016 over 100 tons of microplastics were released into the North Sea by oil and gas operations.

5. Toxins make their way up the food chain, finally reaching dolphins and whales. Chemicals associated with oil and gas infrastructure, including mercury, have also been found in seafood. Long-buried toxic chemicals produced in drilling and extraction processes can also be released into the future as sediments are disturbed.

6. Incessant noise pollution is created by all stages of production, in particular from seismic airgun surveys used to find oil and gas resources. The offshore oil and gas industry is a major contribution to marine noise, wit majority of high-impact seismic drilling being undertaken by oil and gas companies. Seismic surveys involve sound impulses which can have direct physical impacts for marine mammals including hearing loss in bottlenose dolphins or in extreme cases death. Noise reduces harbour porpoises' capacity to find prey and can lead them to starvation as they respond to disturbances. Commercial fishers also report low catches following seismic surveys, with studies demonstrating negative impacts on commercially important species including cod and haddock.

7. While offshore wind's less-significant impacts must be mitigated, these do not have the high-intensity seismic noise, the routine chemical pollution, the oil spill risks or the toxic legacies of oil and gas – nor crucially the climate impacts.

appg CLIMATE

Why is this important?

1. In Deep Water reveals how oil and gas production must also be seen through an ocean protection lens. Climate change, increased pollution and overfishing are putting immense strain on our oceans already. This is a critical time for the world's seas. The UK Government has a choice to either continue the destructive industrialisation of our seas or preserve the wonders of marine life and restore thriving marine habitats to their former glory.

2. The evidence is clear that developing new oil and gas fields is incompatible with limiting warming to 1.5°C, and the case for accelerating the transition from fossil fuels has never been clearer – a recent EAC report noted that: "Accelerating the transition away from fossil fuels will enhance the UK's energy security and reduce the ability of aggressive or repressive regimes to use oil and gas supplies as an economic weapon. It will also help to protect households from volatile fossil fuel prices permanently and will reduce the fiscal burden of financial support to households through this and any future energy crisis."

What should the Government do?

1. Accelerate the transition away from fossil fuel developments in the UKs seas.

2. Restore thriving marine ecosystems by properly protecting Marine Protected Areas.

3. Scale up the alternatives, through a drive on renewables and energy-saving measures.

For further information, please contact:
Gwen Peters
Head of Public Affairs
gwen@upliftuk.org