

Scottish Affairs Committee

The future of the oil and gas industry Inquiry

Written evidence submitted by the Scottish Wildlife Trust

1. The Scottish Wildlife Trust welcomes the opportunity to provide written evidence to inform the Scottish Affairs Committee's inquiry into the future of the UK oil and gas industry. The Trust's main area of interest with regards to the oil and gas industry is the decommissioning of offshore infrastructure, in particular disused platforms, once wells have been plugged and abandoned. In 2012, the Trust published its [policy on decommissioning](#), which highlights our willingness to take a pragmatic view towards decommissioning and consider each structure on a case-by-case basis.
2. The Trust considers that the current OSPAR regulations (in particular decision 98/3) do not allow for all decommissioning options to be considered, more specifically the option of leaving a platform in place once operations have finished. Overall, the Trust believes that the option of leaving disused platforms in place has the potential to be beneficial for the environment, the oil and gas industry, and the taxpayer (a triple win).

What challenges does Scotland's oil and gas industry face, and how can they be addressed?

3. The UK oil and gas industry has been prolific since it began in the 1970's and today there is extensive offshore infrastructure associated with the exploration and production of oil and gas, including seabed and platform-mounted production facilities and networks of pipelines. As oil reserves in the North Sea become exhausted and the transition from non-renewable to renewable energy sources gains momentum (i.e. from oil and gas to wind and tidal energy), the oil and gas industry will be required to begin the large task of decommissioning its offshore infrastructure.
4. At present, there are around 470 oil rigs, 10,000 km of pipeline, and 5,000 oil wells in the North Sea, and the decommissioning of these structures will be a logistical and economic challenge for the industry – the estimated cost is between [£35bn and £70bn](#) over the [next four decades](#). According to the Oil and Gas UK [Decommissioning Insight Report 2017](#), 214 fields within the UK Coastal Zone (UKCS) are forecasted to be decommissioned between 2017 and 2025, with an estimated cost of £17bn.
5. The cost of decommissioning to the industry will be significant over the following decades, but much of this cost is expected to be covered by the UK Government through tax breaks. The 1975 Oil Taxation Act, as subsequently amended, allows for participants in Petroleum Revenue Tax liable oil and gas fields to carry-back decommissioning losses against previous tax paid almost indefinitely. The projected cost to the Exchequer, through tax relief, for decommissioning all oil and gas infrastructure is [£24.2bn](#). Therefore, it is in the interest of the UK Government, as much as the industry, to ensure decommissioning is carried out as economically as possible.
6. Under current OSPAR regulations it is estimated that over 90% of offshore installations will be entirely removed. The OSPAR 98/3 decision requires all platforms to be dismantled and brought to land where they will be either recycled, reused, or disposed of in landfill. Exceptions are made, however, for very large steel (over 10,000t) and gravity-based concrete structures, which qualify for derogation. It is expected that these platforms will be cleaned of pollutants and the topsides will be the only section transported to land.
7. At present, the OSPAR regulations provide a strict set of criteria for derogation, which does not include leaving a structure in place if its removal resulted in a direct or net negative impact on the environment. Due to the limited range of options available to the industry, with regard to

derogation criteria, there has been little investigation in the UK into the viability of leaving structures in place and, therefore, the potential benefits are poorly understood.

8. The Trust believes that, until there is sufficient scientific evidence that provides a full understanding of the role of offshore infrastructure in the marine ecosystem, the starting position should be the existing presumption for complete removal for re-use, recycling or disposal to land. However, the Trust also considers that an evidence-based, pragmatic approach to decommissioning, on a case-by-case basis, could identify 'triple-win' opportunities that provide benefits for the environment, the taxpayer, and the industry.

Environmental benefits

9. The Trust considers that leaving oil and gas platforms in place has the potential to provide multiple environmental benefits. The complete or partial removal of an oil and gas platform will impact the environment by:
 - removing a potentially important 'artificial' reef and its associated marine organisms, and
 - unnecessarily increasing carbon emissions
10. Over the lifetime of an oil and gas platform, the subsea structure acts as an artificial reef and a diverse community of marine species establishes on and around the platform. The platform provides a hard, vertical surface in an environment dominated by sand and silt, and can provide:
 - a refuge for mobile and juvenile fish species (including commercially important species like cod),
 - a suitable surface for sessile species (immobile species that attach to hard surfaces) to colonise, which has been found to include a rare species of cold-water coral, [Lophelia pertusa](#), and
 - protection from fishing activities (all active platforms have a 500m exclusion zone)
11. Examples of leaving oil platforms in place, also known as a 'rigs to reefs' approach, have been successful in other [parts of the world](#) with the remaining structures known to support a diverse range of marine life. The ecological impact of removing these artificial reefs, at the single-platform scale or the cumulative multi-platform scale across the North Sea, is not yet fully understood, although there is a growing body of research available on this topic (see the 'Living North Seas Initiative' [reports](#) and the current [INSITE](#) project research).
12. Once cleaned of chemical pollutants, oil and gas platforms are essentially inert structures that pose no further threat to marine life. In addition to continuing their role as artificial reefs, leaving these platforms in place will reduce carbon emissions as there would be no need to dismantle, transport to land, recycle, reuse or dispose of these structures. The Scottish and UK Governments both have targets to reduce carbon emissions by 80% by [2032](#) and [2050](#), respectively. The carbon emissions associated with complete platform removal do not seem to adhere to these targets, despite the potential for an 'easy win' for reducing carbon emissions.

Financial savings for the taxpayer

13. Leaving a structure in place eliminates the financial costs associated with deconstructing, transporting, recycling, reusing, and disposing of the steel subsea structure, which can amount to billions of pounds. According to the Oil and Gas Authority 2017 [report](#) on UKCS Decommissioning, 9% of decommissioning costs are associated with subsea structure removal. The cost of recycling, reusing and disposing of material brought onshore is expected to account for 2% of total costs. The combined cost of removing and managing subsea structure materials

(11%) equates to approximately £3.85bn - £7.7bn in total (using Decom North Sea estimates) and £1.87bn before 2025 (using O&GUK estimates). The UK Government is expected to pay approximately 50% of this cost through tax relief and, therefore, any reductions in the cost of decommissioning will provide a direct financial saving to the tax payer.

Financial savings to the industry

14. The Trust recognises that leaving platforms in place will also create financial savings for the industry and that, under this scenario, the industry could be seen as shirking their responsibility to 'clean up' after themselves. To ensure the industry takes some accountability for its impact on the environment, the Trust considers that a percentage of the industry's savings should go into a **Marine Stewardship Fund** that provides a source of financial support to research, conservation, sustainability, and innovation programmes that aim to improve the health of the marine environment. At a time when resources for marine conservation and research are stretched and face an uncertain future, such a national fund could be very timely.
15. The Trust considers that an effective cost-benefit analysis of all the options for decommissioning (including leaving in place) is required, and that a natural capital accounting approach, which takes into account all of the costs and benefits on the basis that damage to the environment comes at a cost to society, could provide some much-needed guidance. This approach could address some key knowledge gaps and provide a much-needed steer for identifying the most environmentally beneficial approach to decommissioning.

How can the economic return from Scotland's oil and gas reserves be maximised?

16. Returns should be thought of in terms of social, economic and environmental return and not just economic. Returns can be maximised to society if triple-win scenarios are considered that do not simply maximise short-term economic gain.
17. If materials are extracted during decommissioning, careful consideration should be given to circular economy models for resource processing and future use.

What action is the UK Government taking to support the long-term future of the oil and gas industry in Scotland, and how effective has this been?

18. The UK Government has committed to reducing the cost of decommissioning, through supporting technological innovation, particularly for plugging and abandonment of oil wells (expected to account for [48% of decommissioning costs](#)). However, discussions around the potential benefits of leaving platforms in place, both financially and environmentally, are not taking place. The Trust considers that the UK Government needs to review its approach to decommissioning and consider the potential value leaving structures in place has to offer.

How well do the different stakeholders (UK Government, Scottish Government, companies) work together? Does the current devolution settlement enable all stakeholders to support the sector?

19. The Trust considers that leaving structures in place can provide benefits for the environment, the industry and the taxpayer, yet there is not a clear avenue for discussing and questioning the limitations of the current decommissioning regulations. The Trust considers that the UK Government and the O&G industry must work closely with researchers and environmental groups to identify the potential benefits decommissioning can offer to all stakeholders, and advocate for a broadening out of the derogation criteria in the OSPAR regulations.

How can Scotland maximise its expertise, technology and infrastructure in oil and gas industry to secure the industry's future as reserves decline? What support is needed from Government to maximise these opportunities?

20. There is a lot of valuable expertise in the offshore oil and gas industry that could benefit the offshore renewable energy industry, such as structure design, installation and

decommissioning. The widespread installation of offshore windfarms across the North Sea will have an impact on marine ecology at both small and large scales. Research into the current influence oil and gas platforms have on marine ecology could provide valuable insights into the potential impact of offshore renewable energy installations and how best to design structures (both in terms of physical subsea structure and spatial distribution) to ensure environmental impact is minimal during installation, operation, and decommissioning.

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