Oil and Gas Decommissioning – a very poor deal for the Scottish Taxpayer

Recognising that the taxpayer is the largest stakeholder in the costs associated with offshore architecture removal, I would request that the Committee consider conducting a comparative sustainability assessment comparing the current decommissioning plans with that of plugging abandoning the wells, making the infrastructure clean and inert, leaving in-situ and using the money saved to fund green energy projects.

Details of the motivation follow;

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As the oil and gas industry embarks on the complex and costly task of decommissioning and removing offshore architecture, a review of the planned activities is urgently required to ensure the taxpayer, the largest stakeholder, is obtaining value for money.

Any industrial or societal endeavor should be subject to a sustainability assessment and decommissioning is no different. The key metrics for the Scotland and the UK’s sustainable future are contained within the Government’s Sustainability Indicator reports published by the Department of Food and Rural Affairs (DEFRA). There are 35 topics: they change little with government colour and are categorised under the three pillars of sustainability: people, planet and profit.

Oil and gas companies undertake comparative societal, environment and economic assessments to justify their decommissioning approach, these are set within the framework of options from full removal to leave in place. The requirements of the associated marine legislations are also a vital element of the analysis, particularly the OSPAR Directives. In my experience these assessments are undertaken very professionally and without bias. The plans are then submitted to BEIS/OGA for approval.

However, what these assessments miss is the key role of the taxpayer – the taxpayer will fund around half of the costs, around £20 – 30 billion depending upon the final bill. As much as £1000 per taxpayer. By most fiscal standards this is a huge sum of money. As taxpayers we should be asking the Government to show us that the agreed decommissioning plans are the best solution for taxpayers from a societal, environment and economic position. That though has to take into account what else could be done with the taxpayers’ money. The option of what else could be done with the taxpayers’ money to serve society is not undertaken by the oil and gas companies; hence I believe the taxpayer is being short changed.
The motivation for offshore architecture removal is environmental. If, as many believe, the most pressing issue of our time is global warming then it may be much more beneficial for the environment, society and the economy if the architecture was left clean and in place and the money saved directed into green energy and emissions reduction. This is the basis for this exposition.

As background, a typical decommissioning project would involve the following tasks. The suspended production and injection wells are sealed to prevent any possible communication between the sub-surface reservoir and the surrounding environment. This is a complex task involving the setting of cement plugs. At the same time as the well plugging activities, the offshore facility is prepared for removal. This is undertaken in two stages. Offshore installations consist of the equipment for oil and gas processing, and drilling – the topsides, and the supporting seabed to surface structure, which is often a steel frame, piled to the seabed – the jacket. The topsides equipment is cleaned and sectioned as necessary for lifting onto huge crane barges. Once the topsides is removed the jacket is cut and also lifted onto a barge and both topsides and jacket are taken onshore for dismantling and recycle.

A breakdown of anticipated decommissioning costs from 2016 to 2025 is shown below; it is extracted from the OGA’s 2016 report.

![Cost Breakdown](image)

**The Alternative to decommissioning**

Recognising that the taxpayer is the largest stakeholder, how would one show that the green energy alternative may a better option? That would be from a comparative sustainability assessment. This would quantify and compare the three sustainability pillars for two options;

1. The base line – the current decommissioning plans.

2. The alternative – plug and abandon the wells as per the base line, make clean and safe and leave in place. Redirect the capital saved through no removal into green energy - solar, tidal, wind or whatever.

It should be noted that plugging and abandoning oil and gas wells is not up for debate. That activity has to be undertaken irrespective of any other decommissioning option.
A qualitative comparison of the options follows.

**People - Society**

A key area under the people category is jobs. Whilst there is no doubt that decommissioning removal activities will provide jobs, the jobs are not long term – when decommissioning is complete there are no jobs. Decommissioning leaves no long-term legacy. On the other hand, by directing the money saved by leaving offshore infrastructure in place into green energy, there will be the short term jobs in design, fabrication and construction, but more importantly there would long term jobs associated with the operation and maintenance of the green energy stations, not so for decommissioning. I am convinced green energy would yield a jobs profile far superior to asset removal. Furthermore, the decommissioning money saved from leaving in place could also be used to build a Scottish/UK design and fabrication capability in green energy plant and equipment. A capability sadly lacking in the Scotland/UK.

Many MPs and MSPs have commented on the onshore jobs bonanza that decommissioning could deliver. This is a myth. Let us assume that the total decommissioning spend is £40 billion over the next 30 years. Onshore activities are 2% of the overall decommissioning spend. If it is assumed that the onshore spend is linear, that would equate to £27 million per annum on onshore decommissioning. Spread that expenditure over the ports that are vying for decommissioning business - Aberdeen, Arnish, Cromarty, Dales Voe, Dundee, Fife, Kishorn, Lerwick, Lyness, Montrose, Nigg, Peterhead, Rosyth and Wick, not to mention Humberside, Tyneside and Teeside, and come up with a bonanza. Another way of looking at this is that the amount of decommissioning material sent to shore will be around 70,000 tonnes per annum. Previous onshore decommissioning activities have shown that a dismantling metric is 500 tonnes per man. Dividing one by another gives 140 direct jobs across all ports – a bonanza? Furthermore why is the Scottish Government encouraging investment in multiple ports when there is no business case to support it?

What are the other benefits to society from green energy? Green energy will be providing society with an essential commodity – power for industry, electric transport and heat/electricity for homes. It will also be providing cleaner air. What does returning a fraction of a percent of the North Sea seabed acreage provide society?

Taxes are a very important part of a sustainability assessment; they provide funding for health, education, tackling poverty, security, pensions etc. Unlike asset removal, instead of absorbing tax break funding, the renewable stations would be generating profit and paying back to the treasury the associated taxes during their operating life of 25 – 30 years.

Safety at work is also a key people consideration. Whilst I’m sure every effort will be made to keep employees safe during asset removal and recycling it is intrinsically a much more hazardous operation than green energy.
From any sustainable people viewpoint I can't see asset removal being a better option than green energy.

**Planet - Environment**

A growing number of marine habitat experts are saying that there is little environmental benefit from removal. Indeed some of the decommissioning activities will do more environmental harm than good. This is due to seabed disruption of marine colonies built up over 30 or so years. Furthermore, the removal process itself is very energy intensive with consequent harmful combustion gas emissions – contributing to global warming. If the architecture is left in place, it will naturally continue to reef providing an environmental positive. The reefing concept has been proposed in the United States with the Rigs to Reefs programme. Rigs to Reefs provides an alternative to asset removal in which the asset is left at sea to continue to support marine life as an artificial reef.

It is interesting to note the Scottish Wildlife Trust are also proposing that architecture removal may not be the best environmental option.

As previously stated, the most pressing environmental issue of our time is global warming. If our aim is environmental benefit then surely making the offshore infrastructure clean and safe and using the taxpayers’ money, earmarked for removal, to fund green energy projects would be a much more beneficial option. Green energy has the huge environmental positive of CO₂ and emissions reduction – it is unclear what the disputed benefits of a clean seabed offer the environment. The North Sea presently contains around 20,000 wreck sites – what harm are they doing?

From any sustainable planet viewpoint I can’t see asset removal being a better option than green energy.

**Profit - Economy**

How can a decommissioning industry that produces nothing and uses billions of taxpayers’ money be good for the economy? The investment has no legacy – we take something to bits, we have not built a factory or provided new infrastructure to serve society and the economy. Also, much of the removal money will go to the heavy lift companies – the UK has none.

On the other hand green energy will be making profits, producing dividends and paying taxes for most of the operational life of the green energy station. Those taxes will go to support our societal needs.

In addition by removing the cost of removal from the Operator’s balance sheet offshore production platforms will be commercial for an extended period. This would allow for continued oil and gas production for much longer prior to decommissioning. The upshot being more taxation income for the treasury.
From any sustainable profit (economic) viewpoint I can’t see asset removal being a better option than green energy.

**Point of Principle**

NGOs, such as WWF and Greenpeace, have consistently said the Oil and Gas Companies should clean up after themselves – a point of principle. Which, on the face of it, seems a perfectly reasonable position. Clearing up redundant industry architecture and equipment must be the starting point of any societal, environment and economic assessment. One would imagine that reaching a conclusion of leaving architecture in place being the correct solution would require a very special set of circumstances. As set out here, those special circumstances present themselves in the case of offshore decommissioning and asset removal.

What we can't do though is not remove and pocket the savings. That would result in the outrage the industry experienced with Brent Spar. Unlike Brent Spar, the green energy alternative offers the WWF, Greenpeace and others a much better option for the environment.

**OSPAR Directives**

OSPAR is the mechanism by which fifteen Governments of the western coasts and catchments of Europe, together with the European Community, cooperate to protect the marine environment of the North-East Atlantic.

As well intentioned as OSPAR is, the directives are taking the nation to a very poor outcome by insisting, in most cases, on asset removal. The OSPAR directives have to be challenged. We know so much more know than when the directives were agreed in 1998 – the consequences of global warming for instance.

That challenge would come from a comparative sustainability assessment as outlined in this exposition. Undertake the people, planet and profit comparative sustainability assessment and bring the evidence to the OSPAR table. OSPAR members should then be able to see green energy as having a much better outcome both for the Scotland, the UK and for the international community.

**The Comparative Study**

Who would fund undertake the study? Firstly it can't be the Oil and Gas Companies. No matter how the study was set up, my experience would indicate that the NGOs and the public would see funding by the industry as tainted and biased. Since the treasury has so much to gain from the assessment it has to be the Government. An unbiased organization such as the Royal Academy of Engineering would seem the ideal partner to undertake the work.

In conclusion, I repeat that the current decommissioning plans are taking the nation to a very poor outcome. As a taxpayer, and part of the largest stakeholder
in offshore decommissioning, I think it imperative that the Government demonstrate to the taxpayer that the current decommissioning plans will deliver a better people, plant and profit outcome for the nation when compared with the green energy alternative.

As a footnote, if not green energy then health, education, tackling poverty, marine conservation, recovering our manufacturing base – the list is huge for the money saved. Just not something as pointless as asset removal.

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