Dear Sir/Madam,

Thank you for the opportunity to comment on this petroleum licensing consultation.

As I understand it there are two elements to this consultation.

a) Policy Change

The first involves a change of policy - in other words changing policy from a current position of supporting the creation of an oil and gas industry onshore and in the inshore waters in Northern Ireland, through the exploration and extraction of Northern Ireland's oil and gas resources, to a position where this is no longer supported by the Northern Ireland Government. To implement this policy change an official moratorium on licensing would replace the current unofficial moratorium on the granting of petroleum licences.

b) Legislation to support the policy change

Once the policy change above is implemented, there follows a commitment to legislate for this policy change by removing the petroleum licensing regime. The legislation would mean that no onshore petroleum licences for exploration for, and the development of, or extraction of petroleum (Oil & Gas) could be granted for onshore and in the inshore waters of Northern Ireland. It would also make it an offence for anyone to explore, or get petroleum in those areas. No details of exactly how this would be achieved, eg by repeal of the petroleum production legislation 1969 and/or petroleum licensing regulations 1987 has been identified within the consultation. I make the assumption that any such legislation will be subject to a meaningful public consultation with Aarhus rights to information on the environment, meaningful public participation and access to justice that is not prohibitively expensive, central to that issue.

Whilst the consultation points the way to the future plan to legislate it does not at this stage determine exactly what that process would look like.

I support the change of policy and have given a number of reasons and also some caveats below.

Change of Policy.

The change of policy is welcomed, even if late. An unofficial moratorium is already in place, and this will strengthen protections for those communities where oil and gas exploration and extraction could occur. It should be noted that our current policy comes originally from the 1960's and was adopted when petroleum exploration and extraction was seen as a significant economic driver. This is no longer the case, as the long term effects of this industry on climate, on the environment, on indigenous industries such as tourism and agriculture and forestry are well documented. I acknowledge this is a consultation which looks at economic drivers under the Department for the Economy but the public health impacts of an oil and gas industry in Northern Ireland can not be overlooked.

Public Health

Northern Ireland's onshore oil and gas resources may be expansive but they are very hard to access, being mainly in tight formations, or underlying basalt formations. This requires an

extensive industrialised approach in order to even explore for these resources (due to their non-uniformity and imaging problems) never mind to extract. The result would see the encroachment of industry right next to communities and the associated impacts on public health, with everything from air quality, noise, light pollution radiation, exposure to chemicals and possible water contamination known issues. (Concerned Health Professionals of New York - Compendium) ¹ Whilst these studies focus on 'fracking' their results can be extrapolated to the type of intensive oil and gas development that would be needed here.

Lack of Regulation and Enforcement

The lack of an effective planning system with proper regulation and effective enforcement has seen the demise of our biggest lake to such an extent that if we take action now, then we are looking at 20 years before it recovers. There are numerous other examples where regulation and enforcement has failed us. Therefore it is very unwise to support an industry with known public health, environmental and climate change impacts.

Gas Policy is not coherent.

Whilst I support this change of policy with regards to petroleum licensing, I cannot help but notice the Department has also other policies which requires changing, or one risks having incoherent or opposing policy. This refers to the Department's policy with regards to the promotion of gas as a fuel. I believe there's a legal obligation for the Department to promote gas, and this legal obligation also extends to the Energy Regulator (something which I find inconsistent with independence of regulation and thereby enforcement in this jurisdiction). While this policy of promotion of gas is in place, along with its associated legislative underpinning, we cannot effectively plan for, nor implement the emissions reduction plans necessary under the climate change act recently passed by the Assembly. Worryingly we have seen and continue to see the build out of gas networks in Northern Ireland with Government support and subvention. This is endangering the energy transition to wholly renewable sources and while this policy/legislation remains in place, both the energy transition, and energy security will be undermined.

Current Licence applications

There are two current petroleum licence applications, one for around Lough Neagh, the other for almost half of Fermanagh. Those applicants will no doubt want to try and sue for compensation - in fact at least one of them has mentioned this. They will use our incoherent policy above as one basis for claim. However I would point out that the UK climate Act was implemented in 2008, and the commitments to reduce emissions were agreed at Paris in 2015. Therefore at the time of the submissions by the applicants in 2016 the UK, and wider world, was already on a path to emissions reduction and by far the greatest source of climate damaging emissions come from the burning of fossil fuels such as oil and gas. Finally there is the work of Howarth et al from 2011 onwards which shows that gas can be worse for the climate than coal in the near term if fugitive emissions are not kept below 3.5 percent for the whole system, including from drilling, gathering, transmission and the burning of gas. His work over the years has shown leaks at all stages of the process and real world figures rather than industry estimates show that the industry cannot control fugitive

¹ https://concernedhealthny.org/compendium/

emissions. Given net zero targets are now in the 20 year window, or just outside it, there is clear evidence that gas cannot be used as a transition fuel to achieve net zero.

Reserves v Resources v economically feasible resources

We also need to be clear about the difference between reserves and resources - Reserves are estimates of the whole basin. Resources are figures which the Oil and Gas industry can claim about what's feasible to extract with todays and also with as yet unproven future technology, whilst economically feasible resources are what one could feasibly extract today. As already mentioned, Northern Ireland's Oil and Gas reserves are in places where formations are tight, or where imaging of those formations is made extremely difficult by the overlying Basalt formations. More extensive exploration would be required than normal to prove any resource exists and I note that at least one of the applicants proposes novel and intensive methods to do so. Given there has been no economic production oil or gas well onshore in Northern Ireland ALL proposed extraction methods are novel to the area.

So to summarise.

I support the introduction of an official moratorium to prohibit the granting of any petroleum licences onshore and in the inshore waters of Northern Ireland.

I support the introduction of legislation to this effect, although any such support is contingent on ALL my Aarhus rights being respected.

I strongly recommend removing the current promotion of gas policy and legislation to ensure coherency with this approach.

I strongly recommend that the current applications be dismissed as soon as possible and that no compensation be payable either in a Northern Irish court, or under the Energy Charter Treaty.

Yours Sincerely