[redacted]

Reply to:
Consultation on the offshore renewable energy (ORE) Future Framework Policy Statement

Dear Minister Ryan and the Department of the Environment, Climate and Communications Team,
My name is [redacted], I am a [redacted] at [redacted] in the department of [redacted]. I had my master's in [redacted] and my Bachelor's degree in [redacted]. I have ample knowledge of the policy landscape with practical experience, having worked as a policy analyst in Nigeria and taken several policy roles in Europe, specifically, Germany. In Germany, I had an experience working with [redacted] where I developed a policy instrument for the adoption of hydrogen fuel in low-income economies and I have worked with the International Power-to-X office of the [redacted]. As a part of [redacted] I have conducted some good amount of literature review in the area of hydrogen and its use in transport decarbonisation in Ireland and the Europena Union (EU). I have also reviewed many documents on transport policies in Ireland and the EU.
I thank you for the privilege to speak to the ORE Future Framework Policy Statement.

Kind regards,
[redacted]

Executive Summary:
The research findings in WS3 (pages 44-51) highlights Germany's anticipated production-demand mismatch and the region's soaring demand for hydrogen. This being acknowledged, the scope should be expanded to include other European countries and adjacent areas in order to take into consideration possible variations in demand that may be influenced by national policies and rates of infrastructure growth.
Ireland has a significant possibility to become a major supplier of green hydrogen to Europe, as predicted by the World Energy Council, which estimates that by 2050, EU members will create half of their own hydrogen. Ireland may become a more respected global provider of green hydrogen by expanding its range of hydrogen offtake partners beyond Germany.
A Renewable Transport Fuel Obligation (RTFO) similar to that of the UK could also quickly decarbonise Ireland's transport industry. Through the use of local hydrogen, this programme would encourage the use of hydrogen fuel cell automobiles, promoting environmental sustainability and economic progress.

Below is a summary of my recommendations

- Diversification of Offtake Partnerships: Expand efforts to secure hydrogen offtake agreements beyond Germany to mitigate market dependence and capitalise on emerging demand in other European nations and neighboring regions.

- Strategic Partnerships: Forge strategic partnerships with EU member states and neighboring countries to position Ireland as a key exporter of green hydrogen, leveraging its potential to meet Europe's hydrogen needs.
- Policy Alignment: Align national policies with EU directives and initiatives, such as the Renewable Transport Fuel Obligation (RTFO), to incentivise hydrogen adoption in the transportation sector, thereby accelerating decarbonisation efforts.
- Promotion of Hydrogen Fuel Cell Vehicles (HFCVs): Promote the adoption of hydrogen fuel cell vehicles (HFCVs) through incentives and subsidies, fostering a cleaner and more sustainable transportation sector while reducing greenhouse gas emissions.
- Research and Development: Allocate resources to research and development initiatives aimed at advancing hydrogen technologies, improving efficiency, and driving down costs to enhance competitiveness in the global hydrogen market.

Supporting information:
The following is a reply to WS3 Page 44-51. I will specifically speak to information on page 51.
I strongly agree with the mapping conducted regarded the deman for hydrogen in Europe and the countries highlighted in the document. I want to contribute to the statement that says "The indication is that Germany will have a gap in domestic production versus demand though there is disagreement on what that volume will be."
I believe that many European countries, especially those highlighted, will have even more demand for hydrogen depending on implemented policies in their country and the rate of infrastructural spread (IEA, 2019). I agree with the numbers highlighted in these pages, however, I anticipate that there could be slight variations. However, I would like to suggest that focus should not be limited to Germany alone. There should be work on other countries in Europe and strategies be put in place regarding other countries close to the EU region. The World Energy Council (WEC) in a report released in 2021 stated that by 2050, EU member states will produce around half of their own hydrogen and hydrogen-based fuels, with the remaining half coming from imports from partner nations. This shows the huge export opportunity that Ireland has in supplying some of this needed hydrogen and therefore boost its image as aglobal supplier of green hydrogen in Europe. To achieve this, Ireland would have to assess other oftakers outside of Germany, encouraging diversity of options for its hydrogen offtake. It is clear that Germany is also working to get hydrogen from other countries, with investments being made in Namibia, as an example. It is also notable that countries like have expressed their disinterest in hydrogen import from outside the EU. These could be targets for export for the country.

Secondly, I will speak to the use-case of hydrogen in Ireland.
Looking at the UK, the country's hydrogen startegy alludes that hydrogen will be eligible for Renewable Transport Fuel Obligation (RTFO) initiatives. In this strategy, fuel suppliers in the country are required by this market-driven certificated plan to supply a certain percentage of fuels with renewable origins to the transportation sector. As a result, by selling fuel suppliers renewable transport fuel certificates (RTFCs), producers of green hydrogen are able to increase their earnings from the generation of green hydrogen.
This can also be looked into for implementation in Ireland. Using a similar strategy could assist Ireland in a number of ways. One direct benefit of this is the decarbonisation of transport in Ireland. This move could encourage a wider uptake of hydrogen fuel cell vehicles (HFCVs) in

Ireland. It would promote transport's decarbonisation, an essential step in meeting both domestic and global climate goals. Second, it might encourage more investment and innovation in technology for local hydrogen consumption, which would promote employment growth and economic expansion in the rapidly expanding hydrogen industry.

Additionally, encouraging the use of hydrogen fuel cell cars (HFCVs) via this system may help lower greenhouse gas emissions from the transport industry in Ireland. HFCVs are a cleaner and more environmentally friendly form of transportation because they have no emissions compared to conventional internal combustion engine vehicles.

Bibliography

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