28th October 2022

RESPONSE TO DECC CONSULTATION on ENERGY SECURITY of SUPPLY

1. Short/Medium Term Solutions

Ireland is highly dependent on natural gas. The Security of Supply Document suggests certain mitigations related to LNG storage. Ireland's nearest neighbour – Wales – has a large facility at Milford Haven where LNG storage supplies over 25% of UK gas requirements. There is some spare capacity in these storage facilities but it would be quicker to construct additional storage tanks with assistance from the Welsh Government that to look for similar constructions in Ireland or to seek permissions for offshore LNG storage in tankers as the mechanisms for approval of same is not readily available.

This may appear to be a risky option but it means that it can be fast tracked compared to an equivalent development in Ireland and is also consistent with our current regimen of storage of some of our 90 day oil supply outside the State.

2. Medium/Long Term Solutions

Ireland is rich in renewable energy sources. There is one major untapped source in the wave energy off the West Coast. This has the potential to make a major contribution to indigenous energy supply as well as creating a new industry with significant economic activity and consequent job creation.

The policy measures required to support this nascent industry are targeted enterprise support as well as effective revenue support to ensure that it develops to make a significant contribution in the timeframe 2025-2040 whilst more conventional renewable energy technologies make the contribution in the short term.

Ocean Energy is an Irish based technology company developing wave energy converters for the past 20 years. The company has developed technology that is now leading the world in the progress to commercialisation. Ocean Energy has tested concepts in Laboratory Tanks and has deployed a prototype device in the Irish Open Sea Test site in Galway Bay for over three years. The company has since progressed to construct a 500kW prototype with support from the Irish Government and the U.S. Department of Energy under the framework of a country to country MoU related to marine energy development. This device now awaits deployment and testing at the US Navy Test Site WETS in Hawaii but has been delayed due to COVID. This device will be deployed in Quarter 1 2023 and demonstrated at sea for a year. The company was recently awarded Horizon Europe funding for a project of €19 million to deliver a 1MW prototype for deployment in Scotland in 2024 as the next step to commercialisation. This means that as a result of this 1MW demonstration, the company will be in a position by the mid 2020s to deliver an array of devices for deployment at the West Coast to contribute directly to the renewable electricity targets in Ireland and also to the 1GW of marine energy for Europe as defined in the Offshore Renewable Energy Strategy.

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Harnessing of all the indigenous renewable energy resources – wind, solar PV, bioenergy as well as wave and tidal energy – will be required if Ireland is to have a high degree of resilience to disruption of international energy supplies. Ireland is overly dependent on imported gas and we are vulnerable to disruption as we are at the end of a long pipeline.

Ireland must move to even higher percentages of renewable energy penetration to achieve this high resilience. This will arise from multiple interconnections to UK and Europe as well as developing a system transformation to utilise export of excess energy as well as incorporating storage and other options like renewable gas injection into the gas grid. The use of technologies where industrial processes like gas or ammonia production as well as direct air carbon dioxide capture can be switched on and off as required to overcome the curtailment issue will allow even 100% in the renewable electricity system plus a significant contribution to transport and heat.

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