Consultation to review of the security of energy supply for Ireland's gas and electricity systems
Enterprise Ireland Submission – October 2022

Enterprise Ireland recognises the importance of security of supply of energy for industry and welcomes the opportunity to engage with this consultation. Enterprise Ireland works with and supports more than 3,500 enterprises ranging in size from micro companies, SMEs and MNCs. As of 2021 these Enterprise Ireland backed companies, employing over 200,000 individuals across Ireland, generated €27.3 billion in exports, directly invested €9.79 billion in the Irish economy in the form of wages and salaries, as well as €15 billion in materials produced in Ireland, and €6.4 billion in Irish services. The Enterprise Ireland client companies represented in these figures cover a vast range of sectors, including but not limited to, construction, energy, engineering, food and drink, medical devices, ICT, and pharmaceuticals.
At a high level, enhancing the security of energy supply of energy in Ireland is a systemic undertaking. No single solution to a complex energy system in transition will achieve the desired outcome.

A specific priority is to increase the national system resilience through physical infrastructure for energy storage and increased flexibility for energy consumption. We recommend consideration of the following solutions:

- The development of a strategic gas storage site provides both increased resilience and security to current energy consumers while also, if correctly designed, having the future potential to seasonally compliment Ireland's large offshore wind potential via hydrogen storage. Hydrogen storage, and the resulting security of supply, is also a key infrastructural requirement for the development of hydrogen dependent enterprise (e.g., green ammonia production).
- In addition to seasonal storage, a diversity of electricity storage solutions are likely to be required to maximise the use of renewable energy and to increase day to day energy supply security for Irish enterprise.
- The planned growing renewable share and direct electrification will require an increasing role for enterprise and large energy consumers to become a more integrated and responsive part of the electricity system. Enterprise consumers contributing to the increased flexibility and resilience of the energy system by offering flexible consumption or storage capacity should be sufficiently remunerated.

Energy supply diversification should be carefully considered to match near term goals of security of supply in a system in transition while avoiding stranded assets. Capital investments in energy supply diversification should be a contributing component of a cost-effective low carbon energy system.

- The scale, pace and cost reductions of offshore wind development is the foundational element to long term security of supply for the Irish energy system. Increasing access to locally generated, low-cost renewable energy is supply diversification.
- Additional electricity interconnection to larger electricity grids provides a compliment to increase Irish renewable deployment, providing a route for energy export in times of oversupply and energy import to increase security of supply.
- Indigenous hydrogen production is not alone an avenue for energy supply diversification. Hydrogen is not an energy source, but an energy vector produced from renewable electricity and its role in terms of energy security should be treated with this in mind. Many processes in industry have the potential to be efficiently directly electrified maximising the displacement of imported fossil energy and enhancing supply security. Where hydrogen is a necessary solution, the production of hydrogen in Ireland will be wholly dependent on access to very large scale and low-cost renewable generation. When this is complimented with hydrogen storage at scale it will give companies active in the hydrogen economy confidence to make the significant investments needed for the energy transition, by providing security of supply for their future hydrogen needs.