

Electricity Storage Policy
Department of the Environment, Climate and Communications
29-31 Adelaide Road
Dublin
Ireland
D02 X285

27 January 2023

RE: Consultation on developing an Electricity Storage Policy Framework for Ireland

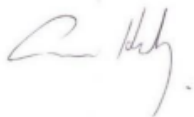
To whom it concerns,

Cork Chamber represents 1,200 members employing over 100,000 people throughout the city, metropolitan area and county. Our vision is to be a world-leading Chamber of Commerce, delivering on a progressive economic, social and sustainability agenda at the heart of a vibrant business community. Our direction is guided by our formal pledge to uphold the United Nations Sustainable Development Goals.

On behalf of our membership, Cork Chamber welcomes this opportunity to contribute to the Department of Environment, Climate and Communications consultation on developing an electricity storage policy framework for Ireland.

We would like to put forth a series of recommendations that we ask to be fully considered. We remain at your disposal to share any additional insights from our member businesses to support this consultation.

Sincerely,



Conor Healy

CEO

The role of energy storage

The transition away from fossil fuels and to a low-carbon renewable energy system, meeting goals set out in the Climate Action Plan 2023, and Ireland's energy security is dependent on having sufficient energy storage. The importance of energy storage to our energy security has become more pronounced since the Russian war on Ukraine has revealed the vulnerabilities of our energy system and dependency on outside sources.

The increasing amount of variable renewable energy sources coming onto the grid e.g., wind and solar, means more intermittency thus requiring greater energy storage to ensure sustainability, stability and security.

Storage projects are set to become an integral part of the electricity system, providing multiple benefits including:

- Improving the quality and security of supply.
- Balancing supply and demand thus improving grid stability and reliability.
- Guaranteeing additional green energy when variable generation is low.
- Contributing to Ireland's energy exporting potential.

It is clear that Ireland is on a path towards an energy system run completely on renewables. With a maritime area that is more than seven times the size of the country's landmass, the potential for offshore renewable generation is uncontested and rivals that of any European country. There is also significant potential to generate biogas and biomethane via on-farm anaerobic digestion that is grounded in the circular bioeconomy, along with solar PV and onshore wind.

With an abundance of potential, it is necessary to map out the use of these resources in accordance with the green energy transition. A new low carbon industrialisation strategy is needed at a national and regional level, aligned to the EU level agenda to join the dots on how to develop and use these significant assets, including the role of energy storage. Developing this strategy requires a systems approach, where all components of the energy system are considered and understood in the context of their relationships with each other, rather than in isolation.

Cork Chamber urges that this strategy be designed so that Ireland may make this transition efficiently and effectively, ensuring no sector or cohort is left behind.

Clear targets & supports

The importance of energy storage to Ireland's sustainability and energy security must also be reflected with the formulation of clear and achievable targets for 2030 and beyond, as with renewable energy. We advise that clear targets and timelines be set for short-, medium- and long-duration storage assets.

Supports should be technology-agnostic, in that whichever storage technology best meets the need for storage should be eligible for supports.

This policy document should also define what long-duration storage means in comparison to medium and short duration. It should be noted that Baringa has projected an approximate 2 to 3 GW of stored capacity will be needed on the Island of Ireland by 2030¹.

¹ <https://www.energystorageireland.com/wp-content/uploads/2022/05/GameChanger-ESI-Report-May2022-Web-1.pdf>

Along with these clear, defined targets, market signals and financial supports are also needed to boost investor confidence. The Renewable Electricity Support Scheme (RESS) should be expanded to encourage both energy storage and co-location, currently not economically feasible under the current RESS.

Other Barriers

The barriers outlined in the consultation document are consistent with the views of our members. Cork Chamber asks the following regulatory and political measures be fully considered in the formulation of this strategy to address these barriers.

High Capex costs

High CapEx costs and potentially long construction periods can increase investment risk. The solution is to provide a long-term guaranteed fixed income in the form of a premium on top of the market price.

New and emerging technologies

The lack of track record for new and emerging technologies, many of which have not been demonstrated at scale, acts as a disincentive for investors.

A thorough examination of existing technologies that have been successfully deployed and adopted in other markets should be carried out and a database created to provide greater clarity to investors. The Danish Energy Agency has a catalogue containing data on energy storage technologies² that is continuously updated as technologies emerge and evolve. A similar Irish database would aid investors and provide valuable case studies.

Lack of revenue certainty

To secure a contract in the CRM T-4 auction, a unit must be able to deliver capacity within four years. As such, if a unit takes longer than that to build and reach commercial operation, which could be the case with longer-duration forms of storage, it would not be able to secure an agreement before construction commences.

The timeframes for the CRM T-4 should either be extended to allow for long-duration storage projects to reach an agreement. Alternatively, a T-4 auction specifically designed for long-duration storage projects should be devised.

Capturing full value

Market signals that fail to capture the full value of LDS projects given the emphasis currently placed on short-duration storage. Additionally, carbon emissions are not fully valued in flexibility markets, meaning low-carbon projects may be outcompeted by high-emitting assets for equivalent system services.

SLDS projects be eligible for long-term ramping products. Further, grid forming LDS should be made eligible for Low Carbon Inertia Services.

² https://ens.dk/sites/ens.dk/files/Analyser/technology_data_catalogue_for_energy_storage.pdf