



**Rialtas na hÉireann**  
Government of Ireland

# **Electricity Interconnection Policy Consultation**

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Prepared by the Department of  
the Environment, Climate & Communications  
[gov.ie/DECC](https://www.gov.ie/DECC)

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# 1 Introduction and Background

The [National Policy Statement on Electricity Interconnection](#), published by the Department of the Environment, Climate and Communications (DECC) in July 2018, emphasises strong Government support for increasing interconnection capacity between Ireland and neighbouring markets. The policy statement further recognises the flexibility that can be provided by interconnection in facilitating increased integration of variable renewables, augmenting wholesale market competition and enhancing security of supply. National and EU policies are aligned in this regard, with the European energy acquis recognising the strategic importance of developing further intra-EU cross border interconnection capacity, as a means of completing the Internal Energy Market (IEM) and delivering upon decarbonisation and security of supply objectives. The need for increased cross border interconnection is further highlighted in the REPowerEU Plan published by the European Commission in May 2022.

Since 2018, Ireland's interconnection policy has provided clarity to prospective investors regarding Government support for increased interconnection and has assisted the Commission for Regulation of Utilities (CRU) in determining an appropriate regulatory approach to electricity interconnection. Following publication of the National Policy Statement by DECC, the CRU published a 'Policy for Electricity Interconnectors' in September 2018, which included an updated set of criteria to be considered by the CRU in assessing interconnector development applications in Ireland.

The Government and CRU policy statements have subsequently facilitated progress in the development of two proposed interconnectors over the last four years; these are the 700 MW Celtic Interconnector between East Cork and Brittany, and the 500 MW Greenlink Interconnector between Wexford and Pembrokeshire<sup>1</sup>. If completed, these projects will significantly increase Ireland's current interconnection capacity beyond the existing East West Interconnector (EWIC), which is a 500 MW transmission line between Ireland and North Wales<sup>2</sup>.

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<sup>1</sup> Construction of Greenlink commenced in spring 2022, while the project promoters of Celtic aim to reach Final Investment Decision in September 2022, before commencing construction in late 2022, contingent on regulatory approval.

<sup>2</sup> The Moyle Interconnector from Northern Ireland to Scotland represents a further 500 MW subsea transmission line between Ireland's all-island Single Electricity Market and Great Britain.

More recently, the [2020 Programme for Government](#) includes a commitment to strengthen the existing 2018 policy framework to incentivise further electricity interconnection and to commence planning for future interconnection with neighbouring countries. This commitment to strengthen the existing policy framework was re-emphasised in the [National Marine Planning Framework \(NMPF\)](#), published in July 2021. The NMPF further noted the flexibility that increased interconnection can provide to the electricity system, through diversification of electricity generation technologies, enhancement of security of supply, and reduction in future costs associated with curtailment of intermittent renewables during periods when the supply exceeds domestic demand or the capacity of the onshore grid. The [Maritime Area Planning \(MAP\) Act](#), enacted in December 2021, has subsequently provided a comprehensive and coherent planning regime for development within the Irish maritime area, including in relation to electricity interconnection and offshore renewable energy.

Consistent with these objectives, Action 110 of the [Climate Action Plan 2021 \(CAP21\)](#) published in November 2021 requires that the 2018 policy statement will be updated by Q4 2022. The process to update the 2018 policy will be informed by this public consultation, seeking stakeholder views on the impact of increased interconnection, and the appropriate policy, legislative and regulatory framework for delivering further interconnection capacity. The scope of the public consultation and subsequent policy statement will exclusively focus on interconnection between Ireland and the EU, and Great Britain, and excludes cross-border transmission lines within the all-island Single Electricity Market between Ireland and Northern Ireland.

The need to update the 2018 policy statement should be seen in the context of significant developments that have taken place over the last several years, including:

- Ireland's increased climate and energy ambition – CAP21 includes the objective that up to 80% of Ireland's electricity requirements will originate from renewables by 2030. The plan further commits to the achievement of 5 GW of installed offshore wind capacity by the end of this decade. There is an additional long-term post-2030 objective outlined in the Programme for Government to develop a plan to utilise the considerable Offshore Renewable Energy (ORE) potential in Ireland's Atlantic waters. To facilitate this ambition, a framework for Ireland's offshore electricity transmission system was approved by Government, which provides for a phased transition towards a plan-led enduring regime to take place in line with three offshore wind auctions.
- The [EU's increased offshore renewable energy ambition](#) – The Offshore Renewable Energy Strategy published by the European Commission in November 2020 sets out

the ambition of increasing pan-EU installed offshore wind capacity to 60 GW by 2030 and 300 GW by 2050. The Strategy estimates that these objectives will require investment of €800 billion and emphasises the need for cross-border cooperation between EU member states in the deployment of offshore generation and offshore grid planning and development. The additional importance of ORE as a means of achieving energy self-sufficiency and reduced reliance on imported fossil fuels has risen following the Russian invasion of Ukraine in February 2022.

- The revised EU TEN-E Regulation – The EU Regulation on guidelines for trans-European energy infrastructure (TEN-E) has provided a legislative framework for development of intra-EU cross-border energy infrastructure, including interconnectors, through designation of EU Project of Common Interest (PCI) status and benefits associated with this designation. Irish interconnectors have hitherto been developed in the context of EU PCI recipient status. TEN-E has been revised during 2020-22 to reflect the increased climate ambition in the European Green Deal, with enactment of the revised regulation scheduled for mid-2022. The requirement to develop further cross border interconnection, the role of the revised TEN-E Regulation in facilitating this, and the need to streamline development of cross-border PCIs is highlighted in the RePowerEU Plan, published in May 2022.
- Brexit – The decision by the United Kingdom (UK) to leave the EU and by extension the Internal Energy Market and its regulatory orbit has altered its future energy relationship with the EU, including the regulatory framework for development and operation of interconnection between Ireland and the UK.
- Hybrid Interconnectors - Comprising offshore generation electrically connected with two or more countries, dual purpose hybrid interconnectors can optimise the allocation of renewable electricity to demand centres and are considered as essential towards subsequent development of a meshed offshore grid connecting numerous European neighbouring countries. The deployment potential of hybrid interconnectors has increased significantly in recent years, with a number of projects at pre-construction stage development in Europe. However, deployment of hybrid interconnectors is arguably not adequately provided for by existing national and EU legislative and regulatory framework.

## 2 Ireland's increased energy ambition

Towards the overarching Government objective of achieving a 51% reduction in Ireland's greenhouse gas emissions by the end of this decade, CAP21 includes a target that up to 80% of Irish electricity consumption will originate from renewable sources by 2030. To provide for this ambition, CAP21 further commits to achieving 5 GW of installed offshore wind capacity, up to 2.5 GW of grid scale solar and up to 8 GW of onshore wind. In addition to increasing renewables development and supporting carbon emission reduction commitments, these targets will meet anticipated increases in domestic electricity demand and increase Ireland's security of electricity supply, through reducing reliance on imported fossil fuels.

Consideration of the benefits of future interconnection, including the optimal geographic location of future capacity, will need to account for both Ireland's medium and longer-term energy and ORE ambitions. Analysis of Ireland's future interconnection requirements will also need to account for security of supply considerations, including challenges associated with operating an electricity system with a very high and rising proportion of variable generation.

It is anticipated that the overwhelming majority of ORE to be delivered by 2030 will be located off Ireland's East and South coasts. This is due to the suitability of these waters for fixed bottom turbines and available grid capacity. This position is consistent with the underlying analysis in ['Shaping Our Electricity Future'](#), published by EirGrid in October 2021, which identified the optimal regions to connect 5GW of offshore wind generation to the onshore system by the end of this decade.

Notwithstanding the above, the Programme for Government includes a commitment to take advantage of the considerable longer-term potential for ORE development off the West and South-West coasts. This will include additional capacity in Ireland's deeper Atlantic waters, which will become increasingly exploitable with the advent of floating offshore wind generation technology, potentially enabling Ireland to become a major European producer and exporter of ORE, beyond domestic consumption requirements.

In updating the 2018 interconnection policy, consideration will be given to consistency of future interconnection development with the enduring plan-led enduring regime that will deliver post 2030 offshore objectives beyond the 5 GW target. While this plan led enduring regime is currently under development by DECC, the [Framework for Ireland's Offshore Electricity Transmission System](#) approved by Government in 2021 has provided that offshore transmission system assets within the plan-led enduring regime will be developed,

operated and owned by EirGrid. Benefits identified with this enduring offshore grid regime will include reduced infrastructure requirements and associated costs for Irish electricity customers.

In the context of the forthcoming update to existing interconnection policy, DECC is seeking stakeholder views regarding the potential contribution of increased interconnection towards meeting Ireland's 2030 and post 2030 climate and energy objectives.

Questions:

- To what extent would a commitment by Government on delivery of further interconnection capacity, beyond the proposed Celtic and Greenlink interconnectors, impact achievement of Ireland's 2030 and post 2030 energy objectives?
- In the context of Ireland's increased climate and energy ambition, should Government establish future minimum interconnection targets, with capacity to be delivered by a specific point in time? If so, what should these targets be?
- Regarding the location of future interconnection, should priority be given to developing further interconnection with Great Britain or the EU IEM, or both?
- What are the primary benefits associated with increased interconnector capacity? For instance, would the primary benefit relate to enhanced security of electricity supply or de-risking future renewables development?

### 3 National Legislation

The principal legislation governing the electricity sector in Ireland, including electricity interconnectors, is the [Electricity Regulation Act, 1999, as amended](#) ("1999 Act"). The provisions contained in the 1999 Act in relation to interconnector development are as follows:

- Section 14 (1)(i) – provides that the CRU may grant or refuse a licence to operate and maintain an interconnector.
- Section 16 - provides that the CRU may grant or refuse any application to construct an interconnector, and that any authorisation shall be subject to terms and conditions specified by the CRU.
- Section 2A - provides that only an interconnector owned by the Electricity Supply Board (ESB) shall constitute part of the Irish electricity transmission system. It further provides that non-ESB owned interconnectors may be considered part of the transmission system for the purposes of calculating and imposing charges for the use of the transmission system, should the CRU deem development to be in the public interest. It further states that an interconnector owned by the transmission system operator shall be regarded as part of the transmission system for the purposes of the functions of the transmission system operator (TSO). In this context, the CRU can consider an interconnector to be part of the transmission system for the purposes of project cost recovery and may consider its regulatory treatment accordingly.
- Section 16A - provides that the CRU may, with the consent of the Minister of the Environment, Climate and Communications, secure interconnection capacity via: competitive tender; an authorisation granted to a person without a prior competitive tender where the CRU considers this to be in the interest of final electricity customers; or by requesting EirGrid to provide for the construction of an interconnector in TSO development plans. As provided for by Section 2A, an interconnector secured under Section 16A will be considered to be in the public interest.

Questions:

- Is the existing legislative framework contained in the 1999 Act appropriate to secure future development of interconnector capacity?
- What amendments, if any, do you consider necessary to the 1999 Act?



## 4 Brexit and future EU-UK Interconnection

The 2020 EU-UK Trade and Cooperation Agreement (TCA) provided for the establishment of an EU-UK Specialised Committee on Energy to develop and govern energy relations between the EU and UK. The European Commission is leading this aspect of the post-Brexit settlement for the EU. The outcome of the Committee's work will determine the future energy relationship between the EU and the UK, including in relation to trade across EU-UK interconnectors, ORE cooperation, and the establishment and regulatory framework for a pan-European offshore grid.

Due to the UK decision to leave the IEM, uncertainty remains over the enduring electricity wholesale market timeframe which will determine future interconnector flows between the EU, including Ireland, and the UK. Following the expiry of withdrawal transition arrangements in 2021, Great Britain is no longer included within European Single Day Ahead Market Coupling, with interconnector flows between the all-island Single Electricity Market and Great Britain now determined by the Intra-Day Market timeframe in which these markets remain coupled. Assuming project completion, the Celtic Interconnector will be subject to the EU rules on interconnector trading. It is not yet clear how this will affect trade across interconnectors between the Single Electricity Market and Great Britain.

The UK's decision to leave the EU has also negatively impacted the ability of Irish energy infrastructure to qualify for EU PCI status, with a number of proposed interconnector projects excluded from the recently agreed 5th PCI list. It is important to note, however, that the revised TEN-E Regulation will newly provide for the designation of priority project status for infrastructure connecting the EU with Third Countries, known as Projects of Mutual Interest (PMI). It is envisaged that interconnectors between Ireland and Great Britain will be eligible to apply for PMI status when the 6th PCI list is established in 2023.

Question:

- To what extent will the development of future interconnection between Ireland and Great Britain be impacted by the removal of Great Britain from European Market Coupling?
- To what extent will clarity over the future energy relationship between the EU and UK be necessary in order to provide for future interconnection between Ireland and Great Britain?

## 5 The Role of the CRU

The CRU has a central role in relation to electricity interconnector development in Ireland, including through the determination of the appropriate regulatory treatment and assessment criteria for applicant projects, and whether project development is consistent with the interests of Irish electricity customers. The role and responsibilities of the CRU in relation to interconnector development and operation, and the legislative basis for these functions, include:

- Authorising Interconnector Construction - Section 16, 1999 Act
- Licensing Interconnectors - Section 14(1)(i), 1999 Act
- Procuring Interconnector Capacity - Section 16A, 1999 Act
- Determining Regulatory Treatment of Interconnectors – Section 2A, 1999 Act; Articles 12 and 13 in the existing EU TEN-E Regulation, and Articles 16 and 17 in revised TEN-E Regulation, upon enactment
- Functions of the Commission – Section 9, 1999 Act

Proposed projects may apply to the CRU for preferential regulatory treatment, including in relation to recovery of costs through network tariffs, under Section 2A of the 1999 Act. In addition to this, proposed projects in receipt of EU PCI status may also apply under Article 12 or 13 of the EU TEN-E Regulation, including in relation to a determination on cross-border cost allocation. In both instances, it is for the CRU to determine whether development of the proposed project will be in the interest of Irish electricity customers and should be considered for a preferential regulatory treatment framework to enable cost recovery via network tariffs. It is for the CRU to carry out cost benefit analyses with the appropriate methodology to determine whether a project is in the interest of Irish electricity customers.

Clarity over the criteria employed by the CRU in determining its approach to applications for development and allocation of preferential regulatory treatment for prospective interconnectors is provided by the 'Policy for Electricity Interconnectors' published by the CRU in September 2018. The policy highlights that:

- The CRU will assess electricity interconnector applications on the basis of a set of technical, economic and regulatory criteria, including their socio-economic impact across a range of scenarios.
- The CRU gives particular consideration to socio-economic benefits as well as in terms of costs under a range of different scenarios and sensitivities. However, economic considerations will be complemented with information on qualitative, equity

and distributional impacts as well as strategic issues. The policy provides further detail on the technical assessment criteria.

- Projects will be assessed on a case-by-case basis with due regard for long term interest of electricity consumers, including any impact on network tariffs, by means of an independent and impartial economic and technical appraisal.
- While PCI status is not a pre-requisite for submission of applications, which may take place on the basis of the Irish national law, PCI status is advantageous in terms of signalling a level of project maturity and providing the opportunity for application under either national or EU as well as national legislation. There is also no legal basis for cost recovery via cross border cost allocations for projects absent PCI status.
- Applications should only be submitted by 'sufficiently mature' projects for a determination under section 2A of the 1999 Electricity Regulation Act. A sufficiently mature project is one which is able to display sufficient certainty about the costs and benefits being assessed by a CBA. Permitting procedures should have also started in each of the countries where a project will be hosted.

As part of the wider objective to update Irish electricity interconnection policy, CAP21 has requested that the CRU update its 2018 interconnector policy by Q3 2023. This timeline will enable the CRU to take due account of the updated policy to be published by DECC in Q4 2022.

The CRU's Electricity Interconnector Policy highlights three possible models of regulatory treatment in respect of proposed interconnectors, which are as follows:

- Merchant – the interconnector bears the entirety of the risk of investment with the entirety of revenue for the project coming from its congestion revenues.
- Fully regulated – investment costs are recovered through network tariffs. The consumer bears the full cost of investment and receives all the revenues from the sale of interconnection capacity.
- Cap and floor – interconnectors are partly regulated in this instance. Projects with this regulatory treatment have sales revenues that fall below the floor topped up by network tariffs while its sales revenues above the cap are returned to the consumer. In September 2021, Greenlink was the first Irish interconnector project to have been offered this regulatory regime by the CRU, in parallel to an equivalent offer from UK energy regulator, Ofgem.

Questions:

- Are the technical criteria employed by the CRU in assessing interconnector development applications appropriate?
- What of the above three regulatory models offers the most viable route for development of future interconnection between Ireland and neighbouring countries?

## 6 Hybrid Interconnection

Government recognises the significant contribution that dual-purpose hybrid interconnection, which in this instance comprise offshore generation with electricity transmission lines connected to more than one country, can make towards achieving Ireland's post 2030 climate and energy ambitions. In particular, hybrid interconnection can play an important role towards the creation of a pan-European offshore meshed grid, which would enable renewables to flow from resource rich countries, such as Ireland, to major load centres in continental Europe and the UK. A possible further additional benefit of hybrid interconnection includes a reduction in associated energy infrastructure requirements, due to combining onshore grid connection points.

In addition to existing national legislation, it is not clear that current EU electricity market rules adequately provide for the operation of dual-purpose hybrid interconnectors. In particular, existing rules on ownership unbundling, cross-border trade, and Third-Party Access may complicate hybrid interconnector development and operation. Accordingly, these rules may be subject to review over the coming years.

Questions:

- To what extent can dual purpose hybrid interconnectors contribute to Ireland's post 2030 climate and energy objectives?
- What is the appropriate policy and regulatory framework to provide for development and operation of dual-purpose hybrid interconnectors?
- What if any amendments to national legislation may be necessary to provide for the above? Should hybrid interconnectors be considered as new electricity market infrastructure, separate from conventional point to point interconnectors?
- What are the principal barriers in existing EU electricity market rules, most notably the [Electricity Market Directive](#) and [Electricity Market Regulation](#), to development and operation of hybrid interconnectors?