

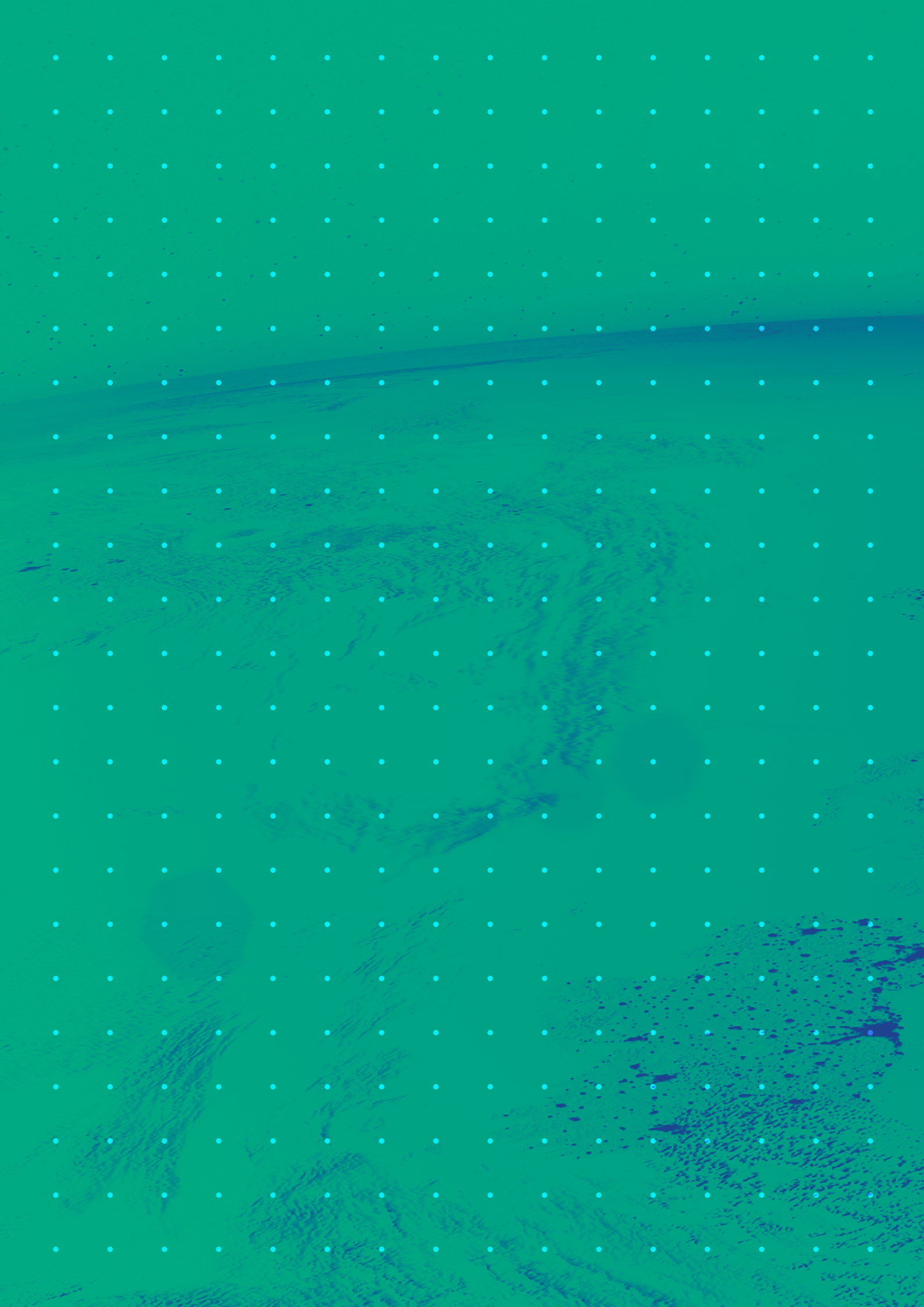
Ibec
For Irish Business

CBI

Shared Energy Futures

An Ibec/CBI NI
Policy Brief

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“The two islands must build on past successes and work together to reinforce energy security and drive zero carbon innovation and investment.”



Introduction

An Energy

Crossroads

Ireland and the United Kingdom are at a major energy crossroads. Both have set world-leading climate and renewable targets and are targeting net zero greenhouse gas emissions by 2050.

Meanwhile, international and domestic pressures threaten to undermine the affordability and security of energy supply across the two islands. The business community believes these challenges can only be effectively addressed through enhanced North-South and East-West cooperation.

The two islands must build on past successes and work together to reinforce energy security and drive zero carbon innovation and investment. Business is calling on policymakers in Belfast, Dublin, and London to develop and pursue more coordinated and ambitious efforts to transition to net zero. This should be underpinned by a new phase in energy collaboration and investment in shared infrastructure, including a recommitment to the Single Electricity Market.

Policymakers across the two islands must urgently:



01
Embrace new opportunities for regional collaboration and policy alignment on energy and climate action



02
Provide greater regulatory and policy certainty for investors in the green transition



03
Safeguard the Single Electricity Market (SEM) and strengthen electricity infrastructure



04
Support the decarbonisation and resilience of the region's gas network



05
Cooperate to address skills gaps, supply chain constraints, and shared transition challenges



06
Undertake an Energy Futures 2040 scoping exercise

1. The net zero opportunity

The transition to net zero emissions is an environmental and economic imperative. In a world where investment, talent, and consumers increasingly follow environmental integrity, economies that do not transition will lose competitiveness and get left behind.

Equally, the transition to net zero brings immense opportunities in the form of increased energy security, investment, job creation, enhanced quality of life for citizens, and a more competitive manufacturing and industry sector.

Ireland and the UK recognise these imperatives and opportunities and have established robust carbon budget regimes to ensure a decoupling of emissions from economic growth. Both have begun major zero carbon investment journeys in renewable energy, energy storage, network infrastructure, and climate solutions. Meeting these ambitious targets will reinforce the region's energy resilience, help normalise energy prices, and establish a global hub for sustainable enterprise.

Shared challenges

To realise this net zero opportunity, Ireland and the UK must work together to overcome shared challenges to transition. The energy demands, emissions drivers, and barriers to decarbonisation are broadly shared across the region and policymakers face the same difficulties with infrastructure delivery, grid capacity, energy affordability, public buy-in, skills shortages, carbon leakage, and technology readiness. An uncoordinated and disjointed approach could see policymakers working against each other, an unnecessary duplication of effort and investment, increased costs, mixed signals for consumers and investors, and missed opportunities for emission reduction.

1. The net zero opportunity / continued

Policymakers must urgently work together to overcome the following shared challenges:

■ **Maintenance of the all-island Single Electricity Market (SEM)**

Since its launch in 2007, the SEM has reinforced security of supply, moderated electricity prices, and enabled the integration of renewables. It is the driving force behind investment in the island's electricity system. The benefits and value of the SEM have endured throughout Brexit and the European energy crisis. The SEM's importance will only increase in the coming years because of increased demand, the integration of more renewables, and the electrification of heat and transport sectors. However, the benefits of the SEM are often undervalued and misunderstood. For businesses on both sides of the border, the SEM is an indispensable part of the island's energy and economic future, and its maintenance must be supported and protected. At the same time, major investment is needed in the underlying generation and network infrastructure. EirGrid and SONI are forecasting capacity deficits every year for the next decade because of aging generation infrastructure and delays to capacity expansion.

■ **The European Energy Crisis and Gas Security**

In Ireland, as in most other European countries, natural gas will continue to play a crucial role in the energy system and will be vital to the integration of renewable power generation. However, the war in Ukraine and resulting energy crisis has revealed the unreliability and affordability challenges that come with this reliance. With natural gas supplies expected to decline over the next decade, Ireland will be increasingly reliant on imports through Great Britain from Norway, the United States and further afield. The island of Ireland also has no emergency gas storage in the event of a major disruption to the gas interconnectors with Great Britain. This demands the development of indigenous renewable gas, long term gas storage solutions, increased energy crisis cooperation, and an emergency storage solution.

■ **Delays to infrastructure delivery**

The net zero transition requires the speedy roll out of critical energy infrastructure including network modernisation and expansion, offshore and onshore wind farms, anaerobic digesters, hydrotreated vegetable oil (HVO) biorefineries, district heating networks, hydrogen electrolyzers, solar PV farms, flexible gas-fired generation, interconnectors, and energy storage facilities. However, developers face

immense difficulties delivering such projects on time. Critical projects like the long overdue 400kV North South electricity Interconnector (NSIC) can take over a decade to bring from pre-planning to completion. The reasons for these delays include cumbersome planning processes, regulatory uncertainty, a lack of resources in key agencies, and lengthy judicial review challenges. A failure to address these issues will see vital investment, talent and supply chains move elsewhere. Ultimately these delays threaten the island's ability to meet energy and emissions targets.

■ **Investment risk and uncertainty**

Significant public and private investment is needed to progress the transition to net zero. On the island of Ireland alone, it is estimated that over €125 billion (c. £110bn) will be needed this decade. However, the absence of a functioning Northern Ireland Executive, delays to infrastructure delivery, and the threat of post-Brexit divergence have frustrated investment in recent years. Investors, businesses, and homeowners also need greater policy and regulatory certainty before making long term investments. This can be achieved through clear, consistent, and joined-up policy signals on the upward price of carbon, the future of the SEM, and the governance of agencies and institutions. There must also be greater guidance on the technologies to be supported, and the phase-out timelines for fossil fuels and state supports through taxes.

■ **Skills gaps and supply chain constraints**

To realise the net zero transition, developers and state agencies will need access to a strong talent pipeline, critical materials, specialist equipment, and highly sought-after niche services. In Ireland, the Expert Group on Future Skills Needs (EGFSN) has identified emerging skills challenges in the areas of building retrofit, construction, electrical engineering, and environmental and planning law. The Northern Ireland Skills Council and Department for the Economy have identified similar barriers and green skill deficits. Indeed, right across the UK, the CBI has reported that access to skills and training for the green economy are misaligned to the needs of key industries that have pressing decarbonisation targets. The sector's access to talent is also hindered by competition from other sectors, professions, and large infrastructure projects locally and further afield. Waiting for market forces to resolve these supply challenges or any delays to the roll out of renewables will see both economies fall behind in the race to net zero.

2. Recommendations

The two islands must build on past successes and work together to reinforce energy security, harness the region's immense wind resources, protect the benefits of the SEM, and deliver the investment and innovations required to develop competitive net zero economies.

Policymakers across the region must:

- 1. Embrace new opportunities for regional collaboration and policy alignment on energy and climate action:** The region's long history of cooperation to address shared problems provides a blueprint for a new phase of joint action and collaboration on decarbonisation and energy security. The platforms established by the Belfast Good Friday Agreement and the Windsor Agreement could be used to shape a more considered and efficient net zero transition, mobilise investment, prepare for energy emergencies, build resilience and accelerate projects of common interest. The 2023 memorandum of understanding (MOU) between the Irish and UK Governments on natural gas security of supply also provides a basis for greater cooperation on security of supply. Policymakers must also consider, where appropriate, new ways for the EU and the UK to cooperate on energy security, decarbonisation, and shared infrastructure delivery.
- 2. Provide greater regulatory and policy certainty for investors in the green transition:** Significant investment is needed this decade to transition our economies away from high carbon activities and fossil energy. To support this, investors require greater policy certainty and signals on the direction of energy markets, the readiness of enabling

infrastructure, and the role and interplay of different energy technologies. This would be aided by development of an all-island transition roadmap or scoping exercise and energy system modelling on an all-island basis. The restoration of a functioning Northern Ireland Executive is an opportunity to begin a new phase of joint collaborative action, boost investor confidence, and refocus minds on net zero transition. A new strategic infrastructure investment fund should also be established to help mobilise private investment in decarbonisation, and critical system and network upgrades.

- 3. Safeguard the Single Electricity Market (SEM) and strengthen electricity infrastructure:** For business the SEM is indispensable and must be maintained and protected in the coming years. It must also be strengthened to support growing demand, the integration of more intermittent renewables, and more proactive end-users. The expert groups set up under the Windsor Agreement offer a means for collaborative action to support the SEM in the years to come. Meanwhile major investment is needed in the underlying network infrastructure. Policymakers must make a renewed commitment to the SEM and support vital grid projects like the NSIC which are critical to ensuring more secure, sustainable, and affordable electricity on the island.

2. Recommendations / continued

4. Support the decarbonisation and resilience of the region's gas network. The war in Ukraine and resulting energy crisis have revealed the unreliability and affordability challenges inherent in a system heavily influenced by global gas markets. Policymakers must build on the 2023 MoU between the Irish and UK Governments and implement joint strategies on gas supply and emergency response¹. Meanwhile cooperation on renewable gas policy, standards, certification and investment is needed to accelerate decarbonisation of key gas-dependent sectors and open up new opportunities for gasification through biomethane, hydrogen, and carbon capture.

5. Cooperate to address skills gaps, supply chain constraints, and shared transition challenges. Policymakers across the region should collaborate to help reduce costs, maximise resources, progress waste circularity, and develop green skills and specialist services. The Common Travel Area provides a means to develop more dynamic flow of specialist skills and services to support infrastructure delivery. Similarly, there is scope for greater collaboration and knowledge sharing

between agencies, departments, regulators, research performing organisations, and industry. Deeper collaboration could be especially helpful in unlocking the full potential of bioenergy, hydrogen, and the circular economy. It could also help support the decarbonisation of hard-to-mitigate sectors like road freight, shipping, biogenic and process emissions, aviation, and heavy industry.

6. Undertake an Energy Futures 2040 Scoping Exercise: designing, planning and delivering large scale energy infrastructure is a long-term process that can take up to, and beyond, a decade from conception to commencement. More crucially once operational, it must meet the demands of the following twenty to thirty years. A scoping exercise is needed to identify, compile and present a detailed picture of what the island of Ireland's energy landscape will look like two decades from now. It should be undertaken by independent experts but with the cooperation of stakeholders, in particular governments, and include all aspects of energy and climate. As these investment decisions need to be made soon the scoping exercise is urgent and should be completed and presented in 2024.

“A scoping exercise is needed in 2024 to identify, compile and present a detailed picture of what the island of Ireland's energy landscape will look like two decades from now.”

¹. <https://www.gov.ie/en/press-release/eb0e4-minister-ryan-announces-new-energy-cooperation-agreements-with-united-kingdom/>

Conclusion

The net zero transition presents a major opportunity to strengthen competitiveness, improve energy resilience and affordability, and create new sustainable jobs across the island. With the right policies and a focus on cost competitiveness, the island could remodel itself as a global hub for sustainable manufacturing and enterprise. However, the road to net zero is not straightforward. Progress towards climate goals is hindered by regulatory uncertainty, planning delays, skills shortages, supply chain constraints, and emerging energy security risks. These challenges can only be successfully overcome through renewed partnerships and collaboration. These challenges can only be successfully overcome through renewed partnerships and collaboration. Ibec/ CBI members are fully committed to participate fully in this endeavour – with the recent restoration of a functioning Northern Ireland Executive, there is a real opportunity to deliver a new phase of energy cooperation across the island and as well as play a critical role in the transition across the two islands.

Regional Energy Cooperation and Connectivity

The long and successful strategic energy partnership between Ireland and the UK pre-dates and exists outside EU frameworks like the EU Internal Energy Market. It is driven by the ties of history, the imperatives of geography, and needs of citizens and businesses. A major milestone was set in 2007 with the creation of the SEM, the world's first cross-border wholesale electricity market. The scope, importance and potential of this strategic energy partnership is illustrated in Figure 1.

The following is additional information on key elements of the shared energy infrastructure:

Electricity networks

Major North/South and East/West developments include the construction of two subsea electricity interconnectors and three overland electricity interconnectors on the island of Ireland. These investments have ensured a secure flow and trading of energy across the region. By leveraging electricity infrastructure on an all-island basis, SONI and EirGrid, as operators of the transmission networks, can utilise the combined strength of both grids to enhance security of supply for the entire island. Additionally planned electricity infrastructure connecting the island of Ireland to Wales and France will further reinforce supply and create new opportunities for the import and export of renewable electricity to and from the UK and the European Continent. Construction of the long-delayed North/South Interconnector will considerably expand and strengthen this transmission capacity.

The Single Electricity Market (SEM)

The SEM functions as a single market for the wholesale trade of electricity generation. Generators bid in their power to the market and suppliers buy from the pool to sell on to electricity consumers. In any given year, the SEM manages financial flows of approximately €3.5 billion. Crucially it enables greater economies of scale which have proved more attractive to investors. This in turn has helped improve competition, reduce costs and improve security of supply.

Electricity Decarbonisation

Both Ireland and Northern Ireland have set targets to deliver at least an 80% share of renewable electricity by 2030. In 2018 the island of Ireland became a global leader in grid decarbonisation, successfully enabling the deployment of 65% intermittent renewable electricity on the grid at the same time – a world first. By March 2022 this number had increased to 75%.²

Gas networks

Ireland and the UK work closely together on ensuring security of gas supply. Gas flows securely across the three interconnectors connecting Great Britain and Ireland. Both jurisdictions share similar natural gas emergency and loadshedding plans. This means that in the event of a gas emergency, both will work together to protect vulnerable and priority customers. Gas Networks Ireland (GNI) and GNI UK are responsible for the operation and strengthening of these networks. This includes the development of renewable gases i.e. biomethane and hydrogen and the creation of a new all-island compressed natural gas refuelling network which will help reduce emissions in the transport sector.

2. See Delivering a Secure, Sustainable Electricity System" programme (DS3).

Figure 1: Energy interconnectors

ATLANTIC OCEAN

NORTHERN IRELAND

NORTH SEA

Key

— Gas pipeline

— Electricity interconnector (existing)

..... Electricity interconnector (planned)

IRISH SEA

NETHERLANDS

IRELAND

GREAT BRITAIN

BELGIUM

Belfast

Deeside

London

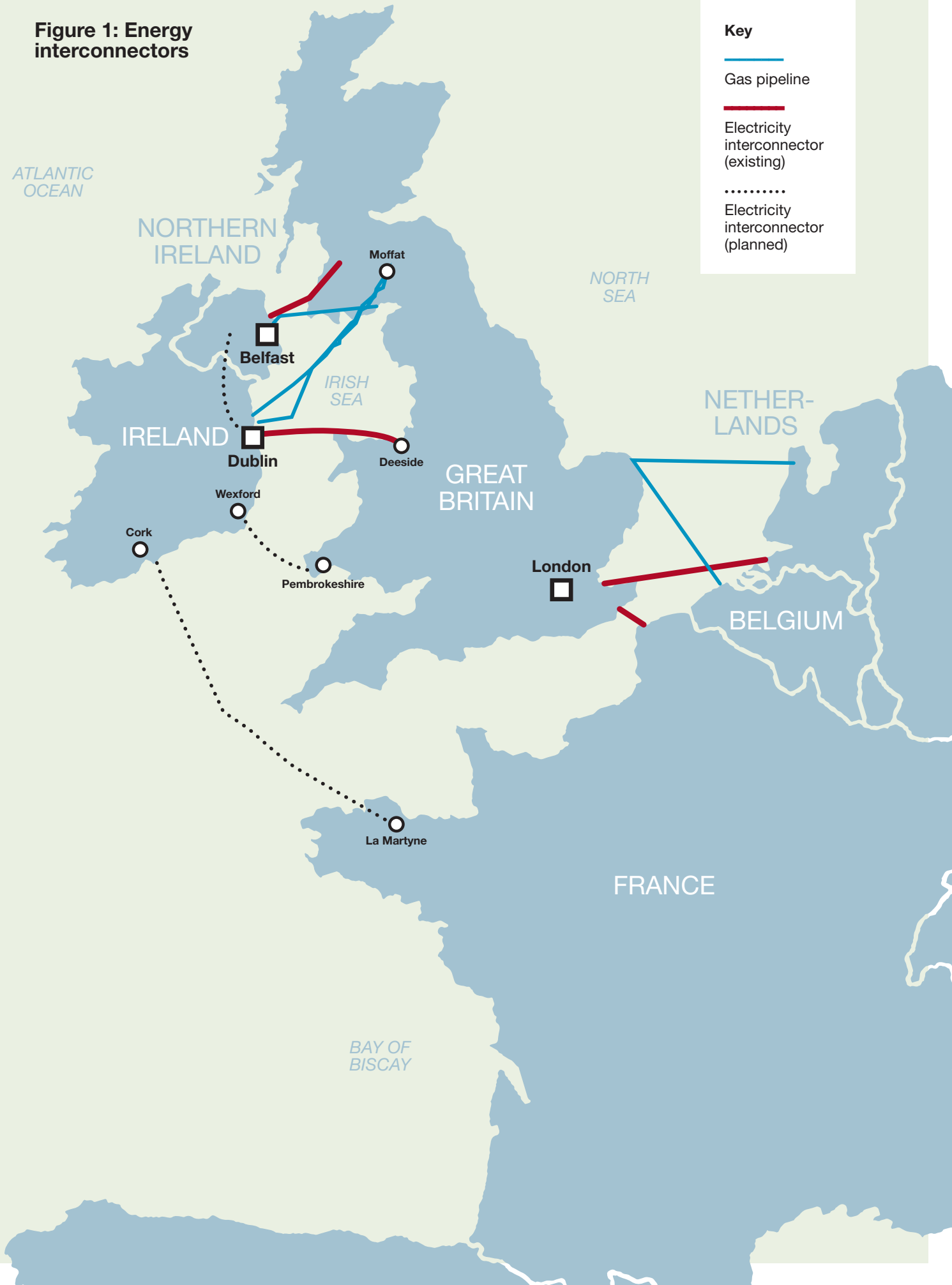
Dublin

Cork

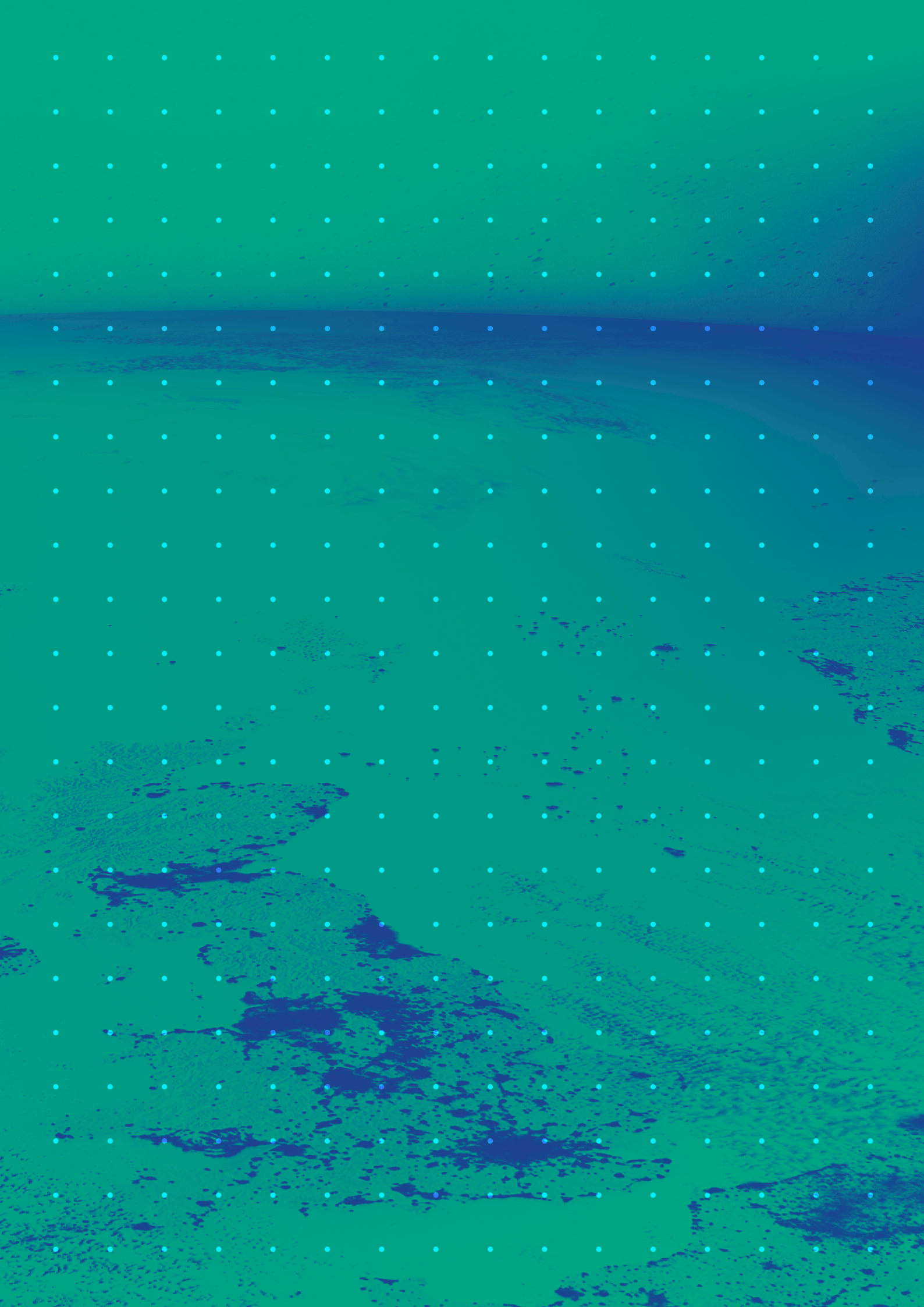
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