



Transform the power system for future generations

Strategy 2020-25



Our purpose

Transform the power system for future generations

We are EirGrid Group

We operate and develop the electricity system, the wholesale market, and interconnection with our neighbours. We do so to meet the needs of all electricity users, rather than to pursue our own commercial interests. We are an independent entity, with no vested interest in the generation or selling of electricity. We don't own the grid infrastructure, and so have no self-interest in adding to it.


We ensure that electricity is always available when and where it's needed, every second of every day, and for decades to come.

We do this in the most cost-effective way possible, and in the interests of all electricity users.

We have now developed our strategy for 2020 to 2025, which is summarised in this publication. This strategy was informed by extensive engagement with key stakeholders. This included customers, as well as board members, management and staff from across EirGrid Group.

The aims of this new strategy are reflected in a new statement of purpose, shown on the opposite page.





Our new strategy is shaped by two factors: climate change and the impending transformation of the electricity sector.

The context of climate change is well understood, and beyond scientific doubt. The only question now is how fast society can respond to limit the damage, and so protect our planet for current and future generations.

The response – at a government, EU and global level – is to plan for the transition to a sustainable, low-carbon future. This is reflected in international treaties such as the 2016 Paris Agreement, and in the EU Climate and Energy Framework to 2030. It is also visible in the Irish Government's 2019 Climate Action Plan, and in the UK Government's plan to achieve net zero carbon emissions by 2050.

The transition to low-carbon and renewable energy will have widespread consequences. There will be major changes in how electricity is generated, and in how it is bought and sold. There will also be major changes in how electricity is used, such as for transport and heat.

The electricity system will carry more power than ever before and most of that power will be from renewable sources. Coal, peat and oil-based generation will be phased out in the next decade.

And while this happens, new technology will allow electricity users to generate and store power, and return any surplus to the grid. Combined with real-time consumption information from electricity users, this creates opportunities for all.

Realising these opportunities will require a significant transformation of the electricity system. More importantly, these changes will need to be managed in a co-ordinated and cost-effective way.

EirGrid Group has a unique role to play in leading the radical transformation that is now required. This publication sums up our strategic response to these challenges. Our strategy consists of a set of key goals, underpinned by our purpose.

If you want to read about our strategy online, please visit eirgridgroup.com/strategy2025

EirGrid Group is responsible for a safe, secure and reliable supply of electricity on the island of Ireland – now and in the future.

We develop, manage and operate the transmission grid and electricity market on an all-island basis. The grid transports power from where it is generated to where it is needed – in every part of Ireland and Northern Ireland. We balance supply and demand every minute of the day, while also planning for the island's long-term electricity needs.

In Ireland, we deliver this service as EirGrid. In Northern Ireland, we are SONI – the System Operator for Northern Ireland.

Our services include SEMO, the Single Electricity Market Operator. This wholesale market for power runs 24 hours a day, seven days a week. This ensures electricity users across the island of Ireland always have reliable power at a competitive price.

EirGrid Group develops and operates interconnections with neighbouring grids, such as the East West Interconnector. We also enable interconnections developed and operated by third parties. These include the Moyle interconnector and the proposed Greenlink project. Other proposed interconnections include the North South and Celtic Interconnectors.

The transmission grid brings power to industry and businesses that use large amounts of electricity. The grid also powers the distribution network. This supplies the electricity you use every day in your homes, businesses, schools, hospitals, and farms.

We implement government policy in Ireland, and in Northern Ireland. We act independently and in the public interest. We are regulated as monopoly service providers. We perform our services for the benefit of every electricity user on the island of Ireland, and to support the economy in both jurisdictions.





Our primary goal

Lead the island's electricity sector on sustainability and decarbonisation

Electricity from renewable sources will play a vital role in the global response to the climate crisis. Heating and transport are switching from carbon-based fuels to electricity, which will increase demand for power.

The expectation is that the electricity system will carry more power, and most of it will be generated from renewable sources. But this kind of once-in-a-generation change cannot happen unless the power system is transformed. It has to be made ready to perform reliably, even with close to 100% renewable energy.

The system we depend on for a reliable and secure supply of power was originally based on traditional methods of generating electricity. These methods relied on burning fossil fuels, and have been successfully used for over 100 years.

Now we will prepare the electricity system for a future based almost entirely on renewable energy.

EirGrid Group has a unique set of roles across the island of Ireland. We operate and develop the electricity system, the wholesale market, and interconnection with our neighbours.

This gives us the deep expertise needed to deliver a low-carbon, cost-effective power system. That is why we are making a commitment to take real responsibility for many elements of this energy transition.

We will offer our expertise to provide real leadership for this fundamental change. EirGrid Group will be a beacon towards an ultimate future for electricity that is sustainable and free from carbon

Achieving this goal will require significant change. Government policy in Ireland and the UK has already set ambitious targets that will affect how electricity is generated. In Ireland, the Climate Action Plan 2019 states that 70% of electricity will be generated from renewable sources by 2030. In the UK, the government is pursuing net zero carbon emissions by 2050.

Both of these targets will require us to break new ground in the amount of renewable electricity we manage on the electricity system. In real terms, we will need to connect up to 10,000 megawatts of additional renewable generation to the electricity system.

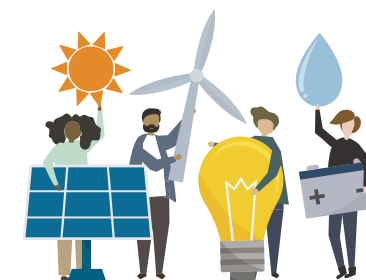
There are many technical challenges when integrating renewable energy to an electricity system. The objective is to ensure the electricity system is stable and supply is secure.

We can currently operate the grid with up to 65% of renewable power, including onshore wind and solar. This is a pioneering engineering achievement. By 2030, this must increase to 95%.

We will then have to operate the system in a more dynamic and responsive way. In turn, this will require improvements to infrastructure to make the grid stronger, and more flexible.

We will aim to achieve this by using innovative solutions as well as proven technologies. Our goal will be to achieve the required increase in renewables while minimising the addition of new infrastructure. And as always, we will pursue these changes without impacting on the reliability of the electricity system.

System interconnection - such as the proposed new North South, Celtic and Greenlink Interconnectors - is a key part of this goal.



Interconnection makes the system more resilient and efficient by connecting to neighbouring grids. This added strength will become increasingly important as renewable forms of generation grow.

The first step towards this energy transition is to articulate what this means to key stakeholders, so we can get their support. It is only through real understanding that we can secure their buy-in, and we believe we have an obligation to help create this understanding.

We are committed to be visible in leading the change towards a carbon-free electricity system. We will invest in communications to explain the challenges, changes and benefits of this transition.

Visible and trusted leadership is essential. This is because we cannot achieve this goal without public, political and regulatory support.

We already have a real and recognised expertise in accommodating renewable energy on the grid. We will work to continue our role as a trusted source for information and advice for those who set the energy agenda. We will build on and leverage our expertise, both at local and EU level, to influence policy and support for our work.

This new strategic goal will allow us to make a tangible and impactful contribution to the UN's Sustainable Development Goals.

In particular, our work towards a clean electricity system will support:

1. Affordable and clean energy
2. Industry, innovation and infrastructure
3. Sustainable cities and communities
4. Climate action



Our supporting goals

Operate, develop and enhance the all-island grid and market.

Our primary role is to operate, develop and enhance the all-island power system and the wholesale electricity market. This ensures that everyone who uses electricity can be confident it is available, reliable and competitively priced.

We depend more than ever on electricity in almost every aspect of our work, social and family lives. Large-scale customers like data centres locate here because of our reputation for reliability. And as the grid powers the distribution network, every home, farm and small business relies on us to function.

Across the world, there is now a revolution taking place to clean, renewable ways of generating electricity. The pace and scale of this change has the potential to test our promise of reliability. That is why our new strategy includes a restatement of this promise. The energy transition will be a challenge, but we will still provide an electricity supply that is constant, reliable and competitive.

To meet this promise, we will keep the grid strong, flexible and increasingly enabled with technology. We will also make sure that the wholesale market is efficient and effective.

The all-island Single Electricity Market is key to this. In 2018, we completed a process to integrate our market more closely with European markets. This created a more liberalised market which could trade in real time. In turn, this introduced greater competition – and downward pressure on prices.

Brexit creates a potential for uncertainty in all our operations. It could negatively impact how we operate across the island of Ireland. We have, however, planned for the next five years on the basis that Brexit will not materially impact our work. This reflects assurances from Irish and UK Governments, as well as the EU. All have stated their commitment to maintaining the all-island Single Electricity Market.

In the next five years, we will continue to focus our efforts on the best possible operation of the Single Electricity Market. We will ensure that the market is ready to take an increasing amount of renewable electricity. We will also work to meet expected growth in demand across the island of Ireland.

We will achieve this by ensuring the electricity market is balanced, transparent and open. This will permit greater competition. In addition, an enhanced market will allow for rapid growth in renewable generation.

We forecast that the demand for electricity in Ireland will increase by 23% by 2025, with modest single-digit growth in Northern Ireland.

We will also prepare for growth in demand-side participation, as more electricity users start to generate and store power.

As part of this goal, we will plan for a system that can take advantage of future interconnectors from EirGrid Group, and from third parties. They will be key to managing larger amounts of renewable generation. They will also enhance energy security across the island.

We will also continue our work to make sure that grid infrastructure is prepared for the future. At a fundamental level, this means ensuring the electricity system can take more renewable generation. We must also ensure it can accommodate increases in electricity demand.

We will do this by optimising existing assets, and by developing new infrastructure.

Where possible, we will use innovative yet proven technologies to minimise the need for new infrastructure.

This will all be done in response to government policies. In Ireland, these policies are spelt out in the National Development Plan, and in the 2019 Climate Action Plan.

In Northern Ireland, we will be guided by UK climate change policies, which have always been at the forefront of global best practice. The Department for the Economy is developing a new Strategic Energy Framework for Northern Ireland. We will continue to work constructively alongside key stakeholders in supporting this process.

Any new infrastructure developments will require comprehensive and best practice consultation. Without this, we will not gain the acceptance needed from local communities and landowners.

We need to further expand our engagement if we are to transition successfully to a clean electricity system. You will learn more about this goal later in this strategy.





Our supporting goals

Work with partners for positive change

To achieve our goals, we have always recognised the need for successful partnerships. Now that our strategic ambition is evolving to respond to the climate crisis, we need these relationships more than ever.

We work every day with those who own and build grid transmission assets. ESB Networks and NIE Networks also operate the electricity distribution systems in Ireland and Northern Ireland.

We recognise the need for a major collaborative programme with these partners. This will be essential to deal with the changes caused by the switch to electric vehicles and electric heating in the home.

We partner with the operators of neighbouring transmission systems using interconnectors. We have partnerships with customers that generate or use large amounts of power.

We have a responsibility to the consumers who depend on us for a constant, reliable supply of electricity. We are guided by government and regulators, and work in partnership with them to realise government policy.



We recognise the key role that technology will play in this energy system transformation. We expect to develop new strategic partnerships with global players to help with this change.

We will seek partners who can assist us in delivering the best and most cost-effective solutions on the power system.

We recognise the key role that government and regulatory policy will play in enabling the energy transition. We will put our resources and expertise to provide data and analysis to assist and help inform policy in Ireland and Northern Ireland.

And finally, development of new grid infrastructure requires partnership with landowners and communities.

In summary, we will invest effort with a renewed focus on getting the best from existing and new partnerships. We will do this to achieve our strategic goals, and to help our partners achieve theirs.

Together, we will deliver the most significant change to the energy system since rural electrification.

We will achieve this by having a common purpose, common goals and a common view on what success looks like for both of us.





Our supporting goals

Engage for better outcomes for all

The electricity system relies on an intricate mesh of grid infrastructure in Ireland and Northern Ireland.

Advances in technology are increasingly helping us to find less intrusive ways to move large amounts of power. But all electricity grids, in any country, depend on a backbone of large-scale infrastructure. This means we still rely on pylons, substations and overhead wires.

Asking landowners and local communities to accept new infrastructure has never been an easy task. We never take these decisions lightly, or without first investigating all alternative solutions. But where new infrastructure is essential, we need to inform and persuade this audience.

In recent years, we transformed our public and stakeholder engagement. We are committed to further improvements where required, but our new strategy will test these advances.

Our new focus on accommodating more renewable energy is a significant evolution. It will lead to major changes in how we operate the electricity system and the wholesale market.

It will also need us to make the grid robust, resilient and more flexible. This will be essential as we prepare the grid to move away from the predictable certainty of power generated by burning fossil fuels.



It can be a challenge to make the case for the long-term benefits of new grid infrastructure to concerned landowners or their neighbours.

Our new purpose – intervening to help resolve the climate crisis – provides an urgent rationale. As a first step in our continuing efforts in engagement, we will articulate this goal in a compelling way.

We will also continue to look for innovative new ways to engage. Our aim is to achieve world-class standards, and to deliver better results as a consequence.

Our goal is to deepen and broaden our consultation, and to respond in meaningful and persuasive ways to fears and concerns.

We will also continue to invest our time and resources in a strategic and transparent approach to regulatory engagement. Our regulators - in Ireland and Northern Ireland - are primary stakeholders to enable our new focus on sustainability.

To achieve this, we will re-align our current engagement to our new strategy. We will do this in an open and transparent manner. Our aim is to collaborate with regulators to agree how best to manage the energy transition in response to the challenge of climate change.



Strategy 2020-2025

This sums up our strategy for the next five years. It shows the external context we face, and the strategic approach we will take in response.

70%

Ireland's target for electricity from renewable sources by 2030

zero

UK target for net carbon emissions by 2050

10,000MW

Potential amount of new renewable generation that will need connection to the electricity system by 2030

95%

Renewable electricity on the system at any one time by 2030

Our purpose

Transform the power system for future generations

Our primary goal

Lead the island's electricity sector on sustainability and decarbonisation

Our supporting goals

Operate, develop and enhance the all-island grid and market

Work with partners for positive change

Engage for better outcomes for all



Working for electricity users in Northern Ireland

EirGrid Group operates throughout the island. This allows us to achieve economies of scale and to provide greater security of supply compared to two separate systems. In Northern Ireland, our operation is called SONI - System Operator for Northern Ireland.

We plan and operate the grid for the benefit of the electricity users we serve here. We implement policy set by government through the Department for the Economy, which is responsible for energy policy. We are regulated by the Utility Regulator for Northern Ireland.

We are now bringing our expertise and data to the table as policy makers work to develop a new energy policy for 2030 and beyond.

There are several requirements in Northern Ireland that inform our new strategy.

We must ensure that SONI can meet the future needs of electricity users. We need to help Northern Ireland contribute to UK emissions targets - by engaging and collaborating with stakeholders. Our work here needs to respond to the unique factors that affect the electricity system in this region.

But the fundamental requirements of those who use electricity are universal. All electricity users across the island expect a reliable and competitively priced supply of power.

Equally, governments and regulators in both jurisdictions are now addressing climate change. They are seeking ambitious and cost-effective responses from electricity system operators. As previously indicated, this requires a commitment to innovation without disrupting stability.

The UK Government has set a target of net zero carbon emissions by 2050, which is consistent with global best practice. While Northern Ireland has not yet set a target, the move to clean energy generation is well underway.

We have a proven track record of innovating to respond to Northern Ireland's needs. Our initiatives have allowed for up to 65% renewable energy on the Northern Ireland grid.

We will now use our expertise to allow Northern Ireland to increase this figure to over 95% by 2030.

Meanwhile, our work continues to ensure the grid can support the Northern Ireland economy. Key projects like the North South Interconnector are central to this.

We are committed to delivering for Northern Ireland consumers and businesses. We are committed to stewardship of its environment and supporting its biodiversity.

We are committed to lead the decarbonisation of Northern Ireland for the good of everyone who lives and works here

Our capability promise

Value our people and enable them to deliver our ambition

Although the electricity system is a highly technical operation, our work is powered by our people. Those who work at EirGrid Group in Ireland and Northern Ireland are the foundation of our new strategy.

We have an increasingly diverse workforce with a variety of skill-sets. They are drawn from a range of engineering, scientific, technology and business disciplines.

We will ensure our people are engaged in their work. We want them to understand the critical part they play in delivering our strategy, and in supporting the transition to a low-carbon future.

As we work towards our new strategy, we will need to develop new capabilities and acquire new skill-sets.

We will develop the skills of our current employees and we will seek new talent. This will include the graduate and new entrant markets.

Our strategy is informed by the reality of a changing world of work. Our people will benefit from advances in information and communication technologies.

At the same time, we want our people to enjoy their work. We want them to give their best, while still balancing their personal and work lives.

We pursue these objectives for our people because it is the right thing to do. It will also help us to attract and retain the people we need, with the capabilities and world-view to help deliver our strategy.

Achieving our new Group strategy

Delivering our strategy to 2025 will require us to enhance what we do, and how we do it – in every aspect of our operations.

Reaching the goals we have outlined in this document will be the tangible proof of our new strategy. But they can only happen if we aim for better results in everything we do. We will achieve this by embracing change, and by pursuing innovation in all aspects of our work. In doing so, we will never lose sight of the fundamental measures that are the benchmark of success in our operations.

Here are the Group-wide themes we will now pursue to help realise our strategy. They show our commitment to pursue unprecedented change while still maintaining the highest standards.

- **Deliver best performance across the Group**
- **Achieve operational excellence**
- **Embrace change and innovation to make a real difference**
- **Leverage and share data to enable better solutions**
- **Use technology for improved performance**
- **Achieve financial goals to deliver our strategy**
- **Set the benchmark for governance excellence**



Your support will make our goals possible

As the operators of the electricity system and the all-island market we hold a leadership role.

In this role, we are committing to make the changes that will allow a fundamental move away from carbon-emitting generation.

Without evolving and strengthening the electricity system, this transition to renewable energy simply can't happen.

The changes we are now planning have the potential to secure all of our futures, as well as the future of the next generation.

We want to achieve these changes with the backing of those who regulate and fund us, and with the understanding and support of the public.

The scale of the challenge caused by climate change is immense. We are committed at the company and at an individual level to make a difference.

By acting as a beacon for change, EirGrid Group can create a path towards an increasingly carbon-free electricity system.

This will enable the lifestyle and behavioural changes needed in every household and business in the country.

Together, we can make a difference.



The Oval, 160 Shelbourne Road, Ballsbridge, Dublin D04 FW28
Telephone: 01 677 1700 • www.eirgrid.com

Castlereagh House, 12 Manse Road, Belfast BT6 9RT
Telephone: 028 907 94336 • www.soni.ltd.uk