Energy for generations

# DRIVEN TO MAKE A DIFFERENCE

## Sustainability Report 2022

# Invested in Ireland

ESB Group was established by statute in Ireland and is 96.9% owned by the Government of Ireland. We have been invested in Ireland since our foundation in 1927

Proposed dividend of €327 million for 2022, bringing to almost €1.5bn the declared dividends in the past decade

Over €2.3 billion contribution to Irish economy in 2022

## We will empower, enable and support customers and communities to achieve net zero.

Over 12,000 Primary school children participated in ESB Science Blast in 2022 promoting STEAM subjects.

Electric Ireland forwent all profits from its residential electricity business in 2022. A €50 credit was applied to each existing Electric Ireland residential electricity customer.

€5 million hardship fund supporting customers, extended from €2 million.

In 2022, Electric Ireland set up over 55,000 instalment plans to help customers manage their energy costs.

In 2022, ESB Smart Energy Services on behalf of Electric Ireland supported the delivery of over 1,000 Home Energy Upgrades and 100 large-scale energy efficiency projects in business and industry, contributing over €2.4 million in investment and resulting in energy savings of over 39 GWh.

## We will develop and connect renewable energy to decarbonise the electricity system by 2040.

Our Networks businesses connected 700 MW of renewables to the Irish electricity networks, in addition to 79 MW of new battery storage in 2022.

ESB developed 490 MW of new capacity for the Irish market. This entails five battery projects totalling 300 MW of which two projects completed construction in 2022.

Moneypoint's synchronous compensator, completed in 2022, is the first in the country and incorporates the world's largest flywheel used for grid stability purposes. This will promote the connection of greater volumes of renewable energy onto the electricity system.

## We will invest in infrastructure to maintain reliable and secure electricity supplies.

€1.1 bn invested in network infrastructure by our networks businesses on the island of Ireland in 2022.

1.1 million smart meters installed by ESB Networks, including over 30,000 microgeneration customers.

As part of the Temporary Emergency Generation (TEG) process, ESB is developing c.200 MW of temporary capacity at North Wall in Dublin, due for delivery in October 2023.

'Invested In Ireland' is an advertising campaign that began running in the Republic of Ireland in early 2023, highlighting the contributions ESB makes to the Irish Economy. The wider sustainability report provides details on all ESB Group activities across our key markets of ROI, NI and GB.

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Chapter 1

# Driven to Make a Difference



Millvale Solar Farm
Photo credit Neoen
Photographer Keith Arkins

Chapter 1

# Driven to Make a Difference

## ESB's Sustainability Timeline

**2001-**

**2009:** Renewal of Distribution Network to a Smart Network

**2011:** First cross border EV charging network

**1998:** First wind farm

**2004:** First Sustainability Report

**2009:** First CDP disclosure

2010

**2015:** Launch of SIRO

**2017:** ESB's Brighter Future Strategy
Launch of low-carbon economy study

**2018:** Launch of Dingle active network and community energy area
First offshore wind farm investment

**2019:** Investment in Oriel and Clogherhead offshore wind farms

**2020:** Smart meter roll-out
PR5 ESB Networks 5-year plan for smarter networks to support Ireland's climate targets

2020

**2021:** Nos. 27 & 28 Fitzwilliam fossil-free office buildings
Electric Ireland-Superhomes Retrofit Partnership
Launch of FuturEnergy Ireland Partnership

**2022:** Number of smart meters breaks through 1 million mark
Launch of Net-Zero by 2040 Strategy
Commitment to set a Science Based Target by 2030
ESB Networks Beat the Peak initiative launched
World's largest fly wheel commissioned at Moneypoint to enable more renewables
First battery project commissioned at Aghada
Joint arrangement with dCarbonX, to develop hydrogen storage projects

**2024:** Neart na Gaoithe offshore wind farm commences operation

**2026:** Inch Cape offshore wind farm commences operation

2030

**2028:** Green Atlantic @ Moneypoint wind turbine construction hub

**2030:** targets:
- >50% reduction in $CO_2$ per electricity unit
- 35,000 deep home retrofits completed
- 51% reduction in $CO_2$ of buildings and fleet $CO_2$
- 5 GWs renewable generation

**2040:** ESB commitment to Net-Zero Emissions

2040

**2050:** Ireland & UK National carbon neutrality commitment by 2050

# Stepping forward on Sustainability

In December 2021, ESB Group launched its new strategy: 'Driven to Make a Difference: Net Zero by 2040'. This sets the target of achieving Net Zero by 2040 in alignment with the 1.5ºC goal in the Paris Agreement. In addition, the strategy committed ESB to 'step forward on social and environmental responsibility'. In December 2022, our Chief Executive, Paddy Hayes, set out our ambition in the form of a leadership statement.

**Sustainability Leadership Statement**

## Driven to make a difference through electricity as an enabler for regeneration

ESB's purpose is founded in the consistent belief in electricity as an enabler of social regeneration.

We commit to:

- Playing a full role in building a resilient electricity system of the future, where carbon-free energy will displace carbon emissions in how we power our buildings and transport.
- Enhancing nature where we operate, and supporting our host communities to develop and grow stronger.
- Empowering our people in a healthy workplace to act sustainably, supporting our customers to reach net zero and working to protect the rights of all people in our value chain.

By listening, learning and collaborating, we will create a brighter future where everyone can thrive.

Throughout the year we have worked to develop that ambition into a sustainability plan with a set of goals aligned to our key impacts across the full range of social and environmental sustainability topics. We believe electricity is a key enabler for societal regeneration.

## Sustainability in 9 Pillars (from the Sustainable Finance Pillar of the EU Green Deal)

**Climate Change**

**Biodiversity:** Protect Biodiversity and Ecosystems

**Pollution and Hazardous Waste:** Reduce/ eliminate harmful pollution

**Water:** Reduce water consumption

**Resource Use & Circularity:** Build circular value chains for key materials

**Our Workforce:** Increase diversity and strengthen culture of inclusion

**Workers in the value chain:** Influence suppliers to ensure high standards are met

**Affected communities:** Proactive, positive engagement with communities

**Customers:** Help Customers reach Net Zero

Our strategy and material impacts

**Our focus**

To address:

**Climate**

We are developing and installing energy systems for the future,

**Energy Systems**

**Sustainability Impact**

relying on:

**Our People**

interacting with / depending on:

**Community**

**Biodiversity**

**Resource Use**

and serving:

**Customers**

# Stepping forward on Sustainability (continued)

Sustainability is about benefitting people through a healthy environment and positive social impacts. To sustain human life, society needs to stay within safe environmental planetary boundaries while sustaining human needs. They can be represented as in the figure as an outer circle of environmental boundaries which are unsafe to exceed and a floor of minimum social conditions for a dignified life. The area between this social 'floor and environmental 'ceiling' can be thought of as a 'safe operating space for humanity', as proposed by economist Kate Raworth.

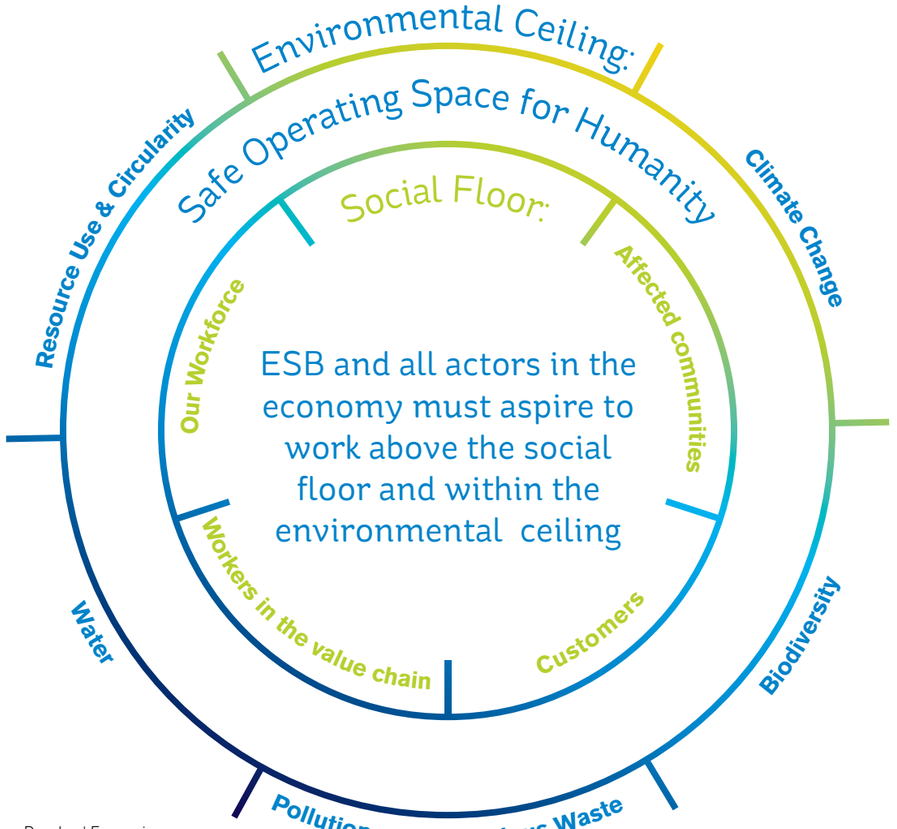
## Developing the Sustainability Plan

In developing a sustainability plan, ESB sought views from all parts of ESB and from external stakeholders. All agreed that the Net Zero goal in ESB's strategy is central. Achieving Net Zero and facilitating its realisation for other sectors through electrification is a transformational and far-reaching goal. This can be viewed as 'developing and installing energy systems of the future' from new generation, through networks and into customer's homes and businesses with smart meters and low carbon home retrofits. To deliver this, we rely on our People and how we interact with the communities we serve and the biodiversity which we coexist with, while indirectly drawing on the earth's resources through the technologies we install to serve and enable our customers.

These are our principal impacts. Our mission will be to work and collaborate over time to ensure that those impacts are positive ones. This is the focus of the commitments we are developing as part of our sustainability plan.

This is already built into ESB's strategy. As well as climate action, ESB's strategy has a headline commitment to wider sustainability. The work to spell out the headline targets of this ambition and what 'stepping forward in social and environmental responsibility' will mean is currently progressing within ESB.

The current work is to select the key targets and actions that ESB will commit to in order to achieve this. The starting point was to look at ESB's main impacts. The EU Green Deal is the programme that aims to achieve the EU's climate target of a 55% reduction in carbon emissions by 2030. What is less well known is that the EU Green Deal has a very significant financial pillar – or sustainable finance pillar. We need to attract, retain and inspire talented committed people for this transformation. This work building the future electricity system impacts on biodiversity and host communities when we develop new sites. It involves the use of resources in equipment such as wind turbine blades, grid batteries and PV panels. Circular pathways for maximising the use of the materials from these are still evolving. All of this work revolves around customer needs. All customers will be affected by the transition which is ultimately happening to serve them into the future. We need to remember the impacts on them. Our strategy commits us to help customers to reach Net Zero.




*Based on Doughnut Economics
Developed by Kate Raworth, adapted for ESB's sustainability plan and ambition

Transitioning to a Net Zero economy and a healthy environment means moving to a world with better health outcomes and a better quality of life. It is indeed a social revolution.

In doing this we need to consider our sustainability impacts – not just within our own 'four walls' but also those extending across our value chain. Our carbon footprint (on page 41) is a good illustration of this. This diagram represents our value chain from left to right. Emissions are represented by the bubbles, outlining direct (Scope 1) and indirect (Scope 2 &3) emissions within our value chain.

Note that our generation emissions currently dominate. But they cast an upstream shadow: the emissions caused by methane that leaks from the coal mines, gas wells and gas pipelines that provide the fuel used in generation, as well as its refining and transportation. These emissions plus the carbon content of network losses – the electricity used by the transmission and distribution system, another indirect emission – will decline as ESB and the electricity sector moves to renewable generation.

Also significant are the emissions from the gas we supply to customers. They are part of ESB's indirect emissions. Helping our customers to move to Net Zero is a system challenge: it will require collaboration with policymakers, retrofit companies and others. Collaboration to solve system challenges is another feature of leading sustainable organisations, which is what ESB aspires to become.

So these are our main sustainability impacts. Our plan is to make these regenerative.

This is our aim and the logical one based on the dimensions of our business, on our values and compatible with our history at the centre of previous social revolutions.

# Chief Executive's Introduction

## DRIVEN TO MAKE A DIFFERENCE: NET ZERO BY 2040

**Paddy Hayes,** Chief Executive

The latest report of the Intergovernmental Panel on Climate Change calls for deep, rapid and sustained reductions in greenhouse gas emissions to slow down and reverse global warming.

ESB is committed to playing our part. In 2022, we launched our *Driven to Make A Difference* strategy which sets a target for ESB to reach net zero by 2040. Our focus is on building and connecting renewables to decarbonise electricity, investing in infrastructure that supports greater resilience, and empowering the customers and communities we serve to use clean electricity to decarbonise heat, transport and society. While net zero by 2040 is the overarching ambition of our strategy, we are also conscious of the impact of our operations on people and planet. We are challenging ourselves to ensure that our activities make positive social and environmental impacts. ESB's Sustainability Leadership Statement, based on our belief in electricity as an enabler of social regeneration, reinforces our commitment to building a resilient, zero carbon, energy system. It challenges us to enhance nature where we operate and to support our host communities to develop and thrive. And it commits us to empowering our workforce to act sustainably, supporting our customers to reach net zero and protecting the rights of people in our value chain.

The past year saw unprecedented increases in wholesale energy costs, driven by concerns relating to European gas supplies and the war in Ukraine. This not only pushed up retail electricity prices for customers, it also caused an increase in demand for coal generation and a consequential increase in ESB's carbon emissions. This has changed more recently, and, as gas prices have softened somewhat, the demand for coal generation has fallen back.

During 2023, we made capital investments that will deliver lasting emissions reductions. ESB Networks and NIE Networks connected a record 688MW of new renewables and 79MW of battery storage. ESB Generation, working with Bord na Mona, made significant progress in the construction of the second phase of Oweninny, bringing the total operational capacity of that onshore wind farm in Co. Mayo to 172MW. Working with EDF, ESB made real progress on the 450MW Neart na Gaoithe wind farm off the coast of Fife in Scotland. We also significantly increased our pipeline of onshore and offshore wind and solar developments.

Meanwhile, Electric Ireland has worked to mitigate the impact of high prices on customers through a range of supports including delaying price increases for as long as possible and establishing a €5m hardship fund. We also took the decision to forgo profits from our residential supply operations in ROI, returning €55m to customers in the form of energy credits.

Electric Ireland also offered customers a range of products and services to help them implement sustainable energy savings, including EV chargers, solar panels and smart meter tariffs. Together with the Tipperary Energy Agency, Electric Ireland Superhomes doubled the number of deep homes retrofits it delivered in 2022. ESB Smart Energy Services helped large customers decarbonise heat and transport and Siro, our superfast broadband joint venture with Vodafone, is reducing carbon by supporting people and businesses to work from their homes or local communities.

To further protect customers from extreme price volatility and reduce emissions in line with 1.5 degrees, the clean electricity transition must continue to accelerate. For ESB, this means maintaining the financial and organisational capability to invest in low carbon infrastructure, collaborating with industry partners to increase the pace of change, and embracing innovative technologies.

This decade is critical. Increasingly clean electricity and widespread electrification offer a solid foundation for zero carbon living. At ESB, we are driven to make a difference and continue to invest in the electricity system in order to deliver Net Zero by 2040 and to create a brighter, more sustainable future for all.

**Paddy Hayes,**
Chief Executive
09 March 2023

# ESB's Business Environment

In December 2021, ESB's Board adopted a new strategy - Driven to Make a Difference: Net Zero by 2040 - based on an extensive review of the internal and external factors impacting the overall strategic direction of the Group.

Since December 2021, there have been several major external developments in the broader economic, political, market and policy landscape within which ESB's strategy must be framed. 2022 has seen a dramatic change in ESB's business environment which has potential implications for ESB's strategy over the short and long-term. These developments are summarised in Figure 1.

### Russia's Invasion of Ukraine

The Russian invasion of Ukraine in February, combined with a reduction in gas exports to Western Europe has created both an unprecedented escalation and volatility in gas prices and major concerns regarding security of energy supply at European and national level.

### Higher Electricity Prices

The escalation of gas costs has translated into higher electricity prices with day ahead European wholesale gas prices multiples of what they were in 2021. This is leading to significant pressure on household living standards and the cost base of businesses.

### Energy Policy Interventions

In response to the large-scale social and political pressures stemming from increased electricity prices, the European Union and national governments across Europe (including Ireland and the United Kingdom) have responded with significant, if varied at times, energy policy interventions including radical forms of intervention in gas and power markets (both wholesale and retail). This was combined with large-scale fiscal support for households and businesses, policies to reduce energy demand and measures to lower dependence on fossil fuels by accelerating the deployment of renewables and the use of hydrogen and increasing electrification.

### Energy and Climate Policy

The long-term implications for European and national energy and climate policy of the factors above are still highly uncertain but are likely to be significant with the level of uncertainty in Ireland amplified by the additional complication of a risk to security of supply stemming from a potential imbalance between generation capacity and demand.

### Macroeconomic Environment

The macroeconomic, financial and interest rate environment has deteriorated, driven in part by the issues in the energy sector described above but also by post-COVID factors (e.g. supply chain disruptions, overhang of household savings). Since the start of 2022, inflation has surged in Europe and most developed economies and Central Banks have responded with aggressive increases in interest rates. Equity market valuations and consumer confidence metrics have declined and economic growth forecasts have been revised downwards.

### Digitalisation

The uptake of technologies leveraging data analytics such as machine learning and artificial intelligence continues to drive the transformation of many businesses and industries including those within the utility sector.

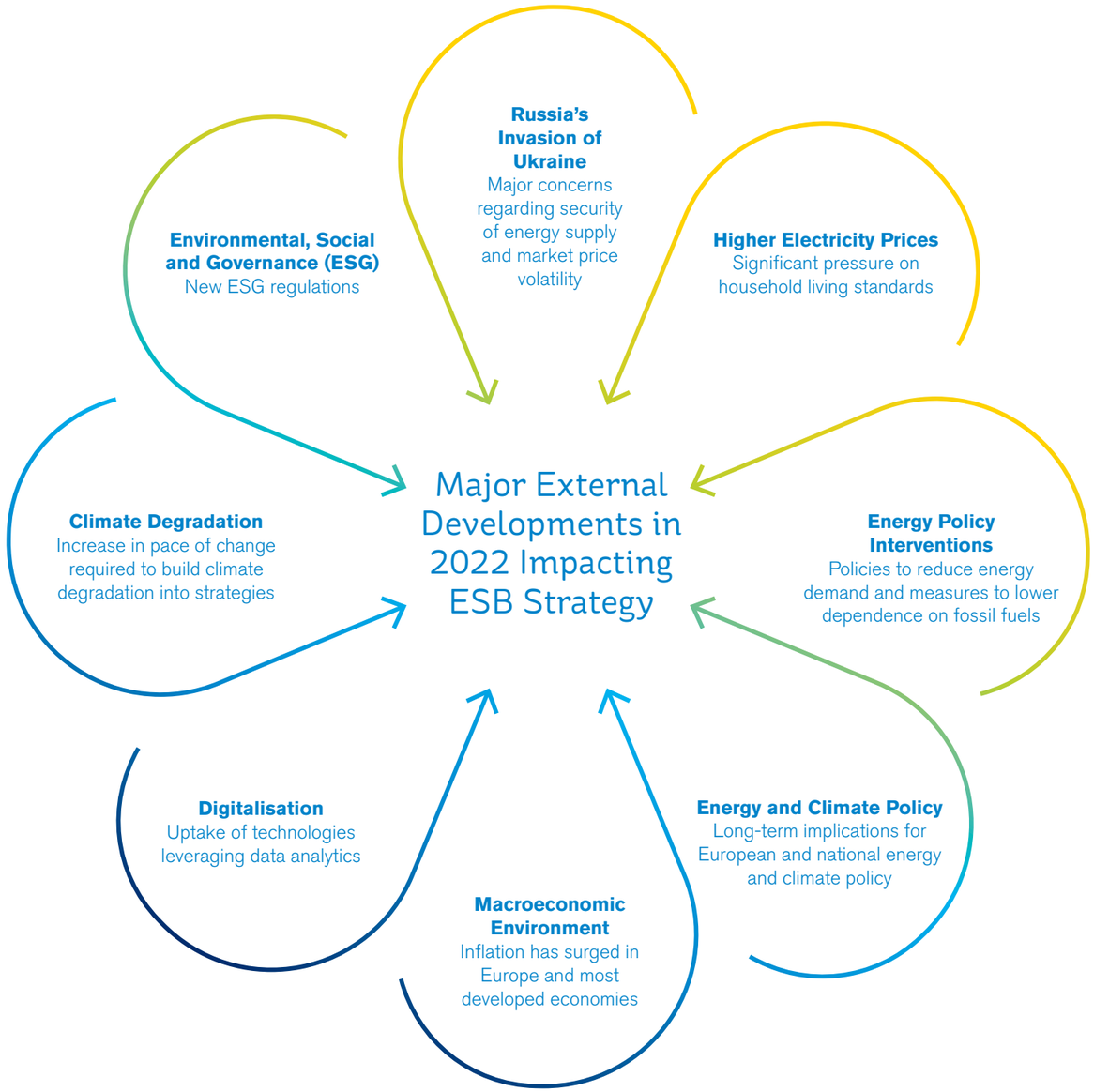
### Climate Degradation

As indicated in COP27 discussions (November 2022), and as the long-term impacts of climate change begin to take hold, an increased recurrence of extreme weather events threatens business continuity and vulnerable critical infrastructure. This signals that an increase in the pace of change is required for organisations to build climate degradation into their strategies.

### Environmental, Social and Governance (ESG)

New ESG regulations and increased stakeholder scrutiny mean organisations must build meaningful ESG policies into their strategies.

**Figure 1 - Major External Developments in 2022 Impacting ESB Strategy**



# TCFD Disclosure

ESB's processes around climate risk and opportunity build our organisational approach to Climate Related Financial Disclosure. We follow the format and guidance of the Task Force for Climate-Related Financial Disclosure (TCFD).

This section describes ESB's processes around climate risk and opportunity. It follows the format and guidance of the Task Force for Climate-Related Financial Disclosure (TCFD). It is planned to build on and develop processes and the detail of these disclosures over the next few years.

**Core Elements of Recommended Climate-Related Financial Disclosures**


**Governance**
The organisation's governance around climate-related risks and opportunities

**Strategy**
The actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning

**Risk Management**
The processes used by the organisation to identify, assess, and manage climate-related risks

**Metrics and Targets**
The metrics and targets used to assess and manage relevant climate-related risks and opportunities

**ESB Board of Governance**


**Governance of Environment and Sustainability**
Climate Risk and Opportunity is integrated into the strategic review process in ESB. It is also linked to the Enterprise Risk Management process through a Principal Risk on climate. The Safety, Sustainability and Culture Committee of the Board monitors the management of safety, environment and climate risk and climate opportunities. The Audit and Risk Committee oversees the overall Enterprise Risk Management process for ESB Group. The Committee reviews risks throughout the year as well as having a 'deep dive' day on risk, including climate risk.

The Environment and Sustainability Leadership Team, a group of senior managers from across the Group, receive regular updates on environmental, sustainability and climate issues. The Group Safety, Health and Environment Manager and the Environment and Sustainability Manager are members of this group. The Environment and Sustainability Managers group provide day to day updates on environment and sustainability and pool knowledge across the Group.

# TCFD Disclosure (continued)


## Strategy

ESB's current strategy is a climate and sustainability strategy. Its centrepiece is the target to achieve net-zero Green House Gas (GHG) emissions by 2040. It is a response to policy and physical changes brought about by climate change and is anchored in the Group's purpose to deliver a brighter future for the customers and communities served.

The strategy is driving transformation in every part of the Group, with new product and service offerings and investments in infrastructure that will empower business, retail and industrial customers to reduce emissions and operate more efficiently and sustainably. ESB's electric vehicle (EV) infrastructure network is being refurbished and extended to help serve the current public network needs of EV owners. ESB's generation business has set a target for reduced carbon intensity by 2030 and net zero by 2040. ESB's networks businesses in Ireland and Northern Ireland (ESB Networks and NIE Networks) are investing in smart, reliable infrastructure to increase resilience and reliability, enable widespread electrification and meet the changing needs of customers.

At the end of 2022, over 1.1 million smart meters have been rolled out in the Republic of Ireland, improving the efficiency of the network and giving customers access to smart technologies that will enable them to manage their energy use more sustainably. ESB is also investing in emerging technologies with the potential to play a key role in the future decarbonised energy system, such as battery storage and green hydrogen. All of these initiatives to support climate targets and policies feed into ESB's financial planning through the integrated business planning process. Annual capital investment has increased significantly to support the delivery of ESB's strategy, as increased investment in renewables, electricity infrastructure and customer solutions is needed to mitigate climate risk and capitalise on new opportunities presented by the energy transition.

The strategy is relatively resilient to climate risks as it is in effect a climate-led strategy. It is regularly reviewed by the Executive Committee in light of changing conditions to assess potential impacts and any need for new actions in response. Scenarios, including climate scenarios are used as part of this review. Progress on strategic goals is monitored and new developments in the environment and the status of climate risk and opportunities are considered in the review and actions are agreed, if appropriate. See climate risks and opportunities below.

## Risk Management

ESB has identified the main transition and physical climate risks and opportunities across the Group and climate risk is a Principal Risk for ESB as set out in our Annual Report 2022 (pages 24-42). Three climate risk scenarios were used in this assessment: one physical scenario, based on the Inter-Governmental Panel on Climate Change (IPCC) Representative Carbon Pathway (RCP) 4.5 and two transition scenarios, one based on the Irish Government's 2019 Climate Action Plan and the second on the more ambitious climate commitments for 2030 in the 2021 Climate Action Plan and Climate Act, respectively. The IPCC RCP 4.5 scenario is based on global carbon emissions peaking in 2040 followed by a moderate decline thereafter. This is seen as a suitably severe possibility but more realistic than the no mitigation pathway. The transition scenarios broadly align with the EU's Clean Energy Package and the EU Green Deal respectively. ESB's current definitions for short term, medium term and long-term time horizons are: short term 0-5 years (1 ESB Networks' price review), medium term: 5-10 years (2 price reviews) and long term: 10-40 years (to tie in with typical asset lives).

### Transition and Physical Climate Risks and Opportunities

| Type | Category | Risk/Opportunity | Potential financial impact | Likelihood | Timescale (years) |
|---|---|---|---|---|---|
| **Physical Risks** | Storms | Increased frequency of severe storms | Increased repair costs and penalties for networks and station assets | Likely | 0-5 |
| | Flooding | Increased riverine flooding and episodes of intense rainfall | Higher frequency of hundred year plus flood events on rivers with dams | Likely | 0-5 |
| | Flooding | Increased riverine flooding and swamping due to water table rise | Damage to network substations, customer outages. Damage to generation assets | Likely | 0-5 |
| **Transition Risks** | Market and regulation | Market and regulatory environment for generation | Existing gas generation assets lose value potential | Likely | 5-10 |
| | Policy | Policy environment for offshore generation | Potential delay in planning framework legislation | Likely | 5-10 |
| | Policy | Increased pace of renewable connection vs. planned | Potential increase in cost to meet timelines | May occur | 5-10 |
| | Policy | Increased heat pump retrofit of homes | Potential increase in cost to meet timelines | May occur | 5-10 |
| **Transition Opportunities** | Policy | Pace of electrification faster than planned | Increased demand for retrofit service | Likely | 0-5 |
| | Policy | New low-carbon electricity system investment | Increased investment opportunities in zero-carbon generation, storage and system services | Likely | 0-5 |

## Metrics and Targets

The key metric for climate risk used in ESB is the ratio of grams of $CO_2$ to kWh generated. ESB's target for 2030 is 140g $CO_2$/kWh. ESB's target of net-zero emissions by 2040 is as explained in our Strategy and our Scope 1, 2 and 3 emissions are fully disclosed in the emissions section of this report, including details of the verification and assurance of emissions data.

# Strategic Performance Indicators (SPIs)

Strategy in Action – See Chapter 2 for examples of strategic delivery and Annual Report 2022 (pages 66 to 85) for details of progress on Strategic Objectives by Business Unit

## Strategic Objectives

| | Indicator | Progress as at end of 2022 | 2030 Target (unless otherwise stated) | SDG Contribution |
|---|---|---|---|---|
| **Decarbonised Electricity**<br>Develop and connect renewables to decarbonise the electricity system by 2040 | ESB renewable generation | 923 MW | >5,000 MW | |
| | Scale of low-carbon energy connected to our networks | 5.4 GW in ROI<br>1.8 GW in NI | >15 GW in ROI<br>2.6 GW in NI | |
| | Share of ESB generation output from zero-carbon sources | 15% | 63% | |
| **Resilient Infrastructure**<br>Provide resilient infrastructure for a reliable low-carbon electricity system | Networks Regulated Asset Base (RAB) | ESB Networks: €9.7bn<br>NIE: €2.3bn | ESB Networks: €13 - 14bn<br>NIE: €3 - 3.5bn | |
| | Carbon intensity of the electricity ESB produces | 419g $CO_2$ / kWh | 140g $CO_2$ / kWh | |
| **Empowered Customers**<br>Empower, enable and support customers and communities to achieve net zero | Number of smart meters installed | 1.1 million | 2.6 million | |
| | Electrification of transport network: public EV chargers | 888 (island of Ireland and GB) | 3,000 (total) | |
| | Customer satisfaction | 73% (Electric Ireland residential electricity) | >85% across all customer-facing business lines | |

## Foundational Capabilities

| | Indicator | Progress as at end of 2022 | 2030 Target (unless otherwise stated) | SDG Contribution |
|---|---|---|---|---|
| **Our People**<br>Ensure we have the people capability to deliver our strategic objectives with a strong values-based and inclusive culture | Employee engagement (Our Voice Staff Survey) | 7.1 / 10 | 7.3 / 10 | |
| | Health and Wellbeing score (Our Voice Staff Survey) | 7.2 /10 | 7.8 /10 | |
| **Digital & Data Driven***<br>Leveraging data and technology, transform ESB to a data driven digital utility | Percentage of customer engagements that are digital | On track to be top quartile by 2026 | Top quartile (by 2026) | |
| **Financial Strength**<br>Maintain the financial performance and strength required to deliver our purpose | Strong investment grade credit rating | Credit ratings of A- or equivalent and BBB+ on a standalone basis | BBB+ on a standalone basis | |
| | Return on Capital Employed (ROCE) | 6.9% | ROCE >WACC | |
| **Sustainable & Socially Responsible**<br>Step forward on social and environmental responsibility, cultivating a safe, sound and sustainable ethos in line with our values | ESB Greenhouse Gas Emissions | Will be included in ESB's Sustainability Report which will be published in 2023 | An externally accredited Science-Based Target by 2030 | |

*This metric does not include NIE Networks or So Energy

Chapter 2

# Our Approach to Delivering a Brighter Future

Chapter 2

# Our Approach to Delivering a Brighter Future

At ESB, we're driven to make a difference. Delivering a brighter future, creating and connecting sustainable, reliable, affordable energy and supporting the customers and communities we serve to achieve net zero.

While this remains our North Star, our strategy accelerates the pace of change, providing clear deadlines and accountability for achieving our target by 2040, in a way that supports ESB's continued growth, and our financial capacity to invest in a net zero future.

While influenced and shaped by external developments, our Strategy is anchored in our purpose to deliver a Brighter Future for the customers and communities we serve and links directly to the UN Sustainable Development Goals.

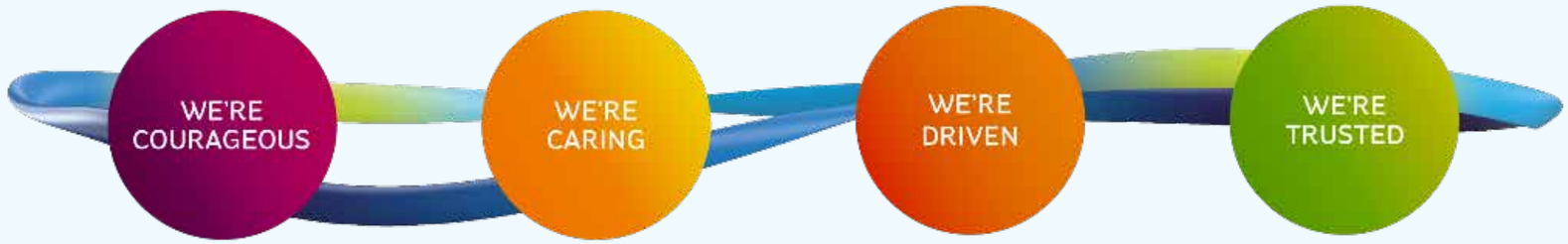
The 17 UN Sustainable Development Goals (SDGs) provide a global and widely accepted blueprint to achieve a better and more sustainable future for all by 2030. They act as a call to action for countries, NGOs, companies and individuals to align their actions around common goals that matter to people and planet.

Our strategy is focused on three of the SDGs where ESB can make a lasting and tangible difference, namely:


Chapter 2 outlines and details some examples of ESB's delivery on being Driven to Make a Difference during 2022.

## Our Values

ESB's values are deeply rooted in the organisation and encapsulate the integrity and ambition that ESB stands for. They are integral to the development and delivery of the strategy - they inform decisions, and they underpin our commitment to earning the trust that customers and communities place in ESB.




Each of us is prepared to challenge the way we've always done things, stand up for what we feel is right and try better ways of working.

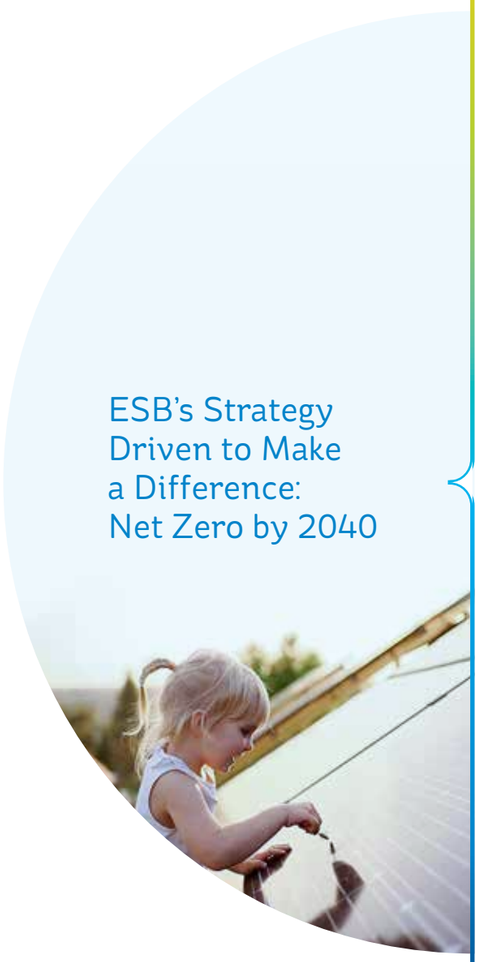
We're putting customers' current and future needs at the heart of what we do and we keep ourselves and others safe and healthy.

We bring passion and persistence to what we do every day, innovating and collaborating to meet the challenges and opportunities ahead.

We each play our part, taking ownership of our responsibilities, seeing the job through and protecting our own health and safety, as well as others.

# Strategy

ESB's strategy is informed by developments in the external environment and driven by our enduring commitment to deliver a brighter future for all.




## Strategic Objectives

ESB has identified three strategic objectives, aligned with Sustainable Development Goals 7, 9 and 13, which are core to the delivery of our net zero ambition.

| | |
|---|---|
| **Decarbonised Electricity**<br>Develop and connect renewables to decarbonise the electricity system by 2040 | This objective reflects ESB's commitment to supporting the societal goal of achieving net zero emissions through the generation of renewable electricity and by enabling the connection of renewable generation to our electricity networks. We will deliver a fivefold increase in our renewable generation portfolio to 5,000 MW by 2030, and ESB Networks and NIE Networks will increase the amount of renewable energy connected to our networks over the same period. |
| **Resilient Infrastructure**<br>Provide resilient infrastructure for a reliable low-carbon electricity system | This objective recognises the fundamental and increasing importance of having stable, robust infrastructure to ensure secure, reliable electricity supplies. New technologies and fuels will be deployed to transition our thermal generation to a zero-carbon dispatchable portfolio which, combined with existing and new storage assets, can compete to meet society's need for non-intermittent sources of energy. ESB Networks and NIE Networks will invest in smart, reliable network infrastructure to enable increasing levels of renewable generation, and to underpin widespread electrification of transport and heating. |
| **Empowered Customers**<br>Empower, enable and support customers and communities to achieve net zero | This objective reflects our commitment to working alongside customers and communities as a trusted energy partner, providing best value sustainable energy and supporting them to achieve net zero. We will use data and digital technologies to deliver convenient and personalised customer experiences and reduce our cost to serve. We will also develop insight-driven products and services to meet diverse and evolving customer needs. ESB Networks and NIE Networks will put in place solutions for our networks' customers to enable the electrification of heat and transport and will make it easy for customers and communities to participate in markets for flexibility and make active choices in their use of energy. We will leverage our telecoms and fibre infrastructure to provide excellent telecommunications services and enable sustainable living. |

## Foundational Capabilities

Underpinning the strategic objectives are four foundational capabilities which are essential to success.

| | |
|---|---|
| **Our People**<br>Ensure we have the people capability to deliver our strategic objectives with a strong values-based and inclusive culture | This capability references the critical role of our people in delivering our purpose and strategy in line with our values. We will create an environment that encourages creativity, commitment and ongoing learning through a safe, people centric and inclusive experience. This will underpin a high-performance, innovative, sustainable and customer-focused culture. We will support this through a leadership capability that is inspiring, adaptive, empathetic and curious, and through an agile and efficient organisational design that can meet the changing needs of our customers and the business. |
| **Digital & Data Driven**<br>Leveraging data and technology, transform ESB to a data driven digital utility | This will see ESB transformed into a data driven digital utility delivering excellent customer experience (by leveraging customer insights and digital engagement channels), an enhanced people experience (by becoming a technology enabled workforce) and modern business operations and processes enabled by technology. |
| **Financial Strength**<br>Maintain the financial performance and strength required to deliver our purpose | We will deliver on ESB's commercial mandate to provide shareholder value, growing the business while maintaining our financial strength. Consistently strong financial performance, underpinned by efficiency and investment discipline, will ensure that we can deliver appropriate shareholder returns, maintain a strong investment grade credit rating and secure optimal long-term funding to match investment plans for a net zero future. |
| **Sustainable & Socially Responsible**<br>Step forward on social and environmental responsibility, cultivating a safe, sound and sustainable ethos in line with our values | To positively impact on the experiences of employees, customers, partners and other stakeholders, we will embed a culture that prioritises safety, environmental performance and sustainability. We will meet stakeholder expectations relating to, but not limited to, Environmental, Social and Governance (ESG) performance and safety, and we will adopt a best practice transparency and compliance framework to track and report on progress. We will achieve net zero emissions by 2040 and secure an accredited science-based carbon target for 2030. We will collaborate with stakeholders to provide thought leadership on decarbonisation policy in Ireland and Northern Ireland. |

## Strategic Framework

Driven to Make a Difference: Net Zero by 2040 has been developed using ESB's Strategy Framework which ensures that strategic actions and decisions are consistent with ESB's purpose and values, and that there is a clear and consistent 'line of sight' both for those within the organisation and for external stakeholders.

**Our Purpose**

**Supporting global goals**

- Ensure access to affordable, reliable, sustainable and modern energy for all
- Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation
- Take urgent action to combat climate change and its impacts

ESB's strategy directly supports the UN Sustainable Development Goals (SDGs) which provide a global blueprint to achieve a better and more sustainable future for all by 2030. The strategy is focused on three of the SDGs where ESB can make a lasting and tangible difference.

**Our Strategy**
**Strategic Objectives**
**Foundational Capabilities**

**Our Values**

# Decarbonised Electricity

Develop and connect renewables to decarbonise the electricity system by 2040

ESB is ensuring that clean energy is the fuel of the future – continuing to make everything possible by investing in infrastructure to bring clean, reliable electricity to customers.

## MSD and ESB launch Ireland's largest self-supply Solar project

ESB's Smart Energy Services has delivered Irelands largest behind the meter solar project, a 7.3MW ground mounted solar PV array for MSD at their facility in Ballydine. It is estimated that the system will generate approximately 7.9GWh of clean renewable electricity on an annual basis for the MSD site, ensuring up to 20% of the site's energy requirements are now coming from renewable energy sources.

ESB's Smart Energy Services deliver a range of sustainable solutions to reduce energy costs and lower carbon emissions for large businesses. ESB's Smart Energy Services has already delivered projects for more than 300 large businesses across Ireland and the UK. Their list of clients includes Tesco, ABP Food Group, Ardagh Group, the Dublin Airport Authority amongst many others. Smart Energy Services (esb.ie)

## Oweninny Phase 2 Energised

Oweninny Wind Farm, a 50:50 joint venture between ESB and Bord na Móna, successfully energised phase 2 of the wind farm in September 2022, bringing a further 83MW of clean renewable energy onto the electricity grid. The wind farm's 2 phases consist of 61 turbines delivering an installed capacity of 172MW.

The project site comprises of approximately 2,400 hectares and was formerly utilised for peat harvesting by Bord na Móna to provide fuel for the ESB Bellacorick peat fired power station, which ceased operation in 2005. Oweninny Wind Farm

## Neart Na Gaoithe (NnG) Wind farm opens its state-of-the-art Operations and Maintenance (O&M) base in Eyemouth, Berwickshire

NnG has the potential to generate 450 MW of renewable energy, which is enough power to supply around 375,000 Scottish homes – and will offset over 400,000 tonnes of $CO_2$ emissions each year. The opening of the Operations and Maintenance (O&M) base is a significant milestone in this project as we work together to bring clean renewable power to the people of Scotland and help the country achieve its climate targets.

# Decarbonised Electricity (continued)

## Renewable Connections

In 2022 ESB Networks has connected 23 large renewable generation projects to the Network with total green energy capacity of **688 MW**, smashing the previous record year of 573 MW set in 2017. The increase represents a 15% increase in renewable generation year on year bringing the total MIC to just under 5.4 GW. 2022 also saw four battery energy storage projects connect to the network, bringing **79 MW** of additional energy storage into service. Currently, there are **768.5** MW of energy storage on the network, (figures include Turlough Hill at 292 MW). Battery energy storage was dispatched during a cold spell and during the 2022 world cup final to manage the peaks just after the penalty shoot-out.

## Battery Energy Storage

ESB is continuing to make significant investments in delivering a pipeline of grid-scale battery technology projects in line with our NetZero by 2040 strategy. In July 2022, we opened a major battery plant at our Aghada site in Co Cork, which added 19MW (38MWh) of fast-acting energy storage to help provide grid stability and deliver more renewables on Ireland's electricity system.

As can be seen in our time-lapse, the second phase of the project, Aghada II, is continuing to make significant progress. Once complete, the project, among the largest in Europe, will deliver 150MW (300 MWh).

Along with additional flexible technologies, these high-capacity batteries will store excess renewable energy for discharge when required, and in doing so, support Ireland in reaching its ambitious climate targets by 2030.

## Moneypoint Synchronous Compensator

In November, Minister for the Environment, Climate and Communications, Eamon Ryan TD launched ESB's new synchronous compensator with the world's largest flywheel at Moneypoint Generating Station in Co Clare. This is Phase One of Green Atlantic @ Moneypoint – our multi-billion-euro project to transform the site into a green energy hub.

# Resilient Infrastructure

Provide resilient infrastructure for a reliable low carbon electricity system.


## ESB Networks for Net Zero Strategy

Networks for Net Zero Strategy sets out ESB Networks' role in enabling the delivery of the Government's Climate Action Plan 2023 and supports the decarbonisation of the electricity system by 2040. It is based on our role in transforming the electricity distribution network that will empower customers to decarbonise their energy consumption, and in our role as Transmission Asset Owner in delivering the ambitious electricity transmission programme.

networks-for-net-zero-strategy-document.pdf (esbnetworks.ie)

## NNLC Programme

ESB Networks' National Network, Local Connections Programme is a multi-year project that will transform how energy on Ireland's electricity distribution network is managed. It will ensure that the distribution system can monitor, forecast, and manage power at a local level. In this new energy landscape, customers and communities across the country will become more active in managing and controlling their electricity usage. Through active participation by all in the process, we can develop a distribution system that is safe and secure, introducing new localised marketplaces which are responsive to new local and regional needs, and make a positive impact in the fight against climate change.

In 2022, a pilot to support the role of early adopters in local markets was delivered. This is the first time ESB Networks has worked with customers in paying for demand side flexibility at an aggregated customer level.

## Smart Meters

During 2022 ESB Networks continued the replacement of over 2.4 million electricity meters in homes, farms, and businesses with next generation smart meters to support the transition to a low carbon electricity network. In 2022, 482,000 smart meters were installed, despite a global supply chain issue, by almost 400 installers across the country. During 2022 the programme reached a significant milestone of 1 million smart meter installs, completing 1.1 million installs by year end.

# Resilient Infrastructure (continued)

## Network Improvement Programme

ESB Networks is currently uprating the 10 kV medium voltage (MV) network to 20 kV. This provides a number of advantages such as, four times more capacity on the MV network and reduction of losses. Currently approximately 53% of the MV network is now rated to 20 kV.

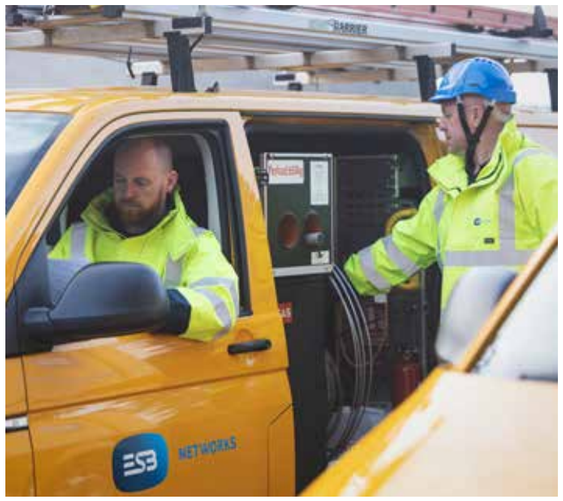
The Network Improvement Programme is a project which involves the upgrade of the network, from poles and wires to substations and mini pillars. This programme will improve the safety, capacity, reliability and resilience of the network which means a stronger electricity network that can stand up to severe weather conditions, resulting in less unplanned and prolonged outages. By increasing the capacity of the network, it means that we can connect more new homes and businesses as well ensuring capacity to enable the electrification of heat and transport.

## Emergency Standby Generation

ESB is continuing to support Ireland's security of supply with the delivery of circa 200MW of electricity generation, enough to power more than 40,000 homes, that will be operational at our North Wall site in Dublin later in 2023.

Standby Generation capacity has an important role to play in meeting national peak demand, in particular when the wind is not blowing.

This time-lapse video charts the project's progress to date. Pouring has taken place for the concrete foundations for the first unit while steel works are ongoing on the remaining units ahead of the arrival of a shipment of large-scale equipment that is due on-site in the coming months.




## Improving & expanding our public EV charging network

ecars (esb.ie)

ESB Energy for Electric Vehicles

ESB continues to expand and improve its EV charging network across Ireland and the UK. At the end of 2022, 888 chargers were operational and network reliability is approaching 99%. ESB ecars now have 86,000 customers across all jurisdictions.

Approximately 75% of all EV drivers in Ireland are ecars customers. 21 new High-Powered Charging (HPC) hubs have been commissioned in ROI with a further 20 in various stages of construction. These hubs are primarily located on motorway or primary routes and will provide 100km of range in six minutes. In Northern Ireland, ecars replaced the worst performing 20% of the charging network in 2022 and will complete the replacement of the entire network including the addition of five high-powered charging hubs beginning in Q1 2023.

In the UK, ESB continues its roll out of fast charging infrastructure in Birmingham, Coventry and London, in collaboration with city councils and transport agencies. Our plans aim to deliver over 1,000 fast chargers in urban areas, enabling the electrification of city taxi fleets as well as enhancing public charging infrastructure.

# Empowered Customers

Empower, enable and support customers and communities to achieve net zero.

## Electric Ireland solar PV and Microgeneration

Solar Panels | Solar PV Grant | Electric Ireland Shop

Electric Ireland installation service for solar PV provides customers with the means to self-generate clean electricity to power many of the devices in their homes. With the introduction of the microgeneration support scheme in 2022, any surplus electricity exported onto the grid is eligible for a payment. At the end of 2022 Electric Ireland supported c.18,000 microgeneration customers avail of the microgeneration scheme with first payments being made to customers in December 2022.

## Beat the Peak

In 2022, ESB Networks working as part of a wider suite of initiatives led by the CRU and the Department for Environment, Climate and Communications launched three Beat the Peak pilots which supported both domestic and commercial customers. These pilots aimed to help individuals and organisations take control of their electricity usage by shifting electricity demand outside of peak hours.

**Beat the Peak Commercial Active:** This is a financially incentivised initiative to encourage eligible commercial electricity users to reduce their electricity demand during specific times over the course of the winter 2022 period, Q4 2022- end of Q1 2023. This initiative is making an impact on peak electricity demand, and the lessons learned will be applied across future winters. www.Esbnetworks.ie/active

**Beat the Peak Commercial:** The Beat the Peak Commercial Pledge initiative encourages participation from any commercial, semi-state and public sector organisation willing to 'pledge' to specific actions or measures to reduce their electricity demand at peak times. www.Esbnetworks.ie/pledge

**Beat the Peak Domestic:** This initiative is open to all domestic customers, regardless of their electricity supplier and encourages peak demand reduction. It gives customers the knowledge and tools to take control of their electricity and customers may even be rewarded for supporting during times of peak events. www.Esbnetworks.ie/pilot

## RULET – Rural-Led Energy Transition

RULET is an initiative within the SPIRE 2 project aimed at reducing or eliminating the risk of low-income households being left behind in the transition to clean, smart, integrated energy systems.
Led by Ulster University and the Northern Ireland Housing Executive (NIHE), and partners, NIE Networks, Energia/PowerNI, heat pump manufacturer Grant of Birr, Co Offaly, and smart heating control developer Climote, RULET is focused on making the full benefits of smart energy technology available to the most vulnerable households in the western counties of Northern Ireland, a wind energy hotspot.

## Electric Ireland SuperHomes – A 'One Stop Shop' For Your Home Energy Retrofit

Home Retrofit One Stop Shop - Electric Ireland Superhomes

A joint venture by Electric Ireland and Tipperary Energy Agency - 'Electric Ireland SuperHomes' – was launched in 2021 with the ambition to guide Irish homeowners to warmer, comfortable and more energy efficient homes and support Ireland's climate action targets through a commitment of delivering 35,000 deep home energy upgrades by 2030, as part of the national plan to retrofit 500,000 to B2 or better BER rating by 2030. 2022 saw the approval of Electric Ireland SuperHomes as Ireland's first "One Stop Shop" for home energy retrofits and over 200 deep retrofits completed delivering over 3GWh of energy savings and the avoidance of 1,000 tonnes of $CO_2$ per annum.

# Our People

ESB is investing in infrastructure and solutions to enable people, businesses, and communities to live low carbon lives

## So Energy – International Women's Day – Break the Bias

Great value green energy made easy | So Energy

In 2022, So Energy celebrated International Women's Day with a look at what we can do to break the bias of women working in the Energy Industry. While equality in all its forms is at the heart of the company's decision making and the growing number of women joining the business and being appointed to senior positions represents movement in the right direction – there is still more that all of us can do, to be bold and stand as an example for the rest of the industry.


## Growth in Female Apprenticeship numbers

ESB Networks has a long tradition of promoting and delivering high quality craft apprenticeships. We promote apprenticeships through school engagements, careers fairs and targeted social media during our campaigns. As part of this, we have sought to encourage women to consider electrical apprenticeships, and in our 2022 campaign, 22 of the 92 new apprentices were female.

This brings the total number of female apprentices in training to 58. This is significant in our industry and ESB Networks has shown leadership in this area. Having a diverse workforce reflecting the communities that we serve is a key priority for ESB Networks and ESB.


## Smart Working – Post Covid

In early 2022, ESB began to reopen offices, including the new Fitzwilliam 27 head office building, transitioning out of the COVID-19 pandemic arrangements into a Smart Working hybrid arrangement for many office based workers.

Smart Working is ESB's term for how we work at site, in offices and remotely, building on the massive once-in-a generation change to the world of work driven by COVID-19. Through Smart Working, ESB is empowering people with the autonomy, flexibility and digital tools to deliver on ESB's strategy.

ESB has laid solid foundations for a sustainable hybrid model – this will deliver better business results, support sustainability goals and improve wellbeing while enjoying the benefits of an inclusive, flexible working culture. In 2023, the organisation will continue to Try, Learn, Adapt and Apply to further evolve the best ways of working.

# Our People (continued)


## Gender Pay Gap

In December 2022, ESB published its second Gender Pay Gap report. Increasing all aspects of diversity of ESB's workforce, including gender, and reducing the gender pay gap is a priority and a business imperative for ESB.

- ESB's mean gender pay gap at 30 June 2022 is 10.9%, an improvement of 0.7% on 2021
- When overtime is excluded, the gap reduces to 3.25%, an improvement of 1.25% on 2021
- The median gender pay gap, excluding overtime, is -1.4% (the median hourly rate is slightly higher for females)

## Employee Volunteering

Employees in ESB volunteer in many ways from giving time to the running of the Energy For Generations (EFG) fund and Electric Aid (ESB's staff charity), to getting involved in initiatives that ESB funds, to organising fundraising events. In addition, when ESB employees volunteer over 20 hours of their time or fundraise at least €250 in a calendar year, they can apply to the ESB's EFG fund for a grant of €250 to that charity organisation, increased to €500 for support of refugees.

ESB is an active supporter of the Time to Read, Time to Count and Skills at Work programmes, run by Business in the Community, which aim to improve literacy and numeracy initiatives in primary schools throughout Ireland. In 2022, ESB employees volunteered nearly 600 hours in support of these programmes at eight schools.

# Digital & Data Driven

Leveraging data and technology, transform ESB to a data driven digital utility


## Electric Ireland Smart Tariffs and energy usage insights

Switch to our best electricity and gas price plan | Electric Ireland

Electric Ireland has developed a range of Smart Tariffs called Home Electric + to enable customers leverage the benefits of the national smart meter roll out. These smart tariffs include 24-hour tariffs where the rate is the same every hour of the day and Time of Use tariffs where the rate changes between Peak, Day, Night and special times like Weekend and Night boost hours. A core benefit of our Time of Use tariffs is that they allow customers to shift usage to off peak times and benefit from lower electricity rates – helping to manage costs as well as benefiting the environment.
All of Electric Ireland's Home Electric+ plans come with advanced analytics. Customers can see detailed information about their electricity usage, such as when they have high electricity demand and which appliances are using the most energy and to discover ways to use less with personalised advice.

## ESB Smart Energy Services – Energy Management Hub

Energy Management Hub (esb.ie)

Energy is one of the highest costs for any business. ESB Smart Energy Services Energy Management Hub monitors all energy and water usage in customers buildings and enables ESB's team of experts to develop solutions to control and reduce it, enabling large financial and carbon emissions savings. Our process offering involves:

- Measure - to gain an understanding of the energy usage we apply measuring and tracking systems in real-time and highlight future energy saving opportunities with some well-placed meters across the customers premises.
- Monitor and Analyse - These measurements are provided to our team of energy analysts over the cloud with real-time information on how much and how efficiently energy is being used. They can optimise systems in real-time to highlight faults or anomalies to make adjustments on the spot.
- Implement - We provide energy insights based on our expert analysis and knowledge of similar buildings. We highlight and recommend potential long-term improvements, energy saving projects and efficiency measures to reduce energy.

## Long Term Evolution (LTE) network

ESB Networks secured bandwidth to develop a private LTE (P-LTE) network, the first roll-out of this technology solution by a utility in Europe. The P-LTE will be deployed over the next three years and will support additional connectivity to ensure the safe and reliable operation of the electricity infrastructure at transmission and distribution levels. P-LTE serves as a key enabler for the transition to sustainable digitally driven technology and future connection of renewable technologies to the network and can also be made available to support other utility services.

## Real Time Visualisation

ESB is delighted to partner with Microsoft to enable Real Time Visualisation (RTV) in our Generation and Trading business. RTV is the processing and visual publishing of data as it changes and updates, in real-time.

How Microsoft is empowering ESB to achieve its Net Zero 2040 ambition

Every day across Ireland and the UK, ESB Generation and Trading use a variety of tools and interfaces to manage, monitor and trade energy from nine hydro stations, 10 thermal stations and 18 wind farms.

# Financially Strong

Maintain the financial performance and strength required to deliver our purpose.

## Capital Investment

Approximately 80% of capital investment was in our two networks' businesses in line with agreed regulated capital programmes, including over €130 million on the roll-out of smart meters in ROI. ESB invested c.€179 million in new renewable generation and systems services projects (including batteries) as well as over €20 million in maintaining its existing generation fleet to ensure the reliability of electricity supply to customers during the ongoing transition to low-carbon generation, particularly over the winter period. In addition to this, €287 million was advanced by way of shareholder loans to joint venture projects (the majority of which related to our continued investment in offshore wind).


## EU Taxonomy Regulation Reporting

ESB has once again included disclosures in the Annual Report under the EU Taxonomy Regulation on a voluntary basis, ahead of the requirement to do so. An initial alignment assessment has been completed and KPIs calculated outlining the proportion of ESB's turnover, OpEx and CapEx which relate to Taxonomy Aligned activities. Based on this initial assessment approximately 81% of ESB's capital investment relates to Taxonomy Aligned activities as we continue to invest in renewable generation and the enhancement of the electricity networks in both the Republic of Ireland and Northern Ireland.

**CapEx**


- 81% Taxonomy-Aligned
- 1% Taxonomy Eligible but not Taxonomy-Aligned
- 18% Taxonomy Non-Eligible

# Financially Strong (continued)

## Contribution to the Stakeholders and Society

The overall level of profits earned in 2022 are higher than anticipated largely as a result of the extraordinary wholesale market conditions which prevailed and the limitations of current market structures which prevented additional profits in the Generation and Trading (GT) business being passed on to customers. In that context, a significantly enhanced dividend of €327 million is proposed to be paid to stockholders, 97% of which goes to the Irish Government.

€5 million hardship fund established

€2.5 million to support communities

Empowering and enriching the lives of individuals and communities through the corporate social responsibility programme

€327 million dividend return to stockholders for 2022

96.9% goes to the Irish Government as majority stockholder

Almost €1.5 billion of declared dividends over 10 years

€245 million paid to debt investors

Annual interest and repayments

Over €2.3 billion contributed to the Irish economy

MOODY'S A-

S&P Global Ratings A3

## Standalone Credit Rating

ESB remains financially strong with net assets of €4.8 billion at 31 December 2022. In a volatile and uncertain funding environment, it is significant that we raised 3 additional bonds during 2022 and we have a strong liquidity position of over €2.2 billion at 31 December 2022.

We have a moderate gearing level, relative to other utilities, of 58% at the end of 2022 and standalone credit ratings of A- and A3 with Standard & Poor's and Moody's respectively, both reaffirmed during 2022.

This strong financial position along with a stable business profile, means ESB is well positioned to meet the challenges that lie ahead and to deliver on the strategic ambition to make a difference, deliver a brighter future and achieve net zero by 2040.

# Sustainable & Socially Responsible

Electricity is an enabler of societal and economic well-being. ESB has been at the heart of Ireland's economic transition through electrification and we must remain strong and sustainable to lead Ireland's transition to a low carbon society.

## Electric Ireland Foregoes Profit and increases hardship fund to help residential electricity customers

[Electric Ireland Forgoes Profit to Help Residential Electricity Customers]

[Electric Ireland Customer Hardship Fund Support]

2022 was a very challenging year for energy customers, primarily because of increases in international gas prices. Electric Ireland is acutely aware of the pressures that customers face and recognising these exceptional circumstances, Electric Ireland decided to forgo profit from its residential electricity business with each customer receiving a €50 credit on their electricity bills in early 2023.

Throughout 2022 Electric Ireland remained committed to supporting our customers who experienced financial difficulty. Electric Ireland has a long and proud history of working with trusted partners such as Money Advise Bureau Service (MABS), Saint Vincent DePaul and Alone. In 2022 the Electric Ireland Hardship Fund increased by €2 million to bring it to €5 million, to help ensure the fund is accessible to those most in need of support during the winter months. In 2022, over €2.2 million was drawn from the Hardship Fund by our trusted partners which was used to support nearly 5,500 customers.

Electric Ireland is committed to helping any of our customers who experience financial difficulty. As always, we encourage any Electric Ireland customer who has difficulty in paying their energy bill to engage with us and we will work with them to put a manageable payment plan in place.

## Darkness into Light

Electric Ireland has sponsored the Pieta Darkness into Light event since 2013. The sponsorship helps to bring to life ESB's commitment to positively impact the communities within which it operates through an extensive marketing and PR campaign, as it supports Pieta in its fundraising efforts during Darkness into Light. In 2022, the event returned to its pre-pandemic format with events in communities around the island of Ireland and raised over €4.6 million with 140,000 people participating in the 5 km walk at dawn on Saturday, 7 May 2022. Pieta is one of Ireland's leading mental health charities and provides free 24/7 therapy to those engaging in self-harm, with suicidal ideation or bereaved by suicide in communities across Ireland.

## Magnefix Replacement Programme

The Magnefix Replacement Programme is a key PR 5 work programme carried out by the National Programme Delivery Team.

This programme entails having retired Unit Substations refurbished with a newly fabricated shell, vents, cover plates and internal shields all designed to accommodate new electrical MV switchgear. These refurbishments impacts ESB Networks carbon footprint by reducing waste and recycling existing material, in line with the circular economy approach undertaken by ESB Networks.

# Sustainable & Socially Responsible (continued)

## Electric Ireland Sponsorship of Women's Football in Northern Ireland (NI) with Game Changers

Electric Ireland, in partnership with the Irish Football Association, are the proud sponsor of girl's and women's football across all levels in Northern Ireland working to increase participation, attendance at games and increase media coverage. With a 125% increase in registered players, Electric Ireland continue to help provide more opportunities for females to play football in Northern Ireland through supporting the Irish FA with new league structures, new schools' competitions and increased primary school outreach. This is in addition to confirming in 2022 support for the Electric Ireland Female Leaders Programme which is designed to equip women for leadership roles in their own football communities.

Electric Ireland Game Changers

## Inclusion & Diversity

ESB has a comprehensive implementation plan underpinning its Inclusion and Diversity strategy. Key areas of focus in 2022 included:

- Ensuring diverse talent is attracted as part of ESB's National Recruitment Campaign, by reviewing recruitment policies and practices and leveraging existing and new partnerships such as OpenDoors, ASiAM and Ahead.
- The further development of Diversity Action Plans for network technician apprentice and engineering graduate programmes. These plans are beginning to have real impact with a record number of female apprentices (24%) joining ESB in the 2022 intake.
- Building on the success of the award winning BeMe@ESB (ESB's LGBT+ network which has over 1,200 trained allies), the organisation is now establishing new employee resources.

Inclusion & Diversity

## Biodiversity Enhancement

**All Ireland Pollinator Plan**
As a key partner of the All-Ireland Pollinator Plan (AIPP), ESB has been piloting measures at our National Training centre, including trial grass management regime, short-flowering and long-flowering areas of meadow, planting of native flowering trees and shrubs, rollout of informative signage and the inclusion of biodiversity action in the training curriculum for ESB Networks apprentices.

**Business for Biodiversity Ireland**

Business for Biodiversity Ireland - National business and biodiversity platform

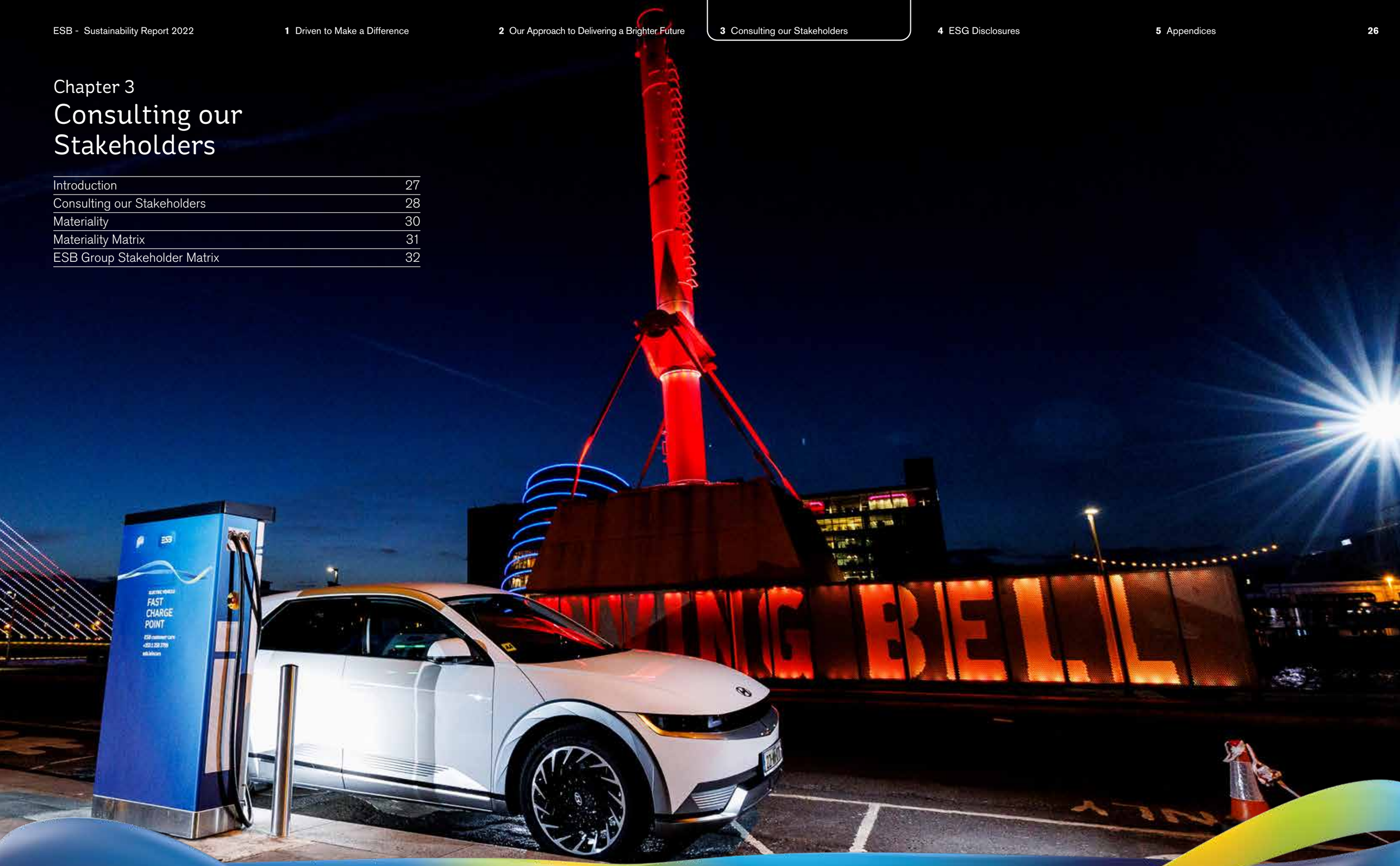
Corporate action is an important element of an all-of-society approach required to address biodiversity loss. The purpose of this platform is to encourage all businesses to sign up and get involved to help protect, conserve and restore nature.

**Nature +Energy**
ESB is delighted to be supporting and participating in the Nature + Energy programme, funded by MaREI, the Science Foundation Ireland Research Centre for Energy, Climate and Marine, Wind Energy Ireland and a consortium of Irish renewable energy companies, including ESB. Nature+Energy will develop new ways of accounting for the value of nature on wind farms.

Chapter 3

# Consulting our Stakeholders





Chapter 3

# Consulting our Stakeholders

This year has been a very difficult time for energy customers with the current global energy crisis having an impact on every household and business across our countries of operation. We are also at a critical point in the fight against climate change, as we seek to accelerate our ambitions and action, as underpinned by the Irish Government's recently published Climate Action Plan 2023. We recognise that progress can only be achieved through continued, extensive engagement with all of our stakeholders.

Engaging with our customers and stakeholders is crucial to how we shape the future of our business and the electricity network. It helps us develop new initiatives which benefit the communities and industry we serve, as well as improving and enhancing existing ones. It shapes our business planning and strategic priorities and informs the decision-making process. Engagement with wider industry accelerates innovation within the business and the energy sector through shared learnings and ideas.

In ESB we are committed to conducting our activities in an open and transparent manner. To the extent that ESB engages in any lobbying activities requiring disclosure under the Regulation of Lobbying Act 2015, such activities are conducted in a transparent manner and in compliance with the requirements of the Act. ESB has registered with the Standards in Public Office Commission (SIPO) and details of our lobbying activities are publicly available through SIPOs lobbying register. ESB has also registered on the EU Transparency Register and discloses annually what interests are being pursued, by whom and with what budgets.

Broadly we seek to align with the reporting principles set out in the Global Reporting Initiative standards in how we engage with customers and stakeholders and report on the ensuing topics that have been identified as of material importance.

| Reporting principles for defining report content | Reporting principles for defining report quality |
|---|---|
| Stakeholder Inclusiveness | Accuracy |
| Sustainability Context | Balance |
| Materiality | Clarity |
| Completeness | Comparability |
| | Reliability |
| | Timeliness |

## Double Materiality under the EU Corporate Sustainability Reporting Directive (CSRD)

Double materiality is a concept which provides criteria for the determination of whether a sustainability matter has to be included in an undertaking's sustainability report.

Double materiality is the union of impact materiality and financial materiality. A sustainability matter meets the criteria of double materiality if it is material from either the impact perspective or the financial perspective or both perspectives.

Currently materiality assessment with respect to sustainability reporting generally only considers the impact perspective.

As part of ESB's preparation for transition to CSRD aligned reporting, during 2023 we plan to undertake a double materiality exercise on our group activities to determine and refine our suite of material issues, considering and identifying both impact and financial perspectives.

# Consulting our Stakeholders

ESB recognises that the environment in which we operate is changing rapidly driven by new policy and regulation, the advancement of technology and the changing needs and expectations of our customers and stakeholders.

This means the role of electricity is also changing, creating new challenges and opportunities. We understand that we have been entrusted with the responsibility to play a vital role in Ireland's energy future, but we cannot do this alone. Collaboration with our customers and all our stakeholders will be critical to achieving our vision for a clean electric future together and meeting Ireland's climate targets.

Part of operating in this multi-stakeholder environment is to understand and balance the priorities of different stakeholder groups while ensuring the successful delivery of our Net Zero strategy, and all the commitments which that entails.

Key stakeholder groups for ESB, include our customers, employees, shareholders, governments, regulators, business partners and suppliers, local communities, academia, non-governmental organisations and wider society.

We gain invaluable insights into the priorities and material concerns of our stakeholders through a multifaceted approach at both Group and business unit level.

## At Group Level

### Stakeholder research every three years

ESB Group is committed to undertaking in-depth Stakeholder research at least every 3 years, to complement and consolidate ongoing stakeholder engagement at the business unit level and via other engagement channels.

### Public research every quarter

Undertaken via brand and reputation tracker, as well as ongoing monitoring of social media channels and through our membership of external alliances such as, Business in the Community Ireland, Irish Business Employers Confederation , Economic and Social Research Institute and Chambers of Commerce.

The breadth of the stakeholders that we engage with across the ESB Group is summarised in our Stakeholder Matrix and in greater detail in the respective business unit stakeholder engagement reports.

## At the Business Unit Level

### ESB Networks

ESB Networks' "Strategic Stakeholder Engagement Framework", sets out their enduring engagement strategy to enable an open and ongoing dialogue with all their stakeholders. The framework identifies all stakeholders and the principles that guide engagement, together with the proposed engagement methodology, governance and control processes. The approach, process and output is captured annually via a planning document and a stakeholder engagement report.

The annual stakeholder engagement report describes the vast engagement ESB Networks have with their stakeholders over the past year. Its aim is to assess how ESB Networks have delivered against the planned engagement strategy and activities for 2022 to deliver strong outcomes for both customers and stakeholders.

This report is an annual requirement to enable the Commission for Regulation of Utilities (CRU) to assess and score ESB Networks on the quality, implementation, and effectiveness of its stakeholder engagement in the previous year.

Stakeholder Engagement Report-2022


The strategy plan document sets out the proposed stakeholder engagement strategy and plans for 2023, which is aligned with ESB Networks vision and ambition to deliver the electricity network for Ireland's clean electric future by 2030 and will continue to be shaped through ongoing customer and stakeholder engagement and collaboration.


Stakeholder Engagement Strategy Plan-2023

# Consulting our Stakeholders (continued)

**NIE Networks Ltd**
NIE Networks' current regulatory price review period (RP6), set out service delivery plans for customers for the period 2017 – 2024, and continues to carry out a significant amount of stakeholder engagement to ensure stakeholders have their say. Stakeholders' engagement helps provide updates on performance and gather feedback to help shape and modify service delivery but also is helping to plan for the future – which is critical as NIE Networks develops its business plan for the period 2024 – 2030 (RP7).

Investing For The Future: Stakeholder Engagement at Northern Ireland Electricity Networks

## Case Study -

**National Networks Local Connections Programme – Advisory Panel**
The ESB Networks' National Network, Local Connections Programme has been established to bring together changes in how we are generating electricity, and how we are using it. The successful implementation of this programme will enable all electricity customers and communities to play an active role in climate action, by using or storing renewable electricity when it is available to them locally. As this objective can only be achieved with the support of, and close collaboration with, our stakeholders. In 2022, NNLC P set up an advisory council with a cross section of organisations and community representative bodies from across Ireland to help guide and navigate the journey to a Net Zero society.

**Customer Solutions**
2022 was an unprecedented year for Customer Solutions with substantial increases and extreme volatility in wholesale energy prices as a result of the Russian invasion of Ukraine. This has unfortunately required significant price increases for all customers. Customer Solutions continued to support customers through this challenging time maintaining prices as low as possible and supporting them to manage their energy consumption and energy bills.

As the energy crisis unfolded through 2022, Customer Solutions conducted weekly on the ground focus groups with customers to understand first-hand the impact of the crisis and to explore how best we could mitigate its worst effects. On foot of this unfolding energy crisis, supply businesses across Customer Solutions delivered a range of supports to assist vulnerable customers and those experiencing difficulty in meeting their energy bills.

Support hubs for customers across our supply websites were established to ensure customers have access to all the information, guidance and support necessary to help manage bills and energy consumption.

Further details on actions undertaken by Customer Solutions to make positive changes within our business to engage customers in helping them through the energy crisis are detailed in the 'Supporting our Customers' section of this report.

**Engagement Approach**
ESB works in the very heart of every community across the island of Ireland and also has a presence in the UK. Being embedded in this way, brings a broad span of exposure to and engagement with a wide range of stakeholders. In our purpose of creating a brighter future for the people we serve, we recognise that electricity is an enabler of societal and economic wellbeing and a pathway to a decarbonised society.

Understanding the expectations, concerns and interests of our customers and stakeholders is front and centre in delivery of our services. The process begins at the business unit level and continues to cross Group level engagement. Our multiple stakeholder touch points are summarised in the stakeholder engagement matrix below.

# Materiality

Materiality refers to the economic, social and environmental aspects of our business that positively or negatively impact the world around us. At ESB, we identify material issues based on what is important to our customers, stakeholders and our businesses, as well as the significance of the issue for the economy, society and the environment.

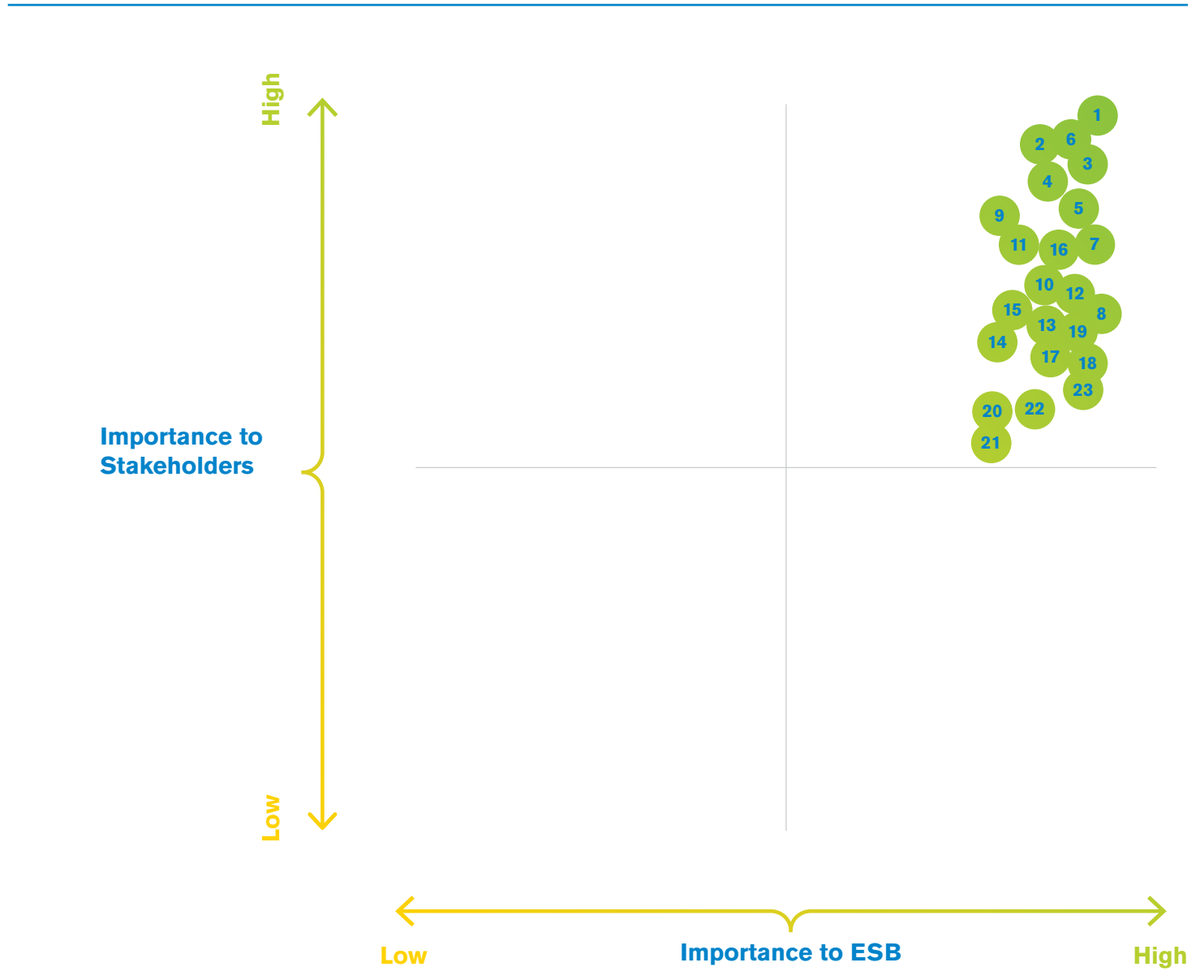
Materiality and Stakeholders (esb.ie)

| Through our materiality assessment process, we have identified and prioritised the following key issues | Related Material Topic Disclosures |
|---|---|
| **Eliminate greenhouse gases from our activities and reduce dependence on fossil fuels**<br>We are developing and connecting renewable energy to decarbonise the electricity system and deliver net zero by 2040. We continue to heavily invest in the development of new renewable generation, including onshore and offshore wind and solar, and will significantly increase the amount of renewable generation connected to our electricity networks. | **Facilitating Ireland's low carbon transition, Reducing Emissions, Increasing renewables,** |
| **Maintain reliable and secure energy supplies for our customers**<br>We will invest in infrastructure to maintain reliable and secure electricity supplies. This is necessary to accommodate high levels of intermittent renewable generation on the system and to support a growing dependence on electricity across all sectors of society. We will develop smarter, more resilient networks to accommodate the electrification of transport and heating that will be crucial to reducing emissions across society. We will also invest in storage assets and zero-carbon dispatchable generation that can compete to meet the need for non-intermittent sources of energy and ensure continuity of supply. | **Maintain security of supply, reliability of supply, invest in modern reliable infrastructure, developing a smart and flexible network,** |
| **Accelerate the electrification of society and empower low-carbon living**<br>We will empower, enable and support our customers and the communities we serve to achieve net zero. This reflects our longstanding commitment to providing the latest and most innovative infrastructure, products and services to help our customers live more efficiently and sustainably into the future. | **Energy efficiency solutions, Supply Chain, energy management,** |
| **Maintain affordable supplies of energy, protect vulnerable customers and tackle fuel poverty**<br>Our retail brand in Ireland – Electric Ireland – is committed to delivering the best value it can for our customers and continues to offer one of the lowest standard rates in the market. Supports that Electric Ireland has put in place for customers with financial challenges include flexible payment plans, payment holidays and PAYG meters, in addition to smart meter tariffs and sharing the latest energy saving advice. Electric Ireland provides support through its long-standing partnerships with organisations such as the Money Advice and Budgeting Service (MABS) and the Society of St. Vincent de Paul (SVP), and by utilising its €5 million Customer Hardship Fund. | **Assisting vulnerable customers, energy affordability,** |
| **Operate to the highest standards of fairness, ethics and transparency**<br>ESB is committed to the highest standards of corporate governance, business integrity and stakeholder engagement in all its activities. ESB's management team and staff strictly adhere to our Code of Ethics and Group policies, comply in all material respects with the Code of Practice for the Governance of State Bodies and publish all relevant documents on our website for transparency. | **Employing highly skilled people, proactive risk management, ethics, integrity and values, human rights, environmental performance, being a well managed company, water consumption, biodiversity, energy management, waste, health, safety and wellbeing.** |

# Materiality Matrix

From the stakeholder engagement and consultation processes, the most material topics are identified and form the bulk of the disclosures in this report. The most material topics are reviewed on an ongoing basis and in depth every 2-3 years as part of the in-depth group level stakeholder engagement process. Disclosures focus on the most material issues identified in the top right quadrant. As part of our ongoing reporting, transparency and disclosure improvement efforts, we seek to develop more robust reporting and data sets and expand the depth and detail which we report to stakeholders in line with their expectation and giving due consideration to newly emerging material issues.

| No. | Material Topic |
|---|---|
| 1 | Energy Affordability |
| 2 | Solutions for vulnerable customers |
| 3 | Security of Supply |
| 4 | Increasing Renewables |
| 5 | Developing a smart & flexible electricity network |
| 6 | Facilitating Ireland's Low carbon transition |
| 7 | Ethics, Integrity & Values |
| 8 | Highly Skilled People |
| 9 | A quality customer experience |
| 10 | Proactive Risk Management |
| 11 | Being a well managed company |
| 12 | Health, Safety & Wellbeing |
| 13 | Environmental Performance |
| 14 | Energy Efficiency Solutions |
| 15 | Invest in modern, reliable infrastructure |
| 16 | Reducing fossil fuel use |
| 17 | Protect Biodiversity |
| 18 | Smart Meter Rollout |
| 19 | Diversity & Inclusion |
| 20 | Waste Management |
| 21 | Water Conservation |
| 22 | Supply Chain |
| 23 | Human Rights |



# ESB Group Stakeholder Matrix

| Stakeholder grouping | Means of Engagement | Subjects of Engagement | Key Issues Arising |
|---|---|---|---|
| **Government Depts, (e.g DECC), national, local** | Policy meetings, consultations | Energy policy, regulatory consultation processes | Energy policy |
| **Market, Data and Transparency Regulatory Bodies (e.g. CRU, UR)** | Price reviews, regular meetings, programme meetings | Compliance with licence and permit conditions, price reviews | Compliance planning, Delivery of work programmes |
| **Networks Operators (e.g. EirGrid, SONI)** | Scheduled meetings, programme meetings | Grid connections, work programmes, planning, renewable integration | Renewable energy, security of supply |
| **Industry NGOs (e.g. Eurelectric, EAI, IBEC)** | Consultation processes, information meetings | National and EU energy policy, climate action and sustainability policy development, consultations | Policy positions, climate action, supply security |
| **Sustainability/Non industry NGO's (e.g. BITCI &NI, IIEA)** | Scheduled meetings, focus groups, member fora, surveys | Work programmes, CSR programme | Emission reduction, corporate responsibility, renewables |
| **Environmental Authorities (e.g. NPWS, UW, SEAI)** | Ongoing dialogue | Annual reporting, planning, safety | Water conservation, energy efficiency, waste, biodiversity |
| **Environmental and Safety Regulators (e.g. EPA, NIEA, HSA, RSA)** | Licences, inspections, formal compliance reviews | Licence conditions and compliance, annual reporting, dealing with breaches and complaints | Legal compliance |
| **Engineering and Scientific Research (e.g. Colleges, EPRI, VGB)** | Industry fora, partnerships, conferences, technical collaborations, ongoing dialogue | Technology, skills pool, research partnerships, technology deployment | Technical innovation, market disruption, energy efficiency, availability of skills |
| **Ratings Agencies** | Scheduled review meetings | Economic performance, Strategy, Funding rounds, Growth programme | Rating, ability to raise debt at competitive rates, financial performance |
| **Employees, ESB Group of Unions** | Team and one-to-one meetings, surveys | Business performance, safe working environment, fair employment and trading practices, sustainability | Employee engagement, Recognition and reward, Development |
| **Customers (Domestic, Commercial, Industrial)** | Social media, customer contact centres customer experience surveys, brand and reputation tracking surveys, customer sentiment focus group research | Price, cost of living crisis, continuity and quality of supply, customer service experience, smart meter experience, time-of-use tariff adoption, energy efficiency services, disconnection policy | Energy price, cost of living, time-of-use tariff adoption, smart meter rollout, disconnection policy, energy efficiency, security of supply |
| **Suppliers** | Tender process, contract review meetings, preliminary market consultations, Meet the Buyer Events | Contractual terms and conditions, corporate social responsibility, sustainable procurement and carbon reduction, Contractor Employment Standards, Human Rights | Contractor Employment Standards compliance, Human Rights, Sustainable procurement, Supply chain, waste, biodiversity |

Chapter 4

# ESG Disclosures

Chapter 4

# ESG Disclosures

## About ESB

ESB was established in 1927 as a statutory body under the Electricity (Supply) Act, 1927. With a holding of 96.9%, ESB is majority owned by the Irish Government. The remaining 3.1% is held by the trustees of an Employee Share Ownership Plan. As a strong, diversified utility, ESB operates across the electricity market, from generation through transmission and distribution, to supply of customers in addition to using our networks to carry fibre for telecommunications. ESB is a leading Irish utility with a regulated asset base of approximately €12.0 billion (comprising ESB Networks €9.7 billion and NIE Networks €2.3 billion), a 30% share of generation in the all-island market and supply businesses supplying electricity and gas to over 2 million customer accounts throughout the island of Ireland and Great Britain. During the year ended 31 December 2022, ESB Group employed an average of over 8,000 people.

## About this Report

This report outlines ESB's strategy, commitment to sustainability and accounts for ESB's environmental and social sustainability performance for the calendar year 2022. It's intended audience is customers, investors, analysts, policy makers, the public and other stakeholders, internal and external to ESB Group and it is focused on the sustainability issues identified as most material to these stakeholders. Our reporting is guided by the principles of materiality, inclusiveness and responsiveness. Under direction from the Environment & Sustainability Leadership Team (ESLT), this report has been prepared in accordance with the GRI Standards Core option and has been independently assessed by DNV against this option. A statement from DNV to this effect is included in the Appendices.

This report covers the fiscal and calendar year 2022. This report pertains to the full activities, on an equity share basis, of ESB and its subsidiary companies, including NIE Networks, hereinafter referred to as ESB Group. Data on Joint Ventures is not included. The 2022 Sustainability Report meets our commitment to report annually on our Sustainability performance. Where scope boundaries pertain to specific material aspects of the business, these are detailed in the specific sections of the report. For queries relating to the 2022 Sustainability Report, please contact sustainability@esb.ie or brian.gray@esb.ie.

## EU Corporate Sustainability Reporting Directive (CSRD)

The CSRD and European Sustainability Reporting Standards (ESRS), which will be finalised in 2023 represent the future of enhanced sustainability reporting for entities operating in the EU. In the following disclosure sections, we aim to highlight the current policies ESB has in place to address ESRS requirements and outline the transition work we are beginning to undertake to ensure our reporting progresses to meet the CSRD and ESRS requirements when they fall due.

# ESB Group Overview


| Business Segment | Region of Operations | Scale of Operations | Revenue | Strategic Focus | Average Employee Numbers |
|---|---|---|---|---|---|
| **ESB Networks** | ROI | 88 depots, yards, stores and vehicle workshops | €1,191m | Building smarter more resilient networks. Putting the customer in control of their energy. Facilitating the connection of renewables. Enabling the widespread electrification of heating and transport. Supporting Micro-generation. | 3,376 |
| **NIE Networks** | NI | 16 depots, offices, area offices, workshops and stores | €346m | | 1,316 |
| **Generation & Trading** | ROI, NI, GB | 8 thermal stations, 8 hydro and pumped storage stations, 24 wind farms | €3,302m | Developing a low carbon portfolio, providing flexibility services and backup generation to support increased levels of renewable generation and maintain secure supplies of electricity. | 708 |
| **Customer Solutions** | ROI, NI, GB | 5 office locations in ROI, NI and GB | €5,537m | Bringing sustainable and competitive energy solutions to all our customers. | 850 |
| **Other Segments** | ROI, NI, GB, EU, Middle East, Asia, Africa | 41 offices and stores across ROI, NI, GB and internationally | €375m | Bringing leading edge energy solutions to all our customers. Innovating for the future. | 1,946 |

# ESB Group Overview (continued)

## ESB Networks DAC Ltd

ESB Networks is the licensed Distribution System Operator (DSO) of the electricity distribution system in the Republic of Ireland, with responsibility for building, operating, maintaining and developing the network and serving all electricity customers across the country. ESB Networks also owns the transmission network in the Republic of Ireland, working closely with the Transmission System Operator, EirGrid.

2022 was the second year of the regulatory Price Review period 5 (PR5) and ESB Networks has made solid progress on the approved investment and maintenance programmes despite the impact of COVID-19 during 2021. ESB Networks invested €347 million in reinforcement (load), asset replacement and constructing new networks in 2022 whilst €130 million was spent on maintaining the existing network. Progress continued on the Smart Metering Programme roll-out with expenditure of €134 million in 2022.

ESB Networks' Networks for Net Zero Strategy recognises climate action as one of the most important challenges of our generation and, in keeping with the Government Climate Action Plan, identifies the critically important and central role of ESB Networks in enabling the transition to low carbon.

Customers are at the heart of all activities for ESB Networks including all 2.3 million customers that use electricity, those that supply or generate electricity and those that access the network for the provision of services such as telecom providers. Relationships with customers are changing as Ireland moves along the path to net zero. 2022 has seen the implementation of a number of initiatives which are intended to engage and empower customers on their energy journeys towards net zero.

## Generation & Trading

The GT business develops and operates ESB's portfolio of wholly and jointly owned electricity generation assets. It also has a significant owned asset and third party asset energy trading portfolio. The generation fleet consists of over 5 GW of generation assets across the Integrated Single Electricity Market (I-SEM) and Great Britain (GB) including almost 1 GW of renewable assets. ESB has a further 700 MW under construction across a range of renewables/renewables enabling technologies. With a strong focus on safety, GT delivers value by:

- Providing wholesale and traded products to meet market and customer needs
- Offering capacity and system services to support a robust electricity grid and facilitate the integration of renewables
- Optimising the operation of the ESB generation portfolio
- Delivering new energy assets to support the transition to low-carbon energy
- Engaging constructively in communities close to construction projects and operating assets

## Northern Ireland Electricity Networks Ltd (NIE Networks)

Northern Ireland Electricity Networks (NIE Networks) is the owner of the electricity transmission and distribution networks in Northern Ireland, transporting electricity to over 910,000 customers including homes, businesses and farms.

NIE Networks is owned by ESB but operates as an independent organisation with its own Board and management teams and separate regulation via the Utility Regulator for Northern Ireland.

Our role is to maintain and extend the electricity infrastructure across Northern Ireland, connect customers to the network and ensure that our equipment is safe and reliable. We also provide electricity meters and metering data to suppliers and market operators.

NIE Networks do not supply electricity. Customers receive their electricity bill from their chosen electricity supplier of which there are currently five operating in Northern Ireland.

NIE Networks is a regulated company and business activities are overseen by the Utility Regulator for Northern Ireland. Our business plan for delivering our services to customers is approved for a number of years ahead with the current price control period set to run until 2024.

Our priority is to deliver benefits for all our customers and this is reflected in the important services we provide, including:

- Ensuring reliability of network performance
- Maintaining public safety of the network
- Minimising the impact on the environment and
- Continually improving customer service and satisfaction

We invest over £100 million annually in maintaining and upgrading the electricity transmission and distribution infrastructure in Northern Ireland to ensure it remains in a safe and reliable condition.

NIE Networks is fully committed to protecting the health and safety of all employees, contractors and the customers we serve. Safety is a core value of our company and we aim to provide an environment of zero harm. We promote an open and proactive health and safety culture and our employees recognise that safety is everyone's responsibility.

Fast resolution of power cuts is particularly important to our customers and therefore by 2024 we will aim to have 90% of customers restored within 3 hours and 100% of customers restored within 18 hours, excluding severe weather events.

If customers experience a power cut they can use the Powercheck facility on the NIE Networks website which provides real-time information about how our teams are responding and an estimated time for restoration.

## Customer Solutions

Customer Solutions brings together all ESB's retail offerings in the Republic of Ireland (ROI), Northern Ireland (NI) and Great Britain (GB), including Electric Ireland, ESB Energy, So Energy, Electric Ireland SuperHomes, ESB Smart Energy Services, ESB ecars and ESB Telecoms.

Electric Ireland is the energy retail arm of ESB in ROI and NI, supplying electricity, gas and energy products and services across the island. Electric Ireland has over 1.5 million customer accounts across all market segments, from domestic households, small and medium enterprises to large industrial and commercial businesses, representing c.41% of the electricity market and c.18% of the gas market on an All-Island basis. Electric Ireland is conscious of operating its business in a sustainable and environmentally responsible way and is certified to ISO 14001 standard. Electric Ireland actively works with customers to assist them in improving the sustainability of their homes and businesses through the efficient use of the energy provided to them.

ESB entered the residential electricity and gas retail business in GB in 2018 through the establishment of ESB Energy. During 2021, Customer Solutions expanded its ESB Energy retail business by acquiring the majority shareholding in So Energy, a retail brand offering 100% renewable energy. The integration of these businesses brings the best of both companies together under the So Energy brand, supplying a total of c.530,000 electricity and gas accounts.

Electric Ireland Superhomes is a joint venture between Tipperary Energy Agency's Superhomes, and Electric Ireland established in 2021 with the ambition to guide Irish homeowners to warmer, comfortable and more energy efficient homes and support the achievement of Ireland's climate action targets through a commitment to delivering 35,000 home retrofits by 2030.

ESB Smart Energy Services (SES) operating as ESB Energy Business Solutions in the UK develops and delivers integrated energy management solutions for large energy users in the UK and Ireland. SES designs, develops and delivers tailored solutions focussed on

# ESB Group Overview (continued)

energy efficiency, electrification of heat, EV fleet solutions and demand management technologies. ESB SES also manages the delivery of our retail business requirements under the Energy Efficiency Obligation Scheme. ESB SES meets our customers energy needs by being their trusted partner and bringing the best of our capabilities to deliver innovative and value driven solutions for a low carbon world.

ESB ecars builds, owns and operates Electric Vehicle Charging Networks for public use in Ireland (ROI), Northern Ireland (NI) and Great Britain (GB). Our public charging network comprises of over 2,000 charge points with a customer base of 85,000 at the end of 2022. ESB Telecoms Ltd is a wholly owned subsidiary of ESB Group managing assets and supplying services into the wholesale ROI telecoms market. These assets comprise of 370 telecoms transmission towers and a 2,000+ kilometre fibre optic network sitting mostly on the 110kV network footprint.

## Engineering & Major Projects (EMP)

The EMP business provides a centre of engineering for ESB, delivers large projects across the ESB Group, is responsible for ESB's Group Property and Security portfolio, and provides engineering and other services to external clients through ESB International. The business has over 800 people who work in partnership with other business areas in ESB and deliver engineering services to external clients both at home and internationally.

EMP provides the Centre of Engineering excellence for the ESB Group, including civil, environmental, renewable engineering, generation engineering, and transmission and distribution networks engineering and delivery. These engineering functions are involved in new development projects from concept through to construction and commissioning. They also support the operation and maintenance of existing assets across ESB Group, including ESB International.

## Charters to Which The Organisation Subscribes

### Governance / Economic

Code of Practice for the Governance of State Bodies (2009)
UK Corporate Governance Code (2012)
Irish Corporate Governance Annex (2010)

### Social

Bettercoal Code (2015)
The Prompt Payment Code of Conduct (2014)
The Energy Engage Code (2014)
Diversity Charter Mark NI

### Environmental

E.DSO Sustainable Grid Charter (2020)
BITCI Low Carbon Pledge (2021)
All Ireland Pollinator Plan (2021)
UN Race to Zero Campaign (2021) NIE Networks

### Principal Associations To Which The Organisation Belongs

ESB plays an active role in many associations, both at a board level and as an active member. Playing an active role in such external associations is central to the development of key staff, the promotion of engineering skills, developing common approaches on national policy, promoting diversity and inclusion in society as well as policies consistent with national climate objectives.

- Association for Higher Education Access and Disability (AHEAD)
- Business In The Community (BITC) Ireland
- Bettercoal
- Business in the Community NI
- CDP Ireland Network
- Chambers Ireland
- Chartered Institute of Professional Development
- CHAdeMO Association
- Corporate Leadership Council
- Diversity Charter of Ireland
- European Distribution System Operators
- Electricity Association of Ireland (EAI)
- Electric Power Research Institute (EPRI)
- Energy Networks Association
- Energy UK EV Task Force
- Engineers Ireland
- Eurelectric
- Institute of Engineering and Technology
- Institute of Directors
- Institute of Customer Service
- Irish Wind Energy Association (IWEA)
- Irish Business and Employers Confederation (IBEC)
- Irish Marketing Institute
- Low Carbon Vehicle Partnership
- Institution of Asset Management (IAM)
- Institution of Environmental Management & Assessment (IEMA)
- National Irish Safety Organisation (NISO)
- NI Chamber of Commerce
- National Energy Action
- Open Charge Alliance
- Society of the Irish Motor Industry
- The Society of Motor Manufacturers & Traders (SMMT)
- The Mediators Institute of Ireland.
- Ulster Wildlife

### Certifications And Management Standards

| Business Unit | Certified Management Systems |
|---|---|
| ESB Group (Cross BU) | ISO50001 Energy Management |
| Generation & Trading | ISO14001 Environmental Management |
| | ISO45001 Occupational Health & Safety Management |
| | ISO55000 Asset Management |
| | ISO9001 Quality Management (Moneypoint) |
| ESB Networks Ltd (DAC) | ISO14001 Environmental Management |
| | ISO45001 Occupational Health & Safety Management |
| | ISO55000 Asset Management |
| NIE Networks Ltd | ISO14001 Environmental Management |
| | ISO55001 Asset Management |
| | ISO45001 Occupational Health & Safety Management |
| | ISO9001 Quality Management |
| Customer Solutions | ISO14001 Environmental Management |
| | ISO45001 Occupational Health & Safety Management |
| Engineering & Major Projects | ISO14001 Environmental Management |
| | ISO45001 Occupational Health & Safety Management |
| | ISO14001 Environmental Management |
| | ISO9001 Quality Management |
| Enterprise Services | ISO14001 Environmental Management |
| | ISO45001 Occupational Health & Safety Management |

# Environmental Disclosures



## EU Corporate Sustainability Reporting Directive (CSRD)

The CSRD and European Sustainability Reporting Standards (ESRS), which will be finalised in 2023 represent the future of enhanced sustainability reporting for entities operating in the EU. ESRS E1 on Climate Change will have a particular relevance for ESB, given both our industry and our strategic ambition.

Currently the key corporate policy which sets out ESB's approach to protect the environment and build a sustainable path for the future is:

ESB Group Policy for Environment & Sustainability

During 2023 we plan to undertake a gap analysis against CSRD and the respective ESRS standards. The outcomes of this assessment will shape our future disclosures and addressing of any identified policy gaps.

## Introduction

ESB recognises that climate change is the greatest priority facing Ireland and the world. It impacts us all and every layer of society has some role to play in how it is addressed. It brings with it great uncertainty in the world, which in turn creates the opportunity to galvanise the organisation around transformational goals towards a decarbonised world. In response, ESB's strategy targets an accelerated transition to low-carbon electricity. ESB exited peat generation at the end of 2020 and will exit coal generation by mid-decade. ESB's target is to more than halve the carbon intensity of its electricity generation by 2030 and to bring renewable electricity output to 63% of ESB's total electricity production by the same date. Beyond that, ESB is committed to achieving net-zero emissions by 2040.

Our net zero commitment includes direct and indirect greenhouse gas emissions i.e. scope 1, 2 and 3 emissions. Scope 1 covers direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company and national transmissions and distribution system losses. Scope 3 includes all other indirect emissions that occur in a company's value chain. Currently, all ESB Group scope 1, 2 and 3 emissions are monitored, reported and are independently assured. As well as reporting our emissions in this report, we disclose emissions performance via the CDP online reporting platform.

Robust environmental stewardship of our operations is essential to identifying, managing and mitigating impacts or potential impacts to the environment from our operations as well as creating the foundation to progress towards Net Zero. ESB maintains environmental management systems across the Group. These are audited externally to the ISO 14001 standard.

ESB discloses environment and sustainability information annually in the Sustainability Report in accordance with the GRI standards of disclosure. Alignment with the GRI standards is independently confirmed. During 2023 we will also publish our Net Zero 2040 transition plan to present the roadmap we have developed for ESB's own emissions to reach net zero by 2040, along with intermediate reduction targets and KPIs to realise our goal.
The Safety Health and Environment group function oversee the development of Group Safety Health and Environment Standards and carry out regular site audits of these standards.

A cross-company group of senior managers – the Environment and Sustainability Leadership Team – provides climate governance and provides overall direction to environmental improvement and assurance in the Group. Group environmental performance is also monitored by the Safety, Sustainability and Culture committee of the Board.

# Emissions

ESB is committed to leadership in caring for the environment in which the businesses operate and to operating sustainably by minimising the impact on the earth's resources. ESB aims to manage its impact on its surroundings, to provide a high level of protection for the natural environment and to reduce its greenhouse gas emissions while supporting a sustainable transition to a low-carbon economy. The concept of a sustainable transition includes empowering electricity users, providing clean energy and seeking that the transition enhances communities and leaves no-one behind.

Over the past number of years ESB has made significant progress in improving its electricity generation emissions performance. 2022 has brought new enabling technologies on grid including the world's largest flywheel in Moneypoint and grid scale battery energy storage in Aghada, both of which will enable further penetration of intermittent renewables on the national grid in Ireland. Continued tightness in generation capacity and availability resulted in higher emissions in 2021 and a marginal improvement in 2022, against the long-term downward trend. Despite this impact on emissions intensity in 2021 and 2022, ESB remains fully committed to delivery of the 2030 reduction in carbon intensity from electricity generation target.

In respect of Scope 1 emissions, while generation emissions have increased in 2021 and reduced marginally in 2022, our medium-term focus continues to be on growing our renewables portfolio. Operational efforts continue to deliver sustained improvements in fugitive emissions and vehicle fleet emissions. Scope 2 emissions for ESB include electricity used in buildings and accounting for all losses on the national electricity grid infrastructure. ESB discloses its Scope 3 emissions and continues to focus on improving estimates and methodologies for the Scope 3 emissions categories that are not directly controlled by ESB. Scope 1, 2 and 3 emissions inventories are reported via the CDP Climate Change Disclosure and ESB's annual Sustainability Report.

## EU ETS, Emissions Verification and Assurance

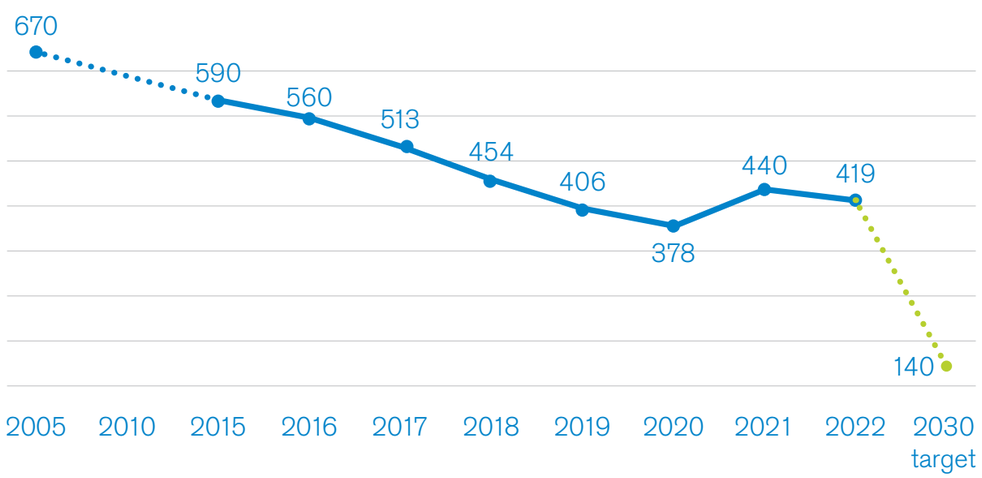
The EU ETS is a cornerstone of the EU's policy to combat climate change and its key tool for reducing greenhouse gas emissions cost-effectively. It is the world's first major carbon market and remains the biggest one. ESB's original baseline year chosen for reporting of the thermal generation $CO_2$ emissions is 2005, the year when the formal reporting for the EU Emission Trading Scheme (ETS) started.

ESB reports emissions based on the Greenhouse Gas (GHG) Protocol methodology. Scope 1, 2 and 3 emissions are reported annually. Greenhouse gas emission data is independently verified. ESB's generation emissions are verified under the auspices of the EU Emissions Trading Scheme (ETS) and submitted to the relevant Environmental Protection Authority annually. The monitoring and reporting of $CO_2$ is carried out in accordance with the EU Commission regulation 601/2012 and is verified by an accredited external verifier, which must also comply with Commission Regulation 600/2012.

ESB does not receive any free allowances under the EU ETS and we are required to procure the necessary volume of carbon allowances to account for our licenced thermal generation emissions each year.

All other Scope 1, 2 and 3 emissions are verified to ISO14064 as part of ESB's annual submission to CDP. ESB discloses environment and sustainability information annually in the Sustainability Report in accordance with Global Reporting Initiative (GRI) standards. Alignment with GRI standards is independently confirmed.

**ESB's Generation Carbon Intensity g/kWh**




## Carbon Price

Explicit carbon prices in Ireland consist of the emissions trading system (ETS) permit prices and carbon taxes, which cover 55.7% (2021) of greenhouse gas (GHG) emissions in $CO_2e$ according to the OECD.
In addition to this the Irish government Department of Public Expenditure and Reform introduced a shadow price of carbon and a public spending code to guide government departments in the economic appraisals of projects.

When calculating the greenhouse gas emissions associated with economic appraisals it is important to consider "additional" emissions associated with the proposed projects.

ESB Group is exploring how best to approach the adoption of carbon pricing into our business planning and project evaluation processes.

### CSRD -ESRS E1 Climate Change

The CSRD and European Sustainability Reporting Standards (ESRS), which will be finalised in 2023 represent the future of enhanced sustainability reporting for entities operating in the EU. ESRS E1 on Climate Change will have a particular relevance for ESB, given both our industry and our strategic ambition.

Currently the key corporate policy which sets out ESB's approach to protect the environment and build a sustainable path for the future is:

ESB Group Policy for Environment & Sustainability

This policy is enacted through our corporate strategy and business unit delivery strategies

Our Strategy (esb.ie)

ESB Networks Strategy: Networks For Net Zero

NIE Networks networks-for-Net-Zero

During 2023 we plan to undertake a gap analysis against CSRD and the respective ESRS standards. The outcomes of this assessment will shape our future disclosures and addressing of any identified policy gaps.

# Emissions (continued)

## Net Zero by 2040

The coming decades are critical to limiting the impact of climate change. Already, we are living through the impact of global warming, with extreme weather events and climate related disasters occurring with increasing frequency around the globe. As a leading energy company driven by a strong commitment to serve society, ESB's strategy is aligned with the urgent action required. We recognise that clean electricity is a key enabler of a zero-carbon future and have a made a commitment to reach net zero by 2040, ten years ahead of the legally binding Government targets for Ireland, Northern Ireland and Great Britain.

At ESB, we recognise that through our own actions, we can enable society to reduce emissions to a much greater extent beyond our own business. We are at the forefront of this global transition and will remain so, delivering the urgent action required to limit the drivers and impacts of climate change. Across ESB, we are working towards our net zero goal through our strategy and business plans. We are examining every aspect of our business activities to identify the source and scale of emissions so that we can fully eliminate greenhouse gases (GHGs) by 2040 across all of our operations. To this end we will publish a Net Zero Pathway report in 2023, identifying how ESB will transition to Net Zero by 2040.

ESB's Driven to Make a Difference, Net Zero by 2040 strategy, sets the objective to develop and connect renewables to decarbonise the electricity system by 2040. This objective reflects ESB's commitment to supporting the societal goal of achieving net zero emissions through the generation of renewable electricity and by enabling the connection of renewable generation to our electricity networks. We will deliver a fivefold increase in our renewable generation portfolio to 5,000MW by 2030, and ESB Networks and NIE Networks will increase the amount of renewable energy connected to our networks from 6.2GW to >15GW over the same period.

## Installed Capacity (MW) by Geography

| Fuel Source & Year | Republic of Ireland | Northern Ireland | Great Britain |
|---|---|---|---|
| **Gas** | | | |
| 2020 | 1,588 | 402 | 1,231 |
| 2021 | 1,588 | 402 | 1,231 |
| 2022 | 1,588 | 414 | 1,231 |
| **Coal** | | | |
| 2020 | 855 | - | - |
| 2021 | 855 | | |
| 2022 | 855 | - | - |
| **Peat** | | | |
| 2020 | 226 | - | - |
| 2021 | - | - | - |
| 2022 | - | - | - |
| **Oil** | | | |
| 2020 | - | 53 | - |
| 2021 | - | 53 | - |
| 2022 | - | 53 | |
| **Wind (Onshore & Offshore)** | | | |
| 2020 | 501 | 101 | 169 |
| 2021 | 501 | 101 | 169 |
| 2022 | 501 | 101 | 169 |
| **Hydro[1]** | | | |
| 2020 | 512 | - | - |
| 2021 | 512 | - | - |
| 2022 | 512 | - | - |
| **Solar** | | | |
| 2020 | - | 1 | - |
| 2021 | - | 1 | - |
| 2022 | | 1 | |

Notes
'-' in table signify no installed capacity in that geography
1: Hydro includes pumped storage capacity.
2. Additional capacity includes 26MW of Battery Energy Storage in ROI.
3. Generation Capacity from Joint Ventures is included based on proportionate shareholding in the entity

## Scope 1 GHG Emissions

Direct (Scope 1) GHG emissions are reported on an equity share basis for thermal assets. All thermal assets operate under licence and all their emissions are subject to measurement, independent external verification and reporting to the relevant licencing authority annually.

## Scope 2 GHG Emissions

Verification of Scope 2 emissions is undertaken by an independent third party assessor using ISO 14064-3:2006 Specifications with Guidance for the Validation and Verification of Greenhouse Gas Assertions. Scope 2 emissions associated with electricity networks transmission and distribution losses are calculated using location based method. The location based rate is derived from the ROI electricity all Ireland location rate SEAI and for NI using the DEFRA factor. The market rate uses the all-island consumption and multiplies it by ESB's own Carbon Intensity factor from generation. A review of the calculation methodology for All Island Transmission & Distribution Losses was undertaken as part of emissions inventory calculations in 2023, resulting in a restatement of T&D losses for 2021,2020 and 2019. This is the only significant restatement of emissions for 2022 and preceding years.

## Scope 3 GHG Emissions

ESB has progressively extended the collection and estimation of Scope 3 emissions sources to all applicable Scope 3 categories. Emissions inventories are now estimated for Categories 1, 2,3, 4, 5,6,7 and 11 using a combination of calculation methods outlined in the Scope 3 GHG Protocol Guidance. Work is on-going to develop a methodology for Scope 3 Category 7 emissions estimates associated with working from home, brought about by the pandemic and ESB's Smart Working Strategy. We aim to report on this aspect of Category 7 with respect to 2023 activity.

## Net Primary Output

ESB does not disclose net primary output by energy source and regulatory regime in MWh. Due to the nature of all island market structures, disclosure of this nature is deemed to be commercially sensitive to a level where it may provide competitors with significant commercial insights and advantage. Energy inputs to the thermal generation process are reported in the energy management section, as is required by legislation in Ireland.

# Emissions (continued)

## Emissions Value Chain

### Business Inputs

Emissions from fuel supply
**1,579,873 tonnes**

### Electricity Generation

Emissions from generation
**7,234,561 tonnes**

### Electricity Transmission & Distribution

Emissions from substations
**8,855 tonnes**

Emissions from transmission & distribution network
**776,371 tonnes**

**7,164 tonnes**

### Electricity Supply & Services

Emissions from home customers and business
**1,784,940 tonnes**

### Business Operations

Building emissions
**549 tonnes**

Vehicle fleet emissions
**14,650 tonnes**

Waste generated in operations

Indirect fuel related activities

Purchased goods and services

Business Travel

**277,718 tonnes**

Capital Goods

Employee Commuting

Transport

Distribution

2018
**454g $CO_2$/KWh**

Low carbon transition reduced by 63%

2030
**140g $CO_2$/KWh**

Direct Emissions (Scope 1)
Indirect Emissions (Scope 2&3)

# Emissions (continued)

## Emissions Performance Table

### GHG Emissions Scope 1 (tonnes $CO_2e$) from Thermal Generation

| | 2022 | 2021 | 2020 | Baseline (2005) |
|---|---|---|---|---|
| Ireland | 4,690,064 | 5,411,950 | 3,570,952 | 14,630,000 |
| Northern Ireland | 761,594 | 709,846 | 682,857 | |
| Britain | 1,782,903 | 1,729,453 | 886,543 | |

### GHG Emissions Scope 1, 2 & 3 (tonnes $CO_2e$) from Business Operations

| | 2022 | 2021 | 2020 | Baseline (2015) |
|---|---|---|---|---|
| **Scope 1** | | | | 38,596 |
| Premises Energy- Thermal | 549 | 679 | 666 | |
| Vehicle Transport | 14,650 | 14,700 | 1,5029 | |
| Gaseous Emissions ($SF_6$, PFC) | 8,855 | 8,868 | 7,846 | |
| **Total Scope 1** | **7,258,615** | **7,875,496** | **5,163,893** | |
| **Scope 2 (Location based)** | | | | |
| Network Losses (SEM, T&D) | 776,371 | 613,880 | 729,122 | |
| Premises Energy -Electricity | 7,164 | 5,979 | 7,238 | |
| **Total Scope 2** | **783,535** | **619,859** | **736,360** | |
| **Scope 3** | | | | |
| Purchased Goods & Services (Cat. 1) | 727 | 525 | 555 | |
| Capital Goods (Cat 2) | 265,912 | 208,931 | 189,936 | |
| Fuel & Energy (Cat 3) | 1,579,873 | 1,730,044 | 1,079,390 | |
| Transport & dist (Cat 4) | 1,937 | 1,937 | 1,937 | |
| Waste (Cat 5) | 666 | 517 | 535 | |
| Business Travel (Cat 6) | 6,278 | 3,862 | 4,340 | |
| Employee Commuting (Cat 7) | 2,198 | 2,029 | 2,063 | |
| Use of Sold Products (Cat 11) | 1,784,940 | 1,380,000 | 1,071,265 | |
| **Total Scope 3** | **3,642,531** | **3,327,845** | **2,350,022** | |
| **Total GHG Emissions (tonnes $CO_2e$)** $CO_2$ | **11,684,681** | **11,823,200** | **8,250,275** | |

### Other Emissions (tonnes)

| | 2022 | 2021 | 2020 | Baseline (2006) |
|---|---|---|---|---|
| NOx | 3,909 | 3,954 | 2,882 | 21,585 |
| SOx | 838 | 1,196 | 157 | 25,400 |
| Dust | 37 | 126 | 50 | 1,127 |
| Carbon Intensity from Generation | 419g$CO_2e$/kWh | 439.51g$CO_2e$/kWh | 375g$CO_2e$/kWh | 670g$CO_2e$/kWh (2005) |

Footnotes to Table:
1 All Generating emissions are subject to verification under EU ETS and are reported to national environmental agencies annually.
2 Sulphur hexafluoride ($SF_6$)$SF_6$ is used in a significant portion of high-voltage switchgear assets on the transmission and distribution networks. It is used because of its very high electrical insulating properties which facilitates efficient and safe operation of the switchgear. In 2022 approximately 166kg of )$SF_6$ in ESB Networks & 222kg of )$SF_6$ for NIE Networks was used due to equipment faults.
3 Emissions table addresses GRI Standards 305-1, 305-2, 305-3, 305-4, 305-5, 305-7, EU5
4 GWP Source - IPPC AR5 Conversion Factors
5 ESB reported $CO_2$ intensity for 2022 of 419g$CO_2$e/kWh
6. A review of calculation methodology for All Island Transmission & Distribution Losses was undertaken as part of emissions inventory calculations in 2023, resulting in a restatement of T&D losses for 2021,2020 and 2019

# Emissions (continued)

## Future Outlook

As Ireland's leading energy utility, ESB has a stable business profile with over 50% of earnings (EBITDA) and assets accounted for by regulated electricity networks on the island of Ireland under established and transparent regulatory frameworks. ESB remains financially strong with net assets of €4.8 billion at 31 December 2022. In a volatile and uncertain funding environment, it is significant that we raised 3 additional bonds during 2022 and we have a strong liquidity position of over €2.2 billion at 31 December 2022. We have a moderate gearing level, relative to other utilities, of 58% at the end of 2022 and credit ratings of A- and A3 with Standard & Poor's and Moody's respectively, both reaffirmed during 2022. This strong financial position along with a stable business profile, means ESB is well positioned to meet the challenges that lie ahead and to deliver on the strategic ambition to make a difference, deliver a brighter future and achieve net zero by 2040.

Priorities for 2022 and beyond for the main business units include:

### Generation & Trading

GT operates its business with a focus on minimising environmental impact, aiming to significantly increase renewable generation and reduce the overall carbon intensity of electricity generation. ESB is committed to leading a secure and affordable transition away from the use of coal and peat for power generation with the closure of its peat plants in 2020. $CO_2$ output from GT's generation plants is lower than 2005 (reference date) by approximately 51%, and the carbon intensity of generation reduced by 37% to 419g $CO_2$/kWh. GT will continue to evolve and adapt the thermal portfolio through delivery of 190 MW of gas turbines to substantial completion in 2023, by finalising an agreement with the system operator to extend the operational life of existing assets and by progressing the hydrogen burning capability in the Carrington plant.

The Synchronous condenser and flywheel at Moneypoint, will enable the connection of greater levels of intermittent renewables to the electricity grid by providing improved voltage regulation.

GT will Increase the number of opportunities for investment in low-carbon generation including solar, storage and offshore wind through continued partnership with Parkwind on development of Oriel and Clogherhead offshore wind farms and exploring JV options to allow the development of its offshore wind development portfolio. Across solar, onshore wind and offshore wind, ESB has developed a pipeline of opportunities in excess of 8 GW. During 2023 GT plans to advance the existing pipeline through the development cycle and capacity auctions.

### ESB Networks

The key strategic objectives for ESB Networks business under the revised ESB Group strategy is to connect renewables to decarbonise the electricity system by 2040 and provide resilient infrastructure for a reliable low carbon electricity system. To this end, with the 31st December long stop date there will be a focus on delivery of RESS-1 (Renewable Energy Support Scheme) projects as a key priority for 2023. Currently 600 to 800 MW of renewable generation projects are programmed to be energized before the 2023 year-end. The exact number of customer projects is subject to a high degree of customer driven uncertainty originating from customer supply chain issues such as the global increase in the cost of solar panels.

ESB Networks is introducing a range of new products and services that will enable and empower our customers to become more flexible. New services such as community energy dashboards, personal or local renewable energy notifications, or renewable energy dashboards for businesses, will give our customers accurate real-time and forecast information about their energy. This information can be communicated directly to their smart devices, to their electricity supplier, or to customers themselves on their smart phone, tablet, or computer.

To support all our customers on their net zero journey, we will design our 'Build Once for 2040' concept, to provide optimal strategic investment. To provide adequate capacity for connection of renewable generation at all voltage levels, as part of our 'Build Once for 2040' concept, we are proposing to develop renewable hubs. Renewable hubs will be 110/38 kV and 110/MV substations where clusters of renewable generation will be connected. This should allow more microgeneration, mini-generation, and small-scale generation to be connected to the distribution system. Connection charging policy changes will need to be considered in conjunction with the development of renewable hubs. ESB Networks is enabling flexibility through the National Network, Local Connections (NN,LC) Programme and we will put systems in place to meet the system flexibility targets set out in CAP23 for 2025 and 2030.

ESB Networks transmission delivery and associated work programmes support delivery of EirGrid's Shaping Our Electricity Future roadmap to meet the targets in the Government's Climate Action Plan. The integrated work programme includes up to 350 individual transmission projects, which will require very significant investment to deliver a low-carbon future, energy independence and security of supply. As this plan is further developed by EirGrid, ESB Networks will respond with agility to changing circumstances and will build this flexibility into our organisation and resourcing.

### NIE Networks

NIE Networks' Sustainability Action Plan outlines its commitments to reducing its business carbon footprint, electrifying c.14% of its small fleet and improving buildings' energy performance as well as consolidating Belfast locations. NIE Networks is a member of the United Nations' Race to Zero campaign and has committed to a 50% reduction in Scope 1 (excluding $SF_6$) and Scope 2 (including losses) emissions by 50% from 2019 baseline levels by 2030. Climate Change Act (Northern Ireland) 2022 – Climate Change Act (Northern Ireland) 2022, came into force on 6 June. It sets a Net Zero target by 2050 (with exception of methane), 48% reduction by 2030 (from 1990 levels). The DAERA (assisted by each NI Dept) will prepare Climate Action Plans (16-week consultation began in Apr 2023 and is due for publication end Dec 2023) and will be produced every five years aligned to a Carbon Budget. The first three Carbon Budgets will be set by Dec 2023 and will include the actions to meet GHG emission targets (first period will be 2023-2027). The Act provides for the appointment of a Northern Ireland Climate Commissioner, a Just Transition Fund for Agriculture, Sectoral Plans, the establishment of a Just Transition Commission and there will be a requirement for Public Bodies to Report on their progress.

# Emissions (continued)


Vehicle fleet electrification at NIE Networks

During 2023 NIE Networks will progress its development of the RP7 Price Control submission to meet societal, customer and business needs and will engage on key policy decisions and processes required for RP7 Price Control as well as Contributing to the implementation of NI's Future Energy Strategy. NIE Networks' proposed plans for the next price control are intended to deliver transformational impact for customers. A net zero carbon future will necessitate a much greater role for and dependency on electricity in society, with the expected need for the rapid electrification of heat and transport a key requirement. Enabling this change will require significant development in the capacity and reliability of the existing network, alongside further development, to ensure adequate capacity for the increasingly diverse mix of renewables that will emerge.

NIE Networks achieved Platinum level accreditation for the Northern Ireland Environmental Benchmarking Survey for the sixth consecutive year in 2022. The Survey aims to push the environmental agenda to the fore by recognising and rewarding those organisations that are going above and beyond their legal requirements to improve their environmental impacts and better manage their resources.

NIE Networks Ltd has committed to set a science-based target to reduce emissions by 50% including network losses by 2030 compared with the 2019 baseline, and reach net zero by 2050 or sooner.

## Customer Solutions

Customer Solutions stepped forward to empower, enable, and support customers and communities to achieve Net Zero during 2022 through:

- Electric Ireland launched a suite of 'Home Electric+' smart meter tariff plans to help customers learn more about their energy consumption, decrease their overall electricity usage and reduce their bills by availing of cheaper electricity at different times of the day.
- Electric Ireland SuperHomes, gaining certification as Ireland's first "One Stop Shop" looking after all the key stages of a home energy retrofit, from retrofit design through to project completion and payment of SEAI grant funding.
- ESB ecars continuing to expand and improve the reliability of its public EV charging network, increasing in size to over 2,000 charge points across our networks in ROI, NI and GB.

Customer Solutions is pivotal in helping ESB deliver on its strategy through empowering, enabling and supporting customers and communities achieve net zero. It does this through the following key objectives:

- Always customer first - everything we do is driven from a deep customer understanding and insight into what they most need to reach net zero.
- Empowering net zero through our products and propositions - We are by our customers' side on their electric journey, putting easily understood products and propositions into their hands, incentivising them to reach net zero.
- Inspiring behavioural change through our portfolio of trusted brands. We provide leadership in energy, showing our customers the future through our brand and marketing programmes, encouraging them to embrace an electric lifestyle.
- Supporting our customers through policy and regulatory advocacy - We do the right thing by our customers, our community, and our environment, advocating for policies and regulation that enables us all to achieve net zero and ensures no one is left behind.

# Technical Case Study

## Synchronous condenser and flywheel Moneypoint

A synchronous condenser is a machine used to manage the stability of the national electricity grid. Its purpose is not to convert mechanical energy to electrical energy, but to allow it to respond to and adjust conditions on the electricity grid to ensure stability is maintained. It does this by providing reactive power for voltage control, sufficient inertia for frequency support and short-circuit power for system strength.

The machine's reactive power control capability provides improved voltage regulation. This can be achieved by continuously generating or absorbing reactive power given a specific voltage set point. The synchronous condenser and flywheel installed at Moneypoint has a reactive power range of +260 MVAr to -111 MVAr. In the electricity grid, inertia is traditionally derived from conventional rotating generators. This inertia is essential to the electricity grid as it allows for a fast short-term response to systems failures. Other asynchronous technologies such as wind turbines and batteries do not provide this inertia. With decommissioning of traditional power stations and the need to further increase renewable penetration, synchronous condensers are set to play a key role in the electricity grid operation.

The addition of the flywheel to a synchronous condenser significantly increases the inertia of the overall system. The synchronous condenser at Moneypoint integrates a large flywheel rotor attached to the shaft of the motor. This heavy, rotating mass of over 130t, rotates in a case under vacuum conditions to reduce friction losses. The rotating mass acts as a physical stabiliser and automatically compensates for sudden short-term changes in systems. The synchronous condenser and flywheel can provide 4,000MW of inertia, is the first of its type in Ireland and presently is the largest flywheel installation in the world.

Short circuit power is another key element involved in the stabilisation of the grid. Large fossil-based power stations produce significantly higher levels of short circuit power than the equivalent renewable generation of a similar power output. As fossil-based power stations are set to phase out, short circuit power can then be generated through synchronous condensers.

Other benefits associated with the use of such technology are the reduced carbon impact of transmission operations and the reduced constraint costs. Both are achieved by allowing additional penetration of renewables.

With Ireland set to increase the share of electricity from renewables to 80 percent by 2030, ESB is transforming its site at Moneypoint into a green energy hub with the Green Atlantic @ Moneypoint project. With the commissioning of Moneypoint's synchronous condenser and the world's largest flywheel completing the first phase of this project, ESB is a step closer to achieving its Net Zero by 2040 strategy.

Inside the Synchronous Compensator building in Moneypoint

# Management of Environment and Sustainability

As a major Irish utility with significant presence in the all-island (Republic of Ireland and Northern Ireland) market, and a growing presence in the Great Britain energy market, ESB has a strategic focus on climate change and biodiversity loss as the two biggest issues facing humanity today. A commitment to leadership in reducing carbon emissions and supporting the electrification of heat and transport is central to ESB's strategy. ESB's Driven to Make a Difference strategy, published in early 2022, commits the business to achieving Net Zero emissions by 2040. We have reported our emissions performance to CDP since 2009 and scored B, management level, in our 2022 Climate Change Questionnaire. ESB joined the All-Ireland Pollinator Plan in 2021.

Sustainability in its fullest sense includes carrying out business operations responsibly and with care for the impact on the environment. ESB's policies, including the Environment and Sustainability policy and Human Rights policies set out the high-level principles to progress towards these goals throughout the organisation. Environmental Management Systems are operated throughout the Group. ESB reports on its ESG performance annually, including full disclosure of direct and indirect carbon emissions.

ESB reports climate risk disclosure voluntarily under the Task Force on Climate-Related Financial Disclosures (TCFD) framework and has also included disclosures in its Annual Report (pages 109-116) under the EU Taxonomy Regulation, ESB Annual Report 2022.

An ESG project, named the Sustainability Transformation Enablement Programme (STEP Programme) to support enhanced reporting and governance to meet the increased requirements of EU regulation, investors, and stakeholders was established during the year. The STEP programme's purpose and deliverables are to enable outstanding Environmental & Social performance by:

- Positioning environmental stewardship and social responsibility as core to everyone's role in ESB through engagement, leadership development and additional supports.
- Establishing the enhanced reporting framework (including standards, systems, processes, organisation, resources, and governance) and external communications to provide leading transparency and accountability.

**ESRS E1 Climate Change**

The policies linked below outline how ESB seeks to address the management of its material impacts on climate change, as well as associated material risks and opportunities. During 2023 we plan to undertake a gap analysis against CSRD and the respective ESRS standards. The outcomes of this assessment will shape our future disclosures and addressing of any identified policy gaps.

Policies related to Climate Change:

ESB Group Environment and Sustainability Policy

ESB Human Rights Policy

ESB Code of Ethics

## Environmental Management Systems

In recognition that our business activities have the potential to cause environmental impacts, ESB seeks to manage our activities in a manner that provides a high level of protection for our natural environment and contributes to the reduction of greenhouse gas emissions, while supporting sustainable economic development. Due to the nature of our activities, we are subject to rigorous standards of environmental legislation and regulation through for example environmental licences and permits issued by relevant Regulatory authorities, our Thermal generating stations operations are licenced activities, and we must comply with all aspects of their associated Industrial Emissions Licences. Non licenced activities are subject to assessment during planning processes and subsequent conditions where the planning authority deems necessary.

We strive for excellence in all our endeavours to comply with all applicable laws and regulatory requirements. We work through externally certified environmental management systems in line with the ISO14001:2015 standard throughout ESB Group to achieve this. We seek out opportunities to adopt best practice, such as the E.DSO sustainable grid charter and the All-Ireland Pollinator Plan. We are committed to playing our part as a responsible business by achieving an appropriately high standard of environmental management and by embedding sustainability in all our activities.

The emphasis on responsibility for environmental management in ESB flows through the company from the Board through the Chief Executive, to all senior management and in turn to each manager, supervisor, team leader and member of staff. The Board Safety, Sustainability and Culture Committee are responsible for oversight of company strategy, policy and compliance in safety, health and environmental matters and for advising the Board on health, safety and environmental matters. The Executive Director Team (EDT) are ultimately responsible for embedding sustainability and the implementation of effective environmental management within their areas of responsibility. Each business unit within ESB has dedicated Environmental managers who report to the relevant business unit senior manager and ultimately keep the Board abreast of all environmental related matters.

ESB Group requires robust and responsive methods for handling any grievances that may arise from the general public or any other societal stakeholder, be they general complaints or complaints of an environmental nature. Environmental Incidents occurring are reported as required to the licencing authorities, for example, via Eden to the EPA. Incidents are categorised in line with impact, severity and escalation status in line with local environmental agency requirements.

## Access to Information on the Environment

ESB is a public authority for purposes of the European Communities (Access to Information on the Environment) Regulations 2014-2018 (the "AIE Regulations"). Under the AIE Regulations members of the public are entitled to request access to information on the environment that is held by or for ESB or by ESB Networks DAC. Only environmental information can be requested under the AIE Regulations. This term however, is widely defined in the AIE Regulations and interpreted widely by the Commissioner for Environmental Information and the High Court.

ESB and ESB Networks DAC are separate public authorities under the AIE Regulations and information on how to make a request for environmental information to ESB or ESB Networks DAC is available at the following company website links Data Protection and AIE (esb.ie) and www.esbnetworks.ie/environmental-information-requests.

# Management of Environment and Sustainability (continued)

## AIE Regulations Statistics

| | ESB 2022 | ESB Networks DAC 2022 | ESB 2021 | ESB Networks DAC 2021 | ESB 2020 | ESB Networks DAC 2020 |
|---|---|---|---|---|---|---|
| New AIE requests | 19 | 11 | 21 | 9 | 18 | 6 |
| Requests b/f from previous calendar year | 4 | 0 | 0 | 1 | 1 | 0 |
| Requests c/f to next calendar year | 3 | 0 | 4 | 1 | 0 | 1 |
| Requests Granted / Part Granted | 15 | 5 | 11 | 2 | 11 | 3 |
| Requests Refused | 4 | 4 | 4 | 3 | 6 | 1 |
| Requests Transferred | 0 | 0 | 0 | 4 | 0 | 0 |
| Requests Withdrawn | 1 | 0 | 2 | 0 | 2 | 1 |
| Internal Review Requests | 1 | 1 | 7 | 4 | 6 | 1 |
| Requests appealed to OCEI | 2 | 1 | 4 | 1 | 4 | 1 |

## Environmental Performance

Significant fines and non-monetary sanctions for non-compliance with environmental laws and /or regulations in terms of:

| | 2022 | 2021 | 2020 |
|---|---|---|---|
| (i)Total monetary value of significant fines | €1,000[1] | 0 | 0 |
| (ii)Total number of non-monetary sanctions | 0 | 0 | 0 |
| (iii) Cases brought through dispute resolution mechanisms | 0 | 0 | 0 |

* GRI 307-1(a)

Notes to Table:
1. EPA issued proceedings against ESB Networks DAC in July 2020. These proceedings included six separate offences alleging a failure to repair leaks of $SF_6$ gas without undue delay in the sub-station in Carrowdotia South, Co Clare. The matter came before the District Court in Dublin on 30 June 2022. ESB Networks DAC entered a guilty plea in relation to one of the offences and the EPA withdrew the remaining five offences. The District Court recorded the guilty plea and imposed a fine of €1,000.

## Environmental Performance statement

In addition to the above noted sanctions, we would like to comment on the following (GRI307-1(b):

### ESB Fisheries

ESB operates several large-scale hydroelectric generation stations on the Shannon, Erne, Lee, Liffey and Clady Crolly river systems and carries out extensive fisheries development and conservation work as a primary fisheries owner. ESB operates three salmon conservation hatcheries on the Shannon, Erne and Lee catchments to maintain and conserve stocks.

There have been two fish mortality events at the salmon hatchery in Parteen over the year and ESB Fisheries Conservation staff take these incidents seriously. On 30 April 2022, an acute fish mortality event occurred when almost 100,000 of first feeding fry (juvenile salmon) were discovered to be dead, out of a total stock of 120,000. A veterinarian analysis of the mortalities found the most likely cause of this event to be an algal bloom within the water supply intake from the River Shannon.

The second mortality event occurred on 4 November 2022, when 78 adult female salmon were discovered dead within a single tank, due to oxygen deprivation. Following an independent third-party investigation by Salmo Salar, civil works have commenced to provide an emergency back up supply of oxygen to the fish tanks adjacent to the river.


Emergency Back Up oxygen supply civil works being undertaken at Parteen Hatchery

## Management of Environment and Sustainability (continued)

### ESB Networks

ESB Networks produce an Annual Environmental Performance Report every year. Some of the highlights of the 2022 report will include:

- ESB Networks maintained external certification of its EMS to the international ISO 14001 Standard in 2022, with a recertification audit in November 2022.
- Carbon Emissions associated with the ESBN Fleet and Equipment, $SF_6$ Gas, and Buildings were further reduced.
- ESBN continued the replacement of over 2.4 million electricity meters in homes, farms, and businesses with next-generation smart meters to support the transition to a low carbon electricity network. 2022 was a landmark year for the project, as we crossed the 1 million smart meters installed threshold. By the end of 2022, 1.1 million smart meters had been installed, despite global supply chain issues. This compares to 622,000 meters installed at the end of 2021.
- The Dingle Project concluded, and ESB Networks continues to share the learnings and insights from the Dingle Project with other energy utility companies, policy makers, community groups and interested stakeholders both nationally and internationally. The data generated as part of the project has also been anonymized and is available to research performing organisations for future research and analysis purposes.
- EPA issued proceedings against ESB Networks DAC in July 2020. These proceedings included six separate offences alleging a failure to repair leaks of $SF_6$ gas without undue delay in the sub-station in Carrowdotia South, Co Clare. The matter came before the District Court in Dublin on 30 June 2022. ESB Networks DAC entered a guilty plea in relation to one of the offences and the EPA withdrew the remaining five offences. The District Court recorded the guilty plea and imposed a fine of €1,000. The equipment which leaked in the substation was replaced in 2019.

### E.DSO Charter

Both ESB Networks and NIE Networks have adopted the European Distribution System Operators' (E.DSO) Sustainable Grid Charter as a statement of intention in relation to their commitment to sustainability in respect of climate change, reducing their carbon footprint and wider environmental and societal impacts.

## Environmental Complaints

ESB's website (www.esb.ie), sets out a variety of channels for reporting directly to the main customer facing businesses in the ESB Group, to ESB Networks Ltd. and Electric Ireland, as does NIE Networks Ltd. website (www.nienetworks.co.uk). The process for each of these public-facing business units is underpinned by a customer charter, code of practice and a complaints handling procedure, all with clear performance expectations stated publicly, as well as a regulatory obligation to report in certain circumstances. These complaints channels relate in the main to general business or customer complaints, however, all complaints are redirected to the appropriate parts of the business with responsibility for resolution.

### ESB Networks LTD

ESB Networks has a customer charter outlining 12 customer distribution service guarantees. A National Customer Care Centre also acts as a first point of contact https://www.esbnetworks.ie/help-centre.

### NIE Networks

NIE aims to provide a first-class service and value for money to all its customers. Its customer charter, code of practice and customer care helpline are accessible via the company website www.nienetworks.co.uk

Other avenues to register environmental complaints include reporting to local authorities and Environmental Regulators for licensed generating stations.

# Biodiversity

In very simple terms "biodiversity" includes all life on Earth. Biodiversity plays a critical role in ecosystem function. As well as their ongoing ability to provide ecosystem services, biodiversity provides the human population with clean air, water, food, fuel, medicines, recreation, pollination, soil fertility, climate regulation and mitigation from extreme weather events. Biodiversity is declining globally and despite increased social awareness and political efforts to halt its loss, biodiversity remains threatened by human activities including overexploitation of wild species and conversion of land to agricultural and industrial use. ESB activities comprise electricity generation, transmission, distribution and supply. ESB Group has a responsibility to manage these in a way that provides a high level of protection for the natural environment and contributes to the sustainable development of the economy.

Managing activities that have the potential to impact on biodiversity is a key aspect of ESB Group's approach to environmental management. ESB's Environmental Management Systems' structure provides the mechanism by which the necessary local statutory authorisations, operational procedures and improvement measures and programmes are developed and maintained.

### ESRS E4 Biodiversity and Ecosystems

The policies linked below outline how ESB seeks to address the management of its material impacts on climate change, as well as associated material risks and opportunities. During 2023 we plan to undertake a gap analysis against CSRD and the respective ESRS standards. The outcomes of this assessment will shape our future disclosures and addressing of any identified policy gaps.

Policies related to Biodiversity and Ecosystems:

ESB Group Environment and Sustainability Policy

## Managing Operational Impacts On Biodiversity

ESB Group has developed a Biodiversity Policy which underpins the ESB Group Policy Statement on Environmental Management and Sustainability. The stated aim of the policy is to set out the context in which ESB endeavours to manage its activities to avoid significant impact on habitats, species or other aspects of national heritage and where feasible, to enhance biodiversity. In addition, a Group Standard relating to Biodiversity is in place, comprising 24 discrete measures to ensure ESB's activities are managed in a sustainable manner in relation to biodiversity. This environmental standard sets out the requirements to identify potential impacts on biodiversity with the aim of avoiding or mitigating these impacts, and where feasible, work to enhance biodiversity.

The network of protected sites in the Republic of Ireland includes those designated under EU legislation, namely Special Areas of Conservation (SAC) and Special Protection Areas (SPA), as well as those designated under national legislation, named Natural Heritage Areas (NHA). SACs and SPAs in Northern Ireland, have retained their protection status under national legislation as part of the UK's withdrawal from the EU. Other sites designated under national legislation in Northern Ireland are Areas of Special Scientific Interest (ASSI).

All proposed operational and maintenance activities are screened at an early stage to determine whether Environmental Impact Assessment (EIA), Appropriate Assessment (AA), Ecological Impact Assessment (EcIA) or Planning Permission are required.

Biodiversity impacts are considered in all areas comprising existing assets or where new assets are proposed within close proximity to designated sites (as set out by national, regional or EU legislation), as well as other non-designated features of ecological interest.

Correspondingly, specific work instructions and methods are put in place to ensure the protection of biodiversity incorporating all habitats and species inside and outside of designated sites, during and following any such works.

# Biodiversity (continued)

ESB Group employs a number of specialist environmental staff including professional ecologists, as well as operating a consultant framework relating to terrestrial, freshwater and marine ecology. ESB's ecology staff, based in Engineering and Major Projects, are involved throughout all stages of projects from feasibility/due diligence/site selection stage, through design stage, construction and operation of a development. They also deliver targeted training and biodiversity awareness workshops to their ESB colleagues as well as providing advisory support in relation to specific queries from across ESB Group.

## Stepping Forward on Biodiversity

Through 2022, ESB has been advancing plans with regard to advocating a 'Nature Positive' approach to its operations and projects. ESB has continued to progress its review of biodiversity at all relevant landholdings, with the aim of identifying and quantifying the extent of ecological features of interest at ESB Asset sites and developing targeted site-specific recommendations for biodiversity gain where feasible. Staff attended the National Biodiversity Conference in Dublin Castle in June, and ESB has since made a submission to the Department of Housing, Local Government and Heritage (DHLGH) with regard to the Draft 4th National Biodiversity Action Plan (NBAP) public consultation. ESB has also furthered biodiversity-specific engagement with key parties in other utilities and the broader environmental sector. This culminated in November, with ESB being selected as a lead participant in the Business for Biodiversity Platform pilot, which will progress the development of its Community of Practice through 2023.

Business for Biodiversity Ireland is driving the transition to a nature positive Irish economy, where business activities enhance natural systems in addition to minimising impact, by harnessing the energy and innovation capacity of Irish businesses. It is an initiative without political affiliation or agenda other than to contribute to the realisation of Ireland's Vision for Biodiversity: '*By 2050, biodiversity in Ireland is valued, conserved, restored and sustainably used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people*.' This multi-stakeholder Platform is being established using seed funding, provided by the DHLGH and the Department of Agriculture, Food and the Marine (DAFM), over a three-year period. The National Biodiversity Data Centre (NBDC) and Business in the Community Ireland (BITCI) are supporting development of the Platform. The initiative is a key objective delivery vector in the Draft 4th NBAP, and ESB looks forward to constructively engaging with the other pilot participants from across the Irish business sector.

ESB is cognisant of the signing of the Kunming-Montreal Global Biodiversity Framework in December 2022 at the UN Biodiversity conference COP15 in Montréal. This framework contains global goals and targets aiming to protect and restore nature, ensure its sustainable use as well as spur investments for a green global economy. The agreement includes several key global targets, including, restoring 30% of degraded ecosystems globally (on land and sea) by 2030, conserve and manage 30% of areas (terrestrial, inland water, and coastal and marine) by 2030 and tackle climate change through nature-based solutions. A significant outcome of the agreement aims to improve business action on biodiversity, wherein large companies and financial institutions will be required to regularly monitor, assess and disclose risks, dependencies and impacts on biodiversity as well as providing information to consumers to promote sustainable consumption.

Outside designated sites, ESB developments and activities are designed and planned to avoid impacting on biodiversity, in line with the aforementioned Biodiversity Policy and Group Standard. Where there is a potential of impacts on biodiversity, measures are undertaken to avoid and reduce impacts. For example, ESB staff and contractors continue to be briefed on the potential negative impact of the spread of invasive species such as Japanese knotweed, giant hogweed, Himalayan balsam, giant rhubarb and rhododendron. Where such species are known to occur in proximity to ESB assets, advice is sought from ecologists and where necessary, specialist contractors are engaged to manage and control any infestations to prevent spread or further impingement on infrastructure.

# Biodiversity (continued)

## Working In Areas Of High Biodiversity Value

The vast majority of ESB Group assets are not located within designated sites. The estimated extent of various ESB Group assets within designated sites in Republic of Ireland and Northern Ireland are set out in the tables below. Examples of these types of site include SPAs, SACs, NHAs (ROI only) and ASSIs (NI only).

### Republic of Ireland:

| | Total | Inside SAC | Inside SPA | Inside NHA |
|---|---|---|---|---|
| Lands under ESB ownership/Foreshore Lease | 80 $km^2$ | 21 $km^2$ | 40 $km^2$ | 2 $km^2$ |
| MV Cabinets and Plinths (10kV & 20kV) | 274,450 | 2,583 | 1,975 | 109 |
| High Voltage Stations (38kV, 110kV, 220kV & 400 kV) | 808 | 1 | 14 | 1 |
| 38 kV TO 400 kV Overhead Lines (km) | 12,703 km | 301 km | 188 km | 42 km |
| 38 kV TO 400 kV Cable (km) | 2,165 km | 31 km | 80 km | 4 km |

### Northern Ireland:

| | Total | Inside SAC | Inside SPA | Inside ASSI |
|---|---|---|---|---|
| Lands under NIE ownership (Land Bank) / Foreshore Lease | 0 | 0 | 0 | 0 |
| MV Cabinets and Plinths (6.6 kV to 33 kV) | n/a | 4 | 4 | 12 |
| High Voltage Stations (110 kV & 275 kV) | 0 | 0 | 0 | 0 |
| 110 kV to 275 kV Overhead Lines (km) | 2,200km | 1.6km | 4.15km | 7.1km |

In the Republic of Ireland, the majority of lands under ESB control which are located within designated sites are associated with the respective hydro power properties and their associated upstream catchments. ESB Networks are also responsible for a significant extent of assets within designated sites such as substations, overhead lines and underground cables. Any overlap of these assets with designated sites is indicated on ESB Networks internal mapping systems.

In the Republic of Ireland, the provisions of the Habitats Directive have been integrated into the Planning and Development Act 2000 (as amended) and the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended). In accordance with the aforementioned legislation, where projects or activities are proposed, ESB undertakes Screening for Appropriate Assessment (AA) to assess, in view of best scientific knowledge and the respective conservation objectives for relevant European sites, if proposed works or activities, individually or in combination with other plans or projects would be likely to have significant effects on any European sites. In the context of electricity infrastructure projects in Ireland, developments normally exempted from planning requirements lose their exemption where an AA is required under the Planning and Development Act (as amended). Accordingly, the Screening for AA outcome will determine, in such instances, whether a project or activity requires planning permission or not. To facilitate such Screenings and any further assessments, ESB draws on the expertise of its internal specialist staff and external framework consultants.

NIE Networks has circa 3,500 kilometres of 11kV (or below) overhead line in natural heritage protected sites. These sites are all mapped on its systems. NIE Networks liaises with the NIEA regularly to receive the required consent and to agree the necessary processes to be followed on all such sites to ensure they and their features are protected and mismanagement is avoided.

Where mitigation is required or when planning conditions are imposed, these are followed and monitored to ensure there is minimal impact while work is carried out. ESB continues to assess the impact of its operations in accordance with its obligations. Where required, development projects and activities are audited to ensure effectiveness of biodiversity processes.

## Case Study

### Ongoing pollinator action at the ESB Networks Training Centre, Portlaoise

As a key partner of the All-Ireland Pollinator Plan (AIPP), ESB has committed to take up opportunities for more pollinator-friendly management of landscapes within its property portfolio, where this fits with the needs of safety, business operations and property management. ESB is continuing to collate asset site information with the objective of identifying parts of sites suitable for supporting pollinators, through various actions such as minor changes in mowing regimes or new habitat creation.

Significant progress has been made at the ESB Networks Training Centre in Portlaoise, where several areas of the 14-hectare site (which would historically have been subject to regular mowing) is now subject to both short-flowering and long-flowering meadow regimes. This has proven to be immediately successful, with a diverse wildflower sward becoming apparent in the first growing season, including two species of orchid. Practicalities of the mowing regimes have been discussed with the ESB Networks staff with responsibility for grass cutting and landscaping, with lessons learnt to be collated and utilized to inform broader rollout at other ESB sites. Informative signage sourced from the Pollinator Plan website has been erected throughout the site, while a summer student placement trialled the usage of QR codes for future signage to direct readers to relevant online resources. Pollinator-friendly mowing regimes will be continued through 2023 and beyond, with further actions such as bulb and tree planting being considered.

# Biodiversity (continued)

## Case Study

### Omagh Pond

The Omagh – Strabane 110kV overhead line requires vegetation cutting on a biannual basis to keep the trees a safe distance from the line. A local landowner contacted NIE Networks via Ulster Wildlife with the suggestion of forming a natural 'pond' on his bogland under a section of the line. This is widely done throughout Europe and studies show biodiversity is significantly increased in such areas. NIE Networks will benefit from time and cost savings on future patrolling and cutting, as well as the many biodiversity benefits including, less repeat damage to existing habitat, creation of new habitat that can offer shelter, feeding and breeding opportunities and so increase the variety and abundance of species, regeneration of sphagnum in the standing water, removal of non-native trees and increased carbon capture as the bogland regenerates. After the scheduled 2 year cut and during an already planned outage on the line, the cut trees, remaining stools and top surface were scrapped back to the 'glacial till' layer and banked up around the sides forming a 'pond' 175 x 15 x 1m in size - this area then fills itself naturally with rainwater. The large boulders uncovered were gathered to form an island to offer protection from predators as the surrounding vegetation returns..

Before

During

After

## Case Study

### RSPB Bogland Restoration Works

NIE Networks has contributed £8,000 to the RSPB peatland restoration project, for RSPB NI to conduct a pre-feasibility phase of what will be the first step in developing a validated Peatland Code project. This involves:

- Collation and understanding of the range of potential sites
- Staff awareness raising of the Peatland Code process
- Investigating legal standing/issues of use for specific sites
- Initial discussions with potential partners, for sites outside RSPB estate
- Initial resource planning (staff and budget) to develop the project.

The work will require the deployment of experienced and skilled operatives to establish the current position of peatlands in Northern Ireland, including rural surveying staff, and specialist Legal support staff to review any land related laws/deed obligations/third-party rights.

The donation from NIE Networks has been match funded by RSPB allowing the project to commence in Quarter One of 2022. The work is expected to make a significant contribution towards RSPB NI in protecting and enhancing Northern Ireland's threatened peatlands.

## Biodiversity (continued)

### Case Study

**Timahoe North Solar Farm**

Timahoe North Solar Farm project is a Joint Venture with Bord na Móna. It comprises the construction of a 70 megawatt solar farm on a cutover raised bog in Timahoe, Co. Kildare. A number of key ecological receptors were identified at the site as part of the Environmental Impact Assessment, including the presence of two rare butterfly species - marsh fritillary Euphydryas aurinia and small skipper Thymelicus sylvestris. Marsh fritillary is a European legally protected species listed on Annex II of the Habitats Directive, while small skipper is an extremely rare butterfly species who's only known breeding population in Ireland is at Timahoe North. In order to avoid and minimise any potential impacts on these rare butterfly species, a detailed Lepidoptera Management Plan was prepared for the site in consultation with Butterfly Conservation Ireland (BCI). This Plan includes the following site-specific measures for the protection of these butterfly species: the intensive ecological monitoring of the butterfly species both pre-construction and during construction, the use of protective ecological buffer zones from known locations of butterfly larvae and from areas of suitable habitat, and the provision of a dedicated Project Ecologist who oversees the implementation of these measures onsite during construction. The Plan also includes the management of scrub onsite to provide more suitable habitat for these species. Scrub clearance will be undertaken in consultation with BCI, who have been regularly engaged with prior to and during the construction of the solar farm. The implementation of these measures outlined in this Plan will ensure that the highest level of protection is afforded to these rare butterfly species.

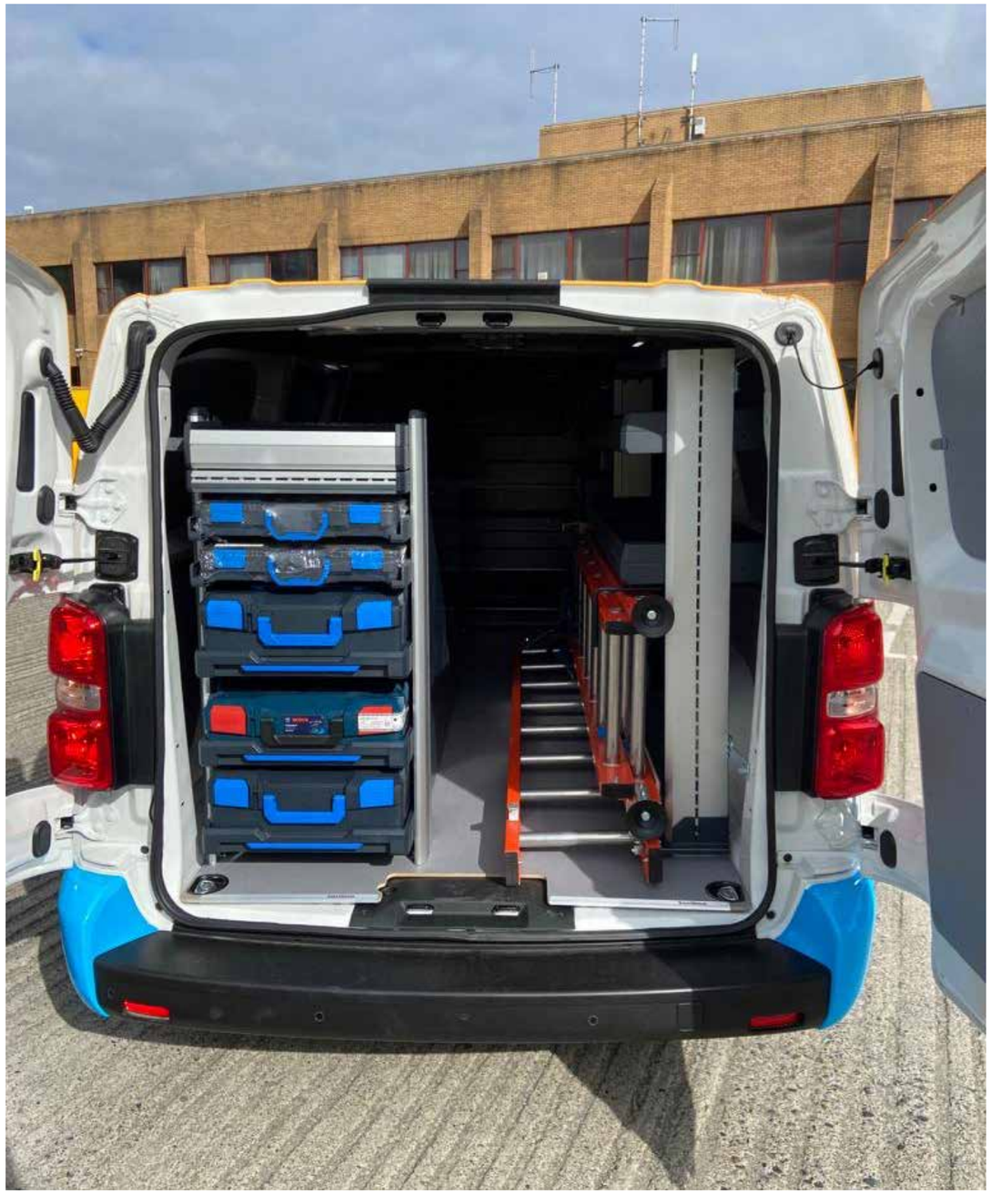
# Energy Management

For employees, energy efficiency is brought to life through our focus on energy conservation within our operations and how behavioural change can contribute to energy efficiencies in building energy, vehicle fuel consumption and other operational energy loads, all which contribute to ESB's broader Net Zero 2040 ambition. During 2022 ESB continued to implement, develop and bed in the cross-business unit energy management system, covering the operation of our buildings and fleet energy across ESB Group ROI operations. Accounting for an annual consumption of approximately 70,000 GWh in 2021. We successfully completed a recertification to ISO50001:2018 following an audit in November/ December 2022 carried out by our auditors, NQA. An additional five sites will be brought into scope of the energy management system during 2023, in an effort to broaden the reach of structured energy management and yield further energy efficiency improvements.

The Energy Management System will be used to achieve further savings against the increased targets for 2030 of 51% energy efficiency and 51% absolute carbon emissions reductions. During 2022, our new state of the art headquarters, F27, opened for occupancy in Q2. Further deep retrofit projects were completed on two of our largest ESB Networks locations, Finglas and Leopardstown, as well as the delivery of a widespread LED lighting upgrade programme. The development of a pipeline of building retrofit projects to be delivered in 2023 and beyond, also progressed significantly.

In an effort to progress the decarbonisation of our vehicle fleet, ESB Networks is continually testing the market for availability of electricity and other lower emissions technologies. A new mid sized 100% electric van was introduced to the fleet in 2022 and under PR5 Price Review to 2025, ESB Networks plans to procure up to 200 of such vehicles.

# Energy Management (continued)



ESB Networks Fleet & Equipment have also worked closely with operational end users within the business to design a bespoke lightweight internal fitout for tool and spare part storage as well as an internally stored ladder, to promote vehicle efficiency and improve vehicle range.

As a commercial semi-state company, ESB is also committed to supporting and being an exemplar in the delivery of Ireland's 2030 public sector targets. Under the legislation (SI426/2014), Irish public sector bodies and commercial semi-state bodies are required to deliver a 50% energy efficiency improvement and a 51% absolute reduction in the carbon emissions associated with operational energy by 2030. Data reported against SI426/2014 is reported a year in arrears against 2 annual regulatory deadlines for metered energy and unmetered energy. To the end of 2021, ESB Group has delivered a 50.2% improvement over baseline against the energy efficiency target. We will commence reporting on the emissions aspect of this legislation following the introduction of SEAI's new online reporting tool, due in 2024.

## Operational Energy Inputs

### Thermal Generation by Energy Source (GWh) *

| | 2022 (GWh) | 2021 (GWh) | 2020 (GWh) |
|---|---|---|---|
| Coal | 6,561 | 7,824 | 2,186 |
| Natural Gas | 22,268 | 22,628 | 17,427 |
| Oil | 1,638 | 2,167 | 468 |
| Peat | - | - | 1,720 |

* Thermal generation fuel inputs data is reported for the current year.

### Operational Energy (Primary Energy Equivalent (PEE) in kWh) **

| | 2022 (kWh PEE) | 2021 (kWh PEE) | 2020 (kWh PEE) |
|---|---|---|---|
| Electricity | 40,097,292 | 38,215,335 | 41,314,003 |
| Thermal | 2,674,878 | 2,202,356 | 2,502,817 |
| Transport | 47,448,251 | 51,906,413 | 53,710,105 |

### Energy Performance Indicator (EnPI)

| | 2022 | 2021 | 2020 |
|---|---|---|---|
| kWh/FTE Employee | 15,149 | 15,467 | 16,442 |
| % improvement against energy baseline | 50.2% | 49.2% | 45.9% |

** Operational Energy Consumption is reported to Sustainable Energy Authority of Ireland (SEAI) under public sector energy efficiency regulations (SI426/2014).

# Energy Management (continued)

## Case Study

**F27 ESB Headquarters –Energy Efficient by Design**

The redevelopment of ESB Fitzwilliam Street headquarters demonstrates the company's commitment to a low-carbon future, with the design of a BER A3, BREEAM Excellent, Near Zero Energy Building (NZEB) incorporating a mix of proven and new sustainable technologies.

F27 provides office accommodation for 1,373 staff covering 21,628sqm over 9 floors and includes a shared basement carpark with 109 car spaces incl. 12 ESB EV charging points, 216 bicycle rack spaces and 8 electric charging points, staff changing facilities and lockers. ESB business units are accommodated in open plan neighbourhoods including lockers, meeting rooms, collaboration spaces, project areas, huddle rooms, hub rooms, break out spaces and kitchenettes.

The building is efficient by design with the design brief being to minimise energy demand. This has been achieved through the incorporation of the following into the fabric design, construction and operation of the building and associated mechanical and electrical services

- Solar control on glazing based on orientation including vertical solar shading
- Ground Granulated Blast furnace Slag (GGBS) used in foundation and structure to reduce construction $CO_2$ impact
- Exposed perimeter concrete soffits within open plan office area to increase day light penetration
- $CO_2$ monitoring and natural ventilation control to maximise free cooling via the Building Management System
- Hybrid ventilation system incorporating new fresh air delivery techniques result in approximately 85% less fan energy
- New air delivery techniques for meeting rooms reduce energy usage dramatically
- Single coil fan coils reduce fan and embodied energy
- Heating energy usage approaches zero and is provided almost entirely from recovered heat
- 100% of domestic hot water is provided from recovered heat
- Free cooling is provided from a 4.8km ground loop system
- Advanced phase change material stores free cooling potential
- A glycol free cooling system reduces waste and improves efficiency
- Demand controlled kitchen ventilation with heat recovery
- Air quality is enhanced and monitored by active VOC monitoring
- Lift destination controls to optimise energy performance
- Roof mounted solar photovoltaic panels
- Energy efficient lighting and lighting control system
- Water conservation measures including ground water well, rainwater harvesting and waterless urinals
- Biodiversity including landscaped roof gardens and bee hives

The result is a low energy building providing a comfortable work environment while ensuring minimum energy consumption. The building management system is being monitored and the current heating and cooling requirements are 7.0 & 4.5kWh/m2/yr respectively, this compares to industry norms for heating of 80kWh/m2/yr. The design for the cooling system is based on 18W/sqm compared to an industry norm of 60-100W/sqm

# Energy Management (continued)

## Case Study

**Dargan Refurbishment**
During 2022 NIE Networks carried out extensive building refurbishment works to its Belfast Dargan Depot to improve the energy efficiency of the building.

The 1100m$^2$ building was originally Energy Performance Certificate (EPC) Rating D-80, similar to buildings of the same age and construction. Following the insultation upgrade, windows and roof replacement the building has achieved an EPC Rating B-28, which is comparable to a newly built facility.

The completed work includes:

- A new roof with PV panels
- New external windows and doors
- New external insulated cladding
- Ground floor interior layout changes, including increasing the size of the conference room
- A new larger first floor kitchen
- New toilet facilities throughout, including a shower
- Internal redecoration, new carpets and new furniture
- The installation of a passenger lift
- Installation of air conditioning and passive fresh air ventilation throughout the office areas


## Case Study

**NIE Networks commence fleet electrification**
2022 marked a significant milestone for NIE Networks and more specifically its vehicle fleet. Following the successful trial of the fully electric Renault ZOE car during late 2020/early 2021 and coupled with the very positive feedback received from employees, we have transitioned 18 fleet vans (5% of our fleet) to a fully electric van.

As part of the roll out of fleet EVs, we are supplying and fitting both home (7.2kW) and depot (22kW) charge points. Home charging costs are reimbursed to staff.

By the end of 2024, at least 14% of our fleet will be electrified. Our ultimate goal is to have in excess of 70% of our fleet electrified by 2030.

## Delivering Energy Reductions for Customers

Customer Solutions is pivotal in helping ESB deliver on its strategy of empowering, enabling and supporting customers and communities to achieve net zero. It does this through products and services that inform customers on energy use and allow them to control and optimise when they use their energy.

As part of Ireland's requirements under the EU Energy Efficiency Directive to deliver energy savings, Electric Ireland supported the introduction of the Energy Efficiency Obligation Scheme (EEOS) in 2014, under which Energy Suppliers developed solutions to enable customers improve the energy performance of their homes and businesses, reducing both financial costs and environmental impacts.

Following the successful delivery of Phase 1, which ended in 2021, an updated Energy Efficiency Directive sets new and even more ambitious energy saving targets for 2022-2030. We continue to support the government in the delivery of its 2030 targets and are actively engaged in the implementation of the updated obligation scheme.

In 2022, ESB Smart Energy Services on behalf of Electric Ireland supported the delivery of over 1,000 Home Energy Upgrades and 100 large-scale energy efficiency projects in business and industry, contributing over €2.4 million in investment and resulting in energy savings of over 39 GWh.

It is anticipated that these commitments will ramp up substantially in the coming years, with the aim to deliver additional energy savings of over 80GWh/year from 2023.

# Energy Management (continued)

**Pathway to 2030**
The EEOS scheme requires the specific delivery of energy savings across three categories – Energy Poverty, Residential and Non-Residential.

Delivery of energy efficiency savings in the Energy Poverty and Residential sectors will be delivered primarily through Electric Ireland Superhomes engagement with local authorities and directly with private homeowners by improving the energy efficiency of houses through deep retrofits, empowering customers by delivering increased comfort and reduced energy costs, while moving away from fossil fuels to more sustainable energy systems.

Electric Ireland Superhomes, a joint venture between Electric Ireland and Tipperary Energy Agency's Superhomes, established in 2021 completed retrofits in 200 houses in 2022 and has an ambition to deliver a total of 35,000 retrofits in Ireland by 2030. Once fully established, this joint venture will support 13,000 FTE jobs in the construction and retrofitting sector and deliver savings of 167 kt of $CO_2$ annually.

In the Non-Residential sector ESB Smart Energy Services will deliver energy saving targets by working with business customers to design, develop and deliver tailored solutions which include energy efficiency, electrification of heat, EV fleet solutions and demand management technologies by being their trusted partner and bringing the best of our capabilities to deliver innovative and value driven solutions for a low carbon world.

Home Retrofit One Stop Shop - Electric Ireland Superhomes

Smart Energy Services (esb.ie)

## Case Study

**Manufacturing a greener future with ABP Food Group**

ESB Energy Business Solutions - ABP Food Group
ABP is the largest beef processor in Ireland and the UK, working with more than 35,000 farmers and employing over 11,000 people in 46 manufacturing plants around Europe. As the first food company to be awarded a triple certification from the Carbon Trust and a founding member of Origin Green - Ireland's food and drink sustainability programme - ABP Food Group is focused on environmental best practice. So, when ABP needed a partner to develop renewable generation capabilities and improve energy efficiency, they called on ESB Energy Business Solutions.

The Challenge - Like all food and drink manufacturers, meat processing relies on the availability of constant refrigeration and a reliable supply of hot water - both of which requires significant energy. ABP wanted a way to reduce energy usage and cut carbon emissions at two of its Irish plants, to support its journey to carbon zero.
The Solution - Following a detailed analysis of the energy usage at each plant, ESB Energy worked in partnership with ABP to design the solutions. In addition to ESB's global energy expertise, ABP was also able to avail of ESB's €75m decarbonisation fund. This funding enables ABP to adopt the latest technology with no up-front investment. Costs are offset by energy savings, helping ABP realise its sustainability strategy of doing more with less.

The Technology - At ABP's Cahir plant, a waste heat recovery and thermal storage system was developed, allowing the plant to recover heat generated by the refrigeration system and significantly reduce energy costs.

With a boiler run on fossil fuels and a refrigeration system generating substantial waste heat, ABP's Clones plant received a total energy make-over. Ground source heat pumps provide most of the hot water, while heat capture and thermal storage technologies recycle waste heat from the refrigeration process.
An energy and carbon monitoring system facilitates ongoing equipment optimisation and cost savings.

The Results:
- 66% reduction in energy usage projected
- 80% reduction in carbon emissions per year projected, equivalent to 1,700 tonnes annually
- Electrification of heat significantly reduces fossil fuel reliance

# Water

ESB's most significant water demand is for the purposes of providing cooling water, steam process in steam turbine generation, flue gas desulphurisation and burnt lime hydration for thermal power generation.

Water is a natural resource and we are required by industrial emissions licence (generating stations) to identify ways to reduce water use where possible. Water used in industry can be extracted from groundwater, rivers and lakes (surface water), estuaries (sea water) or taken from public water supplies (potable water), recycled from the facility's processes or harvested from rainwater.

Cooling water is generally withdrawn from a riverine or estuarine source for use in the cooling process and is then safely discharged back to source under controlled and licensed conditions. In addition to cooling water abstraction each station has a water treatment plant which demineralises the water for the purpose of providing ultrapure steam to the turbine.

Lesser quantities of water are consumed in our offices and depots. As our operations are primarily in the Republic of Ireland, Northern Ireland and the UK, we do not operate significant water consuming operations in any locations currently considered under water stress. As with the use of all our natural resources, ESB is committed to being a responsible consumer of water through our management and conservation practices.

### EU (CSRD) – ESRS E3 Water & Marine Resources

The CSRD and European Sustainability Reporting Standards (ESRS), which will be finalised in 2023 represent the future of enhanced sustainability reporting for entities operating in the EU. ESRS E3 on Water & Marine resources will have a particular relevance for ESB, given both our industry and our growth ambition into offshore wind generation.

Currently the key corporate policy which sets out ESB's approach to protect the environment and build a sustainable path for the future is:

ESB Group Policy for Environment & Sustainability

During 2023 we plan to undertake a gap analysis against CSRD and the respective ESRS standards. The outcomes of this assessment will shape our future disclosures and addressing of any identified policy gaps.

## Water Consumption and Conservation

### Water Table 2022

| Water Source | Potable Water | | | Cooling Water | | | Recycled Water | | |
|---|---|---|---|---|---|---|---|---|---|
| m³ | 2022 | 2021 | 2020 | 2022 | 2021 | 2020 | 2022 | 2021 | 2020 |
| Withdrawal | 3,339,945 | 2,097,016 | 1,349,995 | 329,608,563 | 329,406,472 | 286,763,352 | 0 | 0 | 0 |
| Discharged | 3,339,945 | 2,097,016 | 1,349,995 | 329,608,563 | 329,406,472 | 286,763,352 | 0 | 0 | 0 |
| Recycled | 0 | 0 | 0 | 0 | 0 | 0 | 0* | 117,896 | 192,843 |

**Potable Water**
The water provided by the local authority via the water network infrastructure, which is consumed and discharged. In some cases this water is also used for steam generation by steam turbines in combined cycle gas turbine stations.

**Cooling Water**
Water abstracted from riverine or estuarine source for cooling. Typically cooling water is filtered and pumped through the cooling cycle, monitored for temperature and pH and returned to its original extraction source under controlled conditions and parameters set out in generating station's environmental licence.

**Recycled Water**
* Pipework corrosion caused by the recycled water has resulted in the cessation of water recycling in Moneypoint in 2022.

The demand for water, both potable and cooling, continues to be driven mainly by generator availability and market demand. Cooling water usage was relatively stable year on year, 2021 to 2022. Overall potable water consumption increased, driven in part by cessation of water recycling in Moneypoint, due to pipework corrosion.

ESB's new head office building, F27, opened for occupancy in May 2022. Its efficiency by design approach applies equally to water demand as it does to energy use. During 2022 average water consumption in F27 was 13.5 liters per person/day, compared to the average office building consumption levels of 50 litres per person/day. This is achieved mainly through low flow devices, rain water harvesting, and waterless urinals.

Water conservation, leak detection and water recycling projects take place across the business, at the power station or location level.

# Water (continued)

## Water Monitoring

Storm water is rain water run-off from roof and other non-process areas of a facility, e.g. carparks, and generally would not contain any pollution. Storm water is usually released into a local water body (riverine or estuarine) after a basic form of treatment. In line with licence requirements, we manage storm water to ensure no polluting substances or materials are released into the environment. Surface water from facilities is collected through various drains on site before passing through Class 1 interceptors & discharging to approved emission points.

Cooling water discharge is typically monitored for pH levels and temperature rise. Licence parameters stipulate the maximum allowable temperature differential between water intake temperature and discharge temperature. ESB carry out extensive testing both in house and externally by certified labs on our rivers, lakes, estuaries, surface, ground water discharge points. Each station carries out an annual testing programme for these waters as per each locations Industrial Emissions Licence. All testing is reported via the Annual Emissions Report to the statutory authority and any breaches or Emission Limit Values are notifiable to the EPA (or other relevant environmental agency) and depending on its environmental impact may be notifiable to the Local Authority.

**ESB's Water Footprint**

### Potable Water

Total potable water withdrawn in

2022: 3,339,945m$^3$

Total potable water discharged in

2022: 3,339,945m$^3$

### Cooling Water

Total cooling water withdrawn in

2022: 329,608,563m$^3$

Total cooling water discharged in

2022: 329,608,563m$^3$

### Recycled Water

Total recycled water withdrawn in

2022: 0m$^3$

Total recycled water discharged in

2022: 0m$^3$

# Effluents & Waste

ESB has made a concerted effort for many years to minimise the impacts to the environment from our operations, including waste. The focus on the area of waste management has led to improved compliance with legislation, better management of waste through continuous improvement programs, improved segregation of waste, implementation of better controls in handling of hazardous waste streams and higher levels of reuse and recycling, including the identification of new streams of reuse for waste products.

Staff commitment and involvement in appropriate segregation, waste reduction and improved reuse is central to our improving waste management performance, as is a strong partnership with incumbent waste framework contract service providers.

An improved level of oversight and assurance of proper and legally compliant disposal methods being employed by waste contractors aims to ensure the maximum possible levels of waste is diverted from landfill and that all waste streams are handled appropriately and compliantly.

Records on the management of waste are collected and maintained by each ESB Business Unit. This information is also used as a basis to estimate the $CO_2$ emissions associated with waste management and disposal.

### EU CSRD, ESRS E2 Pollution

The CSRD and European Sustainability Reporting Standards (ESRS), which will be finalised in 2023 represent the future of enhanced sustainability reporting for entities operating in the EU. ESRS E2 on Pollution will have potential implications for ESB, given both our industry and our strategic ambition.

Currently the key corporate policy which sets out ESB's approach to protect the environment and build a sustainable path for the future is:

ESB Group Policy for Environment & Sustainability

During 2023 we plan to undertake a gap analysis against CSRD and the respective ESRS standards. The outcomes of this assessment will shape our future disclosures and addressing of any identified policy gaps.

## Waste Totals by Method of Disposal

| Disposal Method | Waste Type Hazardous (Tonnes) 2022 | Waste Type Non Hazardous (Tonnes) 2022 | Total 2022 | Total Tonnes 2021 | Total Tonnes 2020 | Total Tonnes 2019 |
|---|---|---|---|---|---|---|
| 2019Reuse | 0 | 834 | 834 | 335 | 1,711 | 569 |
| * Recycling, Incineration & Recovery, incl. energy recovery | 4,959 | 7,406 | 12,365 | 11,143 | 10,472 | 13,896 |
| Composting | 0 | 41 | 41 | 22 | 44 | 63 |
| Landfill | 393 | 121 | 514 | 351 | 119 | 502 |
| Disposed of directly by organization or otherwise directly confirmed (Ash) | 0 | 168,789 | 168.789 | 92,993 | 89,638 | 81,526 |
| Totals | 5,351 | 177,191 | 182,543 | 104,843 | 101,019 | 96,493 |

Notes to Waste Disposal data provided:
1. Zero waste reported for the following categories of disposal method ( deep well injection, on-site storage, organisational defaults of waste disposal contractor)
2. Information provided by the waste disposal contractor for the purposes of collating waste volumes and categories
3. All hazardous waste as identified in the table above is handled and managed by approved and licensed hazardous waste management contractors, including all transport of hazardous waste materials
4. Waste disposed of directly relates to ash disposal from Moneypoint (coal)

## Commentary on Waste Performance

After over 2 years of predominantly working remotely due to COVID-19, without regular access to offices and buildings, ESB reopened all buildings to staff in May 2022, however, with a hybrid smart working model being the new way to work. In terms of office waste, this return to the office has influenced overall levels of waste generated in the business. 2019 data is retained in the waste table to provide a pre-COVID-19 comparison for all waste disposal methods, noting that ash production is directly correlated to electricity market conditions and the running of the coal generation plant at Moneypoint.

### ESB Networks

ESB Networks has a number of national framework contracts to collect and process waste arising from its operations, with collections of hazardous and non-hazardous waste from approximately 140 locations nationwide.

A waste tracking system has been in place within ESB Networks for a number of years to monitor waste generated by the organisation. Construction and demolition (C&D) waste including soil and rubble is associated with operational and maintenance activities. Waste from capital works, including C&D, is not included in waste totals reported.

Overall waste generated by the business unit in 2022 has increased by 9.76% compared to 2021. It is noted that all landfilled material was from the General Waste (non-hazardous) stream. All other waste streams were recycled, reused or incinerated. Bund and interceptor waste is handled as hazardous waste.

### NIE Networks

Waste arising within Northern Ireland Electricity (NIE) is managed by a number of waste contractors. Waste was collected from 16 NIE facilities throughout Northern Ireland. Construction and Demolition (C&D) waste including soil and rubble is associated with operational and maintenance activities. Waste from capital works, including C&D, is not included in reported waste totals. The volume of waste generated in 2022 was on par with 2021, with the recycling/reuse rate also remaining steady at 97%.

### Generation & Trading

ESB Generation and Trading (GT) operates a number of framework contracts to collect and process waste arising from its operations, both hazardous and non-hazardous. The appointed contractors provide itemised monthly invoices which identify the facility served and the waste type. In addition, the ROI Thermal stations, operating under an Industrial Emissions Licence (IEL), prepare a waste register annually for inclusion in their Annual Environmental Report (AER) for submission to the Environmental Protection Agency (EPA). An increase in overall waste totals was recorded for 2022 relating to demolition and overhaul works, with the overall recycling/reuse rate improving from 78% in 2021 to 83% in 2022.

### Enterprise Services, Electric Ireland, Engineering & Major Projects

Waste generated in these business units is largely associated with office premises, including Swift Square, One Dublin Airport Central and the ESB Head Office Estate. Significant progress was made in 2022 on improving diversion from landfill rates and reducing overall waste volumes.

## Spills and Spill Response

### Generation & Trading

Programmed works are scheduled and undertaken to reduce the potential for discharge of pollutants to surface and grounds water, including the completion of retention tests as per bund test schedule and carry out repairs to defective bunds as required. Incidents occurring are reported as required to the licencing authorities, for example, via Eden to the EPA.

### Fluid Filled Cables

#### ESB Networks

Like many international utilities, ESB Networks install underground cables in urban locations where it is not feasible to construct overhead lines. Fluid filled cables (FFCs) were installed on ESB Networks distribution and transmission systems between 1950 and 1989. ESB Networks plan to replace all fluid filled cables by 2035.

# Effluents & Waste (continued)

Replacement is prioritised based upon environmental risk for the circuit involved. Recognising the environmental challenges in operating and maintaining FFCs, ESB Networks started a fluid-filled cable replacement programme in 2005.

So far, 20 % of FFCs have been replaced, removing the source of 40 % of the previous cable fluid leaks from the system. At present, there are approximately 176 kms of FFCs on the Transmission and Distribution Electricity Networks in the Republic of Ireland. There are a number of active fluid filled cable replacement projects at construction stage and additional projects at route selection stage. During 2022, 4,917 litres of cable insulating fluid leaked from ESB's High Voltage Cable network (28 litres per km). This is a decrease of 1,364 litres on the 2021 fluid leakage figure of 6,281 litres.

The breakdown of the fluid leaks was as follows:

- 220 kV Cable Network = 957 litres
- 110 kV Cable Network = 1,990 litres
- 38 kV Cable Network = 1,970 litres

ESB Network's "Management of Fluid Filled Cables" Company Standard set a target maximum cable leakage volume objective of 5,000 litres per annum in 2022. Since 2019, ESB Networks has FFC incident protocols in place dealing with both historic and current FFC leaks with relevant Local Authorities. The protocols ensure all relevant authorities are notified of incidents as they arise and are kept up to date with incident response. Regular communication is maintained with relevant Local Authorities to ensure close collaboration regarding road opening licences, drainage maps and other aspects relevant to our work in cable leak location, environmental assessment, and repair.

Details on repaired fluid filled cable leaks are available on the ESB Networks website ESB Networks Fluid Filled Cable Repair.

## Case Study

### Francis Street Watling 38 kV FFC Replacement

ESB Networks has engaged with local authorities on our PR5 replacement programme and requested advance notification of any planned street works or greenway projects where we may be able to contribute costs towards the project if advanced ducting could be accommodated. In 2021, DCC's roads department notified ESB Networks of planned street works on Francis Street. We identified Francis Street Watling Street 38 kV FFC circuit, while not on our PR5 replacement project list, was routed along the area of the proposed work.

The CRU approved an advanced ducting allowance in PR5 to avail of where an opportunity such as this arises. After confirming a viable advanced ducting route, ESB Networks installed ducting in 2022 along Francis Street in advance of DCC's street works.

We then reviewed the remaining section of FFC from Thomas Street further north towards Watling Street 38 kV substation. We engaged further with DCC's roads department and agreed road opening licences to enable further advanced ducting to enable the full FFC section replacement. In late 2022, we successfully energised the new plastic (XLPE) insulated replacement circuit resulting in 850 metres of FFC being removed from the network.

**NIE Networks**

Like many international utilities, NIE Networks install underground cables in urban locations where it is not feasible to construct overhead lines.

Fluid filled cables (FFCs) have been installed on NIE Networks distribution and transmission systems for 50 years or more and over time age-related deterioration can occur at cable joints and terminations, and less frequently in the breakdown of the outer sheath, resulting in fluid leakage contaminating the surrounding ground.

Fluid-filled cables are some of the highest performing assets on our network, however in the event of third-party damage or age-related deterioration fluid can leak out of the cable and into the surrounding environment causing pollution.

Careful management of our fluid-filled cables and monitoring of their performance has indicated the need for 9.2km of FFCs to be replaced between 2025-31. We will also proactively inject all remaining FFCs with a perfluorocarbon tracer (PFT) to aid the quick location, and therefore repair of, leaks. This PFT is picked up during a walking or drive-by survey of the cable route using highly sensitive detection equipment. Air samples are then analysed to indicate areas likely to have suffered a leakage. This also reduces repeat excavation, and therefore cost and environmental impact, used in traditional leak location methods.

During 2022, 3,980 litres of cable insulating fluid leaked from NIE Networks' High Voltage Cable network (0.69% of overall capacity). This is a decrease of 1,515 litres on the 2021 fluid leakage figure of 5,495 litres.

## Case Study

### Oil Spill Training during 2022 for all Environmental Champions and Landlords, and companywide

To help fulfil our Environmental Business Plan we undertook to complete company wide training for all staff on oil spills – this would be in case they came across anything either on site or at their depot that would need to be cleaned up. Environmental Champions and Landlords from each depot received this in person at bespoke environmental training sessions in the Spring of 2022, then a presentation and training video was developed and issued across the company outlining what was in a spill kit, how it should be used, then follow-up required after a spillage– over 1,000 employees completed this online training with feedback received being positive - it has already been used in the field.

# Social Disclosures



## Introduction

Since its establishment in 1927, ESB has been characterised by a commitment to drive society forward and deliver a brighter future for the customers and communities we serve. This strong sense of purpose is reflected in our constant and unwavering commitment to tackling society's biggest challenges, enhancing people's lives and creating new opportunities for individuals and communities to thrive. We are driven to make a difference. For almost a century, we have harnessed our capability and resources to bring light and energy to communities in Ireland and around the world, helping to transform lives and enable social and economic progress and change.

ESB has a proud history of serving electricity customers through delivery and innovation and has always sought to deliver affordable electricity to all our customers. We are conscious of the significant impact that the price increases of the last 18 months had and will ensure that the impact on customers is always considered. We are committed to ensuring that vulnerable customers are supported during these challenging times. Policies such as never disconnecting an engaging customer, extending credit terms, providing the best energy insights in the market to smart metering customers, and putting in place a Hardship Fund which now totals €5 million underpins our commitment to customers and we will continue to seek ways to further that support.

### CSRD Social and Governance Standards

The new EU standards for Governance and Social disclosure emerging under the CSRD framework are likely to drive a significant increase in the breadth and depth of reporting on critical issues such as governance and risk, business conduct, as well as social issues concerning our own workforce, workers in our supply chain and our customers and broader societal stakeholders.

During 2023 we plan to undertake a gap analysis against CSRD and the respective ESRS standards. The outcomes of this assessment will shape our future disclosures and addressing of any identified policy gaps.

Existing Policies which may need to be revisited as part of our CSRD Gap Analysis include:

Anti-Bribery Corruption and Fraud Policy

Whistleblowing and Protected Disclosures Policy

ESB Code of Ethics - Our Code

ESB Human Rights Policy

# Our People

**Sinéad Kilkelly,** Executive Director,
People and Organisation Development

## Introduction

Ensuring we have the people capability to deliver our strategic objectives with a strong values-based and inclusive culture is a foundational pillar of ESB's strategy - Driven to Make a Difference: Net Zero by 2040.

ESB has a critical purpose which will only be delivered through our people. Delivering on our employee promise so we can retain, grow and attract new people to work with us is therefore fundamental to our continued success. 2022 has been a year of change, challenge, and opportunity. We know that the continuing cost of living impact of the energy crisis is really difficult for our customers and the communities we serve. This puts its own pressure on our people especially those at the front line. In ESB we have a long history of caring for the people we impact upon.

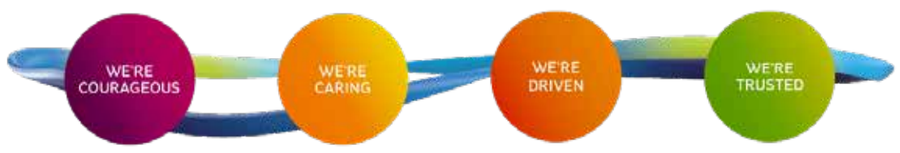
As we came out of COVID-19 earlier in 2022, we have embraced our hybrid working model which we call Smart Working. For ESB, Smart Working has been about moving to a trust based flexible working that makes the most of our in person and virtual collaboration, technology and revamped office spaces. We continue to try, learn, and adapt to develop our ways of working together that work for the business, teams, and our people.

In May 2022, we launched a national recruitment campaign to recruit over 1,000 people into ESB over the next 3 years. We are recruiting across many disciplines and want to attract diverse talent into ESB. By creating an increasingly diverse, inclusive culture where people from all backgrounds and genders feel valued and connected to purpose, we will vastly improve our ability to innovate, collaborate and find the solutions we need. In 2022 our new hires were 552 and employee turnover was 3.1%. The culture of our organisation hinges on our four values – Caring, Driven, Courageous and Trusted. Living these four values is essential to having a truly inclusive organisation.

In December 2022, we published our second gender pay gap report. While it is encouraging to see progress in reducing our gender pay gap, we know we have more to do.

I joined ESB in May 2022 attracted by the company's purpose and values. This is a challenging but really exciting time to work in ESB as we seek to transform into a zero-carbon company and step forward on our social responsibility.

**Sinead Kilkelly**
Executive Director,
People and Organisational Development



# Our People (continued)

## People Strategy at ESB

**People Strategy Statement**

Enable the culture and capability required for sustained performance, where everyone can make a difference to achieve net zero by 2040.

There are eight top strategic goals underpinning ESB's People Strategy as follows:


### ESRS S1 Own Workforce

The policies linked below outline how ESB seeks to address the management of its material impacts on own workforce, as well as associated material risks and opportunities. During 2023 we plan to undertake a gap analysis against CSRD and the respective ESRS standards. The outcomes of this assessment will shape our future disclosures and addressing of any identified policy gaps.

Policies related to Own Workforce:

Anti-Bribery Corruption and Fraud Policy

Whistleblowing and Protected Disclosures Policy

ESB Code of Ethics - Our Code

ESB Human Rights Policy

Gender Pay Gap Report 2022

## Our Workforce

In May 2022, we launched a national recruitment campaign to recruit over 1,000 people into ESB over the next 3 years, to ensure we have the capability needed to deliver on our Strategy for Net Zero 2040.

ESB's main recruitment channels include:

- The Graduate Recruitment Programme
- The Apprentice Programme for both ESB Networks Network Technician Apprenticeships and Generation and Trading Apprenticeship Programme
- ESB careers portal is on ESB's website; ESB Careers

At the end of 2022 our workforce detailed breakdown was as follows:

| | 2022 | 2021 | 2020 |
|---|---|---|---|
| Number of Employees | 8,373 | 7,870 | 7,938 |
| | | | |
| Female | 2,182 | 1,968 | 26% |
| Female (management level) | 127 | 73 | 30% |
| Full Time | 7,994 | 6,139 | 94% |
| Employee with Disabilities[1] | 278 | 236 | 3% |
| Permanent Contract | 8,264 | 5,903 | 92% |
| Temporary Contract | 254 | 630 | 8% |
| Skilled Craft and General | 2,680 | 2,125 | 40% |
| Non Craft and General | 5,867 | 4,407 | 60% |
| Female Board Members | 5 | 4 | 25% |
| Elected Worker Directors | 4[2] | 4 | 4 |
| Third Party Contractor Staff working on behalf of business[3] | 3,982 | 5,323 | 2,800 |
| **Staff By Region** | | | |
| Republic of Ireland | 6,475 | 6,219 | 81% |
| Northern Ireland | 1,344 | 1,200 | 16% |
| Europe | 234 | 38 | 2% |
| Middle East | 155 | 194 | 0.01% |
| Asia | 145 | 2 | 0.02% |
| Africa | 37 | 11 | 0.01% |
| Nationalities Employed | 50 | 58 | 47 |

Notes:
1. ESB meets the 3% Employment target for People with disabilities as set out in the Disability Act 2005.
2. In 2022 two females were elected Worker Directors and will take up the role in March 2023.
3. Contractor workforce numbers are not gathered for all Individual contracts. Numbers reflect regular contractors working on behalf of our networks businesses on construction and overhaul projects, as well as facility service providers.
4. Europe includes 177 GB staff.
5. Permanent (92% of Male and 91% of Female Employees).
6. Temporary (8% of Male and 8% of Female Employees).

# Our People (continued)

## Our People Promise at ESB

At ESB, our purpose is clear, and we've made a commitment to deliver a brighter future through the collective actions of all our people. We believe in creating a positive and flexible environment where everyone feels safe, empowered and that they truly belong. Our People Promise is rooted in our values of being caring, courageous, driven, and trusted.

Recognising how important our people are, we really seek to understand how people are feeling about life in ESB through two-way engagement, focus groups and Our Voice employee surveying. This helps inform how we can improve the employee experience and living our People Promise.

ESB offers a competitive reward package together with comprehensive employee benefits and supports including health, wellbeing and diversity initiatives, family supports and flexible working arrangements. ESB offers employees the resources they need to be their best, working with people who care and support them on their employee journey with ESB so they can thrive. ESB is committed to career progression together with supports for ongoing development. At ESB, we care about the issues that our employees are interested in, and we provide a matching contribution to those charitable initiatives.

ESB is an equal opportunity employer. ESB complies with all employment equality legislation which provides for equal pay for work that is the same, similar or of equal value. ESB respects each employee's right to associate and be a member of a Trade Union. ESB recognises and engages in collective bargaining with the accredited Trade Unions within the organisation, and via the ESB Group of Unions.

ESB is committed to career progression together with supports for ongoing development. All employees in ESB have access to an annual performance management process, goal setting and career development and learning and development process, which is deployed across the business.

## Parental Leave

Parental Leave (includes: Maternity Leave, Paternity Leave, Adoptive Leave, Carers Leave and Parental Leave) can be availed of once one full year of service has been completed.

| | NIE Networks | | ESB Group ROI | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| Total number of employees that were entitled to parental leave, by gender. | 932 | 217 | 4,522 | 1,630 |
| Total number of employees that took parental leave, by gender. | 26 | 25 | 373 | 282 |
| Total number of employees that returned to work in the reporting period after parental leave ended, by gender. | 12 | 25 | 366 | 278 |
| Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work, by gender. | 9 | 22 | 366 | 278 |
| Return to work and retention rates of employees that took parental leave, by gender. | 100% | 100% | 98% | 99% |

## Investment in our people at ESB

ESB's Net Zero by 2040 Strategy highlights the importance of ensuring ESB has the people capability to deliver our strategic objectives with a strong values-based and inclusive culture. ESB understands that our capability and success as an organisation rests with our people. From the moment people join ESB, we invest in their development and support them through their career journey.

## Coaching & Mentoring Academy@ESB

At ESB our Coaching and Mentoring Programmes are a powerful and positive developmental experience enabling our people to fulfil their potential and maximise their contribution to ESB's success. We provided Coaching & Mentoring interventions that support managers, and teams, to align business objectives to team and individual objectives. In tandem with this, Coaching & Mentoring seeks to support the four foundational capabilities of ESB Strategy 2040 which reference the critical role of our people in delivering ESB's purpose and strategy, promoting leadership capability that is inspiring, adaptive, empathetic, and curious. This in turn drives a great people experience, reflected in our people promise and a climate that encourages creativity, energy, performance, and commitment. The Academy supports:

- 98 Internal & External Coaches
- 225 Internal Mentors

The Coaching & Mentoring Academy@ESB delivered the following development interventions in 2022:

- 1,411 Coaching & Mentoring training hours were delivered in 2022
- 100% of Training delivered Online
- 351 Coaching and Mentoring Assignments
- 95% of Coaching & Mentoring delivered Online

# Our People (continued)

## Learning Paths in Success Factors

During 2022, through the introduction of a new online platform, "Learning Paths in Success Factors", we further embedded a learning culture at all levels in the company to support ongoing capability development and a continuous learning approach. From first time managers through to senior executives we have continued to focus on developing a leadership capability that is inspiring, adaptive, inclusive, and empathetic.

ESB's learning programme includes all-employee learning on key policy and culture elements such as Cyber Security and Our Code, (ESB's code of business ethics). Our Code guides us all in the behaviours expected of us and the way we work aligned to our values. The training programmes summarised below includes inductions, graduate inductions and Pre-retirement programmes.

### Employee Learning and Development delivered in 2022

| Training Focus Area | Policy and Governance | Power Skills | Digital Skills | Management Development | Linked In Learning Licenses | Total |
|---|---|---|---|---|---|---|
| Examples of training programmes delivered | ESB Code of Ethics, Inclusion and Diversity policy, Human Rights policy, GDPR, | Soft Skills, i.e. Influencing, Negotiating, Delivering Presentations, Public Speaking, Pre-retirement preparation, Supporting Transition to Parenting, Retraining, Upskilling for new roles | Digital Excel, PowerBi, MS Teams, Data management, Cyber Security | Leadership skills, Team building, Management development | Access to online courses available in a flexible environment | |
| **Employee Numbers trained** | **375** | **606** | **7,091** | **150** | **404** | **8,626** |

includes, Inductions, Graduate inductions, and Pre-Retirement programmes

## Technical Training

ESB Networks National Training Centre (NTC) in Portlaoise is the main stay of training delivery for our Networks business in the Republic of Ireland. Our vision is to continuously innovate towards a clean electric future together with our customers who will be at the heart of the transformation towards a low carbon energy future. Our ambition is to build, maintain, operate, and develop the electricity distribution network to meet the needs of our customers, today and tomorrow. To achieve this we rely on technically competent, capable and motivated employees to maintain, reinforce and develop the electricity network to deliver on our vision.

During 2022 the following training programmes were delivered at NTC:

| | Statutory Training Courses | | | Company Training Courses | | |
|---|---|---|---|---|---|---|
| | No of people trained | No of Training Days | % Delivered online | No of people trained | No of Training Days | % Delivered online |
| Apprentices | 173 | 362 | 5% | 329 | 4,662 | 34% |
| Network Technicians | 4,902 | 1,221 | 15% | 1,397 | 10,057 | 41% |
| Smart Metering | 5 | 1 | 80% | 300 | 911 | 5% |
| Supervisors | 116 | 179 | 28% | 206 | 435 | 37% |
| Engineering Officers | 109 | 166 | 23% | 153 | 334 | 18% |

Smart Working

Smart Working is ESB's term for how we work at site, in offices and remotely, building on the massive once-in-a-generation change to the world of work driven by Covid. Through Smart Working, ESB is empowering our people with the autonomy, flexibility and digital tools to deliver on our purpose - Driven to Make a Difference: Net Zero by 2040.

With input and support from across the organisation, strong foundations for Smart Working have been put in place. Throughout 2022 'Our Learning Year', considerable progress has been achieved with much of Smart Working brought to life. It is an adaptive challenge, where we continue to trust and empower each other to iterate and adapt our approach by embedding hybrid habits into our everyday work life, using digital tools and technology to support our connections and collaboration. In a recent employee survey 92% of respondents reported a positive Smart Working employee experience. ESB has been recognised externally as thought leaders on hybrid working and have delivered numerous briefings externally across different industries and organisations on Smart Working. As a result of our work in this space, we were a 2022 CIPD Finalist in the 'Flexible and Hybrid Working' category.

ESB's approach to hybrid working centres on teams agreeing "Team Charters" on how they best work together to meet the needs of the business and the team. Typically, this involves weekly anchor days for office-based employees where they work together in offices.

# Our People (continued)

## Case Study

### NIE Networks and Queen's University Sustainable Energy Lab

9 Nov 2022 saw the official opening of the new NIE Networks Sustainable Energy Laboratory at Queen's University Belfast, marking the beginning of a 10-year partnership to find the energy innovations and talent of the future.

Representing a significant investment for the company, the laboratory at the Ashby Building in Stranmillis, will be used to educate students on how electricity will be the driving force in the transition towards sustainable energy infrastructure and ultimately how that will deliver a zero-carbon future.

Offering a cutting-edge teaching and research experience, the laboratory is installed with equipment spanning the full electrical energy spectrum, from sustainable generation such as wind and solar, to digital substations and cyber resilient national infrastructure.

Research and development for electrical innovation projects will be a key area of work within the laboratory.

Derek Hynes, Managing Director of NIE Networks, said: "We are delighted to officially open the first ever NIE Networks Sustainable Energy Laboratory and mark the beginning of a crucial decade of collaboration with our colleagues at Queen's University."
"The next decade will see a major shift in the adoption of renewables, the electrification of heat and transport and the deployment of smart technologies on to the electricity network. The laboratory houses state of the art equipment and harnesses the best of academia and our own electrical engineering experts to benefit the teaching of our future electrical engineers."


As we continue to evolve our Smart Working journey and design the workplace of the future we must continuously review and redesign how we work to best serve our people. This will require us to listen to and prioritize the concerns of our people and maintain dedicated channels of communication for our teams to share what's working well and what can be improved.

We've laid solid foundations for a sustainable hybrid model – this, we believe, will deliver better business results, support our sustainability goals and allow us to mind our wellbeing while enjoying the benefits of an inclusive, flexible working culture.

In 2023 we will continue to Try, Learn, Adapt and Apply to further develop our best ways of working.

Managing the opportunities and challenges of hybrid working to positively impact the diversity of ESB's workforce continues to be a focus as ESB embraces working in the new hybrid world.

## ESB's Code of Ethics

At ESB, all our board members and staff adhere to Our Code which outlines our approach to responsible business behaviour. The main premise of our code is that everyone will strive to perform their duties in accordance with the highest standards of integrity, loyalty, fairness and confidentiality and that we will abide by all legal and regulatory requirements. ESB's Code of Ethics encourages employees in the first instance to report any suspected ethical breach to their Line Manager, as one would with any other concern in the course of duties. Alternatively, ESB has made available a Confidential Helpline/Web Facility which staff can use to report suspected wrongdoing. This Helpline operates 24 hours a day, seven days a week. The Helpline offers a safe, confidential and, if necessary, anonymous means of reporting wrongdoing for staff who may otherwise feel uncomfortable coming forward to their line manager.

ESB Code of Ethics - Our Code

## Union Membership and Industrial Relations

ESB respects each employee's right to associate and be a member of a Trade Union. ESB recognises and engages in collective bargaining with a number of accredited Trade Unions (the ESB Group of Unions).

Approximately 60% of employees have elected to join a trade union. ESB supports the freedom of association for all employees.

Under the obligations outlined in ESB's 3rd Party Requirements for suppliers, all contracting entities are required to allow their staff freedom of association. This is monitored as part of the Contractor Employment Standards (CES) audits which are undertaken across all major contracts each year. In essence 100% of contractor staff should have freedom of association, if their employer is abiding by ESB's 3rd Party Requirements.

# Inclusion and Diversity

ESB is committed to building and sustaining an increasingly diverse workforce and a strong values-based inclusive culture, where people engage, thrive and feel connected to ESB's purpose and to each other. Increasing all aspects of diversity of ESB's workforce is a priority and a business imperative. Following a refresh of ESB's Inclusion and Diversity strategy earlier in 2022, for the first time specific diversity targets have been set, starting with gender where the best data is available. ESB is also committed to the public sector target of 6% employees with disabilities by 2024.

ESB's Inclusion and Diversity Strategy, developed in 2020 was reviewed in 2022, to ensure alignment with ESB's Driven to Make a Difference – Net Zero by 2040 strategy. The importance of a strong values based and inclusive culture is called out in our Driven to Make a Difference – Net Zero by 2040 Strategy. Our inclusion and Diversity Strategy outlines a clearly defined statement, definition and objectives supported by a comprehensive implementation plan. We know that diversity leads to more innovation, improved engagement, creativity and collaboration, vital ingredients as we work together to make a difference, delivering climate action through clean electricity.

Our Inclusion and Diversity Strategy speaks to Our Values: Courageous – Caring – Driven – Trusted and is very much aligned to the culture change programme that is underway at ESB.

## Statement

We embrace our diversity, uniqueness and individuality so that together we make a bigger difference.

## Definitions

Diversity is about differences, seen and unseen.

Inclusion is about creating an environment in which people are valued, feel valued, and are able to achieve and contribute their full potential.

## Objective

To build and sustain an increasingly diverse workforce and agile culture of inclusion and belonging, so that together we can make a difference and deliver a brighter net zero future for all.

## Strategic Pillars

All the work to date has led to a clearly identified direction for ESB's Inclusion and Diversity strategy and a specific business rationale for ESB's attentiveness to Inclusion and Diversity aligned to four strategic pillars.

ESB's Inclusion and Diversity programmes and events are delivered either online or hybrid, which continues to enable increased participation from right across the organisation. Over 1,000 employees attended Inclusion and Diversity related programmes and events in 2022.


Inclusion and Diversity is a key component of all Strategic Leadership and Newly Appointed Managers programmes, further supporting our drive to increase momentum for a strong values based and inclusive culture.

To create and sustain an inclusive culture and embed Inclusion & Diversity as a business imperative, ESB is leveraging the 'The Way We Work' (TWWW) Culture Change Programme that is currently underway.


## All Voices – Employee Resource Groups

Building on the success and impact of BeMe@ESB – ESB's LGBT+ Employees and Allies Network which was established in 2016, a number of additional Employee Resource Groups are being established in 2023. The purpose and benefits of our Employee Resource Groups is to better understand the challenges and experiences of our increasingly diverse workforce. The aim is to build on representation and visibility, to create more inclusive work environments. Additional benefits include enhanced People Experience (PX), increased engagement and morale, better innovation and diversity of thought, and increased attraction, retention and progression of diverse talent and key capabilities.

Following a series of Focus Groups, we have prioritised the establishment of pan-ESB Employee Resource Groups in the areas of Accessibility, Cultural Diversity & Ethnicity, and Gender.

# Inclusion and Diversity (continued)

## ESB Gender Pay Gap Report

Increasing all aspects of diversity of ESB's workforce, including gender, and reducing the gender pay gap is a priority and a business imperative for ESB. Since the voluntary publication of our first Gender Pay Gap Report in 2021, we spent time analysing the insights that emerged from the data and putting in place further measures to improve gender representation and reduce the gender pay gap. ESB's Inclusion and Diversity strategic plan covers a wide range of initiatives to address our gender pay gap – such as inclusive leadership capability, training and development, talent management and recruitment policies and procedures.

Our 2022 pay gap shows an improvement on 2021. Analysis of this continues to show that the pay gap is largely driven by significantly lower female participation in craft and engineering roles, which often involve work schedules that attract role specific pay and allowances, and a higher number of men in senior leadership roles across all disciplines.

In terms of increasing gender balance and addressing our gender pay gap, we are focussing on two key areas:

- Increasing female representation at leadership levels
- Growing the number of women in STEM – in engineering and craft roles

Full details can be viewed in ESB's Gender Pay Gap Report 2022

The table below sets out the hourly gender pay gap across a range of metrics as required by the Gender Pay Gap Information Act 2021. The data outlined below is related to ROI Employees and is based on the 12 month period to 30 June 2022. Where the result is shown as a plus number, the male rate is higher. Results shown as a minus indicate female rate is higher.

| Reporting criteria | Including Overtime | Excluding Overtime |
|---|---|---|
| All employees - mean | 10.9% | 3.3% |
| All employees - median | 11.5% | -1.4% |
| Part-time employees - mean | 10.2% | 11.0% |
| Part-time employees - median | 11.1% | 6.3% |
| Temporary employees - mean | -0.2% | -3.1% |
| Temporary employees - median | -2.7% | -15.0% |
| Difference in the mean bonus pay received by male and female employees | -2.2% | |
| Difference in the median bonus pay received by male and female employees | -1.7% | |
| Difference in the percentage of male and female employees paid bonuses | 58% - F 47% - M | |
| Difference in the percentage of male and female employees who received benefits-in-kind | N/A | |

Proportion of male and female employees in the lower, lower middle, upper middle and upper quartile pay bands (including overtime and role specific allowances)

| QUARTILE 1 | QUARTILE 2 | QUARTILE 3 | QUARTILE 4 |
|---|---|---|---|
| 35% - F | 27% - F | 25% - F | 20% - F |
| 65% - M | 73% - M | 75% - M | 80% - M |

Proportion of male and female employees in the lower, lower middle, upper middle and upper quartile pay bands (excluding overtime and role specific allowances)

| QUARTILE 1 | QUARTILE 2 | QUARTILE 3 | QUARTILE 4 |
|---|---|---|---|
| 31% - F | 21% - F | 29% - F | 26% - F |
| 69% - M | 79% - M | 71% - M | 74% - M |

The mean is the average point for all female and male employees and the median is the midpoint.

Notes

1. Analysis of this data shows that the all-employee gender pay gap is largely driven by significantly lower female participation in craft and engineering roles, which often involve work schedules that attract role specific pay and allowances, and a higher number of men in senior leadership roles. This is evidenced by the fact that when overtime is excluded the mean gender pay gap significantly reduces.
2. The median gender pay gap (excluding allowances and overtime) is driven by slightly higher percentage numbers of females in the top two pay quartiles of pay than males.
3/4. The gender pay gap for part time is due to male part time roles being at proportionally higher levels. However, the numbers are small with less than 10% of part time roles being held by males. Part time roles are predominantly in business process areas such as the call centre.
5/6. The temporary employee gender pay gap is explained by the fact that 71% of male temporary employees are apprentices, under graduates and students versus 57% for females. Excluding overtime and role specific allowances increases the higher female hourly rate further.
7&/8. Both the mean and median bonus calculations show that females earned slightly higher bonuses than males.
9. A higher percentage of women than men are in roles that attract bonuses.
10. ESB does not make benefits-in-kind payments.
11/12. When data is adjusted to exclude overtime, the proportion of females in the upper quartiles is more reflective of the current gender balance in ESB.

## Managing Successful Parenting Transitions Programme

This is a key strategic programme, in place since 2015 to support employees through parenting transitions, one of the key moments that matter in the life cycle of employees, with modules delivered across all key audiences. ESB's Managing Successful Parenting Transitions Programme is an award-winning, evidence based, coaching programme that enables sustained systemic change. This programme continues to evolve to support all parents, whatever their journey to parenthood has been and to address the experiences and challenges of working parents. Key to the success of this programme is a specific module to provide Line Managers, who are key influencers of employee experience, with tools, resources and information to support parents. This module is also available to Coaches, HR Community and Support staff.

The 5 modules are:

- Great Expectations – for those going on Maternity/ Adoptive Leave
- Confident Comebacks – for those returning from Maternity/Adoptive Leave
- The Father Factor – for Dads and Dads to be
- Thriving Sustainably – for those with children between 1-5 years
- Success Strategies for Line Managers, HR Business Partners and Support Staff.

# Inclusion and Diversity (continued)

## Menopause Support Programme

The Menopause Support Programme began with an event titled "Let's talk Menopause" from Catherine O'Keefe, founder of Wellness Warrior. ESB's Menopause Support programme provides awareness, information and support to everyone directly or indirectly affected by the symptoms of menopause. Whether it's the individual staff member, a relative or someone on the team – someone we know will experience menopause. ESB is aware that it is important that we all take time to understand it better and discuss what we can do to help ourselves/each other through a major life change.

## ESB a AHEAD's Building the Future careers event for people with Disabilities

ESB's Access Officer and Manager of the Traineeship Programme for People With Disabilities, along with members of our Talent Acquisition Team, met with jobseekers, sharing information in relation to ESB's Traineeship Programme and the announcement of the 2022 Recruitment campaign for 1,000 Jobs.


## ESB Traineeship Programme for People with Disabilities, in partnership with AHEAD's Willing Able & Mentoring (WAM) Programme continued during 2022

The 2022 Traineeship Programme continues to see each of the participants on the programme onboarded and supported in a hybrid working environment. Trainees work across various business units and are supported by line managers, mentors, ESB's Traineeship Programme Manager and AHEAD, ESB's external recruitment partner. AHEAD also assisted with valuable and revised onboarding tips for a remote and hybrid working environment and disability awareness training. ESB's Traineeship Programme is a six to nine month programme, which provides training and experience of working in a modern business environment. It provides opportunities for personal and professional development, which benefits participants when applying for future employment opportunities.

## STEM Teacher Internship Programme

In 2022, ESB was once again a host organisation for the STEM Teacher Internship (STINT) Programme and hosted three interns across ESB Networks, Engineering and Major Projects, and Innovation. This unique programme provides an immersive STEM learning experience across academia and industry, where future primary and post-primary STEM teachers experience 12-week paid internships in STEM roles in ESB and other host tech organisations. This programme provides the opportunity to inspire innovative learning by deepening future teachers STEM knowledge, competencies and understanding of the diversity of STEM roles, building the STEM pipeline and ultimately to increase the number of females engaging in STEM subjects and addressing gender balance representation in STEM roles.

During their placement with ESB, each of the interns also have an opportunity to gain broader insights and understanding of ESB's role to achieve Net Zero by 2040, as well as our role as an employer and service provider. During their 12 week internship, participants will also have the opportunity to engage in introductions and an overview of areas such as Inclusion & Diversity, Corporate Social Responsibility, Science Blast, ESB Networks Apprenticeship Programme, Health and Wellbeing Initiatives and more.

To further compliment their assigned roles, introductions to other broader aspects of employee experience and site visits to one of ESB's Hydro Stations and ESB Networks National Training Centre really help to bring to life the diversity of roles available at ESB.

STEM Teacher Internship Programme

STEM Teacher Internship Programme
A DUBLIN CITY UNIVERSITY INITIATIVE TO INSPIRE INNOVATIVE LEARNING

# Human Rights

## Our Commitment

ESB is an organisation with a strong, values-led culture and a legacy of working closely with the communities within which it operates. ESB seeks to honour the principles of internationally recognised human rights, even when this presents difficult and sometimes conflicting dilemmas. ESB aims to ensure that it is not, directly or indirectly, in any way complicit in human rights abuses and will be transparent in reporting of human rights performance.

ESB commits to respect human rights and to implementing and enforcing effective measures in its supply chain, operations, and in the communities and locations in which ESB operates to ensure human rights abuses are not taking place. This commitment is supported by a range of policies covering focus areas within human rights including employee rights, non-discrimination, inclusion and diversity as well as modern slavery.

In addition, ESB's employee Code of Ethics ("Our Code") requires all employees to operate fairly and to respect all human rights.

ESB is committed to ensuring that universally recognised fundamental human rights are protected and respected within its sphere of influence and to ensuring that ESB's operations are conducted in a manner that does not violate those rights and is compliant with applicable laws and the UN Guiding Principles on Human Rights and Business.

**ESRS S1 Own Workforce, S2 Workers in the Value Chain**

The policies linked below outline how ESB seeks to address the management of its material impacts on own workforce and the workers in our value chain, as well as associated material risks and opportunities.

During 2023 we plan to undertake a gap analysis against CSRD and the respective ESRS standards. The outcomes of this assessment will shape our future disclosures and addressing of any identified policy gaps.

Policies related to ESRS S1 & S2:

Anti-Bribery Corruption and Fraud Policy

Whistleblowing and Protected Disclosures Policy

ESB Code of Ethics - Our Code

ESB Human Rights Policy

ESB Policy on Modern Slavery

Procurement Supplier Requirements Information

Gender Pay Gap Report 2022

ESB has assessed its business areas and locations to identify potential human rights issues and risks and preventive measures, both within the Group and in other organisations that provide goods and services. ESB's assessment of human rights and equality issues (it believes to be relevant to its functions) and the policies, plans and actions in place or proposed to be put in place to address those issues in compliance with Section 42(s) of the Irish Human Rights and Equality Act, 2014, is published separately on ESB's website.


## Protection of Human Rights (Including Modern Slavery)

ESB has a zero-tolerance approach to protection of human rights and modern slavery and is committed to acting ethically and with integrity in all its business dealings and relationships and to implementing and enforcing effective systems and controls to ensure human rights abuses are not taking place anywhere in its own business or in any of its supply chains.

As an organisation that operates in the United Kingdom, ESB fully supports the aims of the UK Modern Slavery Act 2015. To prevent acts of slavery and human trafficking from occurring within its business and supply chains ESB has taken a number of steps, including the adoption of a Policy on Modern Slavery, which is published on ESB's website ESB Policy on Modern Slavery.

ESB prepares an annual statement, as required by the UK Modern Slavery Act 2015, outlining the actions taken during the year (2022) to prevent acts of modern slavery from occurring within its supply chains:

ESB Statement on the Prevention of Modern Slavery

Further details on our supply chain engagement undertaken during 2022 are provided in the Supply Chain section of this report on page 88.

# Human Rights (continued)

## Human Rights Risk Assessment

Areas of human rights impact and our progress against them are outlined in the table below. ESB will report regularly on these measures in its Annual Report and Annual Sustainability Reports.

This assessment is published in compliance with ESB's obligations under Section 42 of the Irish Human Rights and Equality Commission Act 2014.

| **Issue**<br>**Area of Human Rights Impact** | **Action**<br>**Policy, Process, Approach employed** | **Update**<br>**Progress in 2022** |
|---|---|---|
| **Human rights and equality issues affecting employees of ESB (and its subsidiary companies, including ESB Networks DAC)** | A wide range of policies are in place, including:<br>▪ ESB Group Human Rights Policy<br>▪ Cultural Diversity Policy<br>▪ Group Procurement Policy<br>▪ EDSO Sustainable Grid Charter<br>▪ ESB Equal Opportunities and Diversity Code of Practice<br>▪ Health and Safety Policy<br>▪ Environmental Management and Sustainability Policy<br>▪ Whistle Blowing and Protected Disclosures Policy<br>▪ ESB Employee Code of Ethics (Our Code)<br>▪ The Way We Work<br>▪ Modern Slavery Policy<br>▪ Anti-Bribery, Corruption and Fraud Policy<br>▪ Freedom of Association and Collective Bargaining<br>▪ Ongoing awareness and training programmes relating to the above policies | ▪ Publication of consolidated ESB Group Human Rights Policy<br>▪ Employee views sought via regular 'Our Voice' surveys<br>▪ Freedom of Association GRI disclosure<br>▪ Second Gender Pay Gap Report published in 2022<br>▪ Participation in national working group on Business & Human Rights<br>▪ Engaged with Transparency International on Ireland's National Integrity Index 2022<br>▪ Protected disclosure data as reported in ESB's annual report |
| **Human rights and equality issues in joint venture companies** | ▪ Guidelines for joint ventures adopted<br>▪ A Governance Framework is adopted for each joint venture formed | ▪ These governance arrangements are in operation |
| **Human rights and equality issues affecting our contractors** | ▪ Contractual provisions included in all contractor agreements requiring all contractors to comply with specific standards relating to employment laws, ethics, bribery and corruption, anti-slavery and human trafficking, sanctions and related matters<br>▪ Contractor audits conducted by an independent third party | ▪ 74 Contractor Employment Standards audits in 2022<br>▪ Covering all contracts with labour provision in Republic of Ireland |

# Human Rights (continued)

| Issue<br>Area of Human Rights Impact | Action<br>Policy, Process, Approach employed | Update<br>Progress in 2022 |
|---|---|---|
| **Human rights and equality issues arising in our supply lines** | ▪ ESB Supplier Charter adopted, setting out standards required of all suppliers<br>▪ Supplier contracts include contractual provisions requiring all suppliers (as well as agents) to comply with specific standards relating to employment laws, ethics, bribery and corruption, anti-slavery and human trafficking, sanctions and related matters<br>▪ Procurement of screening and audit service<br>▪ Financial standing of suppliers checked every year<br>▪ Member of Bettercoal | ▪ Contracts are now in place with 3rd parties for both risk screening in ESB's supply chain and consequent on-site audits where indicated<br>▪ Under a framework agreement that was awarded in 2021 to British Standards Institute (BSI), questionnaires issued to 188 of ESB's key suppliers seeking information on a range of Corporate Social Responsibility related areas including, Company Human Rights practices, steps taken to prevent Child and Forced Labour, Wage and Benefits, Disciplinary and Environmental practices<br>▪ 128 suppliers responded to these questionnaires and 26 suppliers have been identified as having an elevated risk rating, with 3 suppliers identified as high risk based on this assessment<br>▪ A range of actions, including on-site audits, covering suppliers who failed to respond to the questionnaire and for respondents with an elevated and high-risk rating are currently being progressed<br>▪ ESB continued to engage with our major coal suppliers to ensure that they are aware of ESB's commitment to the Bettercoal Organisation and the Bettercoal Code, including ESB's commitment to Bettercoal tools in its due diligence and continuous improvement processes for the supply of coal. Mines are audited against the principles in the Bettercoal Code. The current version (2.0) of the Bettercoal Code incorporates the UN Guiding Principles on Business and Human Rights and the UN and ILO's instruments on the rights of indigenous peoples<br>▪ We ensured that all tenderers and suppliers were aware of and signed-up to ESB's 3rd Party Requirements Document, which establishes clear contractual obligations on ESB's zero tolerance approach to Modern Slavery in our Supply Chains<br>▪ ESB is an active participant on Bettercoal's Colombia Working Group which has three key focus areas: Development of Dialogue, Water and Just Transition<br>▪ We continued to provide bespoke training to the ESB Procurement Team on Modern Slavery Risks and 13 members of the team also completed the Chartered Institute of Purchasing & Supply's (CIPs) Practitioner Programme, which includes training on ESG related issues and Corporate Social Responsibility, and<br>▪ ESB was assigned an A- leadership rating for Supplier Engagement by the Carbon Disclosure Project (CDP) in 2022 |

# Safety, Health & Wellbeing

## Overview

ESB's Board, management and employees are committed to protecting the health and safety of employees, customers, contractors and the people ESB serves, their safety is always considered first in business actions and activities. ESB believes that all operational processes can be designed and operated in a safe manner. This belief guides the approach to safety across all business activities and is reinforced through strong and visible leadership throughout ESB. The Chief Executive has overall responsibility for the management of health, safety and wellbeing in ESB. The ESB Group Safety Statement sets out the overall policy and general arrangements in ensuring the health, safety and wellbeing of all employees. Functional responsibility is shared with all senior management and, in turn, with each manager, supervisor, team leader and employee. The Safety, Sustainability and Culture Committee supports the Board's monitoring and governance of health, safety and wellbeing.

## Lost Time Injuries

The number of Lost Time Injuries (LTIs) in 2022 was 61 compared to 69 in 2021 and 57 in 2020. The majority of these injuries were of low severity where the injured parties made a full recovery and quickly returned to work. The most common causes of LTIs were slips and trips, and general situational awareness. LTIs are occupational injuries which result in at least one day's absence from work, not including the day that the injury occurred.

## High Potential Incidents (P1)

In 2022, 167 P1 incidents were recorded. 2022 has shown an increase in P1 incidents compared to the years 2018 to 2021. In 2022, ESB had a lower number of serious Lost Time Injuries of 3 compared to the previous two years (4 in 2021 and 11 in 2020). The most significant safety risks arising from P1 incidents for ESB are electrical plant, equipment and overhead lines. Human error is also the cause of many incidents.

## Safety Performance in 2022

ESB uses the following leading Key Performance Indicators (KPIs) to track safety performance.

**1. Good Catch reporting:** A Good Catch is where an employee or contractor intervenes when they notice an unsafe act or unsafe condition. This helps to prevent a safety incident from occurring. 7,923 Good Catches were reported across the organisation during 2022.

**2. P1 investigation closure:** A P1 incident is an incident which has the potential to cause life changing injuries. ESB categorises all incidents and near misses with a particular focus on high potential incidents that could lead to more serious outcomes. All P1 incidents are thoroughly investigated. The P1 investigation closure KPI reports on the timely completion of investigations. This KPI target was exceeded at the end of 2022 achieving an average of 84% on-time closure rate per month.

**3. P1 action closure:** When a P1 incident is investigated the findings often result in corrective actions. This KPI tracks the timely completion of all actions associated with P1 incidents. The P1 action closure target was exceeded in 2022 achieving an average of 84% closure rate per month.

**4. Senior Management leadership activities:** All Senior Managers in ESB are expected to demonstrate their safety leadership by conducting leadership activities each month. This KPI tracks completion of these activities. For the first half of the year, ESB was below target at 74%. The KPI was expanded and refreshed to improve engagement and leadership and the improved performance of 83% in the second half of the year reflects this. Overall, the average performance was below target at 77% completion rate for the year.

**5. Audit non-conformity closure:** ESB is certified to externally accredited Safety Management Systems (SMS). Non-conformities associated with external audits of these SMS are tracked for on-time completion. The number of minor and major non-conformities is consistently very low. All actions have been closed on time.

**Figure 1 Lost Time Injuries 2018 – 2022**

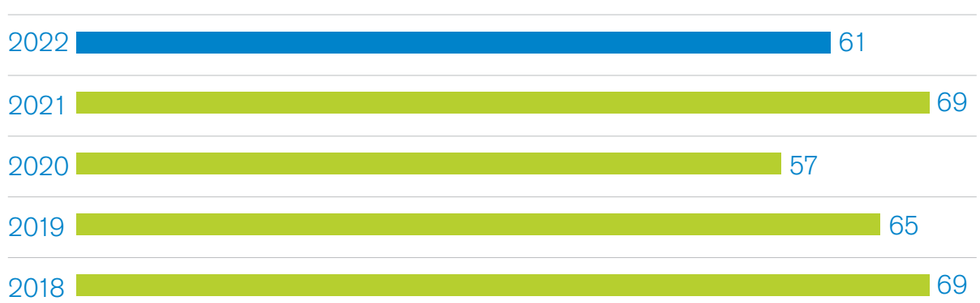
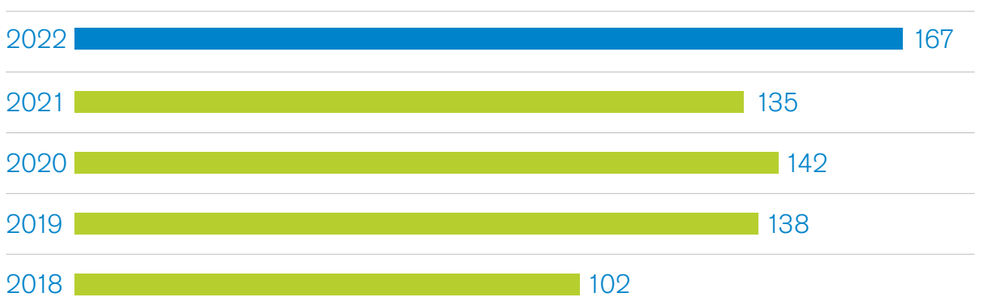



**Figure 2 P1 Incidents 2018 – 2022**



# Safety, Health & Wellbeing (continued)

## Key Safety statistics

| | 2022 | 2021 | 2020 | 2019 | 2018 |
|---|---|---|---|---|---|
| Staff Fatalities | 0 | 0 | 1 | 0 | 0 |
| Contractor Fatalities | 0 | 0 | 1 | 0 | 0 |
| Staff Lost Time Injuries (LTI) | 30 | 40 | 57 | 50 | 41 |
| Staff LTI Rate (per 100,000hrs) | 0.27 | 0.33 | 0.19 | 0.40 | 0.33 |
| Contractor Lost Time Injuries | 31 | 29 | 33 | 17 | 24 |
| P1 (High Potential Severity Incidents) | 167 | 135 | 142 | 102 | 138 |
| Absenteeism Rate (avg. days/staff) | 7.6 | 6.79 | 6.23 | 8.39 | 8.01 |
| Days lost due to occupational injury | 748 | 976 | 1,010 | 1,416 | 1,080 |
| Public Fatalities due to electricity ( Customer side of meter) | 1 | 0 | 0 | 0 | 0 |
| Public Fatalities due to electricity ( Network side of meter) | 0 | 0 | 0 | 0 | 0 |
| Safety Incidents on the Network (including Public Safety Incidents) | 2,368 | 2,512 | 2,106 | 2,232 | 2,015 |

## Public Safety

During 2022, ESB Networks continued to implement its Public Safety Strategy (2021 – 2025). This strategy builds on previous strategies and sees the introduction of a management system framework approach to public safety. The strategy continues to focus on engagement and collaboration with key identified at-risk groups including the farming sector, construction industry, emergency services as well as informing the general public on the need to stay safe and stay clear of the electricity network via various media channels. The ESB Networks' 24/7/365 emergency response service operated to the highest standards to ensure public safety. The 2022 independent audit of ESB Networks' Public Safety Management Programme on behalf of the Commission for the Regulation of Utilities (CRU) was completed in Q4 with zero Category 1 or Category 2 non-conformances recorded. This independent verification of ESB Networks' Public Safety Strategy and associated management programme was welcomed by ESB.

There were no fatalities in 2022 involving members of the public and the electricity network maintained by ESB Networks, as has been the case for the previous five years. However, there were two incidents of contact with the network by members of the public that resulted in electric shock and hospital treatment. In Northern Ireland, a member of the public was fatally injured when they came into contact with the overhead electricity network maintained by NIE Networks.

## Safe and Sound

Safe and Sound is ESB's safety and wellbeing culture transformation programme. Since its launch in 2018 in ESB Networks and Generation and Trading, it has achieved considerable success in evolving the culture at ESB. The programme has helped make safety and wellbeing central to everything being undertaken. It is built on ESB core values, caring for one's own safety and wellbeing and that of their colleagues, being courageous in speaking up when we see something unsafe, being trusted by employees, contracted partners and customers to be safe every day and being driven to be leaders in safety, health and wellbeing and environmental responsibility. The focus in 2022 for Safe and Sound has been on expanding the programme across all of ESB's business units, creating positive safety and wellbeing leadership and on living the Safe and Sound principles in office locations as well as front-line work environments. These principles are:

- Leadership must be 'Why' based,
- People are the Solution,
- Build on Peoples' Strengths, and
- Treating People as Family.

There has also been a strong focus on positive safety engagement with ESB's contractor partners, with the emphasis on growing a positive safety and mental wellbeing culture for all working in ESB. The new Safe and Sound teams formed in 2022 will emulate and build on the successful methodology developed throughout the Safe and Sound journey to date.

SAFE & SOUND
Because we care

## Health & Safety Management Systems

All ESB business units have health and safety management systems in place, many of which are externally verified and certified to the International ISO 45001 or equivalent. The established safety management systems (SMS) describe the formal framework within each organisation/business unit, which is designed to manage the different elements of health and safety in the workplace. All companies, including ESB, have a legal duty to manage the health and safety of all its staff, to know the risks in the business and to then take action to control them. The key elements of an effective SMS include:

- Policy and commitment
- Planning for incident and ill health prevention
- Implementation and operation including responsibilities, procedures and resources
- Measuring performance
- Auditing and reviewing performance

ESB continued to progress and monitor leading and lagging indicators of safety and health performance. These are Good Catches, Leadership Conversations, P1 Investigation, P1 Action closure and Audit non-conformities. ESB continued to make progress during 2022 on improving its safety performance through delivery of key improvement projects across the business.

While the specific training requirements of each individual will be dictated by their roles and responsibilities and the risks to which they are exposed, at a minimum all ESB staff and contractors working on behalf of ESB receive the following mandatory occupational health and safety training. Safety Induction, VDU Workstations (for desk based personnel), Manual Handling as determined by Risk Assessment. Training as required to perform specific tasks or roles safely. All H&S training takes account of differing levels of responsibility, ability, language skills, literacy and risk.

## Risk Assessment

ESB continues to focus on reducing risks in the business that give rise to injurious incidents. Improvement plans, projects, training and audit programmes, with a focus on injury prevention are maintained. Risk Assessment is the basis for the identification and management of hazards that may occur during the course of work. The following Enterprise health and safety risks are communicated to the Board and managed through a number of programmes: electricity, driving, working at height, objects falling from height, load handling, tools, plant & equipment, other hazardous energies, physical, chemical & biological hazards, fire & explosion, slips, trips & falls, lone working, stress and third party sites. Implementation of company-wide Fire Safety Review recommendations commenced during the year. Safety Health & Environment Performance is managed through a Key Performance Indicator process, reported weekly across the organisation on injuries, incidents, training, risk assessments, audits, investigations and corrective actions. All employees and contractors are encouraged to report safety concerns, to intervene when they observe unsafe behaviours and to stop work where unsafe conditions are observed. Safety Management systems across the business define the specific actions and processes required and incidents are ultimately reported via ESB's online SHIELD EHS system. Caring is one of ESB's core values and ultimately our highest priority with all work is that all employees and contractors complete their day's work safely and safely return home to their loved ones.

# Safety, Health & Wellbeing (continued)

## Health And Wellbeing

ESB is committed to proactively supporting its employees in maintaining good health and wellbeing. ESB's Health and Wellbeing team helps employees to reach their full potential in the workplace by providing proactive, preventative and early intervention health and wellbeing services. It provides information and advice to employees to help them to create and maintain a healthy lifestyle. The programme provides effective support where employees face ill health and other personal life challenges through an occupational health medical service, Employee Assistance Programme (EAP), an independent counselling service and a range of other support measures. Health promotion, based on a calendar of monthly areas of focus, was delivered through online events, in-person events, a monthly health and wellbeing bulletin, and regular webinars on mental and physical health.

## COVID-19 Pandemic – ESB Response

ESB maintained its COVID-19 controls including the regular meetings of its Pandemic Response Support Team (PRST) and Crisis Management Team (CMT) until April 2022. Since then, the existing controls of vaccination and isolation when symptomatic or testing positive have proven effective in managing COVID-19 and its effects on ESB business operations and employees' wellbeing. ESB continues to monitor this situation to protect the health and wellbeing of its employees, contractors, customers and the public as well as maintaining essential services.

## Key initiatives and programmes implemented or continued in 2022

| | |
|---|---|
| **Overall** | ▪ ESB business units maintained their SMS certification to ISO 45001 standard or equivalent<br>▪ ESB continued to make progress in 2022 on improving its safety performance through delivery of key improvement projects<br>▪ Principal risks and their management are reviewed and reported quarterly to the Group Risk Manager and the Audit and Risk Committee |
| **ESB Networks** | ▪ Competence and Assurance team continues to expand the areas and work activities covered by the assurance programme<br>▪ ESB Networks adopted "Human Factors" as the Safety theme across 2022 with very positive engagement and response to monthly themes<br>▪ Safe and Sound Culture Transformation Programme continues to gain traction<br>▪ Road Safety and Public Safety programmes and initiatives are on track with engaging content delivered to at-risk groups and stakeholders<br>▪ Continue to monitor all aspects of the COVID-19 pandemic as it relates to an essential service provider |
| **NIE Networks** | ▪ Developed and implemented a company-wide safety culture transformation programme, called Safer Together which has been reinforced through strong and visible leadership and the development of a series of safety improvements. It will now be entering phase two of the same programme as NIE Networks continues its journey to zero harm |
| **Generation and Trading (GT) and Customer Solutions (CS)** | ▪ Health and wellbeing champions forum established in GT<br>▪ Health and wellbeing in-person week completed in CS<br>▪ Phase one of the behavioural safety campaign completed in GT<br>▪ Developing a culture of positive safety behaviour recording<br>▪ 10 locations now fully utilising the Safe System of Work (SSoW)<br>▪ Hazard and explosive risk analysis of the hydrogen system in Moneypoint<br>▪ Process hazard review in Turlough Hill and Ardnacrusha<br>▪ Electrical safety workshops held across the locations |
| **Engineering and Major Projects (EMP)** | ▪ Role of Safe and Sound in EMP was a major focus for 2022<br>▪ Safety Week events included a Codes of Practice webinar, a Project Supervisor Design Process Conference, and webinars on "Winter Wellness", "Movement Snacking" and "Safe Driving"<br>▪ Safety skills developed in new technologies including offshore wind and energy storage<br>▪ The IBEC KeepWell mark was successfully maintained during 2022 |
| **Health and Wellbeing** | ▪ Mental health first aid training has been delivered to c.240 ESB employees and available in 60 locations. 3% of employees have been trained in mental health first aid<br>▪ ESB's stress management programme continues to be delivered throughout ESB and is backed up by ESB's monthly informational webinars<br>▪ The monthly wellbeing webinars have continued delivering high quality content on a wide range of wellbeing topics<br>▪ A new online health and wellbeing information hub was developed making it easier for employees to access information about health promotion activities, occupational health, employee assistance and confidential counselling services<br>▪ A total of 32 employee wellbeing challenges were completed using ESB's health and wellbeing app |

# Community Engagement

## Social Purpose in ESB

Stepping forward on social responsibility is a key element of ESB's sustainability strategy. This means ensuring that ESB has a positive impact on all people that it engages with – employees, suppliers, customers and the communities we serve. Since its foundation in 1927, ESB has supported communities and programmes that enhance the economic and social fabric of Ireland, helping to bring light and energy to the people it serves, allowing individuals and communities to fulfil their potential.

## War in Ukraine

The war in Ukraine continues to have a devastating impact for so many people. Throughout the year ESB sought to provide support to those impacted, both in Ukraine and locally in our communities. Examples of the support given include:

- Electric Aid (the charity funded by ESB employees, retired colleagues and ESB) held an emergency appeal. The fantastic response of over €100,000 was matched by ESB. Electric Aid continued to keep up to date with the humanitarian demands in Ukraine throughout 2022, ensuring these funds were distributed effectively.
- ESB made a special additional donation of €100,000 to the Energy for Generations Fund for initiatives to support all refugees arriving in Ireland in 2022. This has been used to support schemes across the island of Ireland, relating to pre-employment, health and wellbeing and removing barriers to education for refugees in Ireland.
- ESB recruitment advertised jobs on the "Jobs Ireland" website targeting refugees and several refugees are now working in ESB.
- ESB acted as host for an Immigrant Council of Ireland conference in mid-May for Ukrainian refugees.
- Three days annual leave was given to ESB employees who hosted refugee families, allowing support to their transition to life in Ireland.
- The funding available under ESB's volunteering support programme was extended to allow employees to apply for €500 to support volunteering or fundraising for refugees.

## Energy For Generations (EFG) Fund

EFG is ESB's social giving fund which supports a wide range of projects across all the communities served in the Republic of Ireland and Northern Ireland, with an annual budget of up to €1 million. In 2022, the Fund had four funding rounds, and this resulted in EFG supporting 66 projects across the island of Ireland. Currently the fund is focussed on three themes - fighting homelessness, preventing suicide, and enabling access to Science, Technology, Engineering and Mathematics (STEM) education.

ESB's funding includes special partnerships with:

- Kinia for the TechSpace initiative building the capacity of youth organisations to run creative STEM education programmes.
- Aware for their Life Skills for Schools initiative to promote mental health awareness in secondary schools throughout Ireland. Over a three year period, EFG has funded 782 Life Skills for Schools programmes and the training of 92 trainers, resulting in a reach of nearly 16,000 students. In addition, the fund provides much needed funding at Christmas time to a wide range of charities including Capuchin Day Centre, St Patrick's Hostel Limerick, Cork Penny Dinners, Focus Ireland and ISPCC.

## ESB Partnership with Kinia

TechSpace 2022 is a creative technology education programme managed by Kinia, an education focussed non-profit, charity and social enterprise. ESB has supported the growth of this programme which encourages young people to unlock their passions and potential through the creative use of technology. 2022 saw the roll out of TechTour at National Broadband Ireland's Broadband Connection Points (BCP) across Ireland. The BCP TechTour featured a blend of in person and online training events across seven counties (Galway, Tipperary, Cavan, Meath, Longford, Wicklow, and Offaly) introducing participants to many STEM related skills such as mobile filmmaking, podcasting, coding, circuitry and robotics. The annual Creative Educator TechFest event is a celebration of the creative work of young people. At this year's event in November 2022, Kinia launched a range of micro-credentials that recognise the professional development and skills training of educators in the TechSpace and wider network. This included a micro-credential for creative STEM-based learning developed with the support of ESB.

## Employee Volunteering

Employees in ESB volunteer in many ways from giving time to the running of the EFG fund and Electric Aid, ESB's staff charity, to getting involved in initiatives that ESB funds, to organising fundraising events. In addition, when ESB employees volunteer over 20 hours of their time or fundraise at least €250, they can apply to the ESB's EFG fund for a grant of €250 to that organisation, increased to €500 for support of refugees. ESB is an active supporter of the Time to Read, Time to Count and Skills at Work programmes, run by Business in the Community, which aim to improve literacy and numeracy initiatives in primary schools throughout Ireland. In 2022, ESB employees volunteered nearly 600 hours in support of these programmes at eight schools.


Róisín NíChiaráin, Kinia at the Educator event.


ESB & St Mary's Fairview, 25 volunteers across the organisation took part in Time to Read in 3 Dublin schools during the school year 2021-22, reading with a total of 39 children.

# Community Engagement (continued)

## Sponsorship

ESB Group manages an active sponsorship portfolio including the following:

- Supporting the development of key 21st century skills in young people through ESB Science Blast and the Quavers to Quadratics programme
- Supporting the arts through partnerships
- Proud supporter and sponsor of the Pieta House Darkness into Light annual fundraising event
- Encouraging education on social justice matters through support of St Vincent De Paul's Youth Development Programme
- Promoting young people in sport through the Electric Ireland GAA All Ireland Minor Championships and the Higher Education Championships
- Promoting female participation in football through the sponsorship of Women's Football in Northern Ireland.

Programmes such as ESB Science Blast and Generation Tomorrow STEAM workshops, positively impact thousands of primary school students in communities across Ireland.

### ESB Science Blast

ESB Science Blast, delivered by the Royal Dublin Society (RDS), empowers primary school children, from 3rd to 6th class, to work together as a class to investigate the science behind a simple question that interests them, before presenting their findings at one of the three showcase events in Dublin, Limerick, or Belfast. The showcase events were unable to go ahead in 2022 due to the ongoing impact of COVID-19, however, there were 440 school submissions and over 11,000 children participating in the virtual ESB Science Blast. Judges, including over 40 people from ESB, supporting with either in class or virtual judging, while schools hosted ESB Science Blast highlights for parents and the wider school community. One of the event days was reserved for the Gaelscoileanna / Irish Language schools and the projects and judging are carried out "as Gaeilge". The ESB Science Blast Roadshow visited 15 schools across Ireland during April 2022, in an ESB electric vehicle.

### Quavers to Quadratics

Quavers to Quadratics is an innovative STEM education programme that explores the intersection of the worlds of music and science through a series of hands-on workshops. The programme is delivered by the National Concert Hall, University College Dublin and Trinity College Dublin Schools of Education and brings the science of music into classrooms from 3rd to 6th class. Experimentation and play inform each of the four Quavers to Quadratic workshops that focus across Hearing Sound, Seeing Sound, Feeling Sound and Creating Sound. ESB's support in 2022 focused on the delivery of the programme across DEIS (Delivering Equality of Opportunity in Schools) and Gaeltacht schools.

### ESB Supporting the Arts

As a long-term patron of the arts in Ireland, ESB recognises the key role that artists play not only in recording and interpreting social and economic developments, but also in engaging communities and stimulating innovation and creativity. ESB supports several arts organisations and supported five climate arts projects in 2022 through the ESB Brighter Future Arts Fund. The ESB Brighter Future Arts Fund, delivered in partnership with Business to Arts, is a €250,000 donor funded scheme launched in 2021 and open to artists from all art forms working with organisations around sustainability, climate change and energy transition. Five projects from across Ireland were selected by an independent assessment panel for funding.

### Darkness into Light

In 2009, in the Phoenix Park in Dublin, 400 people set off on the inaugural Darkness into Light 5km walk to raise funds for Pieta. From small beginnings, the movement has continued to grow, and now there are about 200,000 participants at over 200 venues around the world participating in Darkness into Light each year.

Electric Ireland has supported Darkness into Light since 2013, working with Pieta to bring hope to customers, staff and communities across Ireland that have been affected by suicide. As Ireland's leading energy provider, Electric Ireland understands the importance of bringing light into homes and communities around the country. As the proud sponsor of Darkness into Light, it is our hope that through this long-term partnership with Pieta that we can help those in our communities that are affected by suicide and self-harm to take their first steps from darkness into light. Darkness Into Light is a true demonstration of how we are brighter together, as people unite to offer support and solidarity to those impacted by suicide.

In 2022, we were delighted to return to our in-person walks following the restrictions in 2020 and 2021 and with participation numbers in Ireland exceeding 140,000 supported by a robust marketing and media campaign helping us to raise €4.6 million for this incredibly important service.

Darkness Into Light 2022 | Electric Ireland

# Community Engagement (continued)

### Young St Vincent De Paul

Electric Ireland have been key partners with St Vincent de Paul and primary sponsors for their Young St Vincent de Paul National Youth Development programme since 2013. The development programme offers young people the opportunity to engage in social action and encourages personal and social development. The programme has been developed for use in schools or youth groups with nearly 20,000 secondary school students from 4th and 5th year taking part since our partnership began. When enrolling in the programme the students are given the opportunity to learn about social justice, and why it is needed and provided with the opportunity to take part in social action projects in their communities.

Young St Vincent de Paul | Electric Ireland

### Electric Ireland Higher Education Leagues and Championships

Electric Ireland has been the title sponsor of the GAA Sigerson, Fitzgibbon and Higher Education Championships (HEC) since 2017. With Electric Ireland's longstanding commitments to youth in GAA and building on the sponsorship of the Minor Championships, the HEC involves 7,000 players from over 50 universities and institutes annually competing for the Sigerson and Fitzgibbon Cups, along with other Higher Education Leagues and Championships.

HEC - Higher Education Championships 2023 | Electric Ireland

### GAA Minor Championships

Electric Ireland has been proud sponsor of the GAA All-Ireland Minor Hurling and Football Championships since 2012. Having worked with minor teams over the years, Electric Ireland truly understands all that encompasses playing Minor. Over the course of the partnership Electric Ireland, under the campaign platform "This Is Major", have redefined what it means to be involved in the GAA Minor Championships, elevating both the perception and understanding of the Minor Championships. Electric Ireland has partnered with the GAA since 2017 to establish the Electric Ireland GAA Minor Star Awards which recognise the best 15 individual performances from across the Minor Championships in both football and hurling as well as a Minor Footballer and Hurler of the year.

GAA Minors 2022 | Electric Ireland

### Electric Ireland Sponsorship of Women's Football in Northern Ireland with Game Changers since 2017

Electric Ireland, in partnership with the Irish Football Association, are the proud sponsor of girl's and women's football across all levels in Northern Ireland working to increase participation, attendance at games and increase media coverage. With a 125% increase in registered players, Electric Ireland continue to help provide more opportunities for females to play football in Northern Ireland through supporting Irish FA with new league structures, new schools' competitions and increased primary school outreach. As well as confirming in 2022 support for the Electric Ireland Female Leaders Programme which is designed to equip women for leadership roles in their own football communities.

Electric Ireland Game Changers

# Community Engagement (continued)

## Community Support

Throughout 2022 ESB has invested €2.5 million through its social programmes aimed at community support.

| | 2022 € | 2021 € | 2020 € | 2019 € |
|---|---|---|---|---|
| Energy for Generations * | 1,082,500 | 1,242,390 | 1,251,309 | 986,078 |
| Employee Volunteering | 11,000 | 12,250 | 9,750 | 25,000 |
| Wind Farm Community Fund | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 |
| Electric Aid | 275,000 | 275,000 | 275,000 | 275,000 |
| Ukraine Emergency | 100,000 | | | |
| UNICEF Get a Vaccine | | 105,000 | - | - |

* In addition to above, ESB provides financial support to employees who engage in volunteering activities and to the Business in the Community volunteering programmes ("Time to Read" and "Time to Count").

## Wind Farm Community Fund

ESB's subsidiary wind farm companies operate in Ireland, NI and GB, and its Wind Farm Community Fund makes €1 million available to communities close to wind farm sites for the development of local infrastructure and services bringing a brighter future for the residents of its neighbouring rural communities.

The Wind Farm Community Funds were established by ESB, representing our intention and commitment to ensure clear and lasting benefits in the communities which surround our wind farms. These funds also help the communities in which we operate our wind farms to become more sustainable, through the support of positive local initiatives and activities.

Funding details for the Wind Farm Community Fund are reported a year in arrears for 2022, due to reporting timing. 191 Projects were supported during 2021, by the 16 funds comprising the Wind Farm Community Fund.

There were three broad focal areas supported by the funds in 2021:

**Emergency Funding** – In response to the COVID-19 pandemic the Wind Farm Community Funds provided a vital source of funding in the communities served during the pandemic, which extended into 2021.

**Outdoor Amenities** - Outdoor recreational spaces make important contributions to social well-being as well as physical and mental health, this was greatly recognised during the pandemic restrictions and as we started to reopen in 2021, applications increased from community groups requesting funding through the Wind Farm Community Funds to expand and improve their current spaces.

**Energy Efficiency** -There is a growing momentum in communities across Ireland to embrace energy efficiency and renewable energy in their homes and community buildings alongside developing community-based energy generation projects.

## International Community Support

ESB is a proud corporate partner of Electric Aid, a charity established by employees of ESB in 1987. Today, Electric Aid is supported by 2,070 serving and retired employees, with donations matched by ESB on a 2:3 ratio to a ceiling of €275,000 annually. In 2022, Electric Aid funded 76 projects in 31 countries to a total of €875,000, with each project directly addressing one or more of the United Nations Sustainable Development Goals. A copy of the Electric Aid Annual Report is available from the Electric Aid website – www.electricaid.ie

In 2022, Electric Aid commenced a new special partnership with SeeBeyondBorders, an Irish development organisation focussed on supporting inclusive education for children in Cambodia. Electric Aid is funding technology education support at a number of schools in Cambodia.

# Customer access to a clean, secure and affordable electricity supply

## Delivering a Net-Zero Future

Clean electricity can and must play a key role in decarbonising the energy system and in reducing dependence on imported fossil fuels. In Q1, we launched our new strategy, Driven to Make a Difference: Net Zero by 2040. This sets a timebound target for ESB to reach net zero on a trajectory aligned to the 1.5°C goal in the Paris Agreement. Working with industry partners, we have made significant progress during 2022.

Across the island of Ireland, we have 100% access to electricity supply. This equates to over 3.3 million connections made by ESB Networks and NIE Networks.

## Connections to the Network

| Republic of Ireland | 2022 | 2021 | 2020 |
|---|---|---|---|
| Residential | 2,179,008 | 2,146,913 | 2,123,093 |
| Small Business | 186,638 | 186,415 | 185,599 |
| Medium Business (incl. Public Lighting sites) | 111,744 | 122,934 | 120,085 |
| Large Energy User (distribution connected) | 1,993 | 1,961 | 1,932 |
| Transmission connected | 30 | 22 | 20 |
| Transmission connected with embedded generation | 106 | 94 | 89 |
| New Connections | 38,924 | 29,000 | 28,500 |

| Northern Ireland | 2022 | 2021 | 2020 |
|---|---|---|---|
| Total Customer connections | 912,838 | 900,000 | 890,003 |
| Residential | 92.5% | 92.6% | 92.6% |
| Commercial & Industrial | 7.5% | 7.4% | 7.4% |

Notes: GRI EU3 - No. of Residential, Industrial & Institutional Customers

## Supporting our Customers with the high cost of Energy

ESB has a proud history of serving electricity customers through delivery and innovation and has always sought to deliver affordable electricity to all our customers. ESB is conscious of the significant impact that the price increases of the last 18 months had and will ensure that the impact on customers is always considered.

Over the course of 2022 and as the cost of the energy crisis deepened, our supply businesses across Customer Solutions delivered a range of supports to assist vulnerable customers and those experiencing difficulty in meeting their energy bills. Electric Ireland engages with all residential customers in line with the voluntary Industry Energy Engage Code. In addition to deciding to forgo profit in 2022 from residential customers and providing a €50 credit to each customer account in early 2023, supports delivered ranged from our Hardship Fund through Payment Plans, Household Budget schemes, disconnection moratoriums, energy efficiency grants and implementing the range of government supports announced over the course of 2022.

Electric Ireland announced in December 2022 that it was forgoing profit from its residential electricity business. A €50 credit will be applied to each existing Electric Ireland residential electricity customer and the Electric Ireland Hardship Fund will be increased by €2 million to €5 million.

Pat Fenlon, Executive Director, Electric Ireland said: *"2022 has been a very challenging year for energy customers, primarily as a result of increases in international gas prices. We are acutely aware of the pressures that customers face this Winter and, recognising these exceptional circumstances, Electric Ireland is forgoing profit from its residential electricity business. Electric Ireland's residential customers can each expect to receive €50 credit in the New Year."*

We have also established support hubs for customers across our supply websites to ensure customers have access to all the information, guidance and support necessary to help manage bills and energy consumption.

Electric Ireland Residential - Support Hub - Help & Support for our Customers | Electric Ireland

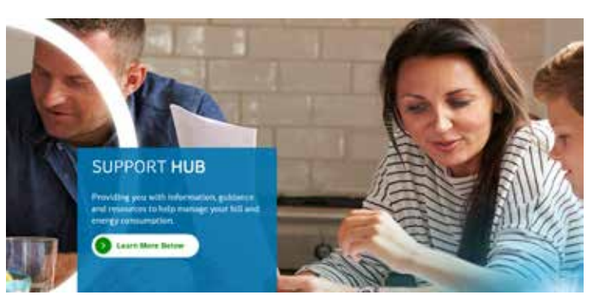
Electric Ireland Business - Business Support Hub - Help & Support for Customers | Electric Ireland

Electric Ireland Northern Ireland - Customer Support Hub | Energy for Home | Electric Ireland NI Help

So Energy - Support for Customers (so.energy)

## Electric Ireland Hardship Fund

Throughout 2022 Electric Ireland remained committed to supporting our customers who experienced financial difficulty. Electric Ireland has a long and proud history of working with valued partners such as the Money Advise Bureau Service (MABS), Saint Vincent DePaul and Alone. In 2022 the Electric Ireland Hardship Fund increased by €2 million to bring it to €5 million, to help ensure the fund is accessible to those most in need of support during the winter months. In 2022, over €2.2 million was drawn from the Hardship Fund by our trusted Partners which was used to support nearly 5,500 customers.

# Customer access to a clean, secure and affordable electricity supply (continued)

## Vulnerable Customers

Electric Ireland is committed to providing support to our vulnerable customers who have special requirements where continuity of energy supply is critically important. In 2022, Electric Ireland embarked on an extensive communications campaign to invite customers to inform Electric Ireland if they or a member of their household were a vulnerable customer, we were delighted with the response of this campaign and we are proud now to have formally registered approx. 24,000 customers as vulnerable customers, information which will help us best serve this customer group.

Caring for our vulnerable customers | Electric Ireland

## Household budget scheme

Electric Ireland works with Fuel Poor customers who sign up to the Household Budget Scheme, or Industry Solution Prepayment Meter as a way to pay their energy bills and also apply a 5% discount. In 2022 Electric Ireland facilitated 1,614 moves to Industry Solution Prepayment Meter.

## Payment Plans

Electric Ireland actively encouraged our customers who experienced difficulty in paying their energy bills to make contact to avail of one of the several flexible payment options on offer, including an Equaliser product that enables customers spread their energy costs in equal payments across the year or to take a payment holiday by agreeing a plan to pay their bills over eleven months instead of twelve. In 2022 Electric Ireland set up over 55,000 instalment plans to help customers manage their energy costs.

## Government Supports

Throughout 2022 a number Government decisions have been implemented to help support customers with their energy spend. Our supply businesses responded with agility and speed to implement these supports.
In Ireland – a lower VAT charge on all residential bills, crediting all residential customers with a series of Government Credits instalments of €200 in both April and November with a further two instalments due in January and March 2023 and information on how businesses could access the Temporary Business Energy Support Scheme.

In UK and Northern Ireland – supporting the administration of payment directly to accounts or via vouchers of £400 or £600 depending on location through the Energy Bills Support Scheme and the Alternative Fuel Payment Scheme. Additionally, suppliers have implemented the Energy Price Guarantee scheme which reduces the amount customers are charged per unit of electricity.

## Moratorium on disconnections

Electric Ireland supported a disconnection moratorium for all residential customers – this moratorium is in place since October 2022 and will run until the end March 2023.

**Disconnection figures for 2022 (prior to moratorium)**

| | |
|---|---|
| Residential Electricity | 827 |
| Residential Gas | 162 |
| Commercial Electricity | 34 |

As a signatory of the Energy Engage Code, Electric Ireland is committed to engaging with all residential customers in line with the voluntary code.

## Supplier of Last Resort

In 2022 Electric Ireland was called upon by the Commission for the Regulation of Utilities (CRU) in Ireland on three separate occasions to carry out the important role of Supplier of Last resort to facilitate a seamless transfer of approx. 55,000 customers who have seen their suppliers exit the market. Electric Ireland efficiently onboarded and communicated with these customers to reassure them that there would be no disruption to customers electricity supply.

## Helping customers with energy efficiency improvements

Electric Ireland provides customers with a range of information and assistance in accessing government supports for energy efficiency improvements in their homes and businesses.

Efficiency | Electric Ireland Help

SEAI Energy Grants | Business Support | Electric Ireland Business

## Customer Complaints

Customer Solutions is committed to offering a quality service. Their service commitment is to treat all customers with courtesy and respect, to try and clearly understand customer needs and to act as quickly as possible. Electric Ireland's service standards are based on five Customer Codes: The Code of Practice on Customer Billing and Disconnection, The Code of Practice on Vulnerable Customers, The Complaints Handling Code of Practice, The Code of Practice on Marketing and Sign Up, The Code of Practice on Pay As You Go Metering. So Energy operate a complaints code of practise – which is fully accessible at the website listed below. ESB ecars offer a range of means of contact support through dedicated contact centres in Ireland and the UK.

Residential customer contact information | Electric Ireland ROI

Contact Us | Electric Ireland Business

Residential contact us - Electric Ireland NI

Complaints procedure | So Energy

ESB ecars ROI/NI Contact Us (esb.ie)

ESB ecars UK Electric Vehicles Help Centre (esbenergy.co.uk)

## Investing to Make a Difference

Against a background of market turbulence and volatility in 2022, ESB worked to support customers impacted by rising energy prices, delivering critical energy infrastructure, enhancing energy security and accelerating the transition to a reliable, affordable, net-zero future.

# Customer access to a clean, secure and affordable electricity supply (continued)

## National Smart Meter Programme (Republic of Ireland)

The National Smart Metering Programme was established by the Commission for the Regulation of Utilities (CRU) and is the delivery plan for the roll out of smart meters across Ireland. ESB Networks has been tasked with the delivery of the roll out programme, which involves upgrading all of Ireland's electricity meters to smart meters. Progress continued on the Smart Metering Programme roll-out with expenditure of €134 million in 2022.

Ireland's smart meter upgrade programme is part of the national Climate Action plan. Smart meters will support Ireland's transition to a low carbon future by enabling the development of smart grids, and supporting the electrification of heat and transport, local renewable generation and microgeneration. Electricity supply companies have begun to offer new smart products and services, which enables you to shift some of your consumption to times of the day when electricity is cheaper.

The Smart Metering Project has passed the 1 million meters installed mark in 2022 and is now connecting in excess of 40,000 smart meters per month.

## Length Of Above And Underground Transmission And Distribution (EU4)

Over 233,000kms of electricity network connects electricity consumers to the generation sources across the island, with a growing percentage of total electricity generation coming from renewables. With a national target of achieving 80% of electricity from renewable sources by 2030, electricity is on a clear decarbonisation trajectory and the network provides the essential infrastructure to provide access for both generators and consumers.

| **Republic of Ireland Distribution Network** | **2022 (kms)** | **2021 (kms** | **2020 (kms)** |
|---|---|---|---|
| OHL LV (< 10 kV) | 40,942 | 40,357 | 39,942 |
| OHL MV (10 kV, 20 kV, 38 kV, 110 kV) | 90,686 | 92,309 | 92,086 |
| Underground LV (< 10 kV) | 15,323 | 14,802 | 14,276 |
| Underground MV (10 kV, 20 kV, 38 kV, 110 kV) | 12,139 | 194,740 | 11,628 |
| **Northern Ireland (length in kms)** | | | |
| Distribution | 47,000 (34% underground) | 47,000 (34% underground) | 47,000 (34% underground) |
| Transmission | 2,300 (5% underground) | 2,200 (5% underground) | 2,200 (5% underground) |

## Managing Interruptions to Supply

Ensuring our customers have access to a reliable and quality supply of electricity is crucial. As the penetration of electrification advances, customer reliance upon uninterrupted supply will increase. We are committed to improving our network each year to ensure that we can continue to supply a reliable service to all electricity customers. Customer Interruptions (CI) represents the number of interruptions greater than three minutes that an electricity customer has on average each year, and Customer Minutes Lost (CML) is the duration that a customer on average spends without supply each year.

## Customer Minutes Lost

| | **2022** | **2021** | **2020** |
|---|---|---|---|
| ESB Networks | 184 | 182 | 95 |
| NIE Networks | 76 | 80 | 75 |

Notes:
The average duration of interruptions (planned and fault) for all customers during the year.
ESB Networks figures included planned and fault information.
NIE Networks figures are fault information.

# Governance Disclosures

# Governance Statement

Good corporate governance provides the foundation for better informed strategic planning and improved decision making, ultimately contributing to long-term value creation. It remains a core focus for ESB Board, particularly given the current volatility in the external environment in which we are operating. It strengthens accountability for the stewardship of resources and is characterised by robust scrutiny which places ongoing emphasis on improving performance.

Good corporate governance does not happen by accident. ESB complies with the Code of Practice for the Governance of State Bodies 2016 (the State Code). ESB also complies on a voluntary basis (insofar as is reasonably applicable, given that ESB is a statutory corporation established under the Electricity (Supply) Act, 1927 (as amended)), with the UK Code and with the Irish Corporate Governance Annex (Irish Annex). In this way, ESB adheres, as applicable, to listed company governance standards with explanations for any exceptions set out in the annual report 2022 (table on page 138). ESB has put in place appropriate measures to comply with the State Code, which sets out the governance framework established by the Government in respect of oversight and reporting requirements of State Bodies, based on the principles of accountability, transparency, probity and a focus on the sustainable success of the organisation over the longer term. ESB has a robust process in place to ensure compliance with the State Code and a report on such compliance is made annually to the Audit and Risk Committee. The Board is satisfied that ESB has complied with the requirements of the State Code and a report is issued annually to the Minister for the Environment, Climate and Communications (the Minister), which confirms such compliance.

The Board is satisfied that appropriate steps have been undertaken to monitor ESB's Irish subsidiaries' compliance with the applicable requirements of the Companies Act, 2014.

As a statutory body, ESB is not subject to the disclosure requirements prescribed in the European Union (disclosure of non-financial and diversity information by certain large undertakings and groups) Regulations 2017. However, on a voluntary basis ESB, in keeping with best practice, discloses certain non-financial information via this sustainability report and as stated on page 6 of 2022 Annual Report.

esb-ethics-code---the-way-we-work-2022.pdf


ESB has adopted a code of ethics, known as "Our Code", which sets out its approach to responsible and ethical business behaviour, underpinned by ESB's values. The underlying principle of Our Code is that employees can best serve ESB by adhering to the highest standards of integrity, loyalty, fairness and confidentiality and by meeting all legal and regulatory requirements. All staff are required to confirm annually that they have read Our Code. The Board has its own Code of Conduct committing ourselves to the highest standards of conduct and business ethics by:

- leading the Group effectively
- treating everyone with respect
- engaging openly and honestly with our customers, communities and stakeholders
- using information carefully Board Members are expected to lead by example and set the tone from the top.

Our Board Code of Conduct is available on the ESB website Board Code of Conduct. Board Members are also mindful of their obligations under the Ethics in Public Office Acts, 1995 and the Standards in Public Office Act, 2001. During 2022, the focus on sustainability and Environmental, Social and Governance (ESG) performance and reporting continued. We have established a dedicated ESG Programme which includes progressing preparations for new requirements under the EU Corporate Sustainability Reporting Directive (CSRD). The Board undertook specific training during 2022 on diversity and inclusion, measuring carbon emissions and sustainability best practice. We continue to report on a voluntary basis under the EU Taxonomy Regulation and the Taskforce on Climate-Related Financial Disclosures (TCFD). ESG reporting will continue to be a focus for the Board throughout 2023.

# Anti-Bribery, Corruption and Fraud

ESB has a detailed Anti-Bribery, Corruption and Fraud Policy in place, which outlines the standards of behaviour expected of staff in how they work and to promote controls to prevent, deter and detect bribery, corruption and fraud. The policy is available on the ESB website Anti Bribery Corruption and Fraud Policy. ESB has a zero-tolerance approach to bribery, corruption and fraud.

In line with its Terms of Reference, the Board Audit and Risk Committee also review and assess reports on incidents of fraud and attempted fraud during the year as well as the processes in place to manage the risk of fraud. The Committee also approved the updated Anti-Bribery, Corruption and Fraud and Whistleblowing and Protected Disclosures Policies in 2022.

During 2022, an allegation of wrongdoing was made by a third party against four ESB employees. ESB reported the allegations to an Garda Síochána and a Garda investigation is in progress. Incidents or attempted incidents of fraud are reported to the Audit and Risk Committee on a quarterly basis.

There were no additional incidents of corruption or termination of contracts due to corruption for employees or contractors reported during 2022 (GRI 205-3).

# Protected Disclosures

Section 22 of the Protected Disclosures Act, 2014 as amended by the Protected Disclosures Amendment Act 2022 requires ESB to publish an annual report relating to reports made to it under the Protected Disclosures Act, 2014 in the preceding year, and confirming the internal and external channels in place for the making of such reports.

In accordance with this requirement, ESB confirms that:
(a) it has internal reporting channels set out in its Group Policy on Whistleblowing and Protected Disclosures, which includes a confidential reporting line managed by an external third party and
(b) 2 protected disclosures were made to ESB in 2022.

One of the matters reported has been investigated and no wrongdoing was deemed to have taken place. The other matter is in the course of being investigated in accordance with applicable ESB Group policies.

# Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices

ESB have a policy in place covering Competition Law requirements, which has been communicated to staff via our intranet site. ESB have no items to report in terms of legal actions regarding anti-competitive behaviour or violations of anti-trust and monopoly legislation in which ESB is identified as a participant that were either pending or completed during 2022 (GRI206-1).

# Customer Privacy

Cybersecurity threats continue to evolve at a rapid pace globally. All electricity users rely on ESB as an essential service to provide secure and reliable electricity, and each person, be they employee or contractor, collectively and individually, have a responsibility to ensure ESB's systems, devices and data are secure so that we protect the company's key assets, customer information, our brand and our reputation. The role of the Chief Information Officer (CIO) is to shape world class technology solutions that enable business growth and efficiencies and to oversee and manage cybersecurity. This includes leading the transformation of ESB Group from an IT, digital and analytics perspective.

As a key public utility, ESB collects and processes large volumes of data about its customers, employees and a range of other business partners. Much of this information is considered to be data that identifies or concerns individuals, also known as Personal Data. ESB is subject to various legal requirements protecting the rights of data subjects.

ESB regards the responsible handling of Personal Data as a key value in its customer centric strategy. In addition to compliance with its legal obligations, ESB respects the rights and freedoms of our customers, employees and others who trust us with their Personal Data. Protecting the privacy and security of this information is a top priority for ESB. The policy also applies to all information systems used by ESB, including all undertakings in which ESB has a controlling interest, wherever located and for whatever purpose used, and whether operated by ESB or by an outside processor on its behalf.

All suspected or actual personal data breaches must be immediately reported in accordance with ESB's data breach management process, where they are subject to investigation and review in line with the governance structures of the organisation, including reporting to the Board Audit and Risk Committee.

### Substantiated complaints concerning breaches of customer privacy and losses of customer data

| GRI 418-1 | | 2022 | 2021 | 2020 | 2019 | 2018 |
|---|---|---|---|---|---|---|
| I | Complaints received from outside parties and substantiated by the organisation | 2 | 5 | 2 | 4 | 0 |
| II | Complaints from regulatory bodies | 0 | 2 | 2 | 3 | 0 |
| III | Total number of identified leaks, thefts, or losses of customer data | 41 | 38 | 15 | 24 | 26 |

# Economic Disclosures



## Introduction

2022 has been an extraordinary year in global energy markets. Driven by the Russian invasion of Ukraine, we have seen high and extremely volatile wholesale market prices. This has had a significant impact on ESB's overall profitability, with additional margins earned in our Generation and Trading (GT) business outweighing losses incurred by our Customer Solutions business.

These conditions have however presented a significant challenge for our market facing businesses in managing risk during such a period of uncertainty. It has shown the benefit of ESB having robust, well managed processes and systems to meet that challenge. 2022 has also demonstrated the benefit of a well-funded and financially strong ESB to meet substantial short term funding requirements (particularly in the form of cash collateral on exchange traded commodity positions) and to allow us to continue to invest at scale in critical low-carbon energy infrastructure in both Ireland and the UK. A number of broader macroeconomic issues such as high inflation levels, increased interest rates and supply chain disruption came to the fore in 2022 also. These factors have had an impact on our electricity generation and networks businesses in particular. We continue to monitor these issues closely.

Operating profit before exceptional items has increased by €168 million on 2021 primarily due to the impact of higher wholesale prices in our GT business both in Ireland and Great Britain (GB). This was offset by lower levels of profitability in our networks' businesses due to regulated network tariff changes, significant losses incurred in ESB's supply business in GB as well as foreign exchange movements, asset retirement provision movements, higher operating costs and a higher depreciation charge.

The overall level of profits earned in 2022 are higher than anticipated largely as a result of the extraordinary wholesale market conditions which prevailed and the limitations of current market structures which prevented additional profits in the Generation and Trading (GT) business being passed on to customers. In that context, a significantly enhanced dividend of €327 million is proposed to be paid to stockholders, 97% of which goes to the Irish Government. We also welcome in principle the introduction of measures by the EU and the Irish and UK Governments to cap the revenues being earned by generators in these exceptional times. It is important that market structures and policy measures enable both the viability of investment and affordability for customers.

## 5 Year Financial Performance Summary

**Operating Profit before exceptional items[1]**

| | |
|---|---|
| 2022 | €847m |
| 2021 | €679m |
| 2020 | €616m |
| 2019 | €682m |
| 2018 | €455m |

**Capital Expenditure[2]**

| | |
|---|---|
| 2022 | €1,395m |
| 2021 | €1,223m |
| 2020 | €1,115m |
| 2019 | €1,242m |
| 2018 | €1,165m |

**EBITDA before exceptional items**

| | |
|---|---|
| 2022 | €1,675m |
| 2021 | €1,493m |
| 2020 | €1,358m |
| 2019 | €1,432m |
| 2018 | €1,175m |

**Net Debt[3]**

| | |
|---|---|
| 2022 | €6,786m |
| 2021 | €4,946m |
| 2020 | €5,120m |
| 2019 | €5,239m |
| 2018 | €4,915m |

1. Before the following exceptional items: 2022: Neart na Gaoithe impairment (€91 million). 2021: Profit on asset sales (including impairment reversals) €152 million, Neart na Gaoithe impairment (€154 million), So Energy impairment of goodwill and onerous contract provision (€61 million). 2020: Impairment charge (€188 million) and increased Asset Retirement Provisions (€59 million). 2019: Severance and associated costs (€60 million) and impairment charge (€34 million). 2018: impairment charge (€140 million).
2. 2018 - 2022 capital expenditure is gross of customer contributions for network connections (in line with IFRS 15 'Revenue from Contracts with Customers').
3. 2019 - 2022 net debt includes lease liabilities recognised in accordance with IFRS 16 'Leases'. 2022: €129 million, 2021: €120 million, 2020: €125 million, 2019: €132 million. It excludes ESB share of debt associated with investments in joint ventures and associates all of which are equity accounted. It also excludes restricted cash (2022: €754 million).

# 2022 Financial Performance

**Paul Stapleton,** Executive Director, Group Finance and Commercial

Our 2022 performance reflects the following progress in our main business units:

- ESB Networks operating profit for 2022 is down €202 million on 2021 due primarily to a decrease in revenue from regulated tariffs as well as higher operating costs to support the delivery of PR5 and higher depreciation costs due to an increase in the asset base. Both ESB Networks and NIE Networks businesses continued to deliver significant progress on their regulated capital and maintenance programmes in line with their agreed price controls.
- GT operating profit is up €590 million on 2021 mainly as a result of higher wholesale market prices benefitting ESB's thermal and renewable assets in both Ireland and GB. GT continued to develop its renewable portfolio, notably through continued investment in onshore and offshore wind projects both in Ireland and GB. The GT business also contributed strongly to maintaining electricity security of supply in Ireland throughout 2022. The hedging policy of GT was important in satisfactorily managing exposures to the large and volatile movements in wholesale prices.
- As was the case in 2021, our Customer Solutions business was loss making in 2022. In GB, the Government imposed price cap alongside dramatically increased wholesale energy costs caused ESB's GB retail business to be loss making in 2022 with So Energy incorporated into the results for a full year for the first time in 2022 following its acquisition in August 2021. Electric Ireland (which is part of Customer Solutions) operating profits were lower than 2021 due mainly to reduced energy margins. Regulatory provisions in Ireland dictate that additional profits in our GT business cannot be used to offset additional costs incurred by Electric Ireland, however, we remain committed to supporting customers during this period of energy crisis. While regrettably, Electric Ireland had to pass on a number of price increases to customers in 2022, in December 2022 Electric Ireland announced a €50 credit for all residential electricity customers in the Republic of Ireland which has been provided for in the 2022 financial statements.

# Green Finance

ESB's Treasury activities and approach to financing our Net Zero 2040 strategic commitment, underpin and enable ESB to deliver on its strategy by providing best funding and risk management solutions and maintaining ESB's strong financial standing.

A €1.4 billion Sustainability-Linked Revolving Credit Facility is in place with a group of 13 international banks. This facility currently extends to February 2027. The cost of this standby liquidity facility is directly linked to the delivery by ESB of specific decarbonisation targets aligned with ESB's strategy. In 2022, an additional Revolving Credit Facility of £750 million was agreed and currently extends to December 2023. £200 million of the €1.4 billion Sustainability-Linked Revolving Credit facility was drawn down at 31 December 2022 leaving c.€2.0 billion of undrawn facilities at 31 December 2022.

In January 2022, ESB successfully raised a €500 million 1.0% fixed-rate green bond, maturing in July 2034. This is the second green bond that ESB has issued in less than three years, following the issue of Ireland's first corporate public green bond in 2019. The net proceeds from the transaction will be allocated to finance eligible green projects, such as renewable energy generation and energy efficiency projects. The bond was purchased primarily by investors across Europe with strong SRI (Socially Responsible Investment) credentials, with orders received of more than €2 billion, demonstrating confidence in ESB's investment programme.

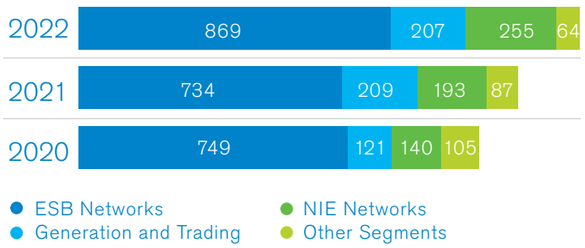
ESB's Green Bond Framework and Green Bond Reports can be found here: Green Financing

In November 2022, ESB and NIE Networks successfully issued two further bonds. ESB raised a €550 million 4.0% fixed-rate bond, maturing in May 2032. The net proceeds from the transaction will be primarily allocated to ESB's significant investment in its regulated asset base. NIE Networks issued a £350 million 5.875% fixed-rate bond maturing in December 2032 with proceeds used to further invest in its regulated asset base. Both transactions attracted significant demand from investors in Europe and the UK, with ESB's progression on its Net Zero by 2040 Strategy a key focus point.

# Investing for the Future

ESB continues to invest at record levels in energy infrastructure with €1.4 billion of capital expenditure in 2022. Approximately 80% of this was in our two networks' businesses in line with agreed regulated capital programmes, including over €130 million on the roll-out of smart meters in ROI. ESB invested c.€179 million in new renewable generation and systems services projects (including batteries) as well as over €20 million in maintaining its existing generation fleet to ensure the reliability of electricity supply to customers during the ongoing transition to low-carbon generation, particularly over the winter period. In addition to this, €287 million was advanced by way of shareholder loans to joint venture projects (the majority of which related to our continued investment in offshore wind).

**Capital Expenditure - € millions**




## EU Taxonomy Regulation Reporting

ESB has once again included disclosures in the Annual Report under the EU Taxonomy Regulation on a voluntary basis, ahead of the requirement to do so. An initial alignment assessment has been completed and KPIs calculated outlining the proportion of ESB's turnover, OpEx and CapEx which relate to Taxonomy- Aligned activities. Based on this initial assessment approximately 81% of ESB's capital investment relates to Taxonomy-Aligned activities as we continue to invest in renewable generation and the enhancement of the electricity networks in both the Republic of Ireland and Northern Ireland. See pages 109-117 of ESB's Annual Report 2022 for the full EU Taxonomy Regulation disclosure.

# Using our Profits in a Sustainable Way

## €1.4 billion in capital expenditure in 2022

Facilitating a more sustainable energy environment as well as supporting economic growth through providing, safe and reliable electricity supply to homes and businesses

## Indirect Economic Impacts

Investments in the generation portfolio are focused on accelerating investment in renewable energy to reduce the carbon intensity of the generation portfolio and support the transition to reliable, affordable, low carbon energy. Investments in the networks business in Republic of Ireland focused on the reinforcement and construction of new network infrastructure to facilitate the connection of renewables and the diversification of electrification, whilst also committing significant investment to maintaining existing network. NIE Networks focused on the delivery of its network investment plan under RP6 to achieve reliability of supply and ensure the safety of the network for customers, as well as continuing investment to facilitate the connection of additional renewable generation and the replacement of customer meters.

## ESB is progressing a pipeline of significant generation projects to deliver ESB's Net Zero by 2040 Strategy

>300 MW battery storage systems in Cork and Dublin

190 MW of flexible gas generation at three locations in Dublin

Onshore and offshore wind developments with our trusted partners including:
- 1,080 MW Inch Cape Offshore Wind Farm
- 448 MW Neart na Gaoithe Offshore Wind Farm
- 83 MW Oweninny 2 Wind Farm

## Combined ROI & UK overall taxes paid €950 million

Taxes borne €340m
Taxes collected €610m

## UK taxes paid €224 million

## ROI taxes paid €726 million

### ROI

| Taxes paid | €726m |
|---|---|
| Taxes borne | €270m |
| Taxes collected | €456m |

### Split between

| Taxes Borne | €270m |
|---|---|
| Profits earned - Corporation Tax | €111m |
| People employed - Employers PRSI | €43m |
| Environment - Electricity Tax | €3m |
| Local communities - Rates | €113m |

### and

| Taxes collected | €456m |
|---|---|
| VAT on sales & purchases of goods/services | €238m |
| People employed - Employee PAYE, PRSI and USC | €162m |
| Environment - Carbon Tax | €16m |
| Withholding tax on services | €40m |

### UK

| Taxes paid | €224m |
|---|---|
| Taxes borne | €70m |
| Taxes collected | €154m |

### Split between

| Taxes Borne | €70m |
|---|---|
| Profits earned - Corporation Tax | (€7m) |
| People employed- Employers National Insurance | €12m |
| Environment - Climate Change Levy | €39m |
| Local communities - Rates | €26m |

### and

| Taxes collected | €154m |
|---|---|
| VAT on sales & purchases of goods/services | €117m |
| People employed - Employee PAYE, National Insurance | €26m |
| Environment - Climate Change Levy | €10m |
| Withholding tax on services | €1m |

Note:
ESB also operates in jurisdictions outside of Ireland and the UK but profits and the taxes relating to these jurisdictions are immaterial.
Tax burden means tax borne by ESB out of its own profits while taxes collected are taxes either charted to others or taxes withheld from payments to others and paid over to revenue authorities.

## €5 million hardship fund established

## €2.5 million to support communities

Empowering and enriching the lives of individuals and communities through the corporate social responsibility programme

## €327 million dividend return to stockholders for 2022

96.9% goes to the Irish Government as majority stockholder

## Almost €1.5 billion of declared dividends over 10 years

## €245 million paid to debt investors

Annual interest and repayments

## Over €2.3 billion contributed to the Irish economy

# Pension Obligations
(GRI 201-3)

The Group operates a number of pension Schemes for staff in both the Republic of Ireland, Northern Ireland and the United Kingdom (UK). Note 24 to ESB's Financial Statements 2022, provides full details on ESB Group's pension obligations on pages 247-253.

## Pension schemes in the Republic of Ireland

The Group operates two pension schemes, which are called the ESB Defined Benefit Pension Scheme and the ESB Defined Contribution Pension Scheme.
Pensions for approximately half of the employees in the electricity business are funded through a contributory pension Scheme called the ESB Defined Benefit Pension Scheme. The fund is vested in Trustees nominated by ESB and its members for the sole benefit of employees and their dependants. The Scheme is a defined benefit Scheme and is registered as such with the Pensions Authority.

The regulations governing the Scheme stipulate the benefits that are to be provided and the contributions to be paid by both ESB and the contributing members. Notwithstanding the defined benefit nature of the benefits, ESB has no legal obligation to increase contributions to maintain those benefits in the event of a deficit. ESB's rate of contribution cannot be altered without the agreement of ESB and approval of the Minister for Environment, Climate and Communications. Should a deficit arise in the future, ESB is obliged under the regulations to consult with the Superannuation Committee, the Trustees and the Scheme Actuary to consider the necessity of submitting an amending Scheme for Ministerial approval.

ESB also operates an approved defined contribution Scheme called ESB Defined Contribution Pension Scheme for employees of ESB subsidiary companies in the Republic of Ireland and, from 1 November 2010, new staff of the Parent. Contributions are paid by the members and the employer at fixed rates. The benefits secured at retirement reflect each employee's accumulated fund and the cost of purchasing benefits at that time. Death benefits are insured on a Group basis and may be paid in the form of a lump sum and/or survivor's pension. The pension charge for the year represents the defined employer contribution and amounted to €18.6 million (2021: €17.0 million).

## FM United Kingdom Stakeholder Scheme

In addition, ESB operates a contract based defined contribution pension scheme in the UK for all its GB employees. Contributions are paid by the members and the employer at fixed rates. The benefits secured at retirement reflect each employee's accumulated fund and the cost of purchasing benefits at that time. Death benefits are insured on a Group basis and may be paid in the form of a lump sum. The assets of this Scheme are held in individual accounts managed by Legal & General Assurance Society Limited. The pension charge for the year represents the defined employer contribution and amounted to €0.7 million (2021: €0.7 million).

## Northern Ireland Electricity Pension Scheme

The majority of the employees in NIE Networks are members of the Northern Ireland Electricity Pension Scheme (the NIE Networks Scheme). This has two sections: "Options", which is a money purchase arrangement whereby the employer generally matches the members' contributions up to a maximum of 8% of salary, and "Focus" which provides benefits based on pensionable salary at retirement or earlier exit from service. The assets of the NIE Networks Scheme are held under trust and invested by the Trustees on the advice of professional investment managers. The Trustees are required by law to act in the interest of all relevant beneficiaries and are responsible for the investment policy with regard to the assets and the day-to-day administration of the benefits of the scheme.

Focus has been closed to new members since 1998 and therefore under the projected unit credit method the current service cost for members of this section as a percentage of salary will increase as they approach retirement age.

# ESB's Supply Chain

ESB's Supply Chain is key to our business success and the delivery of ESB's Driven to "Make a Difference : Net Zero by 2040" Strategy. During 2022 the risk profile of ESB's supply chains has increased, due to the ongoing impact of the Russia / Ukraine War, the Turkish / Syrian Earthquake, general economic uncertainty, and high levels of inflation, which are negatively impacting supply chains in terms of higher prices and extended lead times for key materials and services. To address these increased risks, ESB is applying a range of mitigants, including enhanced levels of supply chain monitoring and supplier collaboration.

ESB's procurement strategy is aligned to ESB's Net Zero strategy & sustainability goals. Competitive tendering is our standard procurement procedure, and all procurement processes are undertaken in a non-discriminatory, transparent, and proportionate manner. This process ensures equal treatment, non-discrimination, mutual recognition, and freedom to provide goods and services, in line with applicable procurement law, the Irish Government's Code of Practice for the Governance of State Bodies and EU Treaty Principles.

Where appropriate, tender evaluations are conducted on the total lifetime cost (LCC) basis, and ESB are increasingly using sophisticated LCC models to take into account whole life costs when assessing major projects and equipment purchases. For example, tailored LCC's are used to evaluate the cost and efficiency of all significant tenders for generation plant and equipment, networks switchgear and transformers, and ESB fleet. These total cost models include a range of cost inputs, including purchase price, freight costs, customs duties, energy usage (load or otherwise), prototyping costs, type tests, installation costs, maintenance, and end of life costs.

ESB requires our suppliers/contractors of all tiers to comply with all applicable laws and to respect internationally recognised human rights. ESB's Supplier Charter sets out the basic principles that all ESB suppliers, service providers and contractors are expected to comply with in relation to:

- Conduct of business
- Health & Safety
- Environment
- Ethics, Bribery & Anti-corruption
- Employment Standards, and
- Modern Slavery.

ESB's Requirements for Third Parties gives contractual effect to these expectations, and copies of these documents and other relevant ESB Procurement Policies, which are subject to regular updates are publicly available on the ESB Group website Supplier Information (esb.ie)

With an annual procurement spend (excluding fuel) of approximately €1.6B, ESB relies on complex and diverse supply chains to provide the services necessary to meet our customer's needs. Of this spend, approximately 80% is procured from suppliers within the Republic of Ireland, Northern Ireland and the UK, and 19% from other EU member states (GRI204-1). We currently have approximately 4,000 Tier 1 suppliers, with whom we placed approx. 37,000 purchase orders in 2022. These suppliers range from local SME's & micro companies to large multi-national corporations / contractors.

**GRI 204-1: proportion of spending on local suppliers**

| Location Name | 2022 | 2021 | 2020 % |
|---|---|---|---|
| UK, NI & Ireland | 80% | 86% | 87% |
| EU | 19% | 12% | 8% |
| Rest of World | 1% | 2% | 5% |

Contracts range from standard supply-type arrangements for consumable items, such as tools & equipment to more complex service/works contracts for renewable generation, smart metering installation, EV Infrastructure and chargers, networks substation & overhead/ underground line construction & refurbishment, customer billing & metering services and financial & engineering related consultancy assignments. Where technical considerations allow, we favour the use of functional and performance-based specifications, supported by International/European standards. All significant contracts are advertised in the Official Journal of the European Union.

# ESB's Supply Chain (continued)

Many of these contracts by their nature are labour intensive and it is essential that suppliers maintain a strong culture of corporate responsibility, in addition to good sustainable and environmental practices.

Sustainability features are generally sought from tenderers where such features contribute to the delivery of ESB's sustainability goals. Some notable procurements that included a strong emphasis on sustainability in 2022, included:

- A contract for additional short-term battery storage capacity of 150MW at Aghada Generating Station
- The award of a suite of Framework Agreements to support the development of a pipeline of Offshore Wind Projects for ESB Generation & Trading
- The award Contractor Frameworks in ESB Networks covering the Design and Build of Overhead Lines, Distribution Substations Construction, and HV Cabling, and
- Supply-only framework agreements in ESB Networks for 400kV Power Transformers, 3-phase Smart Meters, HV Compositive Insulators. Dynamic line rating systems, and the supply of Electric Vans

ESB's aim is to ensure that sustainability is embedded across every business function. In Procurement, all elements of our business operations are transacted electronically, including the issue and receipt of tenders and purchase orders to our suppliers. ESB are also committed to complying with the terms of applicable late payments legislation and are signatories to the Prompt Payment Code of Conduct. ESB's standard terms of payment are Nett Monthly Account. PDF invoice via email is ESB's preferred method of receiving invoices from suppliers. ESB has increased the number of PDF invoices received from suppliers from 93% in 2021 to 94% of all invoices being received in 2022. The key benefits for suppliers for submitting invoices in this way, include traceability and the ability to email queries to a dedicated mailbox for quick resolution. This is a no cost option to suppliers and means invoices can be processed more expeditiously.

## Human Rights (including Protection Against Modern Slavery)

ESB is committed to respecting all internationally recognised human rights, including those expressed in the International Bill of Human Rights and the principles concerning fundamental rights set out in the International Labour Organisation's Declaration on Fundamental Principles and Rights at Work. This commitment is supported by a range of policies covering focus areas within human rights including employee rights, non-discrimination, inclusion and diversity as well as modern slavery. The ESB's employee Code of Ethics ("Our Code") requires all employees to operate fairly and to respect all human rights. Modern slavery is a criminal offence under the UK Modern Slavery Act, 2015. The Act imposes obligations on organisations of a certain size, which carry on a business in the United Kingdom. Modern slavery can occur in various forms, including servitude, forced and compulsory labour and human trafficking, all of which have in common the deprivation of a person's liberty by another to exploit them for personal or commercial gain. As the parent of a number of subsidiary companies with significant operations in the UK, ESB has adopted a policy on modern slavery with the aim of preventing opportunities for modern slavery occurring within its business and supply chains. In accordance with the Act, ESB publishes an annual statement setting out the steps that ESB has taken during the previous financial year to ensure that slavery and human trafficking is not operating within either its own business or its supply chains. No incidents of modern slavery have been found to date.

The most recent Annual Statement was published in April 2022, and it included details of the steps taken by ESB to prevent acts of modern slavery from occurring within its supply chain. The statement is available on ESB's website Prevention of Slavery and Human Trafficking April 2022

ESB has assessed its business areas and locations to identify potential human rights issues and risks and preventive measures, both within the Group and in other organisations that provide goods and services to ESB. ESB's assessment of human rights and equality issues (it believes to be relevant to its functions) and the policies, plans and actions in place or proposed to be put in place to address those issues in compliance with Section 42(s) of the Irish Human Rights and Equality Act, 2014, is published separately on ESB's website Public Sector Human Rights Assessment

ESB seeks at all times to comply with employment law applicable to the jurisdictions in which it operates and puts in place contractual arrangements with providers of agency staff requiring that they achieve the same level of compliance. Following on from its previous statements on the prevention of slavery and human trafficking, ESB has during 2022, taken the following steps to prevent acts of modern slavery from occurring within its supply chains:

- Under a framework agreement that was awarded in 2021 to British Standards Institute (BSI), questionnaires issued to 188 of ESB's key suppliers seeking information on a range of Corporate Social Responsibility related areas including, Company Human Rights practices, steps taken to prevent Child and Forced Labour, Wage and Benefits, Disciplinary and Environmental practices
- 128 suppliers responded to these questionnaires and 23 suppliers have been identified as having an elevated risk rating, with 3 suppliers identified as high risk based on this assessment
- A range of actions, including on-site audits, covering suppliers who failed to respond to the questionnaire and for respondents with an elevated and high-risk rating are currently being progressed
- During 2022, 74 Contractor Employment Standards Audits were also conducted on ESB managed sites throughout the Republic of Ireland
- ESB continued to engage with our major coal suppliers to ensure that they are aware of ESB's commitment to the Bettercoal Organisation and the Bettercoal Code, including ESB's commitment to Bettercoal tools in its due diligence and continuous improvement processes for the supply of coal. Mines are audited against the principles in the Bettercoal Code. The current version (2.0) of the Bettercoal Code incorporates the UN Guiding Principles on Business and Human Rights and the UN and ILO's instruments on the rights of indigenous peoples
- We ensured that all tenderers and suppliers were aware of and signed-up to ESB's 3rd Party Requirements Document, which establishes clear contractual obligations on ESB's zero tolerance approach to Modern Slavery in our Supply Chains
- We continued to provide bespoke training to the ESB Procurement Team on Modern Slavery Risks and 13 members of the team also completed the Chartered Institute of Purchasing & Supply's (CIPs) Practitioner Programme, which includes training on ESG related issues and Corporate Social Responsibility, and
- ESB was assigned an A- leadership rating for Supplier Engagement by the Carbon Disclosure Project (CDP) in 2022.

In ESB all staff are asked annually, via ESB's online learning portal, to take time to review ESB's Staff Employee Code of Ethics, which includes guidance on ethical business practices that apply to all ESB employees and contracting parties. Contracting parties supplying services to ESB are also expected to conduct themselves in accordance with the principles of this Code. Further information about ESB's ethical business practices can be found by accessing the following link http://esb.ie/who-we-are/corporate-governance/esb-code-of-ethics---our-code

Chapter 5

# Appendices

DNV

WHEN TRUST MATTERS

# GRI Standards Option Check
## Independent Assessment

DNV Business Assurance Services UK Ltd. ('DNV') was engaged by the Electricity Supply Board ('ESB') to carry out an Independent Assessment of ESB's Sustainability Report 2022 ('the Report') against the Global Reporting Initiative ('GRI') Standards 2021 and the GRI Electric Utilities Sector Supplement.

The Report has been independently assessed by DNV as being in accordance with the GRI Standards 2021.

DNV's Independent Assessment confirms that the required disclosures for the 'Core' option have been addressed in ESB's Report. The GRI Standards Cross Referencing Table within the Report's appendices demonstrates a valid representation of the disclosures, in accordance with the requirements of the GRI Standards 2021.

This Independent Assessment does not provide an opinion on ESB's sustainability performance in 2022 nor on the quality of information disclosed in the Report.

DNV was not engaged by ESB on any other commitments in 2022 which could compromise the independence of our assessment of ESB's GRI reporting.

4th August 2023, London

**For and on behalf DNV Business Assurance Services UK Ltd**

**Souvik Kumar Ghosh**
Principal Consultant

DNV

# GRI Standards Cross Referencing Table

## General Disclosures

| | Disclosure | Page References | GRI Index Comment |
|---|---|---|---|
| 2-1 | Organizational details | 36-37,92 | |
| 2-2 | Entities included in the organization's sustainability reporting | 37, Annual Report 2022, pg 278 | Annual Report 2022, page 278 ,Note 35 to Financial Statements SUBSIDIARY, EQUITY ACCOUNTED INVESTEES AND ASSOCIATE UNDERTAKINGS. Subsidiaries are currently accounted for in the data reported, however, data for Joint Ventures is not included, with the exception of renewable generation capacity and output, which is included on an equity share basis. |
| 2-3 | Reporting period, frequency and contact point | 36 | ESB's Annual Report generally publishes in March each year, reporting on the preceding calendar and fiscal year, the same reporting period as the sustainability report. ESB's Annual Report 2022 published 22/02/2023. |
| 2-4 | Restatements of information | GRI Index | Emissions associated with All Island Transmission and Distribution system losses have been restated for 2020-2022 following a review of the process and recalculation (see Emissions section, page 41-46). There are no other material restatements of information made in 2022 report |
| 2-5 | External assurance | 36, 41, Appendix | Independent Verification of generation emissions is a requirement for reporting under EU/ETS, as required by EU Commission Regulation 601/2012. Remaining Scope 1,2,3 emissions (non generation) undergo independent verification against ISO14064. In line with our preparatory work for CSRD alignment and compliance, policy requirements in this area will be considered, including seeking data assurance beyond emissions data. |
| 2-6 | Activities, value chain and other business relationships | 35-37,69-71,88-89, GRI Index | No significant organisational changes or restructuring took place during 2022. Our value chain, operations, products and services are outlined on pages 35-37, our supply chain impacts from a human rights perspective on 69-71 and our overall supply chain on 88-89. |
| 2-7 | Employees | 62 | Data to report on regional breakdown of employment contract by permanent/temporary contracts was not made available for reporting. We will endeavour to bring this improvement to the data set as part of our review for CSRD alignment. Full time employees are reported as FTE equivalents. There has been no significant increase in the full time workforce, however a commitment to recruit an additional 1,000 employees over the next 3 years was made in 2022. Numeric differences year on year are due to inconsistencies in data collection, however, the level of data accuracy and consistency is improving year on year. The growth of the workforce is driven by new areas of work in offshore wind and hydrogen in particular, as well as the demands to deliver on the broader corporate strategy.<br><br>Contractor numbers are aggregated across the year, however, the summer season sees a peak due to generating station overhauls and many network maintenance work programmes, which take place across ROI, NI and GB.. |

# GRI Standards Cross Referencing Table (continued)

## General Disclosures

| | Disclosure | Page References | GRI Index Comment |
|---|---|---|---|
| 2-8 | Workers who are not employees | 62 | Contractor workforce numbers are not gathered for all Individual contracts. Numbers reflect regular contractors working on behalf of our networks businesses on construction and overhaul projects, as well as facility service providers and IT and other service support |
| 2-9 | Governance structure and composition | 83 | The role of the ESB Board is outlined in the Governance Statement on page 83 and full detail on the Board and Board subcommittees are provided in ESB's Annual Report, pages 120-159 |
| 2-10 | Nomination and selection of the highest governance body | GRI Index | The role of the ESB Board is outlined in the Governance Statement on page 83 and full detail on the Board and Board subcommittees are provided in ESB's Annual Report, pages 120-159. The nature of appointments to the Board are outlined in the Annual Report, pages 128-129. |
| 2-11 | Chair of the highest governance body | GRI Index | The role of the ESB Board is outlined in the Governance Statement on page 83 and full detail on the Board and Board subcommittees are provided in ESB's Annual Report, pages 120-159 |
| 2-12 | Role of the highest governance body in overseeing the management of impacts | 10, 83 | The role of the ESB Board is outlined in the Governance Statement on page 83 and full detail on the Board and Board subcommittees are provided in ESB's Annual Report, pages 120-159 |
| 2-13 | Delegation of responsibility for managing impacts | GRI Index | The role of the ESB Board is outlined in the Governance Statement on page 83 and full detail on the Board and Board subcommittees are provided in ESB's Annual Report, pages 120-159 |
| 2-14 | Role of the highest governance body in sustainability reporting | 10, 83 | The role of the ESB Board is outlined in the Governance Statement on page 83 and full detail on the Board and Board subcommittees are provided in ESB's Annual Report, pages 120-159 |
| 2-15 | Conflicts of interest | 83 | The role of the ESB Board is outlined in the Governance Statement on page 83 and full detail on the Board and Board subcommittees are provided in ESB's Annual Report, pages 120-159 |
| 2-16 | Communication of critical concerns | GRI Index | The role of the ESB Board is outlined in the Governance Statement on page 83 and full detail on the Board and Board subcommittees are provided in ESB's Annual Report, pages 120-159 |
| 2-17 | Collective knowledge of the highest governance body | GRI Index | The role of the ESB Board is outlined in the Governance Statement on page 83 and full detail on the Board and Board subcommittees are provided in ESB's Annual Report, pages 120-159 |
| 2-18 | Evaluation of the performance of the highest governance body | GRI Index | The role of the ESB Board is outlined in the Governance Statement on page 83 and full detail on the Board and Board subcommittees are provided in ESB's Annual Report, pages 120-159 |
| 2-19 | Remuneration policies | GRI Index | The role of the ESB Board is outlined in the Governance Statement on page 83 and full detail on the Board and Board subcommittees are provided in ESB's Annual Report, pages 120-159 |
| 2-20 | Process to determine remuneration | GRI Index | The role of the ESB Board is outlined in the Governance Statement on page 83 and full detail on the Board and Board subcommittees are provided in ESB's Annual Report, pages 120-159 |
| 2-21 | Annual total compensation ratio | GRI Index | ESB published its 2nd Gender Pay Gap Report in 2022. Whilst the Pay Gap Report does not specifically address the differential between the CEO's pay and the median pay, it should be noted that the CEO's pay is capped and overseen by government. |
| 2-22 | Statement on sustainable development strategy | 7-8, 15 | |
| 2-23 | Policy commitments | 79-81, 83, GRI Index | Pages 79-81, Policies to protect and support vulnerable customers, business conduct and ethics. The role of the ESB Board is outlined in the Governance Statement on page 83 and full detail on the Board and Board subcommittees are provided in ESB's Annual Report, pages 120-159 |
| 2-24 | Embedding policy commitments | 65, 79-81, 83 GRI Index | Pages 79-81, Policies to protect and support vulnerable customers, business conduct and ethics. The role of the ESB Board is outlined in the Governance Statement on page 83 and full detail on the Board and Board subcommittees are provided in ESB's Annual Report, pages 120-159 |
| 2-25 | Processes to remediate negative impacts | 80, 83, GRI Index | Customer complaints mechanisms (pg 80), grievance and protected disclosure (pg83). The role of the ESB Board is outlined in the Governance Statement on page 83 and full detail on the Board and Board subcommittees are provided in ESB's Annual Report, pages 120-159. |
| 2-26 | Mechanisms for seeking advice and raising concerns | 83,84 | anti bribery, corruption and fraud policy, code of ethics and whistleblowing and protected disclosures policy |
| 2-27 | Compliance with laws and regulations | 45-47 | |
| 2-28 | Membership associations | 37 | |
| 2-29 | Approach to stakeholder engagement | 27-32 | |
| 2-30 | Collective bargaining agreements | 65-66 | Working conditions and terms of employment are subject of the contract of employment between ESB and an individual, irrespective of whether said individual avails of collective bargaining agreements. Negotiated agreements between the employer and Group of Unions are accessible to all impacted employees |

# GRI Standards Cross Referencing Table (continued)

## Economic Disclosures

| | Disclosure | Page References | GRI Index Comment |
|---|---|---|---|
| **201 Economic performance** | | | |
| 3-3 | Management of material topic | 29-31, 85-87 | The hardship fund, €50 credit for residential customers and disconnections moratorium have provided added security of energy supply to vulnerable customers during the energy price crisis. |
| 201-1 | Direct economic value generated and distributed | | Whilst the direct contributions to the societies where we operate are summarised on page 87 of the sustainability report 2022 and annual report (pgs 13,118,119), the data is not broken down sufficiently to meet this disclosure. |
| 201-2 | Financial implications and other risks and opportunities due to climate change | | Whilst ESB undertakes climate risk assessment with respect of physical and policy related climate risks, the risk assessment does not currently consider the financial implications. During 2023 we plan to undertake a Double Materiality exercise which will assist us in assessing the financial implications of risks and opportunities associated with climate change. |
| 201-3 | Defined benefit plan obligations and other retirement plans | 88 | Notes 24 & 25 of Annual Report 2022, pgs247-253, outline ESB's approach to meeting the liabilities under the Pension Schemes. The schemes are open to all permanent employees across ESB's geographies of operation. |
| 201-4 | Financial assistance received from government | | With a holding of 96.9%, ESB is majority owned by the Irish Government. Some limited grant funding is received but the government is not a source financial assistance by way of investment for ESB. |
| **203 Indirect economic impacts** | | | |
| 3-3 | Management of material topic | 12, 14-20, 29-31, 86,87 | |
| 203-1 | Infrastructure investments and services supported | | Details on ESB's infrastructure investments are outlined on page 12, 85-87. Both the development of renewables, to contribute to the decarbonisation of electricity generation, and the network infrastructure development are subject to stringent planning conditions at the design and development stage, which outline and address identified potential adverse impacts |
| 203-2 | Significant indirect economic impacts | 86,87 | |

| | Disclosure | Page References | GRI Index Comment |
|---|---|---|---|
| **204 Procurement practices** | | | |
| 3-3 | Management of material topic | 29-31,88,89 | |
| 204-1 | Proportion of spending on local suppliers | 88 | |
| **205 Anti-corruption** | | | |
| 3-3 | Management of material topic | 29-31, 82-84 | ESB Annual Report 2022, pages 120-159, provide additional information and detail on ESB Group's governance approach and practices. |
| 205-1 | Operations assessed for risks related to corruption | | ESB Annual Report 2022, pages 120-159, provide additional information and detail on ESB Group's governance approach and practices. |
| 205-2 | Communication and training about anti-corruption policies and procedures | | ESB Annual Report 2022, pages 120-159, provide additional information and detail on ESB Group's governance approach and practices. |
| 205-3 | Confirmed incidents of corruption and actions taken | 83 | |
| **206 Anti-competitive behaviour** | | | |
| 3-3 | Management of material topic | 14,63-71, 83, 84 | ESB have no items to report in terms of legal actions regarding anti-competitive behaviour or violations of anti-trust and monopoly legislation in which ESB is identified as a participant that were either pending or completed during 2022. |
| 206-1 | Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices | 84 | |

# GRI Standards Cross Referencing Table (continued)

## Environmental Disclosures

| | Disclosure | Page References | GRI Index Comment |
|---|---|---|---|
| **302 Energy** | | | |
| 3-3 | Management of material topic | 11,15, 51-55, 70-71 | |
| 302-1 | Energy consumption within the organization | 52 | The fuel inputs outlined for thermal generation are non renewable (i.e. coal, natural gas, oil and peat). For own electricity usage, we do not procure electricity via specific renewable tariffs, so the renewable element of electricity consumption reflect the national renewables proportion of electricity generation (approximately 36% in 2022). Transport fuels typically have a biofuel content in the region of 7%.<br><br>Zero consumption relating to cooling or steam.<br><br>The sale of energy (electricity and gas) is not detailed in the sustainability report, as this has commercial sensitivity.<br><br>The functions of the energy reported are distinctly different. Thermal generation inputs relate to the energy inputs required to generate electricity. The operational energy inputs, electricity, transport, thermal, relate to the energy required to operate the business.<br><br>Defra & SEAI conversion factors are used to convert energy into GWh & kWh |
| 302-2 | Energy consumption outside of the organization | | This data is not reported due to commercial sensitivity. |
| 302-3 | Energy intensity | 39, GRI Index | ESB does not calculate energy intensity factors. For thermal generation, the key intensity factor is $CO_2$ intensity per kWh of electricity produced. This is reported on page 39. For operational energy used, an activity metric of kWh per FTE (reported pg. 52) is used to track progress on energy efficiency in the context of the size of the organisation. |
| 302-4 | Reduction of energy consumption | 42-44, 52 | Reported operational energy use includes vehicle fleet fuel (diesel, petrol, SFGO, electricity), premises electricity consumption and natural gas used in leased premises. Improvements in operational energy are reported against a 2006-2008 average baseline year. |
| 302-5 | Reduction in energy requirements of products and services | 41, GRI Index | Our sold product is energy, the relevant impact metric for improvement here is $gCO_2$ per kWh of electricity generated, which is reported on pg 41 |

| | Disclosure | Page References | GRI Index Comment |
|---|---|---|---|
| **303 Water and Effluents** | | | |
| 3-3 | Management of material topic | 56-59 | The management of discharge points from sites via interceptors and water sampling are the key methods to prevent against negative impacts of water contamination. Sampling and reporting to environmental authorities, as part of licence conditions, is key to demonstration of compliance with regard to pollution prevention and mitigation of negative impacts.<br><br>Site interceptors are monitored and sampled for pH and conductivity to ensure storm and surface water runoff are free from contaminants prior to discharge. Any exceedances are reported to the environmental authorities, followed by investigation, resampling and retesting as required.<br><br>Cooling water discharge is monitored via Continuous Emissions monitoring systems (CEMS) to ensure temperature and where relevant pH readings remain in line with licence parameters, with any exceedances required to be reported to the licencing authority and followed up by inspection, resampling and retesting. |
| 303-1 | Interactions with water as a shared resource | 56-57 | As part of award of a licence to operate, all generating stations undergo a stringent planning process, which also includes environmental impact considerations. The licence to operate and licence conditions in place for an individual station bring these parameters to bear to monitor the operation of the plant in line with the licence conditions and ensure an established reporting line into the environmental authorities. |
| 303-2 | Management of water discharge-related impacts | 56-57 | Parameters for water discharge from thermal generating stations are governed by license conditions. Water sampling is undertaken prior to any discharge from site in line with environmental requirements and is reported annually via the Annual Emissions Report to the environmental authorities. Any license limit breaches are reported on occurrence to environmental authorities. |
| 303-3 | Water withdrawal | 56-57 | Water data for thermal stations is gathered via the Annual Emissions Reports, which does not break down water details beyond water source, to include for example Total Dissolved Solids. |
| 303-4 | Water discharge | 56-57 | Water data for thermal stations is gathered via the Annual Emissions Reports, which does not break down water details beyond water source, to include for example Total Dissolved Solids. |
| 303-5 | Water consumption | 56-57 | Whilst water consumption is reported on, our key locations of operation are not currently considered as being under water stress. The majority of our water usage (approx. 99%) is as cooling water, which is abstracted, run through the cooling process and returned to point of abstraction. We do not currently gather data to allow for calculation of water storage impacts. |

# GRI Standards Cross Referencing Table (continued)

## Environmental Disclosures

| | Disclosure | Page References | GRI Index Comment |
|---|---|---|---|
| **304 Biodiversity** | | | |
| 3-3 | Management of material topic | 47-51 | The biodiversity impact of all major projects is subject to appropriate assessment prior to the commencement of any works, this would include whole of society impacts. The ongoing Nature+Energy project being headed up by Trinity College seeks to study biodiversity on existing wind farms and compare it with the biodiversity baseline, which was established as part of the wind farm development. This will establish changes and impacts on biodiversity (both flora and fauna) over the life time of the wind farms participating in the study. |
| 304-1 | Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas | 47-51 | Cables through SACs are typically installed overground, and the only subsurface activities pertain to erecting foundations for pylons or poles, which is completed in line with methods approved through environmental risk assessment. A.vi. The biodiversity value of individual sites is not yet fully assessed to a level where it can be reported on. |
| 304-2 | Significant impacts of activities, products, and services on biodiversity | | The information required to report on the work activity levels and individual interventions to manage and minimise impacts has not been collated to enable reporting against this disclosure for 2022. |
| 304-3 | Habitats protected or restored | | The information required to report on the work activity levels and individual interventions to restore individual habitats has not been collated to enable reporting against this disclosure for 2022. |
| 304-4 | IUCN Red List species and national conservation list species with habitats in areas affected by operations | | The information required to report on the species at risk in individual habitats has not been collated to enable reporting against this disclosure for 2022. Typically an environmental impact assessment will be undertaken prior to any works being undertaken, which will identify species and protective measures to be employed. |

| | Disclosure | Page References | GRI Index Comment |
|---|---|---|---|
| **305 Emissions** | | | |
| 3-3 | Management of Material Topic | 39-44 | |
| 305-1 | Direct (Scope 1) GHG emissions | 39-42 | ESB disposed of its only asset emitting biogenic $CO_2$ in 2021, therefore biogenic emissions are no longer applicable<br><br>2015 for operational emissions reflects a decision to extend the gathering and measurement of a broader range of operational Scope 1,2 & 3 emissions.<br><br>SEAI and DEFRA are the emissions factors most commonly used to calculate our emissions |
| 305-2 | Energy indirect (Scope 2) GHG emissions | 40-42 | 2015 for operational emissions reflects a decision to extend the gathering and measurement of a broader range of operational Scope 1,2 & 3 emissions.<br><br>SEAI and DEFRA are the emissions factors most commonly used to calculate our emissions.<br><br>Equity share approach to consolidation of emissions is employed. |
| 305-3 | Other indirect (Scope 3) GHG emissions | 40-42 | ESB disposed of its only asset emitting biogenic $CO_2$ in 2021, therefore biogenic emissions are no longer applicable<br><br>2015 for operational emissions reflects a decision to extend the gathering and measurement of a broader range of operational Scope 1,2 & 3 emissions. |
| 305-4 | GHG emissions intensity | 39 | |
| 305-5 | Reduction of GHG emissions | 42 | |
| 305-6 | Emissions of ozone-depleting substances (ODS) | 42, GRI Index | There are no emissions associated with ODS |
| 305-7 | Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions | 42 | |

# GRI Standards Cross Referencing Table (continued)

## Environmental Disclosures

| | Disclosure | Page References | GRI Index Comment |
|---|---|---|---|
| **306 Waste** | | | |
| 3-3 | Management of material topic | 58,59 | ESB's organisational waste is managed compliantly and handled and disposed of by licenced waste service providers. No undue impact on the economy or society has been identified. |
| 306-1 | Waste generation and significant waste-related impacts | 58,59 | |
| 306-2 | Management of significant waste-related impacts | 58, 59 | Actions taken to prevent waste generation upstream in ESB's value chain include, where applicable, procurement contracts requiring providers to remove excess packaging upon delivery. |
| 306-3 | Waste generated | 59 | |
| 306-4 | Waste diverted from disposal | | Waste service providers do not consistently provide breakdowns of waste recovery, recovery following secondary sorting and energy recovery from incineration. Current data available to the business does not suffice to report on waste diverted from disposal. |
| 306-5 | Waste directed to disposal | 58 | Only the data as reported on page 58 (waste table by disposal method) and broken out by hazardous and non hazardous categories, is consolidated from waste service provider's reporting. |
| **308 Supplier Environmental Assessment** | | | |
| 3-3 | Management of material topic | 69-70,88-89 | |
| 308-1 | New suppliers that were screened using environmental criteria | 88,89 | As per page 88, ESB's Supplier Charter sets out principles and minimum criteria for all suppliers engaged with ESB, including environmental considerations. |
| 308-2 | Negative environmental impacts in the supply chain and actions taken | | Our current engagement with our supply chain partners are principally focused on workers rights and the protection of human rights in our supply chain and the programmes outlined on pages 88 and 89, highlight the actions being taken in that regard. |

## Social Disclosures

| | Disclosure | Page References | GRI Index Comment |
|---|---|---|---|
| **401 Employment** | | | |
| 3-3 | Management of material topic | 15,21-22, 63-69 | |
| 401-1 | New employee hires and employee turnover | | This data was not made available in a format suitable to address the disclosure requirements |
| 401-2 | Benefits provided to full-time employees that are not provided to temporary or part-time employees | | Benefits available to staff, whether temporary or fulltime are governed both by employment legislation and the individual or category contract between the individual and the company, which outlines salary and benefits. |
| 401-3 | Parental leave | 63 | |
| **402 Labour/ management relations** | | | |
| 3-3 | Management of material topic | 62,63, 69-71 | |
| 402-1 | Minimum notice periods regarding operational changes | 66 | Operational changes that could significantly affect employees are typically negotiated between the employer (ESB) and the worker's representatives (Group of Unions), with proposals possibly being put to a vote. Details in the negotiated agreement typically will detail transition periods. |

# GRI Standards Cross Referencing Table (continued)

## Social Disclosures

| | Disclosure | Page References | GRI Index Comment |
|---|---|---|---|
| **403 Occupational health and safety** | | | |
| 3-3 | Management of material topic | 72-74 | |
| 403-1 | Occupational health and safety management system | 72-74 | |
| 403-2 | Hazard identification, risk assessment, and incident investigation | 73 | |
| 403-4 | Worker participation, consultation, and communication on occupational health and safety | 73 | There are 4 Worker Directors on ESB Board, one of whom participates on the SSC (Safety, Sustainability & Culture) Board Sub-Committee, which convenes quarterly. |
| 403-5 | Worker training on occupational health and safety | 73 | |
| 403-6 | Promotion of worker health | 74 | |
| 403-7 | Prevention and mitigation of occupational health and safety impacts directly linked by business relationships | 74 | |
| 403-8 | Workers covered by an occupational health and safety management system | 39,64, 73 | Safety management systems cover the work being undertaken regardless of whether the work is being undertaken by a contractor (pg 64) or an employee (pg 73), applying to all activities and personnel on the site governed by the safety management system. |
| 403-9 | Work-related injuries | 72, 73 | Rate of fatalities is not calculated, as our commitment remains to ensure everyone's safety and avoid injury.<br><br>P1 incidents are no longer separated out, as in our Safe & Sound culture, the learnings from such incidents are people centred and treated the same, regardless of whether the incident is from staff or contractors.<br><br>Total hours worked is not currently calculated across all projects, sites and activities.<br><br>Contractor LTI rate is not calculated. |
| 403-10 | Work-related ill health | 73 | Work related ill health is managed on a case management basis by our Occupational Health Department. The data associated with occupational ill health, the nature of work related ill health cases and their causes have not been made available by the Occupational Health Department for public disclosure. |

| | Disclosure | Page References | GRI Index Comment |
|---|---|---|---|
| **404 Training and education** | | | |
| 3-3 | Management of material topic | 64-66 | |
| 404-1 | Average hours of training per year per employee | 65, 66 | Information unavailable / incomplete |
| 404-2 | Programs for upgrading employee skills and transition assistance programs | | Whilst there are many programmes available and rolled out to transition in roles or into retirement, the consolidated data summarising programme delivery is not available. |
| 404-3 | Percentage of employees receiving regular performance and career development reviews | 63 | |
| **405 Diversity and equal opportunity** | | | |
| 3-3 | Management of material topic | 66-68,69-71, 88-89 | |
| 405-1 | Diversity of governance bodies and employees | 64,83 | ESB does not currently collate reporting data to report on the diversity by age group or ethnicity for governance bodies or employees, Where available this data is reported by gender and employee category, see pages 62-67. |
| 405-2 | Ratio of basic salary and remuneration of women to men | 68 | Information unavailable / incomplete |
| **406 Non-discrimination** | | | |
| 3-3 | Management of material topic | 69-71, 88-89 | |
| 406-1 | Incidents of discrimination and corrective actions taken | 69-71, 83, 88-89 | Information unavailable / incomplete |

# GRI Standards Cross Referencing Table (continued)

## Social Disclosures

| | Disclosure | Page References | GRI Index Comment |
|---|---|---|---|
| **407 Freedom of association and collective bargaining** | | | |
| 3-3 | Management of material topic | 66,69-71,88-89 | |
| 407-1 | Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk | 69-71,88-89 | Contractor Employment Standards audits are in place to ensure workers rights are upheld by their employer, when engaged on ESB sites |
| **408 Child labour** | | | |
| 3-3 | Management of material topic | 69-71, 88-89 | |
| 408-1 | Operations and suppliers at significant risk for incidents of child labour | 69-71, 88-89 | Sections on human rights and supply chain details the engagement being undertaken in ESB's supply chain to identify and address risk, primarily human rights risk. |
| **409 Forced or compulsory labour** | | | |
| 3-3 | Management of material topic | 69-71,88-89 | |
| 409-1 | Operations and suppliers at significant risk for incidents of forced or compulsory labour | | Sections on human rights and supply chain details the engagement being undertaken in ESB's supply chain to identify and address risk, primarily human rights risk. |
| **414 Supplier social assessment** | | | |
| 3-3 | Management of material topic | 69-71, 88-89 | |
| 414-1 | New suppliers that were screened using social criteria | 69-71, 88-89 | As per page 88, ESB's Supplier Charter sets out principles and minimum criteria for all suppliers engaged with ESB, including social considerations. |
| 414-2 | Negative social impacts in the supply chain and actions taken | 69-71, 88-89 | Sections on human rights and supply chain details the engagement being undertaken in ESB's supply chain to identify and address risk, primarily human rights risk |

| | Disclosure | Page References | GRI Index Comment |
|---|---|---|---|
| **416 Customer health and safety** | | | |
| 3-3 | Management of material topic | 27-29, 73, 79-81 | As a regulated energy provider, we are in constant contact and engagement with customers and other stakeholders to assess needs, cater for the vulnerable, facilitate payment challenges, support and deliver connections and to advise and alert electricity users on safe and sustainable use of energy. Electricity is an enabler of modern societies and economies and ensure affordable, reliable, safe and secure access to energy is critical to how ESB operates. |
| 416-1 | Assessment of the health and safety impacts of product and service categories | 27-29, 73, 79-81 | As a regulated energy provider, we are in constant contact and engagement with customers and other stakeholders to assess needs, cater for the vulnerable, facilitate payment challenges, support and deliver connections and to advise and alert electricity users on safe and sustainable use of energy. Electricity is an enabler of modern societies and economies and ensure affordable, reliable, safe and secure access to energy is critical to how ESB operates. |
| 416-2 | Incidents of non-compliance concerning the health and safety impacts of products and services | 27-29, 73, 79-81 | As a regulated energy provider, we are in constant contact and engagement with customers and other stakeholders to assess needs, cater for the vulnerable, facilitate payment challenges, support and deliver connections and to advise and alert electricity users on safe and sustainable use of energy. Electricity is an enabler of modern societies and economies and ensure affordable, reliable, safe and secure access to energy is critical to how ESB operates. |
| **418 Customer privacy** | | | |
| 3-3 | Management of material topic | 27-29, 73, 84 | As a regulated energy provider, we are in constant contact and engagement with customers and other stakeholders to assess needs, cater for the vulnerable, facilitate payment challenges, support and deliver connections and to advise and alert electricity users on safe and sustainable use of energy. Electricity is an enabler of modern societies and economies and ensure affordable, reliable, safe and secure access to energy is critical to how ESB operates. |
| 418-1 | Substantiated complaints concerning breaches of customer privacy and losses of customer data | 84 | |

# GRI Standards Cross Referencing Table (continued)

## Additional Disclosures

| | Disclosure | Page References | GRI Index Comment |
|---|---|---|---|
| **Energy Affordability** | | | |
| 3-3 | Management of material topic | 9,15, 23, 25,26,56-57, 79-80 | |
| | Energy Affordability | 9,15, 23, 25,26,56-57, 79-80 | |
| **Solutions for vulnerable customers** | | | |
| 3-3 | Management of material topic | 26, 79-80 | Electric Ireland is committed to providing support to our vulnerable customers who have special requirements where continuity of energy supply is critically important. Vulnerable Customers fall into two main categories;<br>1) Critically dependent on electrically powered equipment. This includes (but is not limited to) life protecting devices, assistive technologies to support independent living and medical equipment, and<br>2) If the customer is particularly vulnerable to disconnection during winter months for reasons of advanced age or physical, sensory, intellectual, or mental health.<br><br>Electric Ireland Priority Services Customers are suitable for customers who are:<br>Dependent on medical equipment including but not limited to life-protecting devices such as ventilators and home dialysis machines.<br>We recognise that customers on Priority Services have special requirements for electricity continuity, therefore Electric Ireland will never request a disconnection unless requested by a customer to do so.<br><br>Electric Ireland Special Services Customers applies to customers who are:<br>Of advanced age, physical, intellectual or mental health difficulties. Visually impaired and require Braille bills, large printed or talking bills. |
| | Solutions for vulnerable customers | 26, 79-80 | |

| | Disclosure | Page References | GRI Index Comment |
|---|---|---|---|
| **Smart Meter Rollout** | | | |
| 3-3 | Management of material topic | 12,16, 81 | The National Smart Metering Programme was established by the Commission for the Regulation of Utilities (CRU) and involves the upgrading of Ireland's electricity meters by ESB Networks to next generation smart meters. To date almost 1.3 million smart meters have been installed across Ireland. The upgrade which began in 2019 is bringing benefits to the customer, the environment and the economy.<br><br>Customers benefit from greater access to information about their electricity usage enabling them to make informed choices on their consumption and tariff options.<br><br>The environment benefits because smart metering supports an increase in renewable power on the electricity system, helping to cut $CO_2$ emissions.<br><br>The economy benefits because using smart meters will help ESB Networks to manage the network more efficiently and to find faults quicker.<br><br>Smart meters allow customers that generate their own electricity using microgeneration, such as solar panels, to receive payment for any excess they sell into the grid. To date over 44,000 microgeneration customers are benefiting from having a smart meter.<br><br>Smart Meters are helping customers to take more control of their electricity usage and choose from a range of smart price plans which are being offered by electricity suppliers. The programme is being delivered in partnership with the Department of the Environment, Climate and Communications, the Commission for Regulation of Utilities, the Sustainable Energy Authority of Ireland and electricity suppliers. |
| | Smart meter rollout | 12,16, 81 | |
| **Security of Supply** | | | |
| 3-3 | Management of material topic | 9-12, 16-19,38-39, 45-46 | |
| | Security of supply | 9-12, 16-19,38-39, 45-46 | |
| **Developing a smart & flexible electricity network** | | | |
| 3-3 | Management of material topic | 9-12, 16-19, 23, 79-81 | |
| | Developing a smart & flexible electricity network | 9-12, 16-19, 23, 79-81 | |

# Glossary of Terms

| Abbreviated Term | Explanation |
|---|---|
| AA | Appropriate Assessment |
| AIE | Access to Information on the Environment |
| ARO | Asset Retirement Obligation |
| ASA | Ash Storage Area |
| ASM | Active System Management |
| BER | Building Energy Rating |
| BITC | Business in the Community |
| BREEAM | Building Research Establishment Environmental Assessment Method is used to masterplan projects, infrastructure and buildings |
| BSI | British Standards Institute |
| BWR | Business Working Responsibly Award |
| BWG | ESOP |
| CAP | Climate Action Plan |
| CARE | Career Average Revalued Earnings |
| CBD | UN Convention on Biological Diversity |
| CCGT | Combined Cycle Gas Turbine |
| CDP | Carbon Disclosure Protocol |
| CEP | Clean Energy Package |
| CES | Contractor Employment Standards |
| CFD | Contracts for Difference -incentivise investment in renewable energy by providing developers of projects with high upfront costs and long lifetime with direct protection from volatile wholesale prices |
| CI | Customer Interuptions (greater than 3 minutes) |
| CML | Customer Minutes Lost |
| Coillte | Coillte is a commercial company operating in forestry, land based businesses, renewable energy and panel products and owns over 1 million acres of forest on behalf of the Irish Government |
| Colleges | UL – University of Limerick, UCD – University College Dublin, TCD – Trinity College Dublin, NUI – National University of Ireland, DIT – Dublin Institute of Technology, QUB – Queen's University Belfast, UCC – University College Cork, TUD -Technical University Dublin |
| COP | Conference of the Parties, UN climate change conference |
| CRU | Commission for Regulation of Utilities |
| CSM | Conceptual Site Model |
| CSR | Corporate Social Responsibility |
| CSRD | EU Corporate Sustainability Reporting Directive |
| DAERA | Department of Environment and Rural Affairs (NI) |

| Abbreviated Term | Explanation |
|---|---|
| DCCAE | Department of Communications, Climate Action and Environment |
| DfE | Department for the Economy (NI, replaces DETI) |
| DSO | Distribution System Operator |
| DTTAS | Department of Transport, Tourism and Sport |
| EAI (NEAI) | Electricity Association of Ireland (Northern Ireland Electricity Association) |
| EAP | Employee Assistance Programme |
| EBITDA | Earnings before interest, taxes, depreciation and amortization |
| EcIA | Ecological Impact Assessment |
| EDF | Électricité de France |
| EDSO | European Distribution System Operators |
| EDT | Executive Director Team |
| EEOS | Energy Efficiency Obligation Scheme |
| EHS | Environmental Health and Safety |
| EIA | Environmental Impact Assessment |
| Eirgrid | Republic of Ireland System Operator |
| EPA | Environmental Protection Agency |
| EPRI | Electricity Power Research Institute |
| ESB Finance DAC | ESB Finance Designated Activity Company |
| ESG | Environmental, Social and Governance |
| ESOP | Employee Share Ownership Scheme |
| ESRS | European Sustainability Reporting Standard |
| EU | European Union |
| EU ETS | E uropean Union Emissions Trading System |
| Eurelectric | The Union of the Electricity Industry - EURELECTRIC is the sector association which represents the common interests of the electricity industry at pan-European level |
| EV | Electric Vehicle |
| FFC | Fluid Filled Cables |
| FTE | Full Time Equivalent (employee) |
| GB | Great Britain |
| GHG | Green House Gas |
| GRI | Global Reporting Initiative |
| GWP | Global Warming Potential |

# Glossary of Terms (continued)

| Abbreviated Term | Explanation |
|---|---|
| G99/NI | G99/NI details the requirements for the connection of generation equipment, including integration of micro generation, in parallel with public distribution networks in Northern Ireland. |
| H&S | Health and Safety |
| HSA | Health and Safety Authority |
| HV | High Voltage |
| IBEC | Irish Business and Employer Association |
| IE License | Industrial emissions Licensing |
| IFA | Irish Farmers Association |
| IPCC | Intergovernmental Panel on Climate Change |
| IPPCL | Integrated Pollution Prevention and Control Licence |
| IWEA | Irish Wind Energy Association |
| JV | Joint Venture |
| KPI | Key Performance Indicator |
| LCC | Life Cycle Costing |
| LGBT | Lesbian, Gay, Bisexual, Transgender |
| LTI | Lost Time Injury (in ESB defined as being absent from work on the next planned shift/day) |
| LV | Low Voltage |
| MABS | Money Advice and Budgeting Service |
| MHFA | Mental Health First Aid |
| NHA/PNHA/SAC/ SPA/ASSI | National Heritage Area, proposed NHA, Special Area of Conservation, Special Protection Area, Areas of Special Scientific Interest |
| NI Executive | Northern Ireland Executive |
| NIE | Northern Ireland Electricity Networks |
| NIEA | Northern Ireland Environment Agency |
| NOx, Sox | Nitrous Oxides, Sulphur Dioxides, |
| NPWS | National Parks and Wildlife Service (NI) |
| OCEI | Office of the Chief Electricial Inspector |
| OER | Organisational Effectiveness Review |
| OHL | Overhead Lines |
| P1 Incident | High Potential Severity Incidents |
| PFC | Perfluorocarbons |
| PPE | Personal Protection Equipment |
| PR5 | Price Review 5, Republic of Ireland |

| Abbreviated Term | Explanation |
|---|---|
| RAB | Regulated Asset Base |
| RCP4.5 | High Emissions global warming scenario |
| RESS 1 | Renewable Energy Support Scheme |
| RNLI | Royal National Lifeboat Institution |
| RoI | Republic of Ireland |
| RP6 | Price Review 6, Northern Ireland |
| SDG | Sustainable Development Goals |
| SEAI | Sustainable Energy Authority of Ireland |
| SEM | Single Electricity Market |
| SES | Smart Energy Services |
| SF6 | Sulphur Hexaflouride |
| SHIELD | Safety Health Inspection and Equipment Logistics Database |
| SME | Small and Medium Enterprises (Businesses) |
| SMS | Safety Management Systems |
| SONI | System Operator Northern Ireland |
| STEAM | Science, Technology, Engineering, Arts and Mathematics |
| SVP | St Vincent de Paul |
| T & D | Transmission and Distribution |
| TCFD | Task Force for Climate Related Financial Disclosure |
| TSO | Transmission System Operator |
| UK | United Kingdom |
| UR | Utility Regulator of Northern Ireland |
| VDU | Visual Display Unit |
| VGB | European technical association for power and heat generation - a voluntary association of companies for which power and heat generation is the basis of their business. |
| WITS | Women in Technology and Science |

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