Energy for generations

ESB Sustainability Report 2020

LEADING THE LOW CARBON TRANSITION

Our Vision for the Low Carbon Brighter Future

Humanity is at a crossroads. Swift and decisive action is required to cut our fossil fuel use and move to low carbon living. At ESB, we see electricity as being an enabler for this clean transition, in transport, heating and industry. Renewable energy sources are rapidly displacing carbon in electricity generation, providing a pathway for all of our energy system. A future free from fossil fuels will be a Brighter Future for us all.

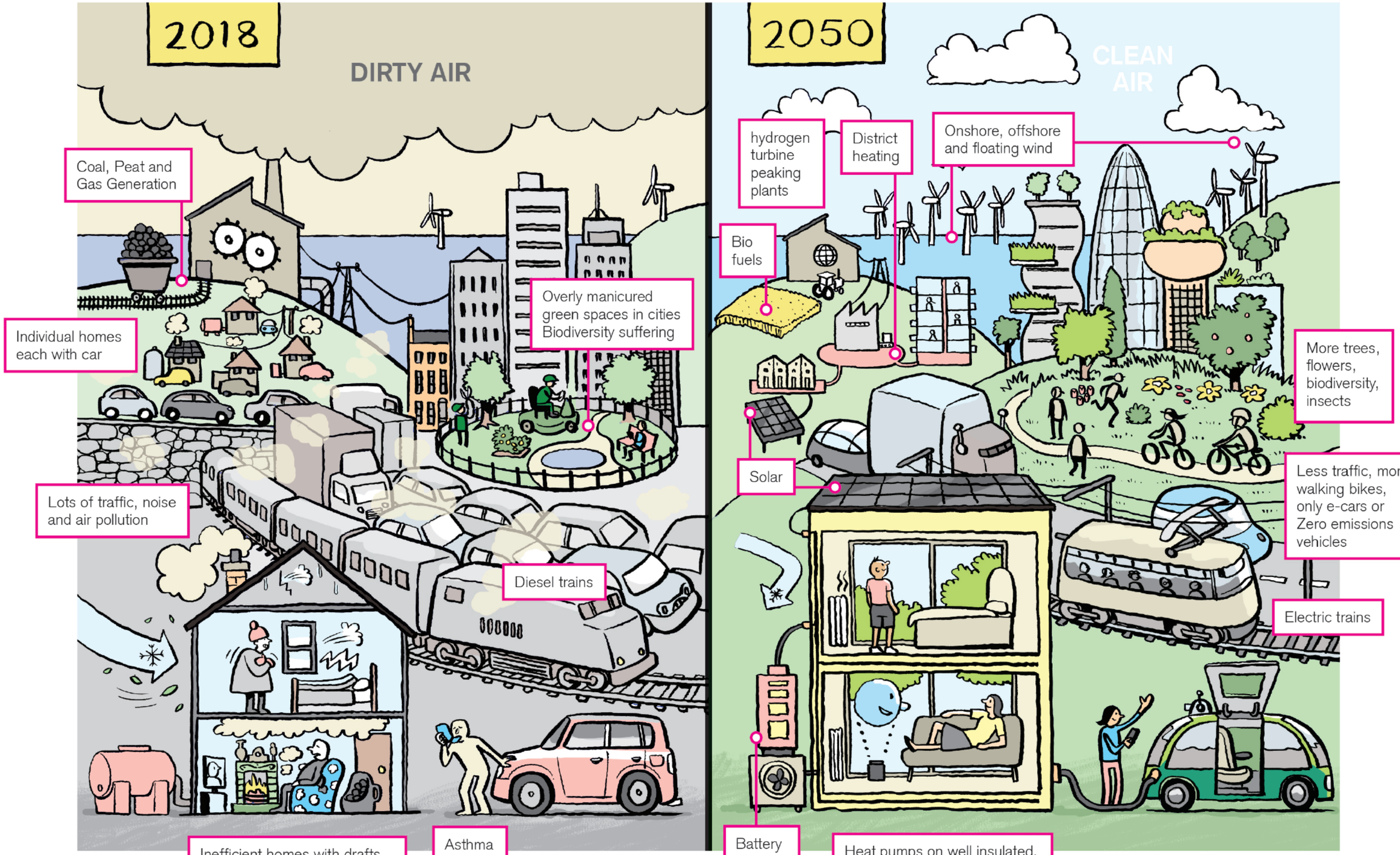


Illustration Credit: Philip Barrett

OUR SUSTAINABILITY TIMELINE

1998 First Windfarm

2000

2001

2001 – 2009 Renewal of Distribution Network to a Smart Network

2009

2008 First Sustainability Report

2009 First CDP disclosure

2011 First cross border EV charging network

Launch of SIRO **2015**

ESB's Brighter Future Strategy • Launch of low carbon economy study. • **2017**

Investment in Oriel and Clogher Head windfarms • **2019**

Smart meter roll-out •

2020

PR5 Networks 5-year plan for smarter networks to support Ireland's climate targets.

2018

- Launch of Dingle active network and community energy area
- First offshore windfarm investment

2020 ESB becomes a CDP 'A' listed company

2021

- Nos. 27 & 28 Fitzwilliam fossil-free office buildings
- Electric Ireland-SuperHomes Retrofit Partnership

2028 Moneypoint Green Atlantic Floating Offshore Windfarm operational

2030 Targets

50% reduction in CO_2 per electricity unit •

35,000 deep home retrofits completed •

50% reduction in CO_2 of buildings and fleet CO_2 •

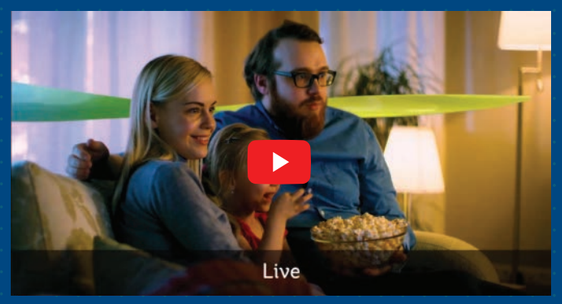
2030

Eurelectric Ambition: Net Zero 'well ahead of 2050

National Carbon Neutrality commitment by 2050'

Climate Change in Context

CHAPTER 1



ESB Creating A Brighter Future...

MESSAGE FROM CHIEF EXECUTIVE

Leading the low carbon transition

"We are committed to taking leadership and action to support the transition to a low carbon energy system..."

Rapid carbon reduction is now a global imperative. Scientists agree that time is running out to address the climate crisis and that transformative action is needed. We look ahead to COP26 in Glasgow later this year in the knowledge that the collective actions we take this decade will determine our future. The 2020s will be a decade of global change, an opportunity to reverse carbon emissions and set the world on an accelerating pathway to a low carbon and sustainable future.

The EU and the Irish and UK governments have responded by increasing carbon reduction targets out to 2030. In Ireland, the commitment is an average annual emission reduction of 7%. ESB stands fully behind these ambitions and our strategy is fully aligned to them. We are committed to taking leadership and action to support the transition to a low carbon energy system, powered by clean electricity.

ESB's strategy is a decarbonisation strategy. By 2030, we aim to halve the carbon emissions for each unit of electricity we generate, connect enough renewable generation to meet the 70% Government target, prepare the distribution network to support the widespread electrification of heat and transport and develop solutions that will enable our customers to live more sustainably.

This will require significant innovation and investment. Over the course of this decade, we will connect the renewable generation that will triple Ireland's capacity from 4,000 MW to 12,000 MW. We will deploy smart digital technologies and reinforcement on the distribution network to serve an extra half a million heat pumps and over 800,000 home EV chargers. At the same time, we will improve resilience, keeping the lights on for customers. We will develop sustainable products and services that are engaging and intuitive by bringing the voice of the customer into every step of innovation.

Our actions will not only help to reduce carbon emissions, they will transform lives and lead to better health outcomes through improved air quality, warmer, dryer and more comfortable homes and more flexible and efficient transport systems.

History will judge us for our actions, and we are determined to lead the way.

Pat O'Doherty, Chief Executive
26 February 2021

CLIMATE ACTION IS URGENTLY NEEDED

Globally, greenhouse gas emissions are running well above the pathway required to meet the goals of the Paris Agreement, concluded in 2015. The COVID-19 pandemic caused a sharp reduction in emissions in 2020 but it is feared that, without strong commitments, emissions will move back to their previous trend as they did following the great recession in 2008. The focus is on the UN Framework Convention on Climate Change Conference of the parties in November 2021 - COP26 – to elicit the more ambitious carbon reduction commitments that are needed to decisively 'bend the curve.'

EUROPE

In response to a call from citizens for this necessary ambition , European leaders agreed the European Green Deal in December 2019. This is an ambitious and comprehensive programme to tackle not just greenhouse gases but all the planetary boundaries that are threatened. It encompasses the areas of food, agriculture, clean energy, industry, buildings, mobility, reduced pollution, sustainable finance, and corporate disclosure. The EU has also committed to increasing the carbon reduction target for 2030 from 40% to 55% with the goal of net zero emissions by 2050 .

IRELAND AND UK

Both Ireland and UK have targets to roughly halve emissions from current levels. Both have likewise set a target of net zero carbon emissions by 2050. In the case of Ireland, the Programme for Government of June 2020 proposed a 51% reduction in greenhouse gas emissions between 2018 and 2030. These targets are included in a Climate Bill recently published by the Government. If passed, this will represent the steepest drop in emissions prescribed by law anywhere in the world so far. The Irish Government's Climate Action Plan in 2019 (CAP) set out a range of policies and targets to achieve the original 2030 climate targets. The CAP set a clear direction and created clarity for citizens and businesses through detailed targets and explicit end dates for ending sales of new internal combustion cars (2030) and for improvements to the building regulations to effectively ban the installation of boilers in new homes (2022 for oil, and 2025 for gas). The Climate Action Plan will be updated to reflect the Programme for Government and a continuation of this clarity will be valuable.

PROJECTED TEMPERATURE RISE BY 2100 COMPARED TO PRE-INDUSTRIAL LEVELS

2.9C On Current Trends

1.5 – 2.0C Paris Agreement

2.6C Current Pledges

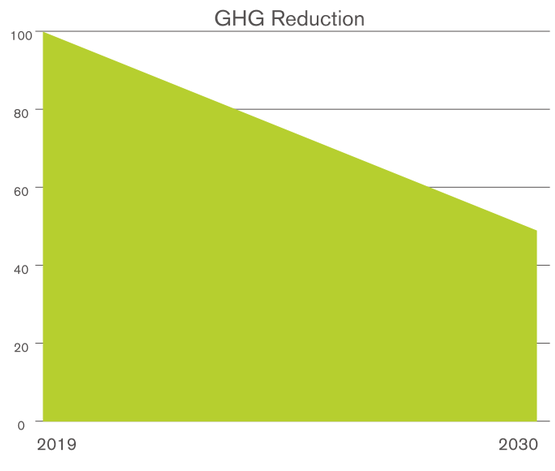
GLOBAL GREENHOUSE GAS EMISSIONS AND TARGET (BILLION TONNES A YEAR)

49.4 (2016)

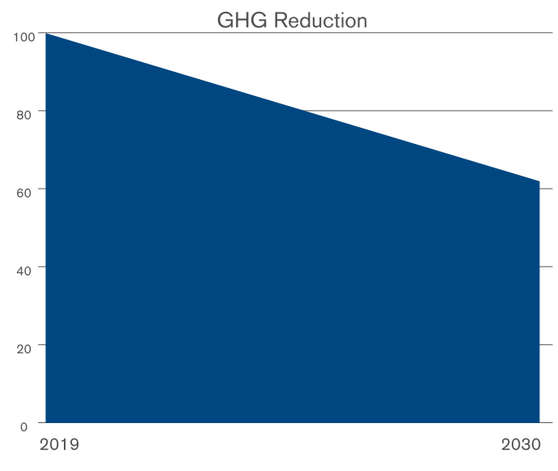
7.6% Annual Reduction required

25 2030 Global Target (UNEP)

GREENHOUSE GAS REDUCTION 2020 – 2030 IRELAND



GREENHOUSE GAS REDUCTION 2020 – 2030 UK



CLIMATE ACTION: 2030 TARGETS - IRELAND

Electricity	**70%** Renewable electricity	**8.2GW** Onshore wind	**5.0GW** Offshore wind	**0.4GW** Solar PV
Built Environment	**500,000** Home retrofits	**200,000** Electric New Homes	**25,000** Electric Commercial buildings	
Transport	**550,000** Battery Electric Cars	**61,000** Battery Electric Delivery Vans	**1,000 – 1,200** Electric Buses	**34,000** Electric HGVs
Fossil Fuel Bans	**2030** New ICE light cars	**2030** New ICE vans	**2022** Oil Boilers in new Homes	**2022** Gas Boilers in new Homes

*2020 Programme for Government

PROPOSED FOSSIL FUEL BANS

	Ireland	UK
Boilers	2022-2025	**2020 - 2035****
Light vehicles	2030	**2035**
New Homes	2025	**2025 - 2028***

* Government announcements and Climate Change Committee
** UK Climate Assembly proposal

ENVIRONMENTAL LIMITS, SOCIAL JUSTICE AND THE SUSTAINABLE DEVELOPMENT GOALS

Scientists have recently documented a number of 'planetary boundaries' that define the ecological limits to the impact that it is safe for humanity to make while maintaining a habitable planet. The level of greenhouse gas is one, biodiversity is another.

At the same time, a minimum level of development is required to sustain a quality of life for all human societies on the planet. People need education, a decent income and a fair and just society for individuals and communities to develop and thrive.

In 2015, the same year as the Paris Agreement, the countries of the world agreed a set of UN Sustainable Development Goals (SDGs) that together define a balanced scorecard for human life on planet earth.

The SDGs include both environmental goals that define the planetary boundary and social goals for acceptable levels of human development. But how to achieve the balance?

The economist Kate Raworth addressed this with her doughnut chart (see right). This illustrates a 'safe space for humanity' between the outer circle defined by the planetary boundaries and the inner circle defined by the necessary level for the social SDGs.

For this balance to exist at the global level, it must be respected and pursued at the societal level and that of the businesses within the community. Sustainable business then, can be seen as successfully operating within the working boundaries of our environment while respecting the rights and needs of employees and the workforces of contractors and suppliers.

This balance is one of the foundations of the EU Green Deal. Companies are asked to engage in activities and investments that are sustainable while doing 'no significant harm' to society or the environment.

ESB seeks to put this thinking at the heart of our Brighter Future strategy, aspiring to enable low carbon living for all, putting the customer first, bringing them clean and reliable electricity and leaving no one behind, all the while keeping an eye on the future by investing and innovating for low carbon solutions.

People

1 NO POVERTY | 2 ZERO HUNGER | 3 GOOD HEALTH AND WELL-BEING | 4 QUALITY EDUCATION | 5 GENDER EQUALITY

Prosperity

8 DECENT WORK AND ECONOMIC GROWTH | 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | 10 REDUCED INEQUALITIES | 11 SUSTAINABLE CITIES AND COMMUNITIES

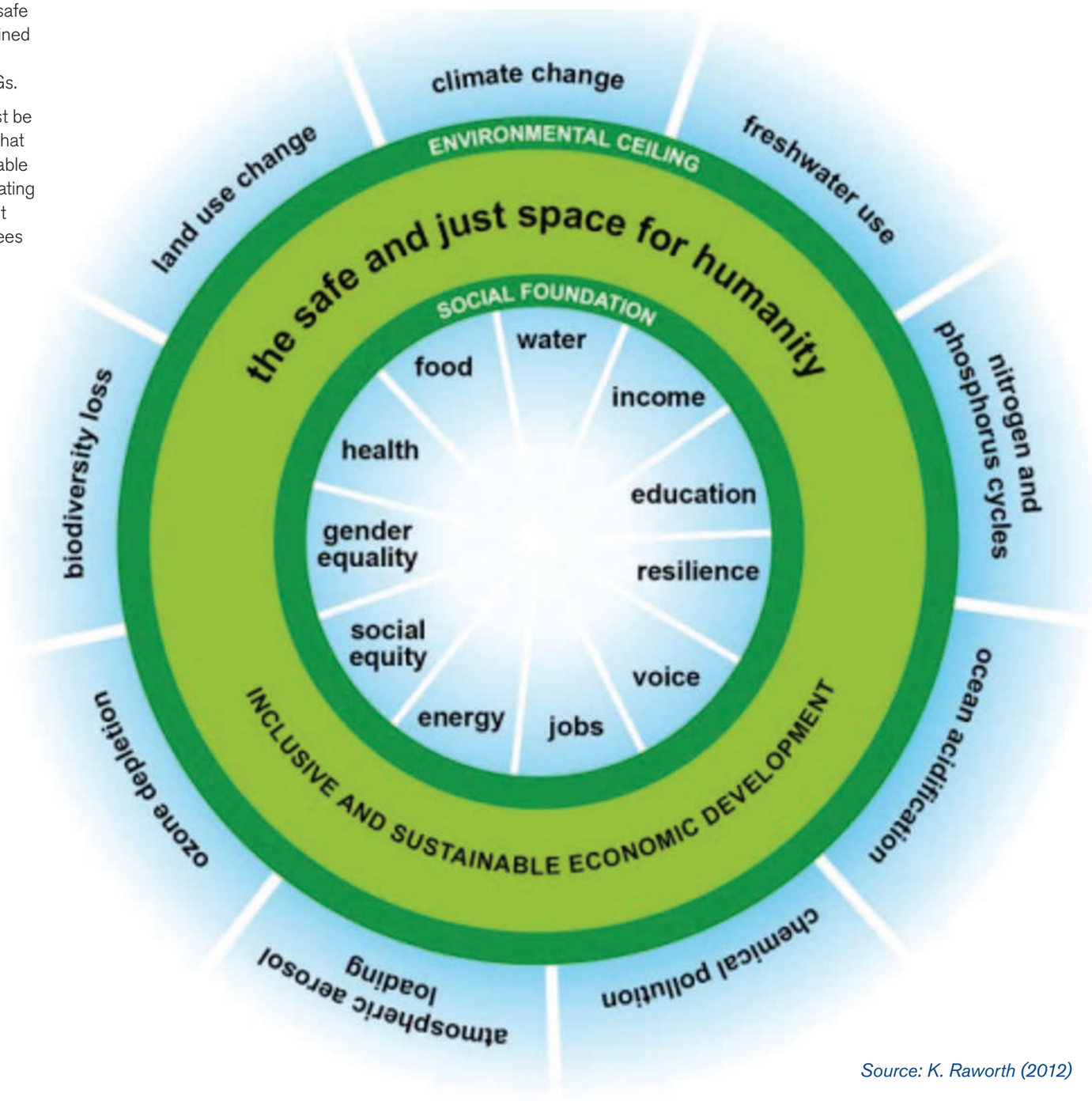
Peace and Partnership

16 PEACE, JUSTICE AND STRONG INSTITUTIONS | 17 PARTNERSHIPS FOR THE GOALS

SUSTAINABLE DEVELOPMENT GOALS

Planet

6 CLEAN WATER AND SANITATION | 7 AFFORDABLE AND CLEAN ENERGY | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | 13 CLIMATE ACTION | 14 LIFE BELOW WATER | 15 LIFE ON LAND



Source: K. Raworth (2012)

ESB'S RESPONSE: BRIGHTER FUTURE

ESB's response to the need for climate action, protection of the environment and a just transition is the Brighter Future Strategy. Brighter Future envisages a move to renewable and low carbon electricity and widespread electrification of space heating and transport, all supported by smarter, flexible networks and products that support customers in the transition. ESB adopted as its purpose the leadership of the transition to a future with low carbon, affordable and reliable energy.

These changes are likely to bring improvements in outdoor air quality, improvements in comfort levels and dryness in the living environment and, ultimately a more balanced, sustainable living.

In this Brighter Future, ESB's corporate strategy is also a sustainability strategy. Investments in onshore and offshore windfarms and electrification solutions have followed, as well as a smart meter rollout and a 5-year networks plan that is designed to meet the Climate Action Plan. All of this is based on a customer-centric and socially sustainable approach.

GENERATION

Moving to low carbon generation will require a significant increase in renewable generation in Ireland and UK. ESB has invested in offshore windfarms in response, supplementing onshore wind generation. ESB is also developing proposals to meet the need for new market services to support the requirements of a largely renewable electricity system.

NETWORKS

The heat pumps and electric vehicle chargers needed to decarbonise heating of buildings and transport will be largely connected to existing low voltage distribution networks. These networks were designed in years past to meet lower power, intermittent demands with an optimum use of materials and capital cost. Selective reinforcement and the addition of digital monitoring and control will be used to enhance these networks to facilitate these new customer needs.

CUSTOMER

Our supply business is based on a longstanding trusting relationship with our customers, focused on their changing needs. We will bring this focus and our deep expertise to bear on the climate challenge from our customers perspective. Our services and products will be designed to support them in their transition.

VALUES AND SUSTAINABLE BUSINESS

ESB works with citizens and communities towards its sustainability goals. We aim to operate in a way that supports our customers and the wider community in their transition and to improve overall wellbeing. We prioritise financial strength so we can always be able to meet these objectives and our role in the historic transformation to a low carbon future.

ENVIRONMENT, SOCIAL, GOVERNANCE (ESG) FRAMEWORK FOR BRIGHTER FUTURE

Strategic Objective	Contribution to ESG	Indicators	Progress Update	SDG Contribution	Find out more
	▪ **Enabling Low Carbon Living** ▪ **Putting People First and Leaving no one Behind**	▪ Rollout of 2.3m smart meters across Ireland by 2025 ▪ Develop ROI network capability to support 600,000 Heat Pumps nationally by 2030	▪ 240,000 Smart Meters installed to end 2020 ▪ JV announced between Electric Ireland and Super Homes to retrofit 35,000 Irish homes by 2030		pg 23 pg 26
	▪ **Bringing Clean Reliable Electricity to our Customers** ▪ **Innovating and Investing for the Future**	▪ Connect 10,000MW of new renewables to All Island Network by 2030 ▪ Carbon Intensity of electricity ESB produces of <200g CO_2/kWh by 2030	▪ 4.72GW renewables connected in ROI, 1.7GW connected in NI. ▪ 375gCO_2e/kWh		pg 20 pg 29
	▪ **Enabling Low Carbon Living** ▪ **Innovating and Investing for the Future**	▪ Deliver 1225.6GWh energy efficiency measures under 2014-2020 EEOS Scheme in ROI ▪ Products & Services to enable more energy efficient customer behaviours	▪ Sectoral targets delivered, fuel poor sector target exceeded by 25%, overall 1294GWh energy saving measures delivered ▪ New 100% Green Tariffs launched for residential & SME sector electricity customers in ROI		pg 23 pg 29
	▪ **Innovating and Investing for the Future**	▪ EBITDA of >€1.9billion by 2030. ▪ Annual Investments	▪ €1.3billion to end 2020 ▪ €1.1 billion invested in 2020, 80% of which was in networks capital programmes		pg 29
	▪ **Innovating and Investing for the Future**	Active Promotion of diversity and inclusion across our workforce	▪ Publication of first Gender Pay Gap report ▪ Launch of revised Diversity & Inclusion strategy ▪ Our ability to respond to COVID-19 and maintain services for customers was underpinned by a rapid transition to remote working for almost 4,000 employees, with others continuing to work on site in power stations and Networks locations		pg 29

RESILIENCE OF ESB'S STRATEGY TO CLIMATE RISK AND OPPORTUNITY

With a large number of assets spread across Ireland and operating in a sector undergoing an historic climate transition, ESB is presented with a changing set of risks and opportunities arising from physical and policy changes. These are generally addressed in normal business planning especially in an industry with long asset lives and a practice of long-term planning. At the same time, it is important to bring a structured approach to looking at climate impacts in the short, medium and longer term and to disclose the company's approach to stakeholders.

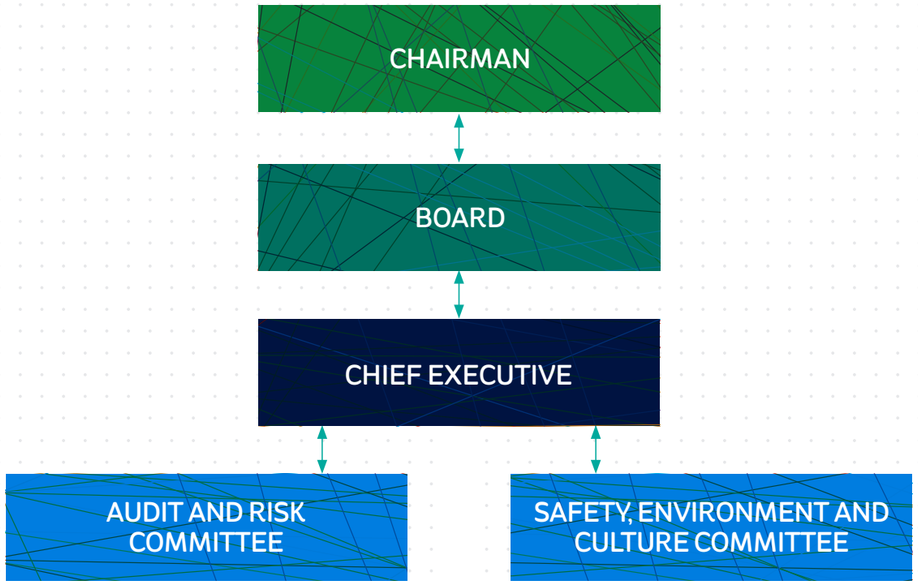
This section describes ESB's processes around climate risk and opportunity. It follows the format and guidance of the Task Force for Climate Related Financial Disclosure (TCFD). It is planned to build on and develop our processes and the detail of our disclosures over the next few years.

GOVERNANCE

Climate Risk and Opportunity is integrated into the Strategy Review process in ESB. It is also linked to the Enterprise Risk Management process through a principal risk on climate and emerging risks. The Safety, Health and Culture Committee of the Board monitor the management of safety, environment and climate risk and climate opportunities. The Audit and Risk Committee oversees the overall Enterprise Risk Management in the company.

The Environment and Sustainability Leadership Team, a group of senior managers from across the company receives updates on environment, 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.

ESB BOARD OF GOVERNANCE



To assist the Board with its responsibilities in relation to:

- Financial reporting
- Internal control and risk management
- Compliance, whistleblowing and fraud
- External and internal auditors

- To advise the Board on health, safety and environmental, cultural and diversity matters
- Monitor progress against agreed health, safety and key environmental performance indicators and risk management in these areas

Governance of Climate Risk

STRATEGY

ESB's current strategy is a climate and sustainability strategy. It is a response to policy and physical changes brought about by climate change. The strategy led to a reorganisation and a climate focus in each of our businesses. Our products and services have been expanded into electric heat pump heating and tariffs and products to serve our customers during the transition. Our EV infrastructure network has been refurbished and extended to serve the current public network needs of EV owners.

In our strategy, our generation business has set a target for reduced carbon intensity by 2030. Our networks businesses are planning for the focused adaptation of the networks to the changing climate and for the changes needed as customers electrify their heating and transport in response to mitigation policies. We are investing in emerging technologies with the potential to play a role in the future low carbon energy system such as green hydrogen.

All the above responses to climate policies and climatic conditions feed into our financial planning through our integrated business planning process For example, our annual capital investment has significantly increased because of these plans. This increased investment in electricity infrastructure is an expected part of climate mitigation as renewable electricity generation increases and other energy sectors move to efficient electric processes using low carbon electricity.

ESB's strategy is the subject of regular dedicated reviews by the Executive Director Team (EDT). 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 and are considered in the review and actions are agreed, if appropriate.

Our strategy is relatively resilient to climate risks as it is in effect a climate-led strategy. The strategy is regularly reviewed by the top management in the company in the light of changing conditions to assess potential impact and any need for new actions in response.

CLIMATE RISK AND OPPORTUNITY

SCENARIOS

ESB uses three scenarios for climate risk and opportunity: one physical risk scenario and two transition scenarios. The physical scenario is based on downscaled local modelling of the IPCC RCP4.5 scenario. The first transition scenario is based on the actions and targets in the Irish Government's Climate Action Plan 2019. The second transition scenario is based on the Irish Programme for Government agreed in May 2020. This sets an increased carbon reduction target of 50% between 2018 and 2030. This is aligned with the national targets that are likely to arise from the EU's increased target of 55%.

ENTERPRISE RISK MANAGEMENT

Identifying Risks and Impacts

ESB operates an Enterprise Risk Management process. Risks are identified by the business units and are ranked according to likelihood and severity. Business units plan mitigation as appropriate. Risks are reviewed quarterly based on a range of designated metrics. A Group list of climate risks is also maintained and updated annually, based on business unit risk registers. All categories of transition risk: Policy, Legal, Technology, Market and Reputation are considered in identifying the risks.

In addition, climate risk is one of ESB's principal risks and this is reviewed quarterly based on a range of high-level metrics tracking overall risk levels.

CLIMATE SCENARIOS

Scenario	1	2	3
Scenario Type	Transition	Transition	Physical
Source	Climate Action Plan 2019	Programme for Government	IPCC
Temperature in 2100	2.7C	2C	1.5-2C
Based on	EU Clean Energy Package Ireland's Climate Action Plan 2019	EU Green Deal Ireland's Programme for Government UK 5th Carbon Budget	IPCC Scenario RCP4.5 (local modelling for Europe)

SHORT, MEDIUM AND LONG-TERM TIMESCALES USED

Range	Years	Reason
Short-term	0-5	Price review period
Medium-term	5-10	Climate targets (UN, EU, national)
Long-term	10-40	Asset life

EXAMPLE METRICS

Emissions Scope	Metric Type	Comment
Scope 1 Emissions	Intensity	
Scope 1 Emissions	Absolute	
Scope 3 Emissions	Absolute	Intensity
CO_2 price used in generation planning	€/tonne	Absolute
Renewable Generation Connected		Absolute

METRICS AND TARGETS

A range of metrics (see left) are used to track climate risks such as the number and cost of severe storms each year, flood damage and emitted carbon. Progress on programmes to avail of opportunities are tracked through business plans. Mitigations, such as adaptation measures are tracked through work management in the relevant business unit. Progress against the generation emission intensity target and the public sector operational energy target carbon are key metrics of progress on mitigation.

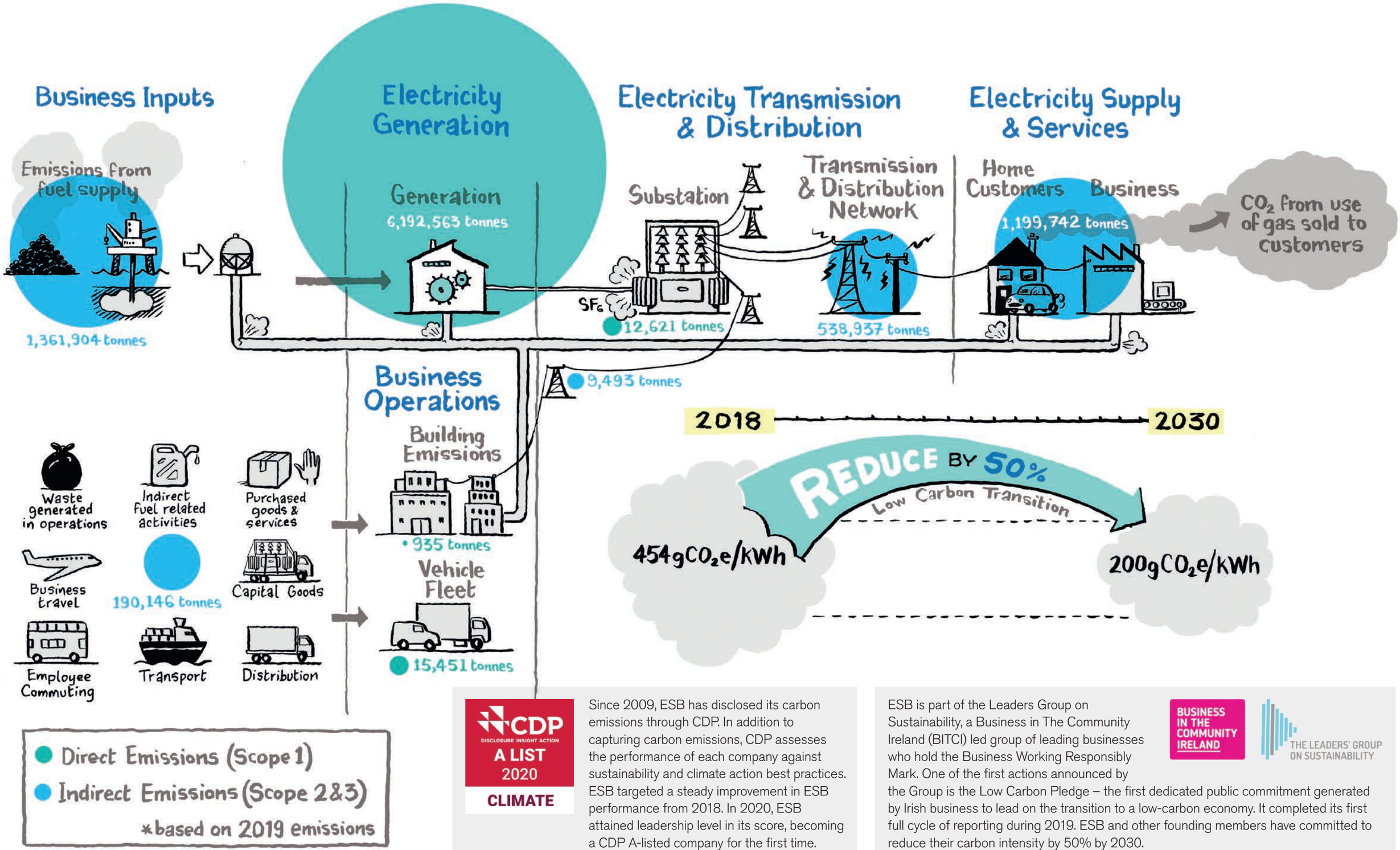
Mitigations, such as adaptation measures are tracked through work management in the relevant business unit. Progress against the generation emission intensity target and the public sector operational energy carbon target are key metrics of progress on mitigation.

SUMMARY OF HIGHER SCORING CLIMATE RISKS AND OPPORTUNITIES

Type	Risk/Opportunity	Potential financialimpact/opportunity	Likelihood
Physical Risks	Increased frequency of severe storms	Increased repair costs to networks and station assets	Likely
	Flooding	Damage to network substations and generation assets	Likely
Transition Risks	Market and regulatory changes in generation	Existing gas generation loses value more rapidly than expected	Likely
	Increase in pace of renewable connections above than planned	Potential increase in costs to meet timelines	May occur
	Increased heat pump retrofit of homes	Increased demand for retrofit services	May occur
Transition Opportunities	Faster pace of electrification	Potential increase in costs to meet timelines	Likely
	Increased decarbonisation of commercial heat	Increased revenue from commercial heat pump installation service	Likely

ESB Group Carbon Emissions

ESB is committed to progressively reducing direct and indirect CO_2 emissions across the Group. ESB has set an ambitious carbon intensity target for generation of 200g CO_2/kWh, which represents a 50% reduction on its current carbon intensity level. Central to our ability to lead the low carbon transition is developing a clear picture of the carbon impacts from our business operations right across our value chain. Having this insight enables us to engage appropriately across the business, with our supply chain and our own operations to identify and enact carbon reduction measures. During 2020, we made a public commitment to setting a Science Based Carbon Reduction target by 2024 at the latest and our efforts to progress our emissions reduction performance, climate risk management and carbon reporting were recognised, when ESB group achieved CDP's A list for climate change disclosure.



CDP DISCLOSURE INSIGHT ACTION A LIST 2020 CLIMATE

Since 2009, ESB has disclosed its carbon emissions through CDP. In addition to capturing carbon emissions, CDP assesses the performance of each company against sustainability and climate action best practices. ESB targeted a steady improvement in ESB performance from 2018. In 2020, ESB attained leadership level in its score, becoming a CDP A-listed company for the first time.

ESB is part of the Leaders Group on Sustainability, a Business in The Community Ireland (BITCI) led group of leading businesses who hold the Business Working Responsibly Mark. One of the first actions announced by the Group is the Low Carbon Pledge – the first dedicated public commitment generated by Irish business to lead on the transition to a low-carbon economy. It completed its first full cycle of reporting during 2019. ESB and other founding members have committed to reduce their carbon intensity by 50% by 2030.

BUSINESS IN THE COMMUNITY IRELAND
THE LEADERS' GROUP ON SUSTAINABILITY

Illustration Credit: Philip Barrett

OUR APPROACH TO DELIVERING A BRIGHTER FUTURE

ESB is making a stand for Ireland's future, powered by clean, sustainable electricity. We are committed to leading the transition to a reliable, affordable, low-carbon energy future, a future that protects our customers and the economy by maintaining the security and affordability of energy. We are investing and innovating across our business to make this a reality. We are developing new renewable sources of generation and flexible, low-carbon backup generation. We are also reinforcing and enhancing our network to accommodate unprecedented volumes of distributed energy resources and developing customer led solutions that will empower everyone in society to live cleaner, more sustainable lives, powered by electricity.

Since the launch of the Brighter Future strategy in 2017, the imperative for climate action and the societal dialogue around the climate crisis have moved much more centre stage. ESB is already on a journey to a net zero carbon future with an ambitious carbon target and full reporting of our direct and indirect carbon emissions.

ESB has a key role to play in supporting the delivery of the targets contained in the Government's Climate Action Plan, especially the ambitious targets for 70% renewable electricity and for electrification in transport and domestic heating. The Climate Action Plan sets out how Ireland will deliver on these 2030 targets, while preparing for deep decarbonisation by 2050 and becoming a leader in responding to climate change. ESB's strategy is to lead on climate action, which is closely aligned with the national climate ambition. We will deliver against these ambitions by;

Delivering a Brighter Future

CHAPTER 2

BRINGING CLEAN RELIABLE ELECTRICITY TO OUR CUSTOMERS

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.

CONNECTING RENEWABLES ROI – 4.66GW CONNECTED

ESB Networks enabled the connection of 4,657MW of renewable energy to the electricity system in the Republic of Ireland (ROI), 2464MW connected at distribution level and 2,193MW connected at transmission level. In addition, 2020 saw ESB Networks facilitate the connection of 135.1MW of battery storage, with 8.5MW of this being connected to the Distribution System and 126.6MW being connected to the Transmission System.

CONNECTING RENEWABLES NI -1.7GW CONNECTED

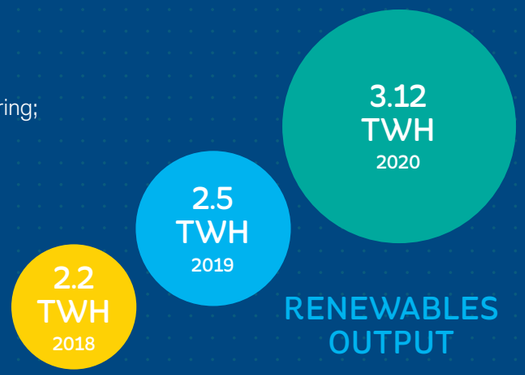
G99/NI Small and Large Scale Generation

NIE Networks has been a significant contributor to ensuring that over 40% of Northern Ireland's electricity consumption is produced from renewable sources. This milestone was achieved in 2019 but it continues to be advanced in 2020. This has been supported through the connection of approximately 1.7 GW of renewable capacity to the network by NIE Networks, with a further 0.3 GW capacity committed to be connected by 2022.

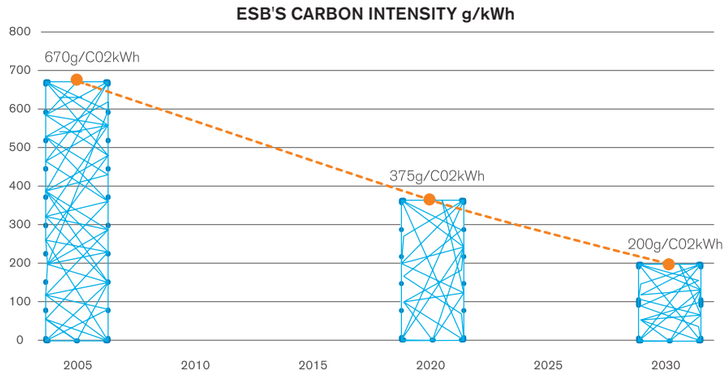
GROWING OUR RENEWABLES AMBITION

ESB intends to have 3.5 GW of renewables assets by 2030

1003 MW of renewables installed by the end of 2020, delivering;



CARBON INTENSITY OF ESB'S ELECTRICITY GENERATION

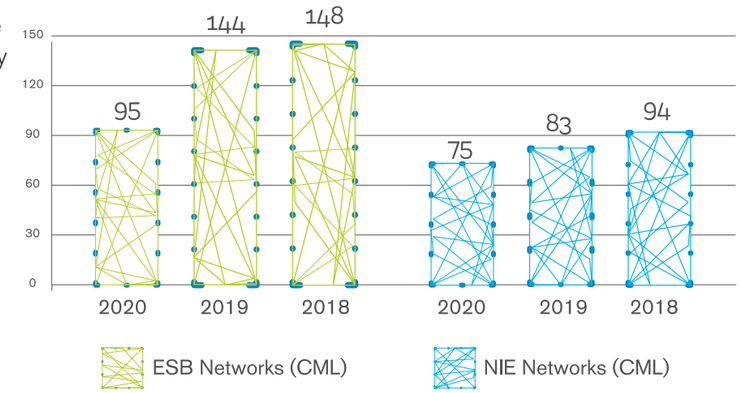


ESB has set an ambitious carbon intensity target for generation of 200g CO_2/kWh, which represents a 50% reduction on its current carbon intensity level. In 2020, CO_2 output from GT's generation plants remain lower than 2005 (baseline) by approximately 64%,and the carbon intensity of generation reduced by 44% to 378 g/kWh. ESB's peat stations permanently closed at the end of 2020.

NETWORK RESILIENCE

The quality, condition and performance of our network will become increasingly important as electrification of lifestyles increases. Measuring and managing customer minutes lost (CML) and customer interruptions will increase in importance.

Cyber Security will become increasingly critical to the integrity of the Network.



OFFSHORE WIND

ESB acquired a 50% shareholding in Inch Cape, a 1,080 MW offshore wind farm development project, located off the east coast of Scotland. This builds on the acquisition of a stake in Neart na Gaoithe in 2019, which is currently under construction, and the Galloper operational offshore windfarm in 2018.

Offshore wind in Ireland remains a key focus through partnering with Parkwind, in the development of the Oriel and Clogherhead wind farms, and with Equinor to co-develop a number of offshore wind assets in Ireland.

FLOATING OFFSHORE WIND

ESB's Moneypoint site is to be transformed into a green energy hub, where a range of renewable technologies will be deployed (subject to planning process) over the next decade with the capacity to power 1.6 Million homes.

SOLAR

In 2020 ESB significantly enhanced its solar development pipeline via the acquisition of projects from Terrasolar and Harmony Solar. These acquisitions have secured a development portfolio of circa 930 MW. Two projects were successful in the first Renewable Energy Support Scheme (RESS-1) auction, with the remaining assets targeting the next scheduled Auction round.

ONSHORE WIND

Completion of the 114 MW Grousemount, ESB's largest wind farm to date.

Development of a significant future pipeline of onshore wind assets with our partners as follows:

- JV with Coillte, will develop a pipeline of up to 1,000 MW of onshore wind in Ireland.
- Oweninny 2 windfarm, an 83 MW project being co-developed in a 50:50 joint venture with Bord Na Mona.
- The ongoing development of a significant pipeline of circa 1 GW of onshore wind assets in Scotland and Wales.

ENABLING LOW CARBON LIVING

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

ENABLING CUSTOMER ENERGY EFFICIENCY

NON-RESIDENTIAL

968GWH SAVINGS

EXCEEDING TARGET BY 49GWH OR 5%

RESIDENTIAL

250GWH SAVINGS

EXCEEDING TARGET BY 5GWH OR 2%

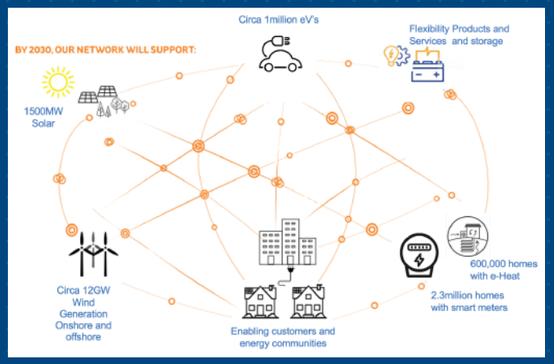
ENERGY POVERTY

76GWH SAVINGS

EXCEEDING TARGET BY 15GWH OR 25%

From 2014-2020 under the Energy Efficiency Obligation Scheme, Electric Ireland enabled customers to improve the energy performance of their homes and businesses, reducing both running costs and environmental impacts. Energy efficiency programmes were delivered to new and existing residential energy customers via our retail business Electric Ireland and Smart Energy Services (SES) for industrial and commercial customers.

ESB NETWORKS AND CRU PRICE REVIEW PR5 2021-2025



The PR5 determination published at the close of 2020, has provided ESB Networks with a clear mandate from the Commission for Regulation of Utilities (CRU) to deliver a business plan which was designed, with our customers and stakeholders, to meet the needs of a transforming and developing Irish society over the coming years. This will be critical to enable a low-carbon future in Ireland, including the electrification of heat and transport and achieving the 70% renewables target by 2030.

ESB NETWORKS SMART METER ROLL OUT

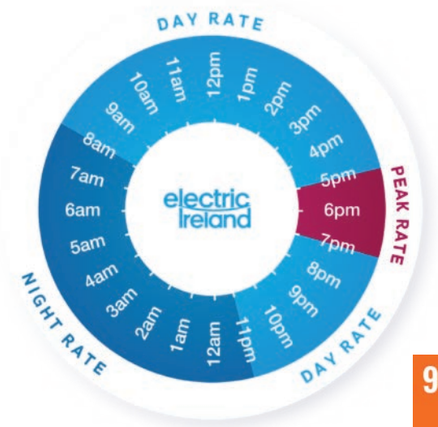
Rollout of 2.3m smart meters across Ireland by 2025

There were 240,00 Smart meters successfully installed to end of 2020. Changes to the electricity retail market processes were successfully delivered and IT systems supported to enable electricity supply companies to offer Smart Services.

CUSTOMER SMART METER SERVICES

Electric Ireland has begun roll out of services on foot of the national smart meter programme in ROI. This will help customers;

- Better understand their electricity usage, use less electricity, receive bill prediction alerts and make more savings
- Avoid estimated bills and choose their bill date
- Personalise their energy usage insights to help reduce usage and carbon footprint
- With regular reviews, so they know they are on the right plan
- Get cheaper electricity with Home Electric + time-of-use price plans



HEAT PUMPS

Develop ROI network capability to support 600,000 heat pumps nationally by 2030 to deliver on Ireland's Programme for Government ambitions.

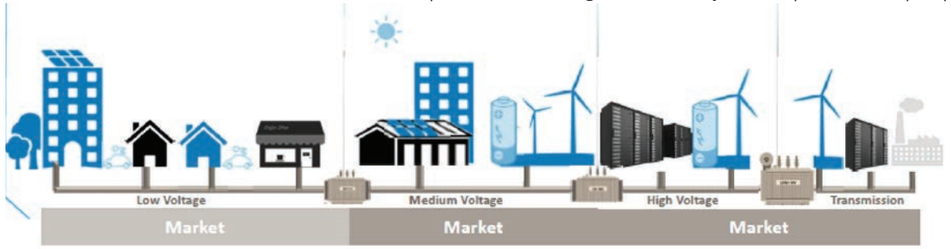
JV announced between Electric Ireland and Super Homes to retrofit 35,000 Irish homes by 2030.

ACTIVE SYSTEM MANAGEMENT (ASM)

The objective of Active System Management (ASM) is to establish the capabilities (systems, processes, people) to securely enable Ireland's renewables and decarbonisation targets, by actively managing the distribution system. This includes implementing the Clean Energy Package by integrating active customers, communities, and distributed generation, into distribution, transmission and market operations.

It is fundamental to the delivery of Ireland's Climate Action Plan.

ASM will actively involve the customer and facilitate communities in market based ways, to provide; Visibility (real-time and forecast) at all voltages; and develop capabilities to actively manage demand & generation (systems, processes, people).



ELECTRIFICATION OF TRANSPORT

Under the Climate Action Fund, eCars in ROI will;

- Launch 50 charging "hubs" throughout Ireland which can charge between 3-8 vehicles simultaneously
- Replace 50 Standard (AC) chargers with Fast (DC) chargers
- Replace over 200 unreliable Standard (AC) chargers

The introduction of fees for EV charing in ROI has enabled a significant improvement in maintenance and performance with availability reaching 99% in 2020.
In the UK, eCars continues its roll out of fast charging infrastructure in Birmingham, Coventry and London, in collaboration with city councils and transport agencies. The plans for over 350 fast chargers will enable the electrification of city taxi fleets as well as enhancing public charging infrastructure.

PUTTING PEOPLE FIRST AND LEAVING NO ONE BEHIND

ESB is putting customers at the heart of the energy transition and helping communities through CSR, sponsorship and customer centric initiatives, so that no-one is left behind.

TECH2STUDENT CAMPAIGN

ESB partnered with Camara Education Ireland and Trinity Access Programme on the Tech2Students campaign to provide laptops and computers to students who needed technology to access education during the pandemic.

More on ESB's education programmes; **ESB Education Hub**

SUPPORTING VULNERABLE CUSTOMERS

Electric Ireland is actively supporting our customers during COVID-19, with an emphasis on our vulnerable customers and the Small and Medium Enterprise sector who have been hardest hit.

A moratorium on disconnections was introduced in 2020, bringing the effective disconnection rate below 1 per 10,000 customers.

Over 85,000 payment plans were put in place to assist those who faced difficulties with their energy bills, as well as the timeframes for payment plans being extended.

Inclusion & Diversity

ESB now has a clearly defined Inclusion and Diversity statement, definition and objectives, supported by a comprehensive implementation plan to build on progress already in place and to sustain an inclusive workplace. The Inclusion and Diversity Strategy speaks to ESB's values – Courageous - Caring – Driven - Trusted and is aligned to the Culture Change programme underway at ESB.

Diversity and Inclusion (esb.ie)

ESB'S ENERGY FOR GENERATIONS FUND

PROUDLY SUPPORTED BY ESB

ENERGY FOR GENERATIONS FUND

ISPCC Childline | Alice Leahy Trust | MQI Merchants Quay Ireland Homeless & Drugs Services | South East Simon Community | The Morning Star Hostel | Capuchin Day Centre for Homeless People | Focus Ireland | SVP Society of St. Vincent de Paul | Penny Dinners | DePaul Homelessness has no place | Inner City Helping Homeless ICHH | Galway Simon Community | Peter McVerry Trust | citychurch belfast

ESB's Energy for Generations Fund sees over €1 million distributed annually to charities fighting homelessness, preventing suicide and enabling access to Science Technology Engineering Arts and Maths (STEAM) and educational disadvantage programmes. This includes funding partnerships with TU Dublin Foundation for the Access to Apprenticeship programme, Aware for their Life Skills for Schools initiative to promote mental health awareness in secondary schools throughout Ireland and Camara Ireland for the TechSpace initiative, building the capacity of youth organisations to run creative STEAM education programmes.

INTERNATIONAL CSR

ESB is a corporate partner of ElectricAid, a charity established by the staff of ESB in 1987. ElectricAid funds aid and development projects worldwide with all projects linked directly to one or more of the United Nations Sustainable Development Goals.

10 REDUCED INEQUALITIES

Electric Aid
Power for Life

COMMUNITY ENGAGEMENT

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 in every walk of life. Our Energy for Generations Fund, Windfarm Community Funds and our support of the staff social justice fund, Electric Aid are the key mechanisms through which we formally support community engagement.

13 CLIMATE ACTION

ELECTRIC IRELAND BRIGHTER TOGETHER

Speaking at the launch of 'We're Brighter Together', Marguerite Sayers, Executive Director, Electric Ireland said: "We're acutely aware of what is happening in the world in which we live, and we've also listened to our customers. We're committed to providing them, not only the best value offerings on an on-going basis, but also an opportunity to contribute to combatting climate change. We understand and acknowledge that many customers want to make a difference with their energy decisions."

13 CLIMATE ACTION

INNOVATING FOR THE FUTURE

ESB's ability to understand, respond to and engage with new and emerging technologies and solutions as they come on stream, plays a critical role in enabling a net zero society by 2050.

PRODUCTS & SERVICES TO ENABLE MORE ENERGY EFFICIENT CUSTOMER BEHAVIOURS

BWG Foods is a customer of ESB's Smart Energy Services business unit, which has already delivered energy saving projects for more than 300 large businesses across Ireland and the UK.

ESB has announced a €75m fund to help large businesses reduce their carbon footprint while making cost savings. With no upfront costs from businesses required for the energy-saving infrastructural projects, payments are made at the same rate as the delivered savings. Once the capital expenditure cost, borne by ESB, is repaid, the client receives 100 percent of the savings.

13 CLIMATE ACTION

INNOVATION ACADEMY

The ESB Innovation Academy is designed to build competency in customer centric innovation across ESB Business Units to support the delivery of our ambitious Brighter Future strategy.

The Academy uses key innovation mind-sets, tools and techniques that can be applied to deliver on key objectives in local business areas.

17 PARTNERSHIPS FOR THE GOALS

LOW CARBON FARMING

13 CLIMATE ACTION

ESB Energy / ESB Smart Energy Services partnered with Low Carbon Farming to design, build and manage a renewable heating solution for the UK's largest greenhouse complex. Located in East Anglia and covering two sites and 29 Hectares, the project now serves as a critical proof of concept in meeting the challenges of the UK's post-Brexit food security needs, as well as its 2030 carbon reduction targets.

FREE ELECTRONS

Free Electrons is the world's first accelerator programme that connects energy start-ups with global utilities.

More than 450 energy start-ups from 51 countries applied to be part of the accelerator programme. The 12 winners will now have the opportunity to work with leading global energy utilities including ESB to refine and test its products in international markets with the potential to reach 73 million customers located in 40 countries.

17 PARTNERSHIPS FOR THE GOALS

BUILT ON A STRONG AND SUSTAINABLE BUSINESS

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.

ENABLING CUSTOMER ENERGY EFFICIENCY

OUR PURPOSE

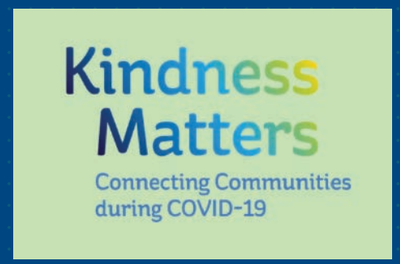
ESB's purpose is to create a brighter future for the customers and communities we serve and we will do this by leading the transition to reliable, affordable, low-carbon energy

At ESB, we believe that electricity is an enabler of societal and economic well-being and that every citizen should have access to secure, sustainable and affordable electricity supplies. Now, as the world is changing, our industry is transforming, our place in it is evolving and there has never been a greater need to be true to ourselves.

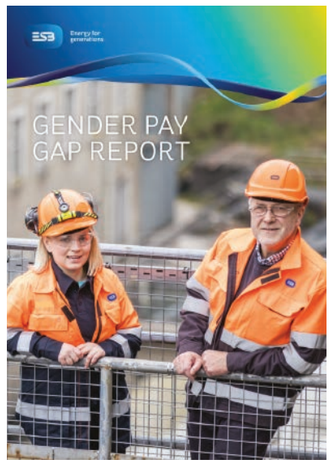
8 DECENT WORK AND ECONOMIC GROWTH

COVID-19

COVID-19 has had a profound impact on communities across Ireland throughout 2020. In response, ESB launched "Kindness Matters" a series of initiatives helping ESB to respond in a meaningful way through employee volunteering, financial supports and payroll giving. Through this volunteering initiative, ESB staff, with local manager approval could take up to 7.5 hours a week to volunteer with a charity, voluntary organisation or club in their community specifically assisting people affected by COVID-19.



10 REDUCED INEQUALITIES



GENDER PAY GAP

ESB published its first Gender Pay Gap Report. It shows the difference in the mean (average) pay between all men and women in the workforce regardless of the nature of their work.

Gender Pay Gap captures whether women are represented evenly across all levels of the organization.

CDP A LIST 2020

In 2020, ESB was recognised for leadership in climate action and corporate sustainability by global environmental non-profit CDP, securing a place on its prestigious 'A List' for tackling climate change and leading the way to a more sustainable future.

In achieving this, ESB was one of only four companies in Ireland and one of just 270 globally that was awarded the 'A' score last year.

GREEN FINANCE

ESB demonstrated its commitment to financing projects that will support our Brighter Future by issuing Ireland's first corporate public green bond in June 2019 as well as becoming the first Irish utility to have a syndicated sustainability linked loan.

ELIGIBLE GREEN PROJECT CATEGORY	PROJECTS	SUMMARY OF ALLOCATED FUNDING	RELEVANT SUSTAINABLE DEVELOPMENT GOALS
Renewable Energy	**Renewable wind farms**	€581m	
Energy Efficiency	**Smart Meter Roll Out**	€50m	
Clean Transportation	**Infrastructure to facilitate Electric Vehicle penetration**	€6.2m	
Green Buildings	**The Redevelopment of ESB'S Head Office, Lower Fitzwilliam Street, Dublin 2** **A Green Certified Sustainable Building**	€60.8m	

DECARBONISING OUR BUSINESS OPERATIONS

Aside from our ambitions to reduce our carbon intensity from electricity generation by 50% by 2030, we have also set an absolute target for a 50% reduction in the carbon from our operational energy use in our buildings and vehicle fleet.

ESB signed the Low Carbon Pledge Commitment in early 2021, committing to setting a Science Based Target by 2024 at the latest.

INTRODUCTION

Consulting with and working collaboratively with all our customers and stakeholders has never been so important. We can take positive actions together to address climate change as the key challenge of our generation.

In ESB Group's home markets of the Republic of Ireland, Great Britain and Northern Ireland, national governments have already declared climate emergencies and set out legislative plans to reach net zero carbon economies by 2050. Electrification is seen as a key component and enabler of that transition and therefore the importance of dialogue and engagement with our customers and stakeholders has never had so much at stake.

The COVID-19 pandemic has had a major impact on all our customers and stakeholders. More than ever, we have seen the importance of having a strong stakeholder engagement strategy and approach to enable us to reach out in support of our customers, communities and stakeholder organisations. This was a year in which we, together with our stakeholders and customers, have had to adjust to new ways of working, communicating and living. Together we have successfully adopted new channels to enable us to work effectively and to continue to collaborate and share ideas, while also supporting each other through this unprecedented period.

We appreciate the importance of listening to our customers and stakeholders, to hear their views, concerns and expectations so that we are better informed in our decision-making and management of our operations.

Broadly, we seek to align with the reporting principles set out in the Global Reporting Initiative (GRI) 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

Consulting our Stakeholders

CHAPTER 3

CONSULTING FOR A DECARBONISED FUTURE

ESB recognises that electricity is an enabler of social and economic wellbeing and a pathway to a decarbonised society.

Through engagement with the communities we operate in across the island of Ireland, ESB gains important insights about the expectations, concerns and interests of our customers and stakeholders, which in turn shapes the delivery of our services.

Engagement with stakeholders takes place on a business unit, regional and Group-wide basis.

Below are some specific stakeholder engagement approaches adopted across ESB business units.

17 PARTNERSHIPS FOR THE GOALS

ESB NETWORKS STAKEHOLDER ENGAGEMENT PLAN, FRAMEWORK AND REPORT 2020

ESB Networks recognise that their engagement approach needs to be tailored to the different needs of our stakeholder groups and the 2.3 million customers which they serve. The principles and methodology of engagement are guided by the AA1000 stakeholder engagement standard. 2020 was an important year as the PR5 Determination, published at the close of 2020, has provided ESB Networks with a clear mandate from the Commission for the Regulation of Utilities (CRU), to deliver a business plan which was designed, with our customers and stakeholders, to meet the needs of a transforming and developing Irish society over the coming years.

Strategic Stakeholder Engagement Framework

Strategic Stakeholder Engagement Plan 2020

STAKEHOLDER ENGAGEMENT REPORT 2020

NIE Networks for Net Zero

COVID-19 Customer Update

NIE NETWORKS FOR NET ZERO CONSULTATION

NIE Networks are developing their network strategy to support the creation of a sustainable energy system for the future. This will impact every customer across Northern Ireland.

ELECTRIC IRELAND DEDICATED TO HELPING OUR CUSTOMERS

Electric Ireland wants to help their 1.1 million customers as much as possible given the unprecedented impact of COVID-19. A disconnection moratorium has been extended for residential customers and the vast majority of business customers until 30th of June 2021.

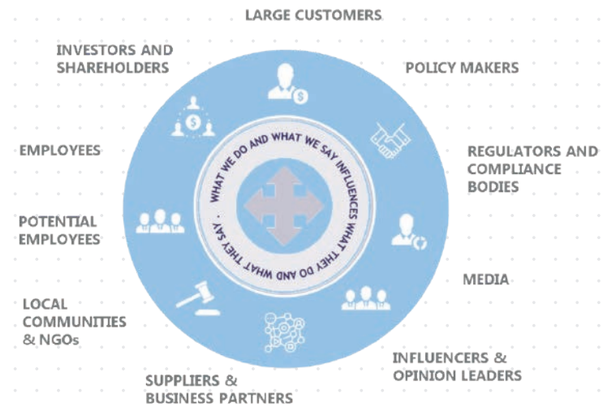
ESB GROUP LEVEL ENGAGEMENT IN 2020

ESB regularly undertakes research with customers, stakeholders and the general public to gain insights about their expectations, concerns and perceptions of ESB's performance,

During 2020, ESB commissioned bespoke research to track perceptions of ESB's performance and identify the Environmental, Social and Governance (ESG) issues of material concern to stakeholders, with a view to developing an ESG tracking and reporting framework.

This included quantitative surveys and in depth interviews with a subset of stakeholders representing a wide variety of external perspectives, that affect, or could be affected, by ESB's activities.

The following stakeholder groups were represented in the research:



The stakeholder engagement approach involved 1 to 1 interviews with senior executives, targeted online surveys and direct questionnaire responses sought from stakeholders , as well as direct engagements with a sample of ESB managers and employees.

STAKEHOLDER FORUM

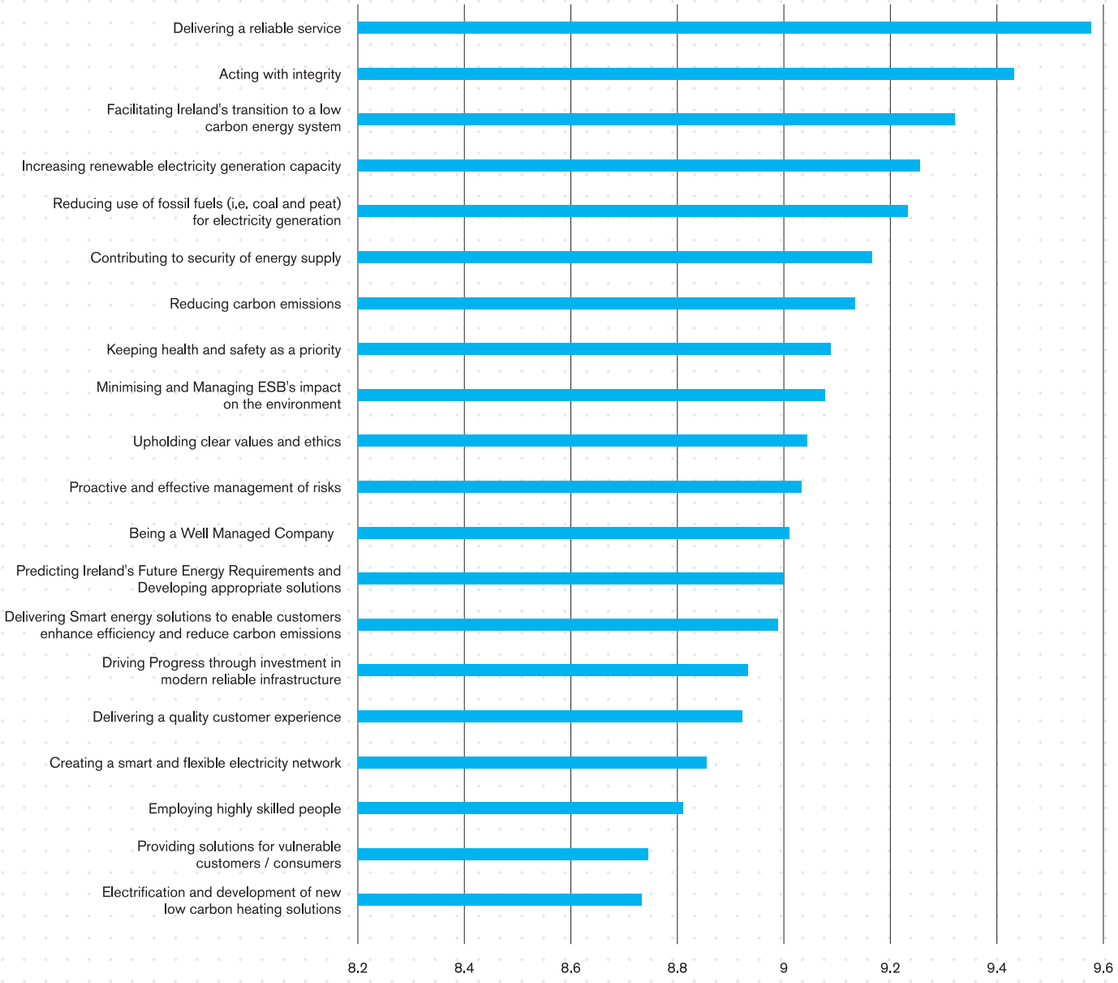
At the ESB Group level, the stakeholder forum coordinates stakeholder interactions and oversees stakeholder management planning and engagement across the business units, to ensure a coordinated approach and timely interventions where required.

From the consolidated business unit engagements and inputs to the various stakeholder channels, the most material topics raised by these stakeholder engagements are identified.

The broad stakeholder groupings that we engage with are detailed in the Stakeholder Engagement Matrix at the end of this section.

This approach combined with the formal engagement process commissioned by ESB during 2020, enable us to develop and prioritise a list of the most material topics that form the bulk of the ESG disclosures and other information provided in this report.

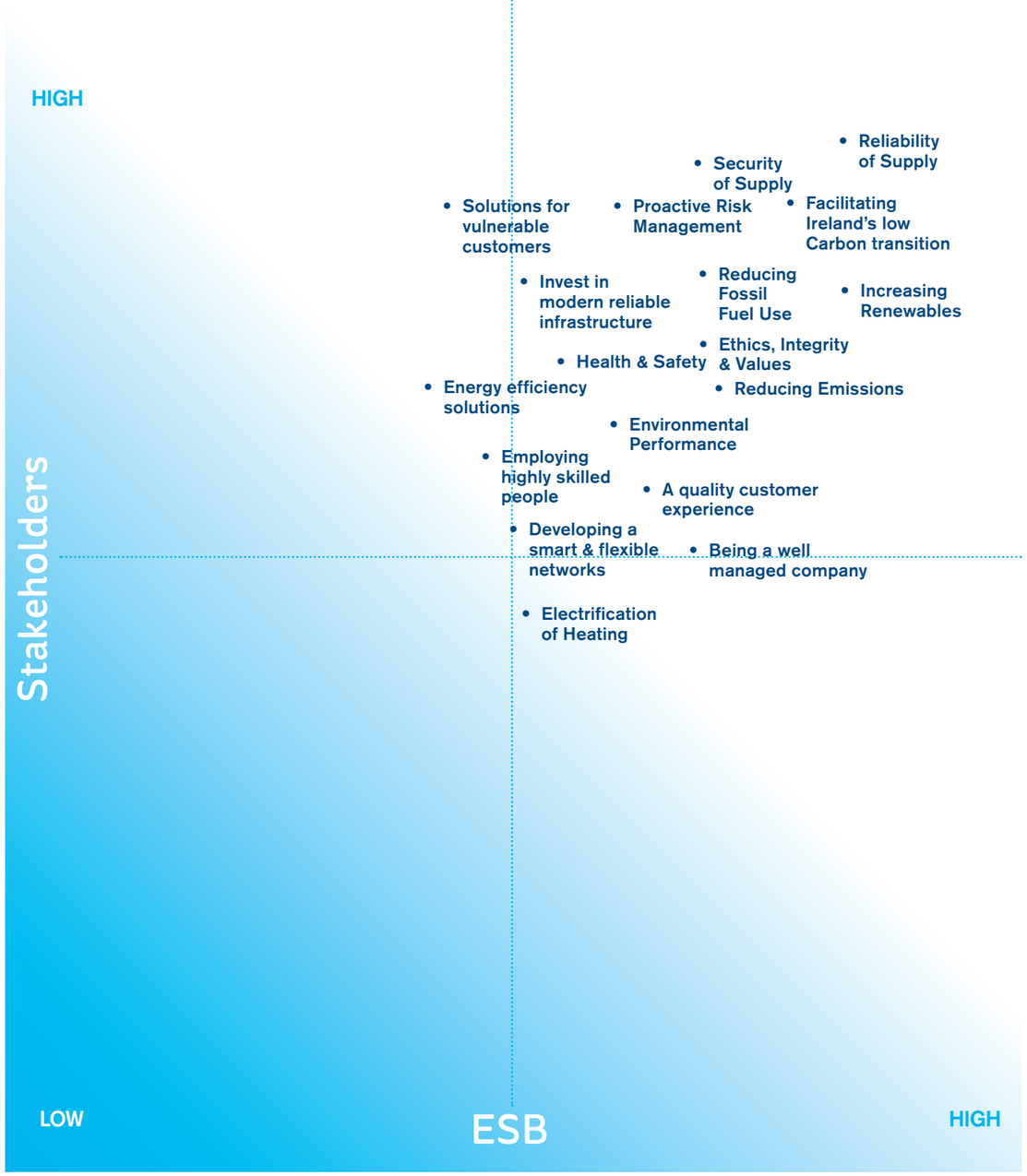
TOP 20 ISSUES OF IMPORTANCE TO STAKEHOLDERS



SUMMARY METHODOLOGY

- The research asked stakeholders to rate 69 separate issues across seven dimensions.
- Participants were first asked to rate the issues ESB should focus on based on how important these issues are to them.
- The bar chart demonstrates the Top 20 issues rated as the most important to ESB stakeholders.
- Almost half (8) of these issues relate to Environment and climate change, demonstrating the importance of the environmental agenda and transition to stakeholders.
- Issues from other dimensions also tend to relate to services and innovation relating to carbon reduction and the energy transition.
- At the same time, stakeholders expect an ongoing focus on reliability, health and safety, customer service, governance and quality management.

MATERIALITY MATRIX 2020



STAKEHOLDER MATRIX

STAKEHOLDER GROUPING	MEANS OF ENGAGEMENT	SUBJECTS OF ENGAGEMENT	KEY ISSUES
Government Depts, (e.g DCCAE), national, local	Policy meetings, consultations	Energy policy, regulatory consultation processes	Energy policy,
Market, Data and Transparency Regulatory Bodie (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 NGOs (e.g. BITCI &NI, IIEA)	Scheduled meetings, focus groups, member fora, surveys	Work programmes, CSR programme	Emission reduction, corporate responsibility, renewable
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 for a, 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, surveys, via business development team	Price, continuity and quality of supply, energy efficiency services, disconnection policy.	Energy price, disconnection policy, energy efficiency
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

ABOUT ESB

ESB is a leading Irish utility that was established in 1927 as a statutory body under the Electricity (Supply) Act 1927. With a holding of 96.1%, ESB is majority owned by the Irish Government. The remaining 3.9% is held by the trustees of an Employee Share Ownership Plan. As a strong, diversified, vertically integrated utility, ESB operates across the electricity market, from generation through transmission and distribution, to supply of electricity to customers, with an expanding presence in Great Britain's generation and supply markets. ESB also supplies gas and uses its electricity network to carry fibre for telecommunications.

ESB has a regulated asset base (RAB) of approximately €10.2 billion (comprising ESB Networks €8.4 billion and NIE Networks €1.8 billion), a 29% share of generation in the all-island market and a significant supply business supplying electricity and gas to over 1.5 million customers throughout the island of Ireland and Great Britain. ESB will continue to grow the scale of its generation, trading and supply businesses so that it can continue to compete within the all-island's competitive environment. ESB is focused on providing excellent customer service and maintaining its financial strength. As at 31 December 2020, ESB Group employed over 7,900 people.

ESG Disclosures

CHAPTER 4

ESB AT A GLANCE

BUSINESS SEGMENT	GENERATION & TRADING (GT)	ESB NETWORKS	NORTHERN IRELAND ELECTRICITY NETWORKS (NIE NETWORKS)	CUSTOMER SOLUTIONS	OTHER SEGMENTS
Regions of Operations	ROI, NI, GB	ROI	NI	ROI, NI, ESB Energy, GB	ROI, NI, EU, Middle East, Asia, Africa
Scale of Operations	10 thermal stations, 8 hydro and pumped storage stations, 24 windfarms	88 depots, yards, stores and vehicle workshops	15 depots, yards, stores and offices	5 office locations in ROI, NI and GB	41 offices and stores across ROI, NI, GB and internationally
Strategic focus	Developing a low carbon portfolio, providing flexibility services and backup generation to support increased levels of renewable generation and maintain secure supplies of electricity.	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.		Bringing sustainable and competitive energy solutions to all our customers.	Bringing leading edge energy solutions to all our customers. Innovating for the future.

ESB's Generation and Trading business develops, operates, and trades the output of ESB's electricity generation assets. The portfolio consists of 5,530 MW of generation assets across the SEM and Great Britain (GB), including 1,003MW of renewable assets, with a further 224 MW under construction. 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 ESB's 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

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.

ESB Networks has a key role to play in enabling the transition to a low-carbon society. Our network provides an electricity connection to over 2.3 million customers in homes, businesses, farms and communities across the country, enabling electricity to be supplied in a safe and reliable manner, and supporting economic and social development.

Northern Ireland Electricity Networks (NIE) is the owner of the electricity transmission and distribution networks in NI, transporting electricity to over 895,000 customers including homes, businesses and farms. NIE Networks' employees maintain and extend the electricity infrastructure across NI, connect customers to the network and ensure that equipment is safe and reliable. NIE Networks also provides electricity meters and metering data to suppliers and market operators. NIE Networks develops and reconfigures the electricity network to facilitate the connection of further renewable generation.

ESB's Customer Solutions brings together all ESB's retail and business offerings in Ireland and GB, including Electric Ireland, ESB Energy, ESB Smart Energy Services, ESB eCars and ESB Telecoms. Electric Ireland is the energy retail arm of ESB in ROI and Northern Ireland (NI), supplying electricity and energy services, as well as gas in ROI. ESB Energy is ESB's electricity and gas residential retail business in GB.

ESB eCars builds, owns and operates electric vehicle (EV) charging networks for public use across ROI, NI and GB. This network contains over 1,100 chargers on the island of Ireland, as well as over 140 chargers in GB.

ESB Telecoms operates within the wholesale ROI Telecoms market, maintaining and operating circa 400 telecoms transmission structures and over 2,000km of fibre optic network.

ESB Smart Energy Services (SES) designs, develops and delivers integrated management solutions for large energy users in the UK and Ireland. Working in partnership with customers, SES delivers tailored energy efficiency solutions, on site generation and demand management technologies.

Engineering and Major Projects (EMP) provides a centre of engineering for ESB, delivers large projects across 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 almost 800 people who work in partnership with other business areas in ESB and deliver engineering services to external clients both at home and internationally.

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)

ENVIRONMENTAL

- E.DSO Sustainable Grid Charter (2019)
- BITCI Low Carbon Pledge (2021)

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
- Confederation of British Industry (CBI)
- 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
- 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	ISO14001 Environmental Management, ISO45001 Occupational Health & Safety Management ISO55000 Asset Management
NIE Networks	ISO14001 Environmental 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, ISO9001 Quality Management
Enterprise Services	ISO14001 Environmental Management, ISO45001 Occupational Health & Safety Management

INTRODUCTION

ESB recognises that climate change is one of the greatest challenges facing humanity. Biodiversity loss is also now recognised as a global priority. Robust environmental stewardship of our operations is essential to identifying, managing and mitigating impacts or potential impacts to the environment from our operations.

ESB maintains environmental management systems across the Group. These are audited externally to the ISO 14001 standard.

ESB has set a carbon target for scope 1 and 2 emissions. All scope 1, 2 and 3 emissions are monitored and are independently assured.

Greenhouse gas emissions are disclosed via the CDP online reporting platform.

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.

This disclosure will be augmented in 2021 with the additional reporting requirements under the green bond issued in May.

ESB's group-level Safety, Health and Environment function oversees 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 overall direction to environmental improvement and assurance in the Group. Group environmental performance is also monitored by the Safety, Environment and Culture committee of the Board. Audits of the Group Environmental Standards continued during the year and no issues were noted.

ENVIRONMENTAL DISCLOSURES

EMISSIONS

OUR COMMITMENTS TO EMISSIONS REDUCTION

ESB is committed to reducing the carbon intensity of its electricity generation by 50% by 2030, to <200gCO_2/kWh.

In early 2021, ESB became a founder member of the Business in the Community Low Carbon Pledge which has recently committed to seek a science-based target by 2024; BITCI Low Carbon Pledge (**bitc.ie**)

We are committed to delivering a 50% absolute emissions reduction by 2030 for our fleet and building operations.

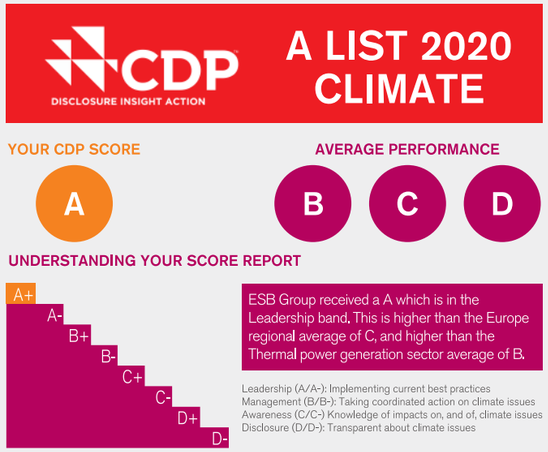
We are engaging with our supply chain to achieve emissions reductions in our procurement of goods and services.

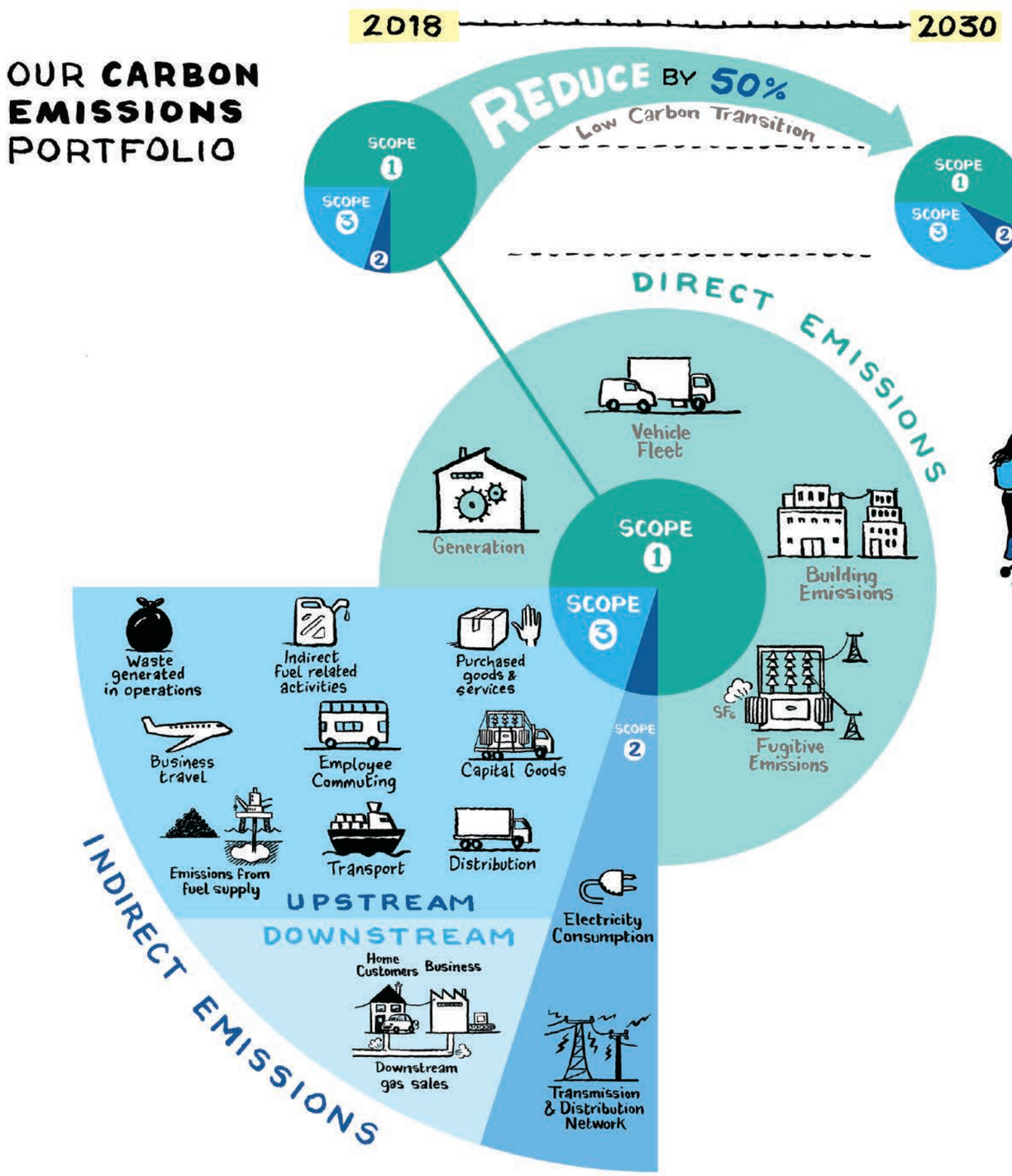
EMISSIONS VERIFICATION

ESB reports emissions based on the greenhouse gas Protocol methodology. Scope 1, 2 and 3 emissions are reported annually. Greenhouse gas emission data is independently verified. Our generation emissions are verified under the auspices of the EU ETS emissions trading scheme and submitted to the relevant Environmental Protection Authority annually. All other Scope 1,2 and 3 emissions are verified to ISO14064 as part of our annual submission to CDP.

CDP A

ESB emissions portfolio reporting, target setting and progress in emissions reduction helped ESB to secure a place on CDP's A List in 2020, one of just four Irish companies to do so.





ESB Networks, in common with most electrical utilities, uses sulphur hexafluoride (SF_6) as a safe insulator in switchgear. During 2020, ESB Networks reduced SF_6 leakage amount by more than half and continues to work to contain, reduce and minimise the use of SF_6.

CO_2 output from ESB's generation plants is lower than 2005 (EU ETS commencement) by approximately 64%, and the carbon intensity of generation reduced by 44% to 375 g/kWh.

NIE Networks has reduced its non-network carbon emissions by 11% during 2020 through a range of measures including improving the energy efficiency of work locations and increasing the use of technology to reduce the need for business travel.

Electric Ireland and Smart Energy Services combined to deliver 1,294GWh of energy savings under EEOS and the associated emissions avoided for customers in the residential, energy poverty, industrial and commercial segments of the market.

DECARBONISATION AMBITION

ESB's unique position as a player of scale in both networks and generation markets enables it to take a leading role in the decarbonisation of society. ESB's response to the need for climate action, protection of the environment and a just transition is the Brighter Future Strategy. This strategy envisages a move to renewable and low carbon electricity and widespread electrification of space heating and transport, all supported by smarter, flexible networks and customer insight led products that support customers in the transition. ESB's strategy is anchored in our purpose to lead the transition to a secure, affordable, low carbon energy future powered by clean electricity.

CLOSURE OF MIDLAND PEAT STATIONS

ESB's last remaining peat-fired power stations, Lough Ree Power and West Offaly Power, closed at the end of December 2020. This brought to an end 70 years of peat fired generation in the midlands. ESB deeply appreciates the support of the communities and particularly our staff past and present over that period. ESB and the staff in Lanesboro and Shannonbridge have engaged constructively to ensure appropriate arrangements are in place for staff in terms of retirement, retraining or reassignment elsewhere in ESB. ESB has contributed €5m to a Just Transition Fund in the midlands to support local communities, following the closure of these stations.

EMISSIONS BASELINE

The original baseline year chosen for reporting of the CO_2 emissions is 2005, the year when the formal reporting for the EU Emission Trading Scheme (ETS) started. The commitment to set a Science Based Target will result in a re-baselining of emissions categories. 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.

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.

BIOGENIC EMISSIONS

ESB's biogenic emissions are associated with our equity share of Tilbury waste wood to energy plant in Tilbury Port, London, which entered commercial operation in 2019. 2020 also included a biomass trial at the peat stations.

2019	**139,860 tonnes CO_2e**
2020	**552,016 tonnes CO_2e**

INSTALLED CAPACITY (MW) BY GEOGRAPHY

Fuel Source & Year	Republic of Ireland	Northern Ireland	Great Britain
Gas			
2018	2,025	402	1,231
2019	1,578	402	1,231
2020	1,588	402	1,231
Coal			
2018	855	-	-
2019	855	-	-
2020	855	-	-
Peat			
2018	226	-	-
2019	226	-	-
2020	226	-	-
Oil			
2018	-	53	-
2019	-	53	-
2020	-	53	-
Wind			
2018	327	100	169
2019	327	100	169
2020	501	100	169
Hydro[1]			
2018	512	-	-
2019	512	-	-
2020	512	-	-
Solar			
2018	-	1	-
2019	-	1	-
2020	-	1	-

Note 1: Hydro includes pumped storage capacity. - in table signify no installed capacity in that geography

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.

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.

SCOPE 2 INDIRECT (FROM ELECTRICITY USE)

Indirect Emissions Location-Based (Scope 2)	**7,238 tonnes**
Indirect Emissions Market- Based (Scope 2)	**9,297 tonnes**

No significant changes in emissions recalculations for 2020.

SCOPE 3 GHG EMISSIONS

During 2020, ESB extended the collection and estimation of Scope 3 emissions sources to all applicable Scope 3 categories. Emissions inventories are 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.

EMISSIONS PERFORMANCE (EU 5)

GHG Emissions Scope 1 (tonnes CO_2e) from Thermal Generation[4]	2020	2019	2018	Baseline (2005)
Ireland	3,570,952	3,999,613	5,704,932	14,630,000
Northern Ireland	682,857	685,350	803,553	
Britain	886,543	1,507,600	1,766,836	

GHG Emissions Scope 1, 2 & 3 (tonnes CO_2e) from Business Operations	2020	2019	2018	Baseline (2015)
Scope 1				38,596
Premises Energy- Thermal	666	833	983	
Vehicle Transport	15,029	15,451	17,216	
Gaseous Emissions (SF_6, PFC)	7,846	12,621	20,558	
Scope 2				13,754
Network Losses (SEM, T&D)	705,262	538,937	562,888	
Premises Energy -Electricity	7,238	9,493	11,243	
Scope 3				10,393
Purchased Goods & Services (Cat. 1)	555	666	757	
Capital Goods (Cat 2)	189,936.9	172,669.90	172,669.90	
Fuel & Energy (Cat 3)	1,079,390	1,770,323.03	1,406,562.59	
transport & dist (Cat 4)	1,937	1,937	1,937	
Waste (Cat 5)	535	732	919	
Business travel (Cat 6)	4,340	9,208	9,338	
Employee Commuting (Cat 7)	2,063	4,932.74	4,805.00	
Use of Sold Products (Cat 11)	1,071,265	1,199,741.78	749,935.72	
Total GHG Emissions (tonnes CO_2e)	8,226,515	8,847,341	11,235,133	

Other Emissions tonnes)	2020	2019	2018	Baseline (2006)
NOx	2,882	3,370	5,061	21,585
SOx	157	628	1,308	25,400
Dust	50	67	159	1,127
Carbon Intensity from Generation	375gCO_2e/kWh	421gCO_2e/kWh	454gCO_2e/kWh	670gCO_2e/kWh (2005)

1 All Generating emissions are subject to verification under EU ETS and are reported to national environmental agencies annually.
2 Sulphur hexafluoride (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 2020 approximately 138kg of SF_6 in ESB Networks & 205kg 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, 305-6, 305-7, EU5
4 GWP Source - IPPC AR5 Conversion Factors

FUTURE OUTLOOK

ESB, Ireland's leading energy utility, has a stable business profile with over two thirds of earnings and assets accounted for by regulated electricity networks in Ireland under established and transparent regulatory frameworks. Priorities for 2021 and beyond for the main business units include;

GENERATION & TRADING

- Continue to oversee the initial stages of build out of Neart Na Gaoithe offshore wind farm.
- Oversee the commercialisation of Inch Cape offshore wind farm.
- Increase the number of opportunities for investment in low-carbon generation including solar and offshore wind.
- Continue to evolve and adapt the thermal portfolio so that its commercial performance is maximised.
- Manage the efficient and orderly closure and decommissioning of the Peat stations.

ESB NETWORKS

- Continue the focus on reducing our carbon footprint while communicating the importance of environment across Networks and working to achieve the environmental articles of the European DSO Charter.
- Engage with renewable customers to develop connections to the transmission and distribution systems and support their successful development as part of the Climate Action Plan goals.
- In line with PR5 contract, commence changes to retail market processes and supporting IT systems to enable smart pre-payment services in 2023.
- Transition to low-carbon by transforming the role of the DSO with a focus in 2021 on establishing a Networks Active System Management Project to act as a vehicle for this transformation for the coming years.
- Safely install 500,000 smart meters during 2021.
- Continue delivering against the National Climate Action Plan actions through our PR5 plans.

NIE NETWORKS

- Continue to deliver strategy to achieve RP6 service commitments while delivering modern customer service through the Customer Service Action Plan.
- Continue effective engagement with key stakeholders to aid development and implementation of NI's Future Energy Strategy as well as the development of NIE Networks' RP7 Price Control submission.
- Engage on key policy and processes required for RP7 Price Control.
- Contribute to the development of a new energy policy for NI appropriate to achieve net zero carbon by 2050.
- Engage with DfE and the NI Executive to pursue investment consistent with the Green Recovery Option.

CUSTOMER SOLUTIONS

- Deliver best in class digital customer journey by improving personalisation, online functionality, capability and personalised insights.
- Strong and robust management of the cost base across Customer Solutions to continue to deliver value for money for all its customers.
- Continue to deliver a customer focused but effective credit management strategy and ensure vulnerable customers are protected and excessive debt is not amassed.
- Deliver the roll out of high-power charging hubs and replacement of standard chargers. This will transform the driver experience for EV owners across ROI.
- Lead the way to a brighter future by focussing on delivering on all energy efficiency targets, as well as offering customers new products and services to encourage more energy efficient behaviours.
- Grow our various Customer Solutions brands, service offerings and market shares across the NI and GB markets, by delivering value and excellent customer service to customers.

MANAGEMENT OF ENVIRONMENT AND SUSTAINABILITY

ESB is committed to the highest standards of environmental management and to proactively addressing the challenges of climate change. Under the Brighter Future Strategy ESB commits leadership in the transition to low carbon energy and to produce, connect and deliver clean, secure affordable energy.

We implement programmes across our operations to promote energy and resource efficiency and develop new environmentally driven product and process innovation and new business opportunities. We believe that continued sustainable business success is built on maintaining excellent relationships with all stakeholders.

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 is focused on maintaining the highest levels of environmental management and sustainability in all aspects of its operations in order to minimise environmental impacts and enhance the reputation of ESB as an exemplar organisation.

ENVIRONMENTAL MANAGEMENT SYSTEMS

ESB recognises that our activities, comprising of electricity generation, transmission, distribution and supply have the potential to cause environmental impacts and that it is our responsibility to manage our activities in a manner that provides a high level of protection for our natural environment and contributes to minimising the impacts of climate change (the reduction of carbon emissions), while supporting sustainable economic development.

Due to the nature of our activities, we are subject to rigorous standards of environmental legislation and regulation. For example, environmental licences and permits issued by relevant Regulatory authorities to our thermal generating stations operations mean that we must comply with all aspects of environmental law through their associated Industrial Emissions Licences. Non licenced activities are subject to assessment during planning processes and controlled through subsequent planning conditions where the relevant planning authority deems necessary. We strive for excellence in all our activities to comply with all applicable laws and regulatory requirements. We utilise externally certified environmental management systems conforming with the ISO14001:2015 standard throughout our company to achieve this.

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, Environment 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.

ACCESS TO INFORMATION ON THE ENVIRONMENT (AIE)

Under the European Communities (Access to Information on the Environment) Regulations 2007-2018 (the "AIE Regulations") members of the public are entitled to request access to environmental information that is held by or for ESB and / or ESB Networks DAC. ESB and ESB Networks DAC are separate public authorities for the purposes of the AIE Regulations.

Only environmental information can be requested under the AIE Regulations. This term is widely defined in the AIE Regulations and interpreted broadly by the Commissioner for Environmental Information and the High Court. Information on how to make a request under the AIE Regulations to ESB or ESB Networks DAC is available at the following respective company website links **ESB** acting-responsibly/environmental-information and **ESB Networks**.

AIE REGULATIONS STATISTICS

	ESB 2020	ESB Networks DAC 2020	ESB 2019	ESB Networks DAC 2019	ESB 2018	ESB Networks DAC 2018
New AIE requests	18	6	20	8	18	4
Requests b/f from previous calendar year	1	0	2	1	0	0
Requests c/f to next calendar year	0	1	1	0	2	1
Requests Granted / Part Granted	11	3	14	7	11	3
Requests Refused	6	1	7	1	7	1
Requests Transferred	0	0	0	1	1	0
Requests withdrawn	2	1	0	0	0	0
Internal Review Requests	6	1	11	1	4	0
Requests appealed to OCEI	4	1	3	0	1	0

ENVIRONMENTAL PERFORMANCE

Significant fines and non-monetary sanctions for non-compliance with environmental laws and /or regulations in terms of;	2020	2019	2018
(i) Total monetary value of significant fines	**0**	**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)

Replanting and rewilding adjacent to sub stations

ENVIRONMENTAL PERFORMANCE STATEMENT

While there were no prosecutions noted against ESB Group in 2020 we would like to comment on the following (GRI307-1(b);

ESB GENERATION AND TRADING

MIDLAND GENERATION STATIONS The main cooling water thermal plume led to a technical breach of conditions set out in the environmental licences relating to the two peat fired Midland Stations. While these breaches were subject to proceedings by the EPA, these matters were concluded in 2020 without any conviction recorded. Both midland stations formally closed in December 2020.

ESB NETWORKS

In July 2020 ESB Networks DAC was served with notice of a prosecution by the Environmental Protection Agency (EPA) relating to the alleged failure of ESB Networks DAC to carry out repairs without undue delay following detection of leaks of fluorinated greenhouse gases (SF6) in switchgear in ESB Networks' sub-station in Carrowdotia, Co Clare. The relevant equipment was decommissioned prior to the commencement of this prosecution and it no longer contains SF6 gas. The existing plant on site which contains SF6 is being monitored in compliance with the legislative requirements. This regulatory prosecution is on hold under the present public health restrictions due to COVID-19.

ENVIRONMENTAL CHANGE PROGRAMME

ESB Networks has progressed an Environmental Change Programme through 2020.

During 2020, ESB Networks continued to work to contain, reduce and minimise the use of Sulphur hexafluoride (SF6). SF6 is used in a significant portion of ESB Network's high-voltage switchgear assets on the transmission and distribution networks. It is used because of its very high electrical insulating properties which facilitate efficient and safe operation of the switchgear. Emissions rates for SF6 gas are reported to the Environmental Protection Agency (EPA) on an annual basis in line with Regulation (EC) No 166/2006.

E.DSO CHARTER

Both ESB Networks and NIE Networks have dopted 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.

SPILLS AND SPILL RESPONSE (GRI306-3)

ESB NETWORKS FLUID FILLED CABLE LEAKS

During 2020, 5,222 litres of cable insulating fluid leaked from ESB's High Voltage Cable network. This is a decrease of 8,115 litres and represents approximately a 61% reduction on the 2019 fluid leakage figure of 13,337 litres.

The breakdown of the fluid leaks was as follows:

- 220 kV Cable Network = 635 litres
- 110 kV Cable Network = 1,287 litres
- 38 kV Cable Network = 3,300 litres

Target reduction is part of our overall lifecycle management of Fluid Filled Cables.

ESB Networks intends to reduce its annual leakage by continuously improving upon leak identification and repair times; and progressing our Fluid Filled Cable replacement program.

ESB Network's "Management of Fluid Filled Cables" Company Standard set a target maximum cable leakage volume objective of 8,000 litres per annum in 2020.

During 2020, ESB Networks operated revised notification protocols in relation to fluid-filled cables with the relevant statutory authorities, carried out preliminary site assessments of all historic leaks and started intrusive investigations on some of these leak sites.

Fourteen circuits had Local Authority notifiable leaks in 2020 with ten cable leaks repaired. You will find details on our repairs on our **website**.

In February 2020 the EPA published a report on an investigation carried out into ESB Networks' fluid filled underground electricity cable leaks. The EPA made a number of recommendations in the report which are now being implemented. The report is publicly available on the EPA **website**.

NIE NETWORKS FLUID FILLED CABLE LEAKS

NIE Networks reported the following quantities of fluid replacement to the NI fluid filled cable network;

2020 - 2,645 litres

2019 - 2,070 litres

2018 - 5,345 litres

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.

For generating sites that are governed by EPA Industrial Emissions Licences there is a formal process for complaints on the EPA **website**. Furthermore, any potential complaints can be made directly to the relevant generating station or windfarm manager.

ESB NETWORKS FLUID FILLED CABLE LEAKS

In February 2020 the EPA published a report on an investigation carried out into ESB Networks' fluid filled underground electricity cable leaks. The EPA made a number of recommendations in the report which are now being implemented. The report is publicly available on the **EPA website**.

ESB Networks has a customer charter outlining 12 customer distribution service guarantees. A National Customer Care Centre also acts asa 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.**

ELECTRIC IRELAND

Electric Ireland 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. **www.electricireland.ie**

BIODIVERSITY

In very simple terms “biodiversity” includes all life on Earth. As defined by the United Nations Convention on Biological Diversity (CBD), “biological diversity” means the variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes genetic diversity within species, between species and of ecosystems.

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. As set out in ESB’s Environment and Sustainability Policy. 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.

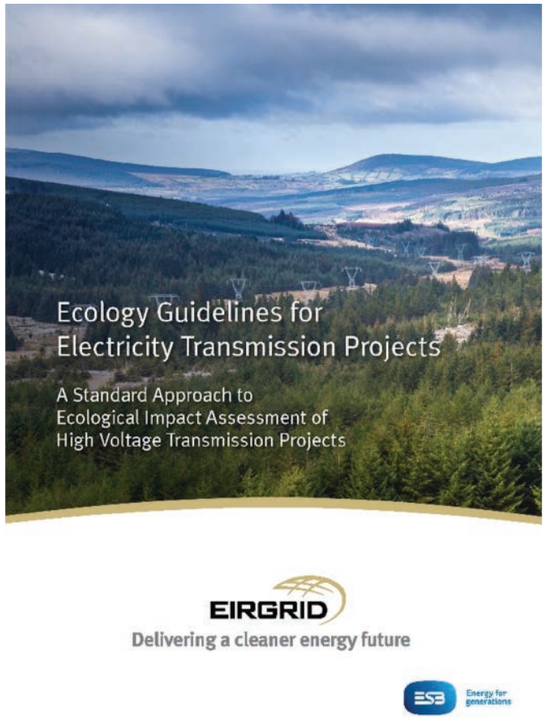
CASE STUDY – EIRGRID ECOLOGY GUIDELINES

ESB Group has worked with one its key partners, EirGrid, to comprehensively revise the 2012 Guidelines for Electricity Transmission Projects: A Standard Approach to Ecological Impact Assessment of High Voltage Transmission Projects.

ESB's ecology team team were lead authors of the updated guidelines and were also responsible for consultation and engagement with key internal and external stakeholders.

The revised guidelines aim to provide a standard approach to Ecological Impact Assessment of high voltage transmission projects and associated infrastructure and to provide greater consistency in impact assessment. They are based on a review of EirGrid’s evidence-based environmental studies, published national and international best practice and legal obligations in relation to protected species of flora and fauna, protected habitats and Nature Conservation Sites.

Avoidance of potential construction and operational phase impacts, as well as the implementation of mitigation where appropriate, form a key aspect of the Guidelines; this is of significance to ESB, as HV project construction and maintenance is carried out by ESB Networks in its role as Transmission System Owner.



Ecology Guidelines for Electricity Transmission Projects

MANAGING OPERATIONAL IMPACTS ON BIODIVERSITY

A Group Standard relating to Biodiversity has been drafted, 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, 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 where there are 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 within and outside of designated sites, during and following any such works.

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.

ESB Group has recently committed to undertaking a review of biodiversity at all relevant landholdings across substations, generating stations, wind farms, telecoms locations, offices and depots. This review, initiated in 2020, will identify and quantify the extent of biodiversity receptors at ESB Asset sites and develop targeted site-specific recommendations for biodiversity gain where feasible. ESB Group has developed and issued a series of job aids to advise ESB Networks staff and contractors in operational matters. A number of these job aids deal directly with biodiversity matters. During 2020, a collaborative working group comprising staff from the ESB Networks Environment Team, regional ESB Networks Engineering Officers and the ESB Engineering and Major Projects ecologists initiated a review of the document relating to Designing & Carrying out Projects or Activities within or close to SACs or SPAs.

NIE Networks has entered a three-year partnership with Ulster Wildlife and has been awarded a Wildlife Aware accreditation by the charity. A collaborative action between the two parties produced a bespoke 'Wildlife Aware Guide' and associated training programme for employees. NIE Networks continues to educate staff and contractors about some of Northern Ireland's most protected species and habitats, making the safeguarding of biodiversity a priority and ensuring their work has minimal impact on the local landscape and natural habitats.

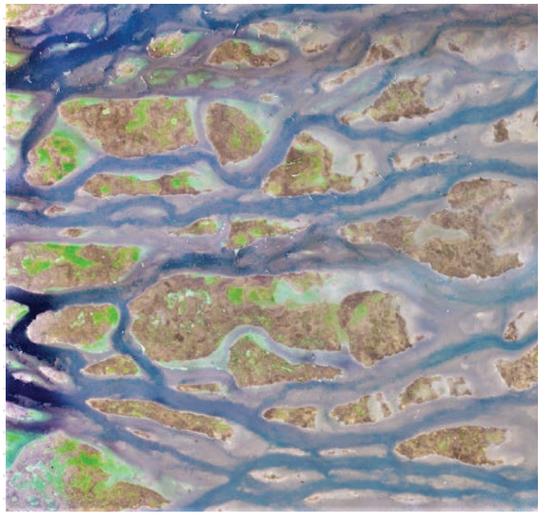
CASE STUDY – ALL-IRELAND POLLINATOR PLAN

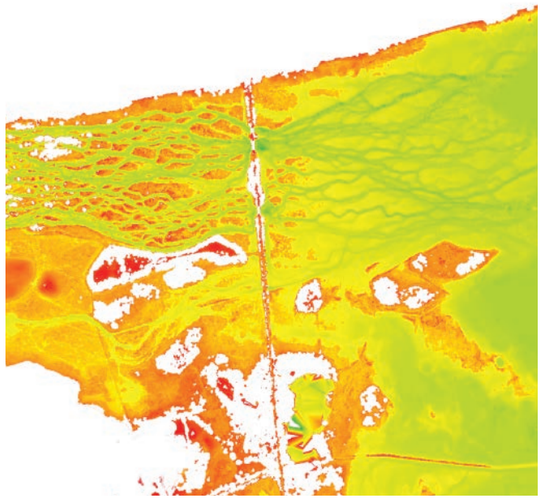
During 2020, ESB Group engaged with the coordinators of the All-Ireland Pollinator Plan (pollinators.ie) during the drafting of the second iteration of the plan, committing to become a Key Partner. ESB has committed to take up opportunities for more pollinator-friendly management of landscapes within its property portfolio, where this fits with the needs of safety, business operations and property management. ESB will review its landholdings to identify parts of sites suitable for supporting pollinators, through various actions such as minor changes in mowing regimes or new habitat creation.

CASE STUDY – ECOLOGICAL MONITORING AT THE GEARAGH

ESB is the primary landholder associated with The Gearagh, about 1.5 km southwest of Macroom in Co. Cork. The site is associated with the reservoir upstream of Carrigadrohid dam. The ESB property boundary for the site incorporates an SAC and an SPA. The site has also been designated also as a Statutory Nature Reserve. The international importance of the site is recognised by its designation both as a Ramsar site and as a Biogenetic Reserve, while the reservoir component is also a Wildfowl Sanctuary. The upstream component of the site at the confluence of the River Lee and River Toon comprises a complex network of narrow channels weaving through a series of islands of mature woodland.

ESB prepared a Scoping Report in 2017 which made specific recommendations for future ecological assessments at The Gearagh. ESB has since progressed a series of monitoring studies to develop a better understanding of the complex ecology of the site. This monitoring regime includes drone surveys of the woodland canopy along the Toon River and the open water component of the site directly influenced by the operational regime of the dam, the deployment of hydrometric loggers around the site and terrestrial laser scanning of the River Toon in the Gearagh woodland to assess potential erosive action and any requirement for remediation works. The outputs of these monitoring studies and further engagement with key stakeholders including the National Parks and Wildlife Service will be utilised to inform the future development of a management plan for the site.



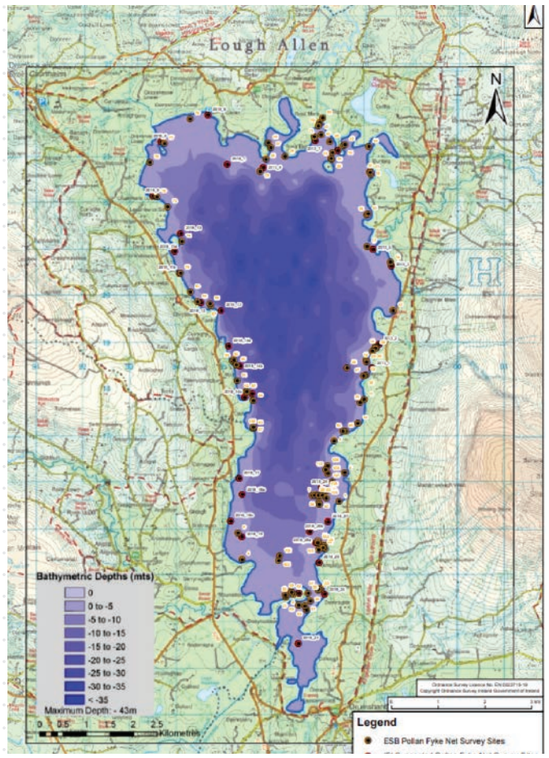


CASE STUDY – LOUGH ALLEN LEVEL REGULATION AND POLLAN SURVEYS

Pollan may be found at Loughs Allen, Ree and Derg on the Shannon in the Republic of Ireland, but also occur within Northern Ireland in Lower Lough Erne and Lough Neagh. They are thought to be a 'glacial-relict' fish species and usually occur in more northerly regions of the world, most notably Canada/Alaska and Scandinavia/Russia. Of the 5 Irish populations most information is known about the L. Neagh pollan population - as it is fished on a commercial basis by the L. Neagh Fisherman's Co-Operative Society. Despite their conservation status, relatively little is known of other Irish populations.

Work was completed by ESB during 2018/2019 and 2019/2020, along with some pertinent information gleaned from various interactions with Inland Fisheries Ireland and The Department of Culture Arts and Leisure, Northern Ireland. The objective of the study was to identify spawning sites of Pollan and establish whether fluctuating water levels in the lake could potentially impact spawning grounds of the Pollan. No spawning sites were identified on the peripheries of the lough, where any water level fluctuations may have impacted.

Fyke nets were set at various depths and recorded GPS locations. Fyke nets by their design, capture fish alive and therefore represent a non-destructive sampling technique. All captured pollan were sampled for genetics and a scale sample taken (for ageing) along with a length measurement, before release. Inland Fisheries Ireland also conducted a hydroacoustic survey, which confirms that Pollan are numerically the most numerous fish species in the Lough.



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 Networks staff and contractors are 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.

WORKING IN AREAS OF HIGH BIODIVERSITY VALUE (GRI 304-1)

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 is set out in the table below. Examples of these types of site include SPAs, SACs, NHAs (ROI only) and ASSIs (NI only).

Republic of Ireland (assets inside SAC, SPA, NHA, PNHAs)	**2020**	**2019**	**2018**
Lands under ESB control (km^2)	96.7	96.7	96.7
LV Stations (No.)	269,591	266,853	260,425
38kV to 400kV OHL (km)	12,725	12,752	12,667
38kV to 400kV Cable (km)	2,080	2,004	1,591
Northern Ireland (Assets inside SAC, SPA, ASSIs)	**2020**	**2019**	**2018**
11kV or below (km)	3,500	3,500	3,500

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 number/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 specialists 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.

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. During 2020 ESB completed the first full year of post-certification implementation of the cross business unit energy management system. This covered operation of our buildings and fleet energy across ESB Group ROI operations, accounting for an annual consumption of approximately 74,000 GWh (2020 figure). We successfully maintained certification to ISO50001:2018 following a series of virtual surveillance audits carried out by our auditors, NQA, in November 2020.

The Energy Management System will be used to achieve further savings against the increased targets for 2030 of 50% energy efficiency and 50% absolute carbon emissions reductions. In 2020, 70 fully electric small vans were brought onto the fleet to replace diesel vans. The fleet management system and the energy management system are in place to identify further savings. The redevelopment project of ESB headquarters with a new state-of-the-art, energy-efficient premises continued.

As a commercial semi-state company, ESB is also committed to supporting and being an exemplar in the delivery of Ireland's 2020 public sector targets. Under this legislation (SI426/2014), Irish public sector bodies and commercial semi-state bodies are required to deliver a 33% reduction in their Total Primary Energy Requirement by 2020. Our operational energy management system, governed by ISO50001, has enabled us to deliver on this target and more. To the end of 2020, ESB Group has delivered a 45.9% improvement over baseline and against the 33% target. ESB must now focus efforts towards the 2030 public sector targets of 50% energy efficiency improvement, 50% absolute carbon emissions reductions regardless of activity levels and ensuring that our buildings achieve a Building Energy Rating of B.

Thermal Generation (GWh)	2020	2019	2018	
Coal	2,186	1,767	5,683	
Natural Gas	17,427	18,999	22,925	
Oil	468	413	205	
Peat	1,720	3,971	4,045	
Operational (Primary Energy equivalent in kWh)				**Baseline[1]**
Electricity	41,314,003	48,823,028	53,489,805	95,785,331
Thermal	2,502,817	4,321,560	4,986,783	
Transport	53,710,105	54,318,204	56,146,927	
Energy Performance Indicator (EnPI)				
kWh/FTE Employee	16,442	18,363	20,852	30,414
% improvement towards 2020 33% target	45.9%	39.60%	35%	0%

Table Notes and Clarifications:
1. Baseline 2006 for Operational energy consumption (excluding generation)
Energy by fuel source (generation) in GWh current year and comparison year.
Operational Energy (disclosed as Primary Energy Equivalent) in kWh for electrical and thermal energy for buildings and transport fuel.
Energy Performance Indicator metric kWh/FTE current year, comparison year and baseline year.
Defra and SEAI conversion factors are utilized to calculate energy consumption.
SEAI data on Operational Energy is reported a year in arrears. 2019 data reflects 2020 SEAI Reporting cycle.

DELIVERING ENERGY REDUCTIONS FOR CUSTOMERS

As part of Ireland's requirements under the EU Energy Efficiency Directive to deliver a 20% energy saving by 2020, Electric Ireland supported the introduction of the Energy Efficiency Obligation Scheme (EEOS) under which energy suppliers developed solutions to enable customers improve the energy performance of their homes and businesses, reducing both running costs and environmental impacts. We deliver energy efficiency programmes to new and existing residential energy customers via our retail business Electric Ireland and Smart Energy Services (SES) for industrial and commercial customers.

Since the introduction of the scheme in 2014, Electric Ireland has exceeded the required target of energy savings across all three categories from energy poor, residential through non-residential. In particular, exceeding our target by 25% in the energy poor sector. Electric Ireland continues to support the next phase of energy efficiency deliverables focused on delivering Irelands 2030 targets and is actively working with government on the introduction of the updated obligation scheme. (GRI302-5)

NON-RESIDENTIAL

968GWH SAVINGS

EXCEEDING TARGET BY 49GWH OR 5%

RESIDENTIAL

250GWH SAVINGS

EXCEEDING TARGET BY 5GWH OR 2%

ENERGY POVERTY

76GWH SAVINGS

EXCEEDING TARGET BY 15GWH OR 25%

Over this period Electric Ireland & SES are proud to have been involved in many energy efficiency schemes that have positively impacted the customers and communities we serve. Some examples of the schemes delivered include;

- Supporting local authorities in delivery of energy efficient home upgrades in the fuel poor sector by offering pre and post BERs and quality auditing of works free of charge.
- Supporting residential customers by offering energy bill cash discounts for works carried out by approved installation companies; this encourages the homeowner to complete works they may otherwise have found an expensive outlay.
- Working with multiple large energy users (building material suppliers, food production companies and large retailers to name but a few); offering expert energy management services to reduce consumption and plan for a low carbon future.

WATER

ESB's most significant water demand is for the purposes of providing cooling water for thermal power generation and water for use in our Hydro/ pumped storage Generating stations.

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 ultra-pure steam to the turbine.

Hydropower is a form of renewable energy that uses the water stored in dams, as well as flowing in rivers to create electricity in hydropower plants.

Lesser quantities of water are consumed in our offices and ESB Networks depots.

Our operations are primarily in the Republic of Ireland, Northern Ireland and the rest of the UK and we do not have any significant water consuming operations in any locations other than the generating stations. As with the use of all our natural resources, ESB is committed to being a responsible consumer of water through our water management and conservation practices.

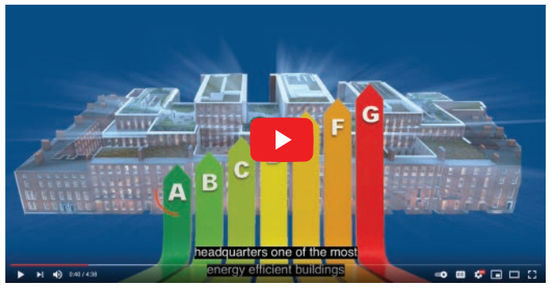
WATER CONSUMPTION

Throughout 2020 the COVID19 pandemic has changed our work patterns for all staff in ESB and this is reflected in this year's figures as most ESB premises have seen large reductions in water consumption.

CASE-STUDY: WATER CONSERVATION AT FITZWILLIAM 27

With an ever increasing need to create a sustainable environment for our customers, communities and each other, it's important our actions reflect our purpose – to create a Brighter Future.

We have designed Fitzwilliam 27, our new Head Office, to be a world-class sustainable workplace with measures in place to reduce our water consumption. Such measures include rainwater and well water collection for the irrigation of plants and for toilet flushing. The well is bored below the Fitzwilliam 27 building to collect ground water for these purposes. Fitzwilliam 27 will feature low water use sanitary fittings with automatic water leak detection and shut off to control water waste. This will contribute to an overall reduction of 70% in water wastage throughout the building.



Water Source	Potable Water (m3)			Surface Water (m3)			Sea Water (m3)			Recycled Water (m3)		
Year	2020	2019	2018	2020	2019	2018	2020	2019	2018	2020	2019	2018
Withdrawal	1,349,995	1,215,888	1,668,548	308,625,635	3,356,679.75	3,727,750	286,454,726	172,979,872	187,820,427	0	0	0
Discharged	1,349,995	1,217,606	1,668,687	308,625,635	3,356,679.75	3,727,750	286,454,726	172,979,872	187,820,427	0	0	0
Recycled	0	0	0	0	0	0	0	0	0	192,843	99,407	71,640

WATER CONSERVATION

Water conservation, leak detection and water recycling projects take place across the business, at the power station or location level. At our generating stations for example, in Moneypoint, a number of potential sources for capturing run off, wastewater and drainage systems for recycling and return of the captured water to the process were identified. This recycled grey water is used in the emissions control equipment and other processes and provides approximately 23% of Moneypoint's water demand. The water recycling project has also alleviated demand pressures on the local authority water infrastructure.

WATER MONITORING

At our generating stations ESB carries out extensive testing both in house and externally by certified EN 17025 Laboratories on our discharges to rivers, lakes, estuaries, surface and ground waters. Each station carries out a regular testing programme for these waters in accordance with each locations' Industrial Emissions Licence or Discharge licence. Any breaches of Emission Limit Values are reportable to the relevant competent body (e.g. EPA) and any other notifiable authority/body.

During 2020 regular ground water and surface water monitoring continued at ESB Networks national wood pole storage facility in Kilteel, Co Kildare. RSK were appointed to progress the next stage of the Conceptual Site Model (CSM) approach to overall site management in accordance with the Environmental Protection Agency guidance document "Guidance on the Management of Contaminated Land and Groundwater at Environmental Protection Agency Licenced Sites".

In 2020, in addition to bunding all new transformer installations in HV substations, ESB Networks retrofitted bunding to 28 existing legacy transformers, and up-graded 8 legacy separators to European Norm 858 and Class 1 performance.

ESB Networks Oil Storage and Transportation Improvement Project continued in 2020. Oil and diesel storage infrastructure upgrades were completed at a number of ESB Networks HV Stations for Back Up Generators and at Depots and Fleet & Equipment Garages. New storage tanks were installed at Maynooth, Carrickmines and Inchicore 220kV Stations, at Dundalk, Finglas, Mullingar, Tullamore, and Wilton Depots and at Galway Fleet & Equipment.

EFFLUENTS & WASTE

In line with our overall focus of being a responsible corporate citizen, there has been a concerted effort to minimise the impacts from our operations, including waste. The focus on the area of waste management has led to improved segregation, 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.

Framework contracts with key waste services providers have also increased our level of oversight and assurance of proper and legally compliant disposal methods being employed by waste contractors and ensuring the maximum possible levels of waste are diverted from landfill and that all waste streams are handled appropriately. 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. Insert link to emissions section.

Waste type	Hazardous (Tonnes) 2020	Non Hazardous (Tonnes) 2020	Total Tonnes 2019	Total Tonnes 2018
Reuse	627	1,084	569	569
*** Recycling, Incineration & Recovery, incl. energy recovery**	327	10,145	13,896	10,770
Composting	0	44	63	126
Landfill	11	108	502	653
Disposed of directly by organization or otherwise directly confirmed (Ash)	0	89,638	81,526	172,634
Totals	985	101,019	96,493	184,765

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) and West Offaly and Lough Ree (peat) stations
5. Waste totals have been updated, having been reported a year in arrears for 2019

1 CASE-STUDY: THE RE-USE OF OUR ASH

The ash generated from the combustion of fossil fuels such as coal are normally managed by placing the ash in the Ash storage Area (ASA) which is managed in accordance with the requirements of the IE Licence. However, ESB has conducted extensive research and investigation into the potential reuse of the ash in Moneypoint prior to placing this ash in the ASA. This research has also included interaction with universities in order to determine the suitability for other uses. To date a significant quantity of the ash has been diverted for use in the cement producing industry. In addition ESB has conducted combustion trials using Moneypoint ash as an additive to combustion processes as it was found to have the potential to reduce Gas-side corrosion of boiler tubes, particularly for the combustion of some corrosive biomass.

Bog Cotton (Eriophorum angustifolium) - a plant of damp, peaty ground found in previously harvested peatlands near the demolished Ferbane Power Station.

2 CASE-STUDY: PEATLAND RESTORATION AND BIODIVERITY

With the closure of our midlands stations ESB are actively looking at options which can provide an effective way of managing the ash landfill and the potential leachate into the future. Integrated Constructed Wetlands is one such solution which can treat associated leachate using natural vegetation. This natural vegetation in turn can enhance the biodiversity of the area and provide a long-term solution which complements the long-term strategy of re-wetting of our bogs.

The town of Ferbane is named after this plant - Fear Ban, meaning white grass, which is common in this part of the country.

Source: About Ferbane Bog - The Living Bog (raisedbogs.ie)

INTRODUCTION

2020 was not the year we had planned for. It turned out to be a year, through adversity, and the challenge of mobilising our workforce in the face of a pandemic and national crisis, in which we embraced change and the need for a "new normal".

In March 2020, like many organisations worldwide, we responded to the threat of COVID-19 by reconfiguring work for all our employees in every jurisdiction. For a great many of our employees, this meant working at home.

In ESB we know that electricity is providing vital support for everyone through the pandemic. It underpins many critical front-line services, and sustains our ability to live, work and stay connected from home. That's why we are taking steps in line with Government measures to balance the provision of essential energy supplies with our need to keep our employees and the communities we serve, safe and healthy. We are doing this knowing that many of our customers are in their homes, working remotely, dealing with illness or self-isolating to flatten the curve.

Acknowledging the impact of the pandemic on many people's livelihoods and incomes, we introduced a moratorium on disconnections, thereby protecting customers experiencing financial hardship and uncertainty during the strict lockdowns. That moratorium was extended for residential customers and the vast majority of business customers until 30th June 2021.

We remain focused on looking after our customers and employees, providing secure and safe electricity to the communities we serve. We will stay connected to families, communities and businesses all over the country and will support the fight against Covid-19.

SOCIAL AND GOVERNANCE DISCLOSURES

OUR PEOPLE

SMART WORKING

In March 2020, like many organisations worldwide, we responded to the threat of COVID-19 by reconfiguring work for all our employees in every jurisdiction. For a great many of our employees, this meant working at home. Work already done on our culture change programme, The WayWeWork, built on the strong foundations of our purpose and our values, became hugely important in the unchartered context of 2020. A number of the key components of this programme have accelerated through 2020 and enabled our people and our managers to sustain business performance and the employee experience throughout this crisis. The learning from this period and the changes our people have experienced have led us to articulate a vision for our ways of working beyond COVID-19, so that in 2021, as we begin to return to our workplaces, we will go back but not backwards.

Our vision is Smart Working, which will see ESB adopt increasingly digital, flexible and trust-based work practices, improving business performance, efficiency and importantly the experience of our people, by giving them more autonomy over where, when and how they work. Many of the changes and investments we have made in recent years, in areas such as leadership development, performance management, communications and engagement, employee voice and digital ways of working, have paid dividends through 2020 and became the infrastructure to enable our people's performance in a remote context.

ESB WORKFORCE

Over 2020, ESB continued to recruit through all our normal channels to ensure we have the capability needed to deliver on our Strategy for a Brighter Future. These 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 on ESB's website; **ESB Careers**

ESB'S WORKFORCE IN OVERVIEW: TRAINING AND DEVELOPMENT

	2020	2019	2018
Number of Employees	7,938	7,974	7,874
Female	26%	25%	24%
Management Level Female			
Female	30%	30%	25%
Full Time	94%	93%	93%
Employee with Disabilities	4%	3%	3%
Permanent Contract	92%	91%	99%
Temporary Contract	8%	9%	1%
Skilled Craft and General	40%	42%	42%
Non Craft and General	60%	58%	58%
Female Board Members	25%	33%	33%
Third Party Contractor Staff working on behalf of business	2,800	2,800	3,100
STAFF BY REGION			
Republic of Ireland	81%	81%	81%
Northern Ireland	16%	16%	18%
Europe	2%	2%	0%
Middle East	0.01%	0.01%	1.40%
Asia	0.02%	0.02%	0.03%
Africa	0.01%	0.01%	0.01%
Nationalities Employed	47	47	35

Notes:
1. Permanent (92% of Male and 91% of Female Employees)
2. Temporary (8% of Male and 8% of Female Employees)
3. ESB continues to exceed the 3% employement target for people with disabilities as set out in the Disability Act 2005
4. Contractor workforce numbers are not gathered for all Individual contracts.
5. Numbers reflect regular contractors working on behalf of our networks businesses on construction and overhaul projects, as well as facility service providers

A key pillar of ESB's People strategy is to create a high performance culture. Leadership behaviours impact hugely on culture, so we are therefore putting particular focus on the enhancement and development of organisational leadership capability. In 2020, for example, all of our Senior Management Teams have engaged in a 360 programme in support of personal development aligned to ESB's leadership profile. Our leadership profile is our benchmark for leadership in ESB and is used in leadership recruitment, selection, development and talent management. It clearly articulates how leaders at all levels drive and guide the way we work in ESB and is underpinned by the key competencies and traits required to ensure a strong leadership capability across the organisation.

ESB is committed to the continuing development of the skills and capabilities of all our employees. We are a company committed to life-long learning and we believe that this commitment is a key factor in the retention of our staff and delivering on our Brighter Future strategy. The identification of training needs and requests for training solutions is managed through the OKR (My Goals and My Development) process, a process for learning and development conversations to take place between employees and their manager throughout the year. Engaging in this process allows an employee the opportunity to access training opportunities to develop their skills and knowledge through a structured process. The Learning and Development Delivery team manage and organise non-technical training, IT, business and personal skills and management development training course. Technical training and safety training solutions are managed and organised by ESB business units and the National Training Centre.

SUPPORTING WORKING PARENTS

One of the strategic programmes that is in place to support an inclusive workplace is ESB's Managing Successful Parenting Transitions programme. Understanding the experience and challenges faced by working parents and the need to work towards a more gender-balanced leadership led to the introduction of the programme, which is in place since 2015.

Having a programme that supports ESB's people and that is agile in terms of content and adapting to virtual delivery has been critical since March 2020. Working parents and those with caring responsibilities experienced additional challenges in relation to working from home, at the same time as losing access to childcare, schools and normal supports due to theimpact of the COVID-19 pandemic.

- Pivoted to a condensed module with a reduced delivery time online- with key messages to support individuals where they are now.
- Being virtual enabled a wider reach and increased participation across geographical business units.
- Modules had an in time impact escalating challenges throughout 2020 for working parents and line managers with content modified to the environment people were trying to work within, at the same time as shifting to remote working.
- Increase of 42% participation rates throughout 2020.

Uncertainty in relation to return dates for schools and college was an additional stressor for working parents. In quarter 3 over 120 parents of school-age children attended sessions facilitated by The Parent Coach - Adjusting to the Next Norm. Participants had the opportunity to consider a road map as parents/guardians/family members to enable them to prepare – practically, mentally, and emotionally for the months ahead.

PERFORMANCE AND CAREER DEVELOPMENT

Our Brighter Future strategy calls out the need for a high-performance culture that supports collaboration to drive innovation and business performance. Achieving high performance in ESB is about how we all perform to our best, delivering outcomes that are aligned with the business needs. Using our performance management approach, managers in ESB play a critical role in enabling all of us to succeed. All employees (100%) are part of an annual performance management process, goal setting and career development process, which is deployed across the business.

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.

FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING

Approximately 60% of employees have elected to join a trade union and are directly covered by collective bargaining arrangements, reflecting ESB Group's position of supporting freedom of association for all employees. Furthermore, under the obligations outlined in ESB's 3rd Party Requirements, 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, as long as their employer is abiding by the ESB 3rd Party Requirements. During 2020, over 100 Contractor Employment Standards audits took place across ESB managed sites.

INCLUSION AND DIVERSITY

ESB's new Inclusion & Diversity Strategy was developed with significant input from people across ESB through online workshops. Over the past number of years, an increasing focus has been brought to the Gender Pay Gap as a means of highlighting the need for increased focus on gender diversity in the workplace. Improving gender diversity continues to be central to this strategy and understanding what is driving the gender pay gap allows us to bring a renewed focus to the changes needed to address it. In support of this, we decided to publish our Gender Pay Gap Report early in 2021, in advance of the requirement to do so. We have also decided to include additional earnings such as overtime in our reporting, wholly reflecting the differential in access to earnings based on gender. The impact of low female participation in these areas is obvious and is an issue we at ESB and other technical organisations need to influence.

ESB's Inclusion and Diversity Strategy creation was facilitated in 2020 while the majority of staff continued to work remotely, enabling ESB to have a more innovative and inclusive engagement. Being virtual provided a great opportunity to ensure participation of a broader and more diverse perspective across each business unit and a wider geographic spread – from Bahrain to Ballyshannon, Carrington to Cork.

ESB now has a clearly defined Inclusion and Diversity statement, definition and objectives, supported by a comprehensive implementation plan to build on progress already in place and to sustain an inclusive workplace. The Inclusion and Diversity Strategy speaks to ESB's values – Courageous - Caring – Driven - Trusted and is aligned to the Culture Change programme underway at ESB.

OBJECTIVE OF INCLUSION AND DIVERSITY STRATEGY

To create and sustain an agile culture of inclusion and belonging where people engage, challenge and feel connected to purpose, colleagues, customers and community.

STRATEGIC PILLARS

Four strategic pillars have been identified to support the Implementation of the strategy over a 2 year timeline.

LGBT+ INCLUSION

ESB believes that having an inclusive workplace benefits all of ESB's people, customers and the communities that ESB serves.

BeME@ESB – ESB's LGBT+ Employees and Allies Network were proud winners of 2020 ESB Awards - "Keeping Us Safe and Well" Category.

GENDER PAY GAP

In 2020, ESB conducted research on the Gender Pay Gap in the company in advance of the legislative requirement to do so in Ireland. The gender pay gap shows the difference in the mean (average) pay between all men and women in the workforce regardless of the nature of their work. It is expressed as a percentage of men's pay. It is different to 'equal' pay which deals with the pay differences between men and women who carry out the same jobs, similar jobs or work of equal value.

Analysis of this shows that the pay gap is largely driven by significantly lower female participation in craft and engineering roles, which typically attract role specific pay and allowances for their associated work schedules, and more men than women in senior leadership roles across all disciplines. ESB has been actively promoting an inclusive and diverse culture through a number of successful initiatives across a range of diversity areas including gender, disability, neurodiversity, cultural, LGBT+ and family. In 2020, ESB developed a comprehensive Inclusion and Diversity Strategy. Gender diversity across all disciplines and through to leadership positions is a key focus in this strategy.

ESB Gender Pay Gap Report 2021

HUMAN RIGHTS

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 Organization's Declaration on Fundamental Principles and Rights at Work.

This commitment is supported by a range of policies covering focus areas within human rights. The Employee Code of Ethics requires all employees to operate fairly and to respect all human rights.

MODERN SLAVERY

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 in order 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. ESB carries out risk screening of its suppliers and, based on this, a number of site-based supplier audits are performed. The most recent Annual Statement on the Prevention of Slavery and Human Trafficking was published in May 2020 and is available on the ESB website, **www.esb.ie/who-we-are/procurement/procurement-policy.**

HUMAN RIGHTS ASSESSMENT

ESB has assessed its business areas and locations to identify potential Human Rights issues and risks and preventive measures, both within the company and in other organisations that provide goods and services

The following is 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. This assessment is published in compliance with Section 42 (s) of the Human Rights and Equality Act (2014). A wide range of policies have been developed covering human rights, including employee rights, non-discrimination, diversity and inclusion, as well as modern slavery. Our Code of Ethics covers the range of behaviours expected of employees in line with ESB values. Focus areas and the actions taken and planned are summarised in the table opposite.

Issue	Action
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:** ▪ Cultural Diversity Policy ▪ Group Procurement Policy ▪ ESB Equal Opportunities and Diversity Code of Practice ▪ Health and Safety Policy ▪ Environmental Management and Sustainability Policy ▪ Whistle Blowing and Protected Disclosures Policy ▪ ESB Employee Code of Ethics (Our Code) ▪ The Way We Work ▪ Modern Slavery Policy ▪ Anti-Bribery, Corruption and Fraud Policy ▪ Ongoing awareness and training programmes relating to the above policies.
Human rights and equality issues in joint venture companies	▪ Guidelines for joint ventures adopted. ▪ Governance Framework adopted for each joined venture formed.
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. ▪ Contractor audits conducted by an independent third party.
Human rights and equality issues arising in our supply lines	▪ ESB Supplier Charter adopted, setting out standards required of all suppliers. ▪ 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. ▪ Procurement of screening and audit service. ▪ Financial standing of suppliers checked every year. ▪ Member of the Bettercoal organisation, a not-for-profit organisation that works towards responsible coal supply.

ESB will report regularly on these measures in its Annual Report and Annual Sustainability and Corporate Social Responsibility Reports.

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

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, Environment and Culture Committee supports the Board's monitoring and governance of health, safety and wellbeing. 2020 was a very challenging year for the whole world. The COVID-19 pandemic tested ESB's preparedness and resilience towards such events. From a health and safety perspective, controls were implemented that have significantly reduced the opportunity for transmission of the virus in an ESB controlled workplace while maintaining electricity supply to all users. Sadly there were a number of serious workplace incidents associated with ESB work activities during 2020 including two fatalities.

SAFETY PERFORMANCE IN 2020

Performance in 2020 has been overshadowed by the tragic fatalities to a member of staff in NIE Networks and to a sub-contractor working on behalf of ESB Networks in separate incidents in August. Comprehensive investigations into these deaths have been carried out and the recommendations arising from them will be implemented. ESB uses the following leading Key Performance Indicators (KPI) 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. The target for 2020 was 12,200 good catches. Due to the significant number of employees working from home since March the number of good catches was below target at 9,604.

2. P1 Investigation closure.
ESB categorises all injurious 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 2020.

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 2020.

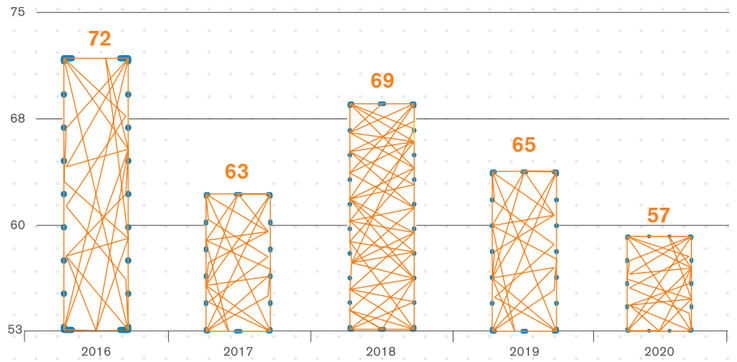
4. Senior Manager Safety Conversations.
All Senior Managers in ESB are expected to demonstrate their safety leadership by conducting safety conversations each month. The KPI tracks completion of these conversations. Despite COVID-19 distractions the Senior Manager cohort in ESB consistently exceeded its target throughout 2020.

5. Audit non-conformity closure.
ESB subscribes to certification of its Safety Management Systems (SMS). Nonconformities 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.

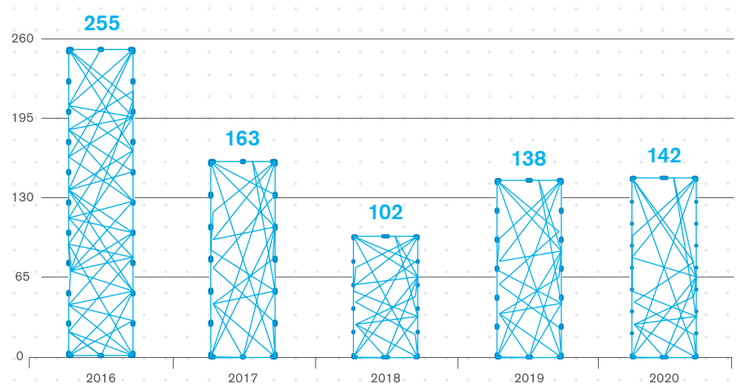
HIGH POTENTIAL INCIDENTS (P1)

In addition to focusing on Lost Time Incidents (LTIs), ESB categorises all injurious incidents and near misses with a particular focus on high potential incidents that could lead to more serious outcomes (see figure 2). In 2020, 142 high potential incidents were recorded. In 2019, 138 high potential incidents were recorded. Although this is a higher number than in 2019, the linear trend for these incidents is decreasing over the years 2016 to 2020. The totals for each previous year were; 2018 (102), 2017 (163) and 2016 (255). All high potential incidents and LTIs are investigated to determine their root causes. The most significant safety risks arising from high potential incidents for ESB are: public/ third parties, electricity, driving and transport and human behaviour which accounted for 67% of all P1 incidents.

LOST TIME INJURIES 2016–2020



P1 INCIDENTS 2016–2020



KEY STATISTICS

	2020	2019	2018
Staff Fatalities	1	0	0
Contractor Fatalities	1	0	0
Staff Lost Time Injuries (LTI)	24	50	41
Staff LTI Rate (per 100,000hrs)	0.19	0.40	0.33
Contractor Lost Time Injuries	33	17	24
P1 (High Potential Severity Incidents) 138 102	142	102	138
Absenteeism Rate (avg. days/staff)	6.23	8.39	8.01
Days lost due to occupational injury	1010	1415.5	1080
Public Fatalities due to electricity (Customer side of meter)	0	0	0
Public Fatalities due to electricity (Network side of meter)	0	0*	0
Safety Incidents on the Network (including Public Safety Incidents)	2,106	2,232	2,015

* *The incident included in 2019 report as a Public fatality due to electricity (Network side of meter) was investigated by the Air Accident Investigation Unit. The fatality was found not to have been due to electricity. It was caused by the collision when the microlight aircraft struck the ESB 38kV portal.*

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 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:

1. Policy and commitment
2. Planning for incident and ill health prevention
3. Implementation and operation including responsibilities, procedures and resources
4. Measuring performance
5. 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 in 2020 on improving its safety performance through delivery of key improvement projects in ESB Networks and in Generation and Trading. Safety assurance audits against our policy and standards were completed in ESB Networks, Generation and Trading, and in Engineering and Major Projects and Customer Solutions.

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 H&S 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 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 return home to their loved ones.

SAFE & SOUND
Because we care

'Safe and Sound aims to create "the culture and safety leadership" across the business, needed to create an organisation where no one gets hurt and everyone feels safe.'

SAFE AND SOUND

The focus of the Safety Culture Transformation ('Safe and Sound') programme during 2020 was to broaden and deepen enrolment. Safe and Sound aims to develop and sustain a culture where safety is central to everything ESB does, where there is a mindset that is intolerant of incidents and injuries, where employees take responsibility and care for their own safety and for those around them, where they speak up when they see something unsafe, where they choose to follow the safety rules, where they implement sensible safety systems and where they take pride in their achievements. Safe and Sound proved very effective during COVID-19 finding successful ways to keep everyone safe and connected. The Safe and Sound (S&S) programme is supported/enabled by in-house S&S coaches. The ESB Networks Safe and Sound coaches were recognised for their outstanding work by receiving the 'Being Courageous, Caring, Driven and Trusted' Award at the annual ESB Awards.

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, EAP (Employee Assistance Programme), an independent counselling service and a range of other support measures. The Health and Wellbeing Roadshows had to be curtailed during the COVID-19 pandemic. The team revamped the yearly health and wellbeing calendar to include a new look and approach to delivering the monthly wellbeing message. A new digital wellbeing resource is close to launching throughout the company. During the year the team has worked to implement a mental health first aid programme into ESB. This is a peer-to-peer confidential support system and one of the goals of the programme is to have it available at all ESB locations. As we know, Covid19 has impacted our mental health and the MHFA programme is a direct response to this and another valuable support mechanism available to ESB staff. Another first for the team this year has been the hosting of live webinars on various wellbeing topics.

PUBLIC SAFETY

ESB has invested in a Public Safety Programmes as detailed below:

- Media messaging to the key at-risk groups: farming, construction and the general public, given the COVID-19 limitations on physical engagement events with stakeholders. This included radio, digital and social media platforms with targeted messaging for DIY, gardening, and during storms.
- Engaging content was delivered, including webinars during Construction Safety Week, as part of the ESB Networks' partnership with the Construction Industry Federation.
- The ESB Networks' partnership with the Irish Farmers Journal continued to deliver relevant content, including new personal testimonies of farm accidents, as well as safety articles across the farming press on electricity safety.
- Public safety work programmes, including hazard identification, inspections and maintenance were completed to ensure public safety.
- The ESB Networks emergency response service operated to the highest standards to deal with storm and other emergency events.
- In 2020, an independent public safety audit was completed in accordance with ESB Networks licence conditions. The report from the external auditor confirmed continuing compliance with the licence. There were no fatalities involving members of the public and the electricity network, as has been the case for the last four years. However, there were three serious incidents where members of the public were injured. These incidents involved entry into a high voltage sub-station, hedge cutting and contact with an electricity pole stay.

KEY INITIATIVES AND PROGRAMMES IMPLEMENTED OR CONTINUED IN 2020

- 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 standard. The scope of the ESB Central Safety Management System increased to include the Engineering and Major Projects business.
- ESB continued to make progress in 2020 on improving its safety performance through delivery of key improvement projects in ESB Networks and in Generation and Trading.
- Safety assurance audits against our policy and standards were completed in departments within ESB Networks, Generation and Trading, Engineering and Major Projects, and Customer Solutions.
- Principal risks and their management are reviewed and reported quarterly to the Group Risk Manager, Board and the Audit and Risk Committee.
- A new Road Safety Strategy was developed in 2020 in recognition that interacting with the public road network remains a significant risk for ESB and its employees.

COMMUNITY ENGAGEMENT

SOCIAL PURPOSE IN ESB

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 in every walk of life.

COVID-19-RESPONSE KINDNESS MATTERS

COVID-19 has had a profound impact on communities across Ireland throughout 2020. In response, ESB launched "Kindness Matters" a series of initiatives helping ESB to respond in a meaningful way through employee volunteering, financial supports and payroll giving. Through this volunteering initiative, ESB staff, with local manager approval could take up to 7.5 hours a week to volunteer with a charity, voluntary organisation or club in their community specifically assisting people affected by COVID-19. A number of teams took time to volunteer with Age Action to deliver training to older members of the community to maintain contact with family and friends using online tools such as Skype, Zoom and WhatsApp.

For ESB staff with specialist medical qualifications required by the HSE or NHS, plans were put in place to release skilled colleagues for up to three months if needed.

SUPPORTING VULNERABLE CUSTOMERS

In December 2020, Electric Ireland announced that it would credit the bills of approximately ten thousand of its **registered** vulnerable customers with one-hundred-euro credit each. This was to help those in need during the Covid-19 pandemic and was another customer commitment as part of Electric Ireland's **Brighter Together Energy Programme** launched earlier in 2020.

In addition to this support for registered vulnerable customers, Electric Ireland announced the extension of its disconnection moratorium which commenced on October 22nd, 2020 and which runs until June 30th 2021. This applies to Electric Ireland's 1.1 million residential customers, but also to business customers, thereby giving some peace of mind to all of those who may experience financial hardship and uncertainty during the winter season.

Marguerite Sayers, Executive Director, Electric Ireland commented; Electric Ireland engages with all residential customers who experience payment difficulty in line with the voluntary Industry Energy Engage Code and offers fuel poor customers who sign up to the Household Budget Scheme or Industry Solution Prepayment Meter a 5% discount. Electric Ireland also works closely with vital organisations such as MABS (the Irish Money Advice and Budgeting Service), and SVP (Society of St. Vincent de Paul) to help individual customers who run into trouble paying their bills.

Electric Ireland have also supported the Young St. Vincent de Paul's National Youth Development programme since 2013 and have given a financial donation to SVP at Christmas time for the last number of years. Finally, for those homes that may experience fuel poverty, Electric Ireland's dedicated Energy Saving Scheme has made €1.1m available in 2020 to support community programs aimed at improving the energy efficiency of homes at risk of energy poverty, so these customers can also be part of Ireland's transition to a low carbon future.

SPONSORSHIP

ESB Group manages an active sponsorship portfolio including the following:

- Promoting young people in sport through the Electric Ireland GAA All-Ireland minor championship and Higher Education Championship
- Proud supporter and sponsor to the Pieta House Darkness into Light annual event.
- Supporting the arts through sponsorships of organisations including Feis Ceoil, the National Gallery of Ireland, Abbey Theatre, and Business to Arts.
- Supporting the development of skills in STEAM to empower Ireland's young people to reach their potential and power their collective brighter future through partnerships with TechSpace, Science Blast, Cool Planet, Generation Apprentice competition, University of Limerick and Engineers Ireland. These programmes provide opportunities for young people to use digital media and STEAM to be creators and inventors of the future.

Through partnership with organisations such as RDS (ESB Science Blast), Camara Education Ireland (TechSpace and ESB Creative TechFest) and Cool Planet Experience among others, the aim is to support children to develop the skills they need to thrive in 21st century society, helping them not only to become creative and innovative problem solvers, but also active and engaged citizens, capable of making informed choices to tackle climate change and other global challenges.

ESB SCIENCE BLAST

ESB Science Blast, delivered by the RDS, empowers primary school children, from 3rd to 6th class, to work together as a class to investigate the science behind a question that interests them, before presenting their findings at one of the three showcase events in Dublin, Limerick or Belfast.

- Over 12,000 children from primary schools across the country participated in the Dublin event in the RDS in March 2020, with project entries increasing from 274 (2019) to 504 (2020). The event also increased from two to four days, including the first ever Gaelscoileanna Day, with 24% of all Gaelscoileanna in Ireland participating in the all Irish event showcase.
- Over 150 staff across ESB Group supported the event as volunteers or judges.
- The Limerick and Belfast events, scheduled for May and June respectively, were unfortunately cancelled due to COVID-19.

WIND FARM COMMUNITY FUND

ESB's subsidiary wind farm companies operate in the Republic of Ireland (ROI), Northern Ireland (NI) and Great Britain (GB) and its Wind Farm Community Fund makes €1million 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.

Over the past seven years, ESB, through its subsidiary companies, has invested in excess of €6.2million in support of over 900 community-led projects completed across our operational portfolio of 25 wind farms. The funds, which open on an annual basis for the lifetime of each wind farm, are made available to local community and voluntary organisations who wish to complete a project within one/any of our broad themes: - education and skills - health, safety and wellbeing - environment and habitat conservation - energy efficiency and sustainability - culture and heritage - recreation, sport and social inclusion." In early 2020 a special COVID-19 emergency fund amounting to €238,000 was distributed by ESB across all of ESB's operating wind farms across the island of Ireland and the UK, aimed at delivering targeted services and support to the most vulnerable in our wind farm communities during the COVID-19 pandemic.

ENERGY FOR GENERATIONS FUND

ESB's Energy for Generations Fund sees over €1 million distributed to charities fighting homelessness, preventing suicide and enabling access to Science Technology Engineering Arts and Maths (STEAM) education and included funding partnerships with TU Dublin Foundation for the Access to Apprenticeship programme, Aware for their Life Skills for Schools initiative to promote mental health awareness in secondary schools throughout Ireland and Camara Ireland for the TechSpace initiative, building the capacity of youth organisations to run creative STEAM education programmes. In response to COVID-19, the ESB Energy for Generations Fund received an additional €250,000 to help organisations respond to the impact of COVID-19 on their operations such as the purchase of personal protection equipment (PPE) or by moving training courses online. The ESB Energy for Generations Fund also promotes employee volunteering. All ESB employees who volunteer 20 hours with a charity can request that ESB donates €250 to that organisation. In 2020, €9,750 was donated through the Fund to a range of charities including St. Vincent de Paul, Blood Bikes East and the RNLI. In total, the Fund supported 87 different projects throughout the island of Ireland in 2020.

EMPLOYEE VOLUNTEERING

Prior to widespread COVID-19 restrictions, ESB employee volunteers participated in Time to Read and Time to Count in partnerships with Business in the Community (BITC), to help improve literacy and numeracy initiatives in 8 primary schools throughout Ireland. ESB volunteers also introduced transition year pupils in 5 secondary schools to the world of work through BITC's Skills@Work work experience programme.

Over 140 staff from across ESB Group participated in ESB Science Blast at the RDS in March 2020 supporting the event either as project judges or staff volunteers facilitating the Generation Tomorrow interactive exhibition space, and supporting the RDS team across a variety of roles.

With a nationwide move to online learning following school closures in March, the concept of a digital divide became more apparent, raising concerns for students who did not have access to technology for home studies. ESB, in partnership with Camara Education Ireland and Trinity Access Programme launched the Tech2Student campaign for homes and businesses to donate disused laptops. ESB donated €100,000 to support the scheme and encouraged its staff to volunteer to collect and distribute more than 1,300 donated and purchased laptops.

	2020 €	2019 €	2018 €
Energy for Generations	1,251,309	986,078	1,158,547
Employee Volunteering	9,750	25,000	25,000
Wind Farm Community Fund	1,000,000	1,000,000	1,100,000
Electric Aid	275,000	275,000	250,000

Electric Aid
Power for Life

In total, ElectricAid funded 122 projects across 31 different countries with €1,065,240, of which €262,372 funded 35 projects that responded directly to COVID-19. A copy of the ElectricAid Annual Report is available from the ElectricAid website www.electricaid.ie

Electric Aid supports Disability- Inclusive Programme in Ethiopia

INTERNATIONAL CSR

ESB is a corporate partner of ElectricAid, a charity established by the staff of ESB in 1987. ElectricAid funds aid and development projects worldwide with all projects linked directly to one or more of the United Nations Sustainable Development Goals. Today, ElectricAid enjoys the support of 2,500 donors (both serving and retired staff) with donations matched by ESB on a 2:3 ratio to a ceiling of €275,000 annually. In 2020 ElectricAid responded with emergency funding for the East Africa Locust crisis (€15,000) and the devastating explosion in Beirut Harbour (€15,000). While all aspects of daily life here in Ireland have been affected, COVID-19 knows no borders. Handwashing and social distancing are working in Ireland but many people in the developing world are living in totally overcrowded settings, without access to clean water or hygiene materials and many countries do not have the healthcare infrastructure needed to combat COVID-19. Earlier this year, ElectricAid launched an emergency appeal to staff and pensioners who responded with €22,500 in donations, further matched by ESB with €25,000. In 2020 ElectricAid has funded overseas projects responding to COVID-19 in Ethiopia, India, Kenya, Malawi, Niger and Tanzania with trusted partners such as Brighter Communities Worldwide, Children in Crossfire, the Edith Wilkins Street Children Foundation, GOAL, Self Help Africa, and The Hope Foundation. All are working to protect some of the world's most vulnerable communities in meaningful ways through funding hygiene and sanitation supplies, health awareness campaigns and equipment for community health centres to meet the challenges of COVID-19.

CUSTOMER ACCESS TO A CLEAN, SECURE AND AFFORDABLE ELECTRICITY SUPPLY

CONNECTIONS TO THE NETWORK

Electricity plays a key role in keeping our homes and businesses running smoothly. It enables better health care, education, communications and transport and many of the modern day comforts that we often take for granted. ESB Group operates across the full electricity system as a generator, network asset owner and distribution system operator and electricity supplier. As ESB delivers on its Brighter Future ambition to lead the transition to a low carbon energy future, the role of and reliance on electricity will move even more centre stage.

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.

Republic of Ireland	2020	2019	2018
Residential	2,099,630	2,099,630	2,057,339
Small Business	185,193	185,193	184,621
Medium Business[1]	117,425	117,425	92,074
Large Energy User (distribution connected)[2]	1,894	1,894	1,779
Transmission connected	20	20	18
Transmission connected with embedded generation	88	88	60
New Connections	30,206	30,206	26,954
Northern Ireland			
Total Customer connections	890,003	890,003	881,492
Residential	92.60%	92.60%	92.65%
Commercial & Industrial	7.40%	7.40%	7.35%

Notes:

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

[1] Includes embedded generation

[2] Includes embedded generation and public lighting

Over 229,000kms of electricity network connect electricity consumers to the generation sources across the island, with a growing percentage of total electricity generation coming from renewables. In 2020, over 36% of electricity came from renewable sources.

MANAGING INTERRUPTIONS TO SUPPLY

Customer Interruptions (CI) represents the number of interruptions greater than 3 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	2020	2019	2018
ESB Networks	95	144	148
NIE Networks	75	83	94

Notes:

The average duration of interruptions (planned and fault) for all customers during the year

LENGTH OF ABOVE AND UNDERGROUND TRANSMISSION AND DISTRIBUTION (EU4)

Distribution Network	2020 (km)	2019 (km)	2018 (km)
OHL LV (<10 kV) 1	c.61,000	c.40,000	c.39,000
OHL MV (10 kV, 20 kV, 38 kV, 110 kV)	c.90,000	c.90,000	c.89,500
Underground LV (< 10 kV)	c. 14,500	c.14,500	c.14,000
Underground MV (10 kV, 20 kV, 38 kV, 110 kV)	c.11,500	c.11,500	c.11,500
NIE Networks (length in kms)			
Distribution	47,000 (34% underground)	47,000 (34% underground)	47,000 (34% underground)
Transmission	2,200 (5% underground)	2,200 (5% underground)	2,200 (5% underground)

Note 1:

The values reported in 2019 and 2018 did not take account of approx. 21,000km of LV OHL which had not been captured in the GIS system

DISCONNECTIONS

Electric Ireland is a signatory of the Energy Engage Code, a voluntary code where energy suppliers pledge to ensure that they will take a number of actions to ensure that customers in arrears and/or at risk of disconnection, remain connected to their energy supply. During 2020, 85,047 payment plans were set up to facilitate customers facing payment difficulties, as well as a disconnection moratorium, which operated from October 2020 to the end of June 2021.

Disconnections (Republic of Ireland)	2020	2019	2018
Number of Disconnections	171	2000	2200
Disconnection Rate (per 10,000 customers)	0.69	<20	20
Vacant Disconnections	Note 1	35%	35%
Reconnection within 48hrs (non vacant)	100%	100%	100%

Note 1:

1471 properties disconnected under the Vacant Premises Process

CUSTOMER COMPLAINTS

Complaints reporting and resolution processes are explained **here**

Customer Minutes Lost	2020	2019	2018
ESB Networks	4,093	3,761	3,036
NIE Networks *	2	2	1
Electric Ireland	1,790	1,930	1,948

*Complaints classified as stage 2 to Consumer Council NI

CUSTOMER PRIVACY

Cybersecurity threats continue to evolve at a rapid pace globally. All electricity users rely on ESB as an essential service provider of secure and reliable electricity. 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.

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 data is considered to be data that identifies or concerns individuals, also referred to 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.

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

GOVERNANCE

ESB, in pursuit of its governance objectives, complies with the State Code. ESB also complies on a voluntary basis (insofar as is reasonably applicable, given that ESB is a statutory corporation) with the UK Code and with the Irish Corporate Governance Annex. Exceptions to compliance with the UK Code are outlined in ESB's Annual Report. In this way, ESB adheres insofar as is reasonably applicable to listed company governance standards. ESB has put in place the 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 must satisfy itself that that ESB has complied with the requirements of the State Code. A report is also issued annually to the Minister for the Environment, Climate and Communications, which confirms compliance with the requirements of the State Code. 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 in the annual report and through this sustainability report. ESB has adopted a Code of Ethics "Our Code", which sets out its approach to responsible and ethical business behaviour, underpinned by its 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. "Our Code" is published on the ESB website. "Our Code" is grounded in ESB's values and Group policies.

ANTI CORRUPTION

There were no reported incidents of corruption or termination of contracts due to corruption for employees or contractors during 2020 (GRI 205-3).

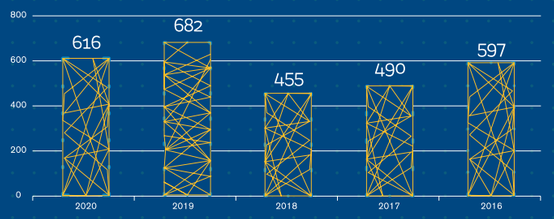
INTRODUCTION

In the context of a challenging operating environment brought about by the global COVID-19 pandemic, ESB delivered an operating profit before exceptional items of €616 million, a decrease of €66 million on 2019. Electricity demand remained resilient, with an overall year-on-year reduction of less than 1% in Ireland, as increased residential demand offset falls in the business sector. While the initial "lockdown" period resulted in a peak demand reduction of 15% during April, it recovered with the easing of restrictions and the reduction during the second lockdown later in the year was smaller, peaking at 5%, and for a shorter duration.

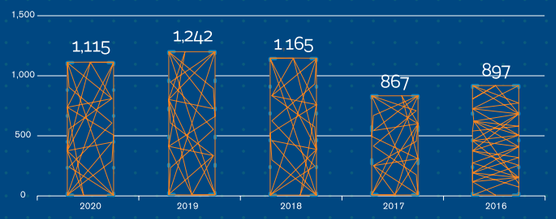
On an overall basis, COVID-19 had c.€15 million negative impact on our operating profit primarily due to an increased provision for bad debts in Customer Solutions. Our 2020 performance reflects good progress across our main business units:

- Despite the impact that COVID-19 had on construction activities, our two networks businesses delivered significant progress on their regulated capital and maintenance programmes to ensure a safe and reliable network. In addition, ESB Networks concluded its regulatory Price Review 5 (PR5) contract with the Commission for the Regulation of Utilities (CRU) covering 2021 to 2025. PR5 includes a significantly increased capital programme which will support the continued transition to a low carbon economy.
- ESB's Generation and Trading business, further developed its renewable portfolio. The 114 MW Grousemount wind farm in Co. Kerry reached commercial operation and a 50% stake was acquired in the 1 GW Inch Cape offshore wind farm (UK) project.
- ESB's Customer Solutions business continued we continued to create value for our customers, launching a 100% green tariff and provided supports to our vulnerable customers who were impacted by the COVID-19 pandemic.

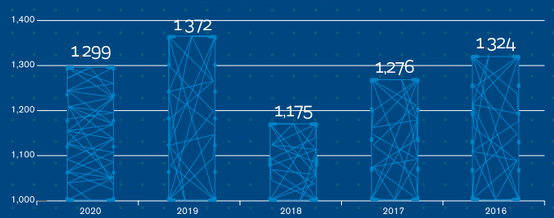
OPERATING PROFIT BEFORE EXCEPTIONAL ITEMS[1]



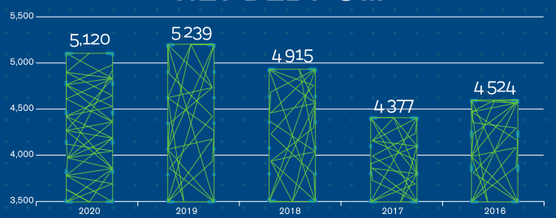
CAPITAL EXPENDITURE[2] €



EBITDA €



NET DEBT[3]



[1] Before the following exceptional items: 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) 2017: impairment charge (€276 million)

[2] Capex in 2016 and 2017 is net of capital contributions

[3] 2020 includes Lease liabilities €125 million 2019: €132 million

ECONOMIC DISCLOSURES

GREEN FINANCE

ESB demonstrated its commitment to financing projects that will support our Brighter Future Strategy by issuing Irelands first corporate public Green Bond in June 2019 as well as becoming the first Irish utility to have a syndicated sustainability linked loan, established in 2020.

ESB considers that Green Bonds are an effective tool to channel liquidity into assets which facilitate the transition to low carbon electricity generation and reduce greenhouse gas emissions and therefore support our Brighter Future Strategy.

In 2020, ESB tapped its 2019 Green Bond, Ireland's first corporate public Green Bond, by €200m. ESB also signed a new €1.4bn five- year sustainability linked loan, further demonstrating ESB's commitment to leading the transition to a low-carbon future while enabling banks and investors to direct increasing levels of capital into carbon positive investments.

We believe that Green Bonds offer transparency to investors who wish to allocate funds to green assets, and in doing so support ESB's transition to reliable, affordable, low carbon energy as well as adding a further diversity to ESB's investor base.

Details of ESB's first **Green bond** can be found here.

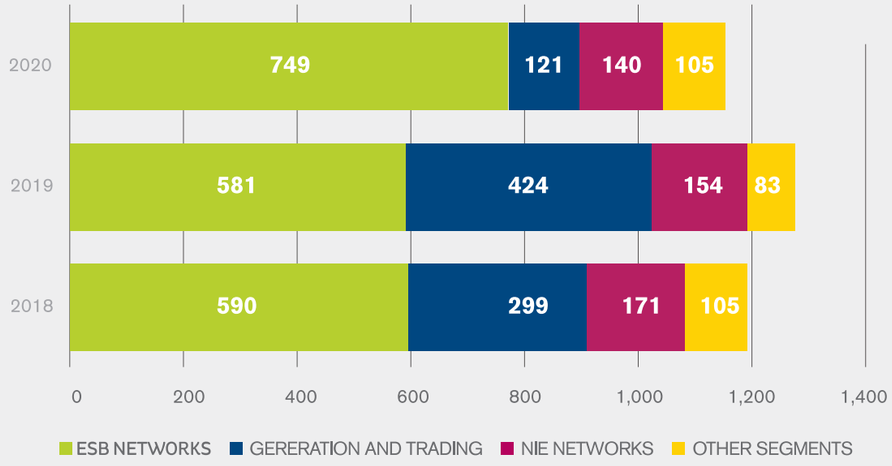
ESB Green Report 2020/21

ESB's Green Bond Report for 2020/21 is included in the appendices of this report or can be viewed on ESB's website.

INVESTING FOR THE FUTURE

ESB invested €1,115 million of capital expenditure in 2020, a decrease of €127 million on 2019. In 2020, €121m was invested in Generation and Trading activities, including the acquisition of 50% of the 1 GW Inch Cape (UK) offshore wind farm development project in 2020. Expenditure in 2019 included the acquisition of the Neart na Gaoithe offshore windfarm and the construction of the Grousemount onshore windfarm (which was commissioned in 2020). Despite the initial restrictions on construction activities due to the COVID-19 pandemic, ESB Networks and NIE Networks continued to invest in the network infrastructure in both ROI and NI in line with their agreed regulatory programmes. Capital Expenditure in ESB Networks includes the increased spend on the SMART metering project and the increase relating to the ARO provision for creosote poles. Capital investment of €105 million in other segments includes various group projects such as the re-development of the Fitzwilliam Street Head Office and significant upgrade of IT systems.

CAPITAL EXPENDITURE



USING OUR PROFITS IN A SUSTAINABLE WAY

INVESTMENT
Investing over €1 billion per annum to facilitate a more sustainable energy environment as well as supporting economic growth through providing, safe and reliable electricity supply to homes and businesses

€1 BILLION

TAXES
Annual payments across various headings

OVER €470 MILLION

SUPPORTING COMMUNITIES
Seek to empower and enrich the lives of individuals and communities through the corporate social responsibility programme

OVER €2 MILLION

EMPLOYMENT
Making a long-term commitment to employees, giving them the time to build their skills and the opportunity to advance their careers. Supporting jobs through contractor and supplier service contracts

41 NETWORK TECHNICIANS EMPLOYED FROM APPRENTICESHIP PROGRAMME

RETURN TO THE SHAREHOLDER
ESB targets an annual dividend of 40% of adjusted profits after tax

€81 MILLION FOR 2020

DEBT INVESTORS
Annual interest and repayments

€647 MILLION

RESIDENTIAL CUSTOMER SATISFACTION
Developing new and innovative products and services for customers aimed at improving customer experience and empowerment

83%

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.

PENSION OBLIGATIONS

ESB Group operates a number of pension Schemes for staff in both the Republic of Ireland, Northern Ireland and the United Kingdom (UK).

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 the majority of 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 registered as a Defined Benefit Scheme 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. Benefits payable are determined by reference to a Career Average Revalued Earnings (CARE) pension model for benefits earned after 1 January 2012 (previously based on final salary). ESB has no legal obligation to increase contributions to maintain benefits in the event of a deficit and ESB's rate of contribution cannot be altered without the agreement of ESB and approval of the Minister for Communications, Climate Action and Environment. Should an actuarial deficit arise in the future, ESB is obliged under the Scheme 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.

FM UNITED KINGDOM STAKEHOLDER SCHEME

ESB also operates a stakeholder 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 and / or survivor's pension. The assets of this Scheme are held in individual stakeholder accounts managed by Legal & General Assurance Society Limited.

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. 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. The assets of the NIE Networks Scheme are held under trust and invested by the Trustees on the advice of professional investment managers.

Full details on ESB Group's Pension Scheme Obligations are available in Note 23 to the **2020 Annual report and Financial Statements**.

ESB'S SUPPLY CHAIN

ESB's supply chain is key to our business success and delivery of the Group's Brighter Future Strategy.

ESB's procurement strategy is aligned to the delivery of these business objectives and 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.

It is custom and practice in ESB to conduct tender evaluations based on the total lifetime cost (LCC) basis, and ESB is increasingly using sophisticated LCC models to capture whole life costs when assessing major projects and equipment purchases.

Tailored LCC's are used to evaluate the cost and efficiency of all significant tenders, including 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.

PROPORTION OF SPENDING ON LOCAL SUPPLIERS

Location Name	2020	2019	2018
UK, NI & Ireland	87%	88%	92%
EU	8%	9%	5%
Rest of World (GRI 204-1)	5%	3%	3%

ESB expects 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 (GRI308-1)
- 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**.

ESB's supply chain supports its business operations across the value chain in generation, networks, and supply - including its international activities. With an annual procurement spend (excluding fuel) of approximately €1bn, we rely on complex and diverse supply chains to provide the services necessary to meet our customer's needs. Of this spend approximately 73% is procured from suppliers within the Republic of Ireland and Northern Ireland, 14% from the UK, and 8% from other EU member states (GRI204-1). We currently have approximately 4200 Tier 1 suppliers, ranging from local SME's and micro companies to large multi-national corporations / contractors, with whom we placed approx. 37,000 purchase orders in 2020.

ESB'S SUPPLY CHAIN CONTINUED

Contracts range from standard supply-type arrangements for consumable items, such as tools and equipment to more complex service/works contracts for renewable generation, smart metering installation, EV Infrastructure and chargers, networks substation and overhead/underground line construction and refurbishment, customer billing and metering services and financial and 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.

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. During 2020 ESB commenced a tender process seeking expressions of interest from specialist 3rd parties to provide an insights-based risk assessment and accompanying audit service on the potential for modern slavery in ESB's supply chains. During Q1 2020, BSI (British Standards Institute) ESB's incumbent service provider conducted audits of three suppliers in Vietnam, Sri Lanka and Brazil and no incidents of modern slavery / forced labour were found. In addition, over one hundred Contractor Employment Standards Audits were conducted on ESB managed sites throughout the Republic of Ireland in 2020 (GRI409-1).

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 sustainability remit in 2020, included:

- The issue of tenders for a Synchronous Compensator in Moneypoint Generating Station and four Battery Energy Storage Projects (Aghada, Inchicore, South Wall and Poolbeg) to support the increasing levels of variable renewable generation on the system
- Continued investment in both on-shore/off-shore wind and solar generation in both ROI and UK
- Contracts to construct and provide an innovative energy solution for a world-first Stg £120m Greenhouse Project in the UK (an Irish National Procurement Awards winner in 2020).

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 is 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. In recent years ESB has significantly increased the number of PDF invoices received from suppliers and this figure is up from 72% in 2019 to 89% of all invoices being received in PDF format in 2020. The key benefits for suppliers for submitting invoices in this way, especially during COVID-19, 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 much faster. This also has a positive environmental impact due to the reduction in the submission of paper-based invoices, envelopes and associated postal costs.

MODERN SLAVERY

As an organisation that operates in the United Kingdom, ESB fully supports the aims of the UK Modern Slavery Act 2015 and has a zero-tolerance approach to modern slavery. 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

Following on from its previous statements on the prevention of slavery and human trafficking, ESB has, during 2020, taken the following steps to prevent acts of modern slavery from occurring within its supply chains:

- Published a Contract Notice in the Official Journal of the European Union in Q1 2020 seeking expressions of interest from suitably qualified and experienced 3rd parties to enter in a framework agreement with ESB to:
  a) Undertake an insights-based risk assessment of the potential for modern slavery in ESB's supply chain, and
  b) As a separate lot to conduct on-site audits of any high-risk suppliers identified, as a consequence of the above risk assessment.
- Issued a Request for Tender for these services and the corresponding framework agreement is expected to be awarded in Q.2 2021. This framework agreement when awarded will build on the in-house risk assessments conducted by ESB Procurement in 2017, 2018 and 2019 (when ESB's vendors with a cumulative annual spend of > €250k were assessed for the risk of modern slavery in their supply chains based on their industry sector and geographical location).
- Instructed our current 3rd party auditor BSI (British Standards Institute) to undertake three on-site supplier audits. These audits took place in Vietnam, Sri Lanka and Brazil during the period February 2020 and early March 2020, and no incidents of modern slavery or forced labour were found.
- These audits were supplemented by over one hundred Contractor Employment Standards Audits conducted on ESB managed sites throughout the Republic of Ireland in 2020, as part of ESB's on-going Contractor Employment Standards Auditing Framework.
- Over the course of 2020 we continued to engage with our major coal suppliers to ensure that they are aware of ESB's commitment to the Bettercoal organisation, including ESB's commitment to implementing the Bettercoal Code and making use of the Bettercoal tools in its due diligence processes in the coal supply chain and to ensure that our suppliers acknowledge the Bettercoal Code as a standard for continuous improvement in ESB's coal supply chain.
- We also ensured that all tenderers and suppliers were aware of and signed-up to ESB's 3rd Party Requirements Document, which sets clear contractual obligations in relation to ESB's zero tolerance-based approach to modern slavery in our supply chains, and
- We continued to provide bespoke training on the risks and impacts of modern slavery to ESB procurement staff. In addition to this bespoke training over 175 staff have viewed ESB's on-line training module on modern slavery since its launch in 2018.

The specific work outlined above is complemented by a broader reinforcement of ethical business practices across the wider group through the introduction of an updated version of ESB's "Our Code". This document provides clear guidance to employees on any ethical issues they may encounter when carrying out their work, including how to report any suspected wrongdoing. 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.**

During the course of 2021, ESB plans to develop a Human Rights policy that reinforces "Our Code" and references ESB's range of policies in this area including: Health and Safety Policy, Environment and Sustainability Policy, Cultural Diversity Policy, ESB Equal Opportunities and Diversity Code of Practice, Anti-Bribery Policy, Corruption and Fraud Policy, Whistleblowing and Protected Disclosures Policy and Modern Slavery Policy.

Appendices

CHAPTER 5

INDEPENDENT GRI STANDARDS OPTION CHECK

This final design draft of ESB's Sustainability Report is currently under external review by DNV.

ESB does not anticipate any material changes to the data reported, however, once the review cycle is completed , the final version including all amendment requests, final GRI cross reference table and DNV Option Check statement will be published on the ESB website.

Many thanks for your understanding.

ESB ENVIRONMENT & SUSTAINABILITY
30TH JUNE 2021

GRI STANDARDS CROSS REFERENCING TABLE

General Standard Disclosure			
Reference	**Dislosure**	**Location**	**Notes on Disclosure**

General Standard Disclosure			
Reference	Dislosure	Location	Notes on Disclosure

General Standard Disclosure			
Reference	Dislosure	Location	Notes on Disclosure

General Standard Disclosure			
Reference	Dislosure	Location	Notes on Disclosure

General Standard Disclosure			
Reference	Dislosure	Location	Notes on Disclosure

ESB GREEN BOND 2019: ALLOCATION AND IMPACT REPORT 2020/21

BRIGHTER TOGETHER

ESB is making a stand for Ireland's future, a future powered by clean, sustainable electricity. We are committed to leading the transition to a reliable, affordable, low-carbon energy future, a future that protects our customers and the economy by maintaining the security and affordability of energy. We are investing and innovating across our business to make this a reality. We are developing new renewable sources of generation and flexible, low-carbon backup generation. We are also reinforcing and enhancing our network to accommodate unprecedented volumes of distributed energy resources and developing customer led solutions that will empower everyone in society to live cleaner, more sustainable lives, powered by electricity.

While 2020 was of course a year like no other and ESB's primary focus for 2020 in the face of the COVID-19 related challenges was on the provision of safe, secure and reliable electricity for all, we were still guided by our purpose to create a brighter future by leading the transition to secure, affordable, low-carbon energy. We made clear progress in delivering strategic initiatives, from growing our position in renewable generation through investments in the 1GW Inch Cape (UK) offshore wind farm project and commissioning Grousemount (ROI) wind farm, Ireland's largest onshore wind farm, to undertaking major network upgrades and installing over 224, 000 smart meters. The closure of ESB's peat stations in the Irish Midlands in December was both a milestone in the delivery of our strategy and the end of an era for generations of employees and communities who contributed to Ireland's energy security over seven decades. Our strategic focus is now firmly fixed on low carbon and renewable generation and we are well positioned to support the green agenda.

ESB continues to recognise the importance of green finance in today's financial markets. In 2020, ESB carried out a €200m tap of its 2019 Green Bond, Ireland's first corporate public Green Bond.

ESB also signed a new €1.4bn five- year sustainability linked loan, further demonstrating ESB's commitment to leading the transition to a low-carbon future while enabling banks and investors to direct increasing levels of capital into carbon positive investments.

ESB GREEN BOND

ESB, through its financing entity, ESB Finance DAC, issued a Green Bond in June 2019. This bond was subsequently tapped in July 2020, increasing the bond size by €200m to €700m. The net proceeds of both issuances which amount to €698m, were used to finance eligible projects in the period since issuance in accordance with the ESB Green Bond Framework, published in May 2019. The Framework is aligned to the Green Bond Principles, (2018).

Issuer:	ESB Finance DAC
Currency	EUR
ISIN	XS2009861480
Bond Value:	€500,000,000
Pricing Date:	4th June 2019
Settlement Date	11th June 2019
Tap Value:	€200,000,000
Pricing Date:	15th July 2020
Settlement Date:	22nd July 2020
Maturity Date	11th June 2030
Coupon	1.125%
Proceeds to allocate	€697,950,000

USE OF PROCEEDS

The net proceeds of the green bond, €698m, were used to finance eligible projects according to the 'ESB Green Bond Framework' and a summary is set out below:

ELIGIBLE GREEN PROJECT CATEGORY	PROJECTS	SUMMARY OF ALLOCATED FUNDING	RELEVANT SUSTAINABLE DEVELOPMENT GOALS
Renewable Energy	**Renewable wind farms**	€581m	7, 9, 13
Energy Efficiency	**Smart Meter Roll Out**	€50m	9, 11
Clean Transportation	**Infrastructure to facilitate Electric Vehicle penetration**	€6.2m	11
Green Buildings	**The Redevelopment of ESB'S Head Office, Lower Fitzwilliam Street, Dublin 2** **A Green Certified Sustainable Building**	€60.8m	11

EVALUATION AND SELECTION

A dedicated Green Finance Committee was created to ensure compliance with ESB's Green Bond Framework and oversee the entire issuance and allocation process. The Committee is composed of the Head of ESB's Treasury, Sustainability and Strategy departments.

The Committee reviewed proposed projects with respect to the eligibility criteria set out in ESB's Green Bond Framework to ensure each project showed a clear, positive and measurable environmental impact. The Committee also ensured that each selection was aligned with ESB's strategic intent of meeting 'customer energy needs by bringing the best of its capabilities together to deliver innovative and value-driven solutions for a low-carbon world'.

A project register and internal controls have been put in place to monitor and track the allocation of proceeds to selected projects. An amount equal to, or greater than, the unallocated funds raised, were held by the Group as cash.

During the life of the Green Bond (11 years from 11th June 2019), should a selected project be sold, cease to fulfil eligibility criteria or otherwise be determined to be incompatible with the environmental objectives of the Green Bond Framework, those allocated proceeds will be reallocated to a different project which complies with the eligibility criteria as soon as is reasonably possible.

ALLOCATION OF GREEN BOND FUNDING AND IMPACTS

PROJECT NAME	ALLOCATED SPEND (€'M)	STATUS	GENERATION CAPACITY (MW)	QUALIFYING GENERATION CAPACITY (MW)	QUALIFYING ENERGY GENERATED OR FORECAST (MWh)	QUALIFYING TONNES OF CO_2 EQUIVALENT AVOIDED	NON – WINDFARM PROJECT IMPACTS METRICS
Neart na Gaoithe Wind Farm (Offshore)	223.2	In Construction	224 MW	206 MW	853,878	154,552	
Galloper Wind Farm (Offshore)	130.9	Operational	44 MW	44 MW	197,637	35,772	
Grousemount Wind Farm (Offshore)	154.7	Operational	123 MW	95 MW	215,316	69,762	
Cappawhite Wind Farm	16.2	Operational	57 MW	11 MW	33,898	10,983	
Castlepook Wind Farm	56.0	Operational	35 MW	30 MW	76,857	24,902	
Smart Meter Roll-Out	50.0	Ongoing Project					More than 239,000 total new smart meters were installed on overall project to end December 2020. This was partially funded by ESB's Green Bond
Project Fitzwilliam – ESB's Head Office Redevelopment	60.8	In Construction					Designed and under construction in line with "BREEAM Excellent" Certified Building Standards
Electric Vehicle	6.2	Ongoing Project					138 Fast Chargers 118 AC Charges Installed over period of spend
TOTAL	698.0		483MW	386MW	1,377,586	295,971	

Notes on Reporting Criteria:

- All spend was incurred between 1 July 2017 and 31 March 2021.
- The equivalent carbon emissions 'displaced' for wind farms are calculated using the most recent 'carbon intensity' of the relevant national grid and the qualifying MWh of renewables generation. At the time of preparation these were:

	CO_2 intensity, Kg/kWh	Source
RoI	0.324	SEAI, 2019 carbon intensity of electricity
UK	0.181	National Grid, 2020 average carbon intensity of electricity

- Generation capacity represents the current or forecast capacity of the windfarm apportioned based on ESB's equity stake in the project.
- In respect of offshore wind farms, impact metrics are calculated based on ESB's equity stake in the wind farm. This is proportioned further when the allocated spend does not represent ESB's full equity investment in the wind farm.
- All onshore wind farms are fully owned and funded by ESB. Impact metrics are apportioned based on the proportion of allocated proceeds to total project capital spend.
- Forecast impact metrics are included for those wind farms which have not had a full year's operation.
- ESB Networks has installed over 239,000 smart meters as at the end December 2020 as part of its Smart Meter Programme. The €50m allocated to the Green Bond represents only a portion of the spend to date on the project. The full programme is expected to cost approximately €1.2bn and involve the roll out of over 2 million meters and a significant level of IT spend. It will result in significant benefits as documented by the Commission for Regulation of Utilities in its cost benefit analysis (see www.cru.ie) of the programme. This includes a change in the patterns of electricity usage by residential households, most notably a reduction in overall energy consumption of c. 2.86% for standard customers and SMEs and a movement of demand away from peak times (over 8%).
- In relation to Electric Vehicle Infrastructure, the spend was incurred in the period 1 July 2017 to 31 December 2019, contributions of €0.3m were received from other funding sources in relation to the charge points (138 Fast Chargers and 118 AC Charges) installed in the period July 2017 to December 2019.

NEART NA GAOITHE WIND FARM

Neart na Gaoithe is a wind farm currently under development off the East Coast of Scotland. In late 2019 ESB, bought a 50% stake in the project from EDF Renewables, ESB's joint venture partner in the development. The wind farm is expected to be approximately 448MW in capacity, enough to power around 375,000 Scottish homes each year. Construction began in 2020 with commissioning to follow in 2023.

GALLOPER WIND FARM

Galloper Wind Farm is a 353MW development, featuring 56 Siemens-Gamesa turbines, 30 km off the coast of Suffolk in the United Kingdom. Galloper is expected to generate, on average each year, enough green power to meet the annual electricity needs of more than 380,000 households. Galloper is owned by RWE Renewables UK (previously Innogy SE (25%), Siemens Financial Services (25%), Sumitomo Corp (12.5%), ESB (12.5%) & a consortium managed by Green Investment Group and Macquarie Infrastructure and Real Assets (25%).

GROUSEMOUNT WIND FARM

The site is located in south east Kerry in the Republic of Ireland. Grousemount Wind Farm began construction in the summer of 2017 and was finalised in mid- 2020. The wind farm comprises 38 wind turbines, which are used to harness the natural energy of the wind to generate electricity and provide enough renewable power for approximately 70,000 homes. Turbines have maximum overall dimensions of 126 metres which will result in up to 123MW of renewable electricity being generated on site. It is ESB's largest onshore farm.

ELECTRIC VEHICLE INFRASTRUCTURE

ESB eCars builds, owns and operates electric vehicles (EV) charging networks for public use across ROI, NI and GB. This network contains over 1,100 chargers on the island of Ireland, as well as over 140 chargers in Great Britain.

CAPPAWHITE WIND FARM

Cappawhite Wind Farm is located at the southern most extent of the mountain range known as the Hollyford Hills in Tipperary in the Republic of Ireland. It was completed in 2017, features 17 turbines and a production capacity of 57MW—enough renewable electricity to power around 32,500 households each year.

CASTLEPOOK WIND FARM

Castlepook Wind Farm is located in Castlepook forest, Ballyhoura, Co.Cork, Ireland. It features 14 turbines with a total capacity of 35MW—enough renewable electricity to power around 17,000 households each year. It was initially developed by ESB as a joint venture with another partner with project finance. It is now fully owned by ESB and was refinanced using Green Bond funds.

SMART METERS

ESB Networks has completed the rollout out of Phase 1 of a National Smart Meter Programme in the Republic of Ireland. Phase 1 included a major IT investment that has enabled Suppliers offer new time of use tariffs since the end of February 2021. Over 239,000 meters installed were installed by the end of 2020. Phase 2 of the project has started that will see further IT enhancements delivered by the end of 2022. Over 2 million meters are due to be installed by 2025, over the three phases of the programme.

PROJECT FITZWILLIAM

The redevelopment of ESB's Fitzwilliam Street Head Office site in Dublin 2 in the Republic of Ireland began in June 2017 and is due to be completed in 2021, having been delayed somewhat due to COVID 19 related restrictions.The project involves the removal of the existing buildings, the retention and refurbishment of a number of protected Georgian structures and the construction of two new office blocks on site. One of these blocks, Fitzwilliam 27, is to be retained by ESB as its Head Office. The building is being designed and fitted to BREEAM Excellent Standard. BREEAM is the world's leading sustainability assessment method for master planning projects, infrastructure and buildings. It recognises and reflects the value in higher performing assets across the built environment lifecycle.

AN EXTERNAL OPINION – SUSTAINALYTICS

ESB's Green Bond Framework (May 2019) was reviewed by Sustainalytics in terms of its alignment with relevant industry standards and its robustness and credibility in the meaning of Green Bond Principles ("GBP") 2018.

ESB also engaged Sustainalytics to conduct a review confirming the green bond proceeds were allocated to projects which meet the Eligibility Criteria defined in ESB's Green Bond Framework.

A copy of the final review can be found at
https://www.esb.ie/investor-relations/green-bond

CONTACTS
If you have any further questions, comments or enquires relating to this report please contact:

ESB TREASURY:

William Young
Investor Relations and Credit Ratings Manager
00 353 1 702 6942
william.young@esb.ie

Susan McCarthy
Group Funding Manager
00 353 1 702 6822
susan.mccarthy@esb.ie

ESB SUSTAINABILITY:

Sustainability Co-ordinator
sustainability@esb.ie or brian.gray@esb.ie

Energy for generations

GLOSSARY OF TERMS

Glossary of Terms	
Abbreviated Term	**Explanation**
AA	Appropriate Assessment
AIE	Access to Information on the Environment
ARO	Asset Retirement Obligation
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
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
COP	Conference of the Parties, UN climate change conference
CRU	Commission for Regulation of Utilities
CSM	Conceptual Site Model
CSR	Corporate Social Responsibility
DAERA	Department of Environment and Rural Affairs (NI)
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

GLOSSARY OF TERMS CONTINUED

Glossary of Terms	
Abbreviated Term	**Explanation**
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
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
G99/NI	G99/NI details the requirements for the connection of generation equipment, including integration of micro generation, in parallel with public distribution networks.
H&S	Health and Safety
HSA	Health and Safety Authority
HV	High Voltage
IBEC	Irish Business and Employer Association
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

Glossary of Terms	
Abbreviated Term	**Explanation**
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
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 Climated 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