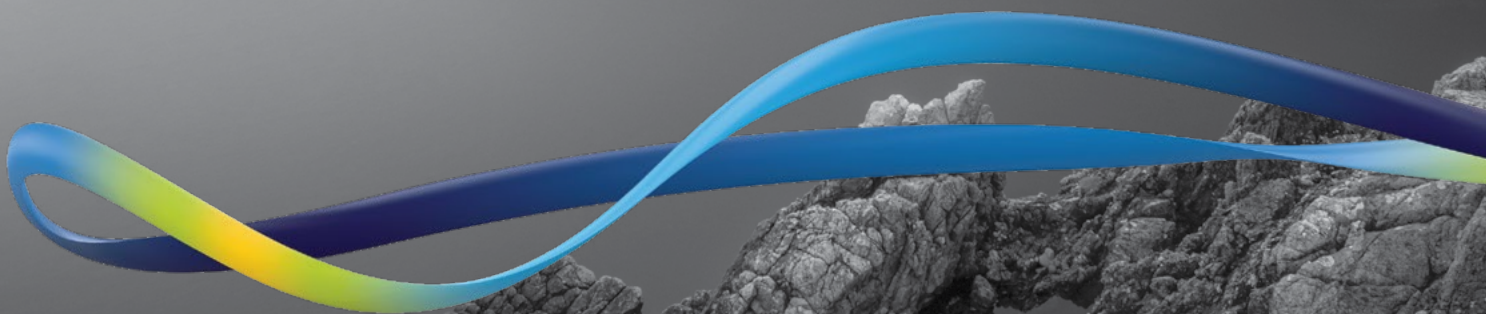


RESPONSIBLE BUSINESS REPORT

LEADING THE WAY TO
A BRIGHTER FUTURE

RESPONSIBLE BUSINESS REPORT 2018



Energy for
generations

LEADING THE WAY TO A BRIGHTER FUTURE

ESB is making a stand for Ireland's future, a future powered by clean, sustainable electricity. ESB is committed to leading the transition to a reliable, affordable, low-carbon energy future, a future that protects its customers and the economy by maintaining the security and affordability of energy. ESB is investing in low-carbon generation; it is expanding and enhancing the grid to accommodate more distributed energy resources and empowering its customers to take more control of their energy use.



THE ESB NETWORKS DINGLE PROJECT IS PREPARING THE NETWORK **FOR THE FUTURE** BY FACILITATING THE ELECTRIFICATION OF HEAT AND TRANSPORT AND DEPLOYING SMART NETWORK TECHNOLOGIES ACROSS THE PENINSULA – THEREBY **EMPOWERING CUSTOMERS** TO PLAY THEIR OWN ROLE IN A LOW-CARBON ENERGY FUTURE.

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ABOUT ESB

ESB was established in 1927 as a statutory body under the Electricity (Supply) Act 1927. With a holding of 95.4%, ESB is majority owned by the Irish Government. The remaining 4.6% 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 customers, with an expanding presence in Great Britain’s generation and supply markets. In addition, we extract further value at certain points along this chain by supplying gas and using our networks to carry fibre for telecommunications. ESB is a leading Irish utility with a regulated asset base (RAB) of approximately €9.6 billion (comprising ESB Networks €7.9 billion and NIE Networks €1.7 billion), 38% of generation in the all-island market and a significant supply business, supplying electricity and gas to approximately 1.3 million customers throughout the island of Ireland. ESB will continue to grow the scale of its generation, trading and supply businesses so that it can compete within the all-islands competitive environment. ESB is focused on providing excellent customer service and maintaining its financial strength. As at 31 December 2018, ESB Group employed over 7,800 people.

ABOUT THIS REPORT

This report is aimed at customers, investors, analysts, policy makers, the public and other stakeholders, internal and external to ESB Group. It aims to address the sustainability issues of greatest concern to these stakeholders and to our business strategy, including the transition to a low carbon future. Our reporting is guided by the principles of materiality, inclusiveness and responsiveness. We use leading standards and methodologies for measuring and reporting impacts, such as the Greenhouse Gas Protocol, CDP and the Global Reporting Initiative (GRI). Further details on GRI indicators are available in the report appendices. This report has been prepared in accordance with the GRI Standards: Core option and has been independently assessed by DNV GL against this option.

SCOPE OF REPORT

This report covers the fiscal and calendar year 2018. This report pertains to the full activities of ESB and its subsidiary companies, including NIE Networks, hereinafter referred to as ESB Group, and has been prepared in accordance with GRI Standards Sustainability Reporting Guidelines, as well as the GRI Electric Utilities Sector Supplement. The report content is based on the output from a materiality process, including both operational and strategic engagements with internal and external stakeholders. The 2018 Responsible Business Report meets our commitment to report annually on our Sustainability performance. Where scope boundaries pertain to specific material aspects of the business, this is detailed in the specific sections of the report. Readers of this report may also view the ESB Group Annual Report 2018 <https://www.esb.ie/investor-relations/result-presentations-investor-updates>. Together these reports illustrate a coherent picture of ESB Group activity, how we are embedding sustainability and how sustainability is at the core of our corporate strategy. The alignment of our activities with the principles and broad direction of the UN Sustainable Development Goals is highlighted where relevant throughout the report.

We welcome requests, comments and enquiries relating to this report and to sustainability. Please email our mailbox: sustainability@esb.ie or our Sustainability Coordinator: brian.gray@esb.ie
www.esb.ie
Twitter: @ESBGroup
LinkedIn: www.linkedin.com/company/esb
YouTube: www.youtube.com/user/ESBVideo

ESB CURRENTLY HAS OVER
1,100 PUBLIC CHARGE
POINTS ON THE ISLAND
OF IRELAND AND HAS
RECENTLY BUILT A RAPID
CHARGE POINT NETWORK IN
GREAT BRITAIN WITH OVER
60 CHARGE POINTS.



1 SECTION 1

STRATEGY & PERFORMANCE BUSINESS OVERVIEW

- 1.1 Chief Executive's Review
- 1.2 Highlights
- 1.3 ESB at a Glance
- 1.4 Business Model
- 1.5 Strategy and Progress
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1.1 CHIEF EXECUTIVE'S REVIEW



Pat O'Doherty
Chief Executive

Q 2018 saw major changes in the energy sector in Ireland, what impact did these have on ESB?

Many of the changes we saw in 2018 reflected broader trends that have emerged in recent years towards a more fragmented and competitive market, and an increased urgency in addressing climate change. We're now seeing much more international commentary on the future of the planet and it's increasingly accepted that clean electricity has a huge role to play in facilitating a low-carbon society. This is driving rapid change and presents new challenges and opportunities for ESB.

Q What is the biggest opportunity for ESB right now?

ESB's first Chief Executive, Thomas McLaughlin, talked in 1928 about electricity 'lightening human burdens, brightening human lives' and that rings very true today in the context of climate change. Electricity will be the catalyst for a low-carbon world. In ESB, we're looking in particular at heat and transport. If we can aid the electrification of these sectors, and remove carbon from the production of electricity, then electricity becomes a hugely transformative force.

Q Is ESB ready to take on such an ambitious challenge?

ESB, like many traditional utilities, is being challenged right across the value chain and we have to adapt our business to stay fit for purpose. In 2018, we carried out an organisation effectiveness review and reorganised our business to make sure that we have the right skills and structures in place to deliver on our strategy. This anticipates a future which will be much more collaborative and relationship based, and gives us the agility and flexibility to leverage our experience and capability to react quickly to change.

Pat O'Doherty reflects on developments in ESB during 2018 and outlines his vision for a transformed energy system, powered by clean electricity in an in-depth interview with journalist Bernice Barrington.

Q So what specifically is your focus?

There are three essential elements in delivering a low-carbon future. Firstly, we have to move the production of electricity from being predominantly fossil fuel-based to being low-carbon and renewable. Secondly, we need a network that can connect together new forms of generation and consumption, down to the level of industry, the consumer and the home, and thirdly, we need customers to use electricity in a way that maximises efficiency and minimises overall cost.

Q What do you mean by that?

Traditionally, power systems were designed for peaks; like in the evenings when everybody switches on their lights. We can't have that in a low-carbon and renewable future including electrified transport or heating because the costs would be prohibitive. Customers therefore have to become an integral part of the value chain; generating and storing their own electricity and moving their demand to different times of the day, i.e. when the wind blows or the sun shines and prices of electricity are lower. New technologies, both at a network and customer level, will facilitate this in a way that gives the customer much more control over when, and how, they use their energy, and the price they pay.

Q Are you sure that customers will engage in this way?

It can only happen if we truly understand and adapt to customers' needs and aspirations. In ESB, we are conducting trials and pilot initiatives to understand what will work best for customers. For example, at Electric Ireland we have been testing customers' responses to different scenarios where they might share control of their demand with their supplier in response to various price incentives. Separately, ESB Networks' Dingle Project is trying to figure out how the electricity network of the future will enable the participation and increasing involvement of the customer in a low-carbon future.

Q That sounds interesting - What specifically are you doing in Dingle?

In Dingle, we are creating an ecosystem of customers who will install a range of new technologies in their homes, such as electric vehicles, heat pumps, solar panels, battery storage and home automation. We are also putting automation devices into the network, which makes the network much smarter. In co-operation with the households and communities participating in the project, we will be understanding what happens in response to different signals and incentives, and how the network behaves under different conditions.

Q Coming back to the electrification of heat and transport, what is ESB doing to support the transition?

ESB has rolled out a fully integrated national electric vehicle charging infrastructure in the Republic of Ireland and Northern Ireland, and we are now about to undertake a significant upgrade to that network. We see that in the future, people will charge their cars predominantly at home but also at motorway and interurban charging hubs. Starting next year, we will expand and enhance the motorway charging infrastructure by installing fast charging multi-vehicle hubs. On the electrification of heat, we are working with policy makers to ensure that heat pumps are part of a wider vision for a decarbonised future.

Q So how far away is this future – is this something customers will see soon?

We are already well into this journey. We are currently the largest supplier of renewable energy in Ireland and over the next decade we plan to reduce the carbon intensity of our generation portfolio by two thirds. Similarly, our network already supports one of the highest penetrations of wind in the world. In 2018, we invested in the network to connect significant levels of renewable generation, while also furthering our smart network and our Smart Metering programmes to make the network smarter and more resilient. Customers are already benefiting, but in the next few years, they will see more products and services emerging that will give them greater control, comfort and convenience. For example, our Smarter Home product launched this year and will give customers more control over when and how they use their electricity.

Q Is it difficult to sustain profitability in the face of all this change?

There is certainly a challenge in today's highly competitive and demanding business environment. However, core to our operating model is the fact that we are a long term, capital-intensive business, so financial strength and an investment grade credit rating are an absolute must. We have to continually innovate and stay relevant to our customers as we transition to a reimagined energy system. To this end, we are focusing our efforts on ensuring our regulated Networks businesses are fit for purpose in this new world, we will continue to invest in low carbon and renewable generation.

Q Turning our attention to Electric Ireland, why did you increase electricity prices during the year and are you doing anything to mitigate the impact on customers?

Unfortunately, during the year, Electric Ireland had to increase prices on the back of rising wholesale energy costs. However, we froze electricity prices over the winter months knowing that it is the most difficult time for customers. Also, almost a million customers continue to enjoy enduring discounts through Electric Ireland's 'Stay Happy' programme that rewards loyal customers.

Q Are the right market and regulatory structures in place to support your vision for a low-carbon future?

The transition to a low-carbon energy future using clean electricity will have to be facilitated and enabled by the evolution of regulation and markets. A key development this year was the Integrated Single Electricity Market (I-SEM), the new wholesale electricity market in Ireland which went live during the year. ESB is now successfully trading in the I-SEM market.

Q Can you comment on ESB's financial performance?

In challenging market conditions ESB achieved a satisfactory financial performance in 2018 with an EBITDA and Operating Profit (before exceptional items) of €1,175 million and €455 million respectively. 2018 has been a challenging year for the generation business which has taken impairments on a number of its generation units due to a combination of lower plant running and downward pressure on energy margins. During 2018 ESB invested €1,165 million including circa €250 million in renewables as we lead the transition to low-carbon generation. The dividend for 2018 amounted to €35 million, bringing the total dividends paid over the past decade to €1.4 billion.

Q On a different note, there were four major storms in 2018, and they caused a lot of damage to the network. Is this something ESB will have to plan for in the future?

We see storms increasing in intensity, and we are planning for this through our investment in network resilience and automation, and in our storm response capability, so we can restore supply to customers, as effectively and as quickly as possible. Storm Ali was significant as it hit when most trees were still in leaf, causing much more timber damage than would have been expected from a similar storm later in the season.

Q Is the United Kingdom (UK) an important part of your strategy?

Yes. Part of our strategy is to expand into other markets because of the constraints we face in the Republic of Ireland (ROI). We now have less than 50% of both the generation and retail supply markets in ROI. The UK is 10 times the size of the ROI electricity market, and presents a real growth opportunity. We've expanded into the UK to maintain scale and capability in both our generation and retail businesses.

Q So what recent investments have you made in the UK?

Over the past 12 months, we made our first investment in offshore wind, buying a stake in Galloper, a 353MW offshore wind farm off the southeast coast of England. We also launched a new retail brand in Great Britain (GB) called ESB Energy, and increased our market share in NI. We are also developing a 700MW pipeline of onshore wind in Scotland.

Q Does this mean that Brexit is a big concern?

Brexit brings uncertainty to our business operations in ROI and the UK. Having said that, our operations are set up on a standalone basis and our Sterling revenues and our Sterling costs are reasonably matched. In terms of the trade of energy between I-SEM and GB, we don't expect a major impact because GB is very reliant on trading electricity and gas with Europe. Another consideration is the impact of Brexit on the ROI, NI and GB economies, and that's hard to predict as things stand.

Q It sounds like you've had a really busy year; to sum up, can you say what you are most proud of in 2018?


We made some really significant steps in 2018 that have put us in a much stronger position for the future. The Organisation Effectiveness Review to deliver on our 2030 Strategy, our move into offshore wind, and the Dingle Project are all key statements of intent in terms of preparing for a very different energy future. I'm also particularly pleased that in 2018, following the production of our report on 'Ireland's Low Carbon Future – Dimensions of a Solution', we're leading the debate on electrification and the role of electricity, and the role that we see for ESB in leading the transition to a low-carbon future. I am extremely proud of the commitment, hard work and ongoing enterprise of ESB staff right across the Group in delivering on our Strategy and maintaining an efficient energy system for our customers, despite a very challenging and rapidly changing environment.








Q And looking ahead... what's next?

I'm very pleased that in 2018 my term as Chief Executive of ESB was extended for three years, and I'm looking forward to working on delivering ESB's strategy through 2019. Major areas of focus for me will be ensuring that our organisation review is implemented. This is critical for ESB in terms of positioning us to deliver on our strategy. In this context, safety remains an area of fundamental importance and we have put in place robust procedures to maintain the safety of our staff, contractors and the public. Another area of focus for me will be working with regulatory, policy, and industry stakeholders, to ensure that the wider electrification agenda is put centre stage, in leading the transition to a low-carbon future.

Pat O'Doherty, Chief Executive
1st March, 2019

1.2 ESB AT A GLANCE




BUSINESS SEGMENT	GENERATION & TRADING (GT) FORMERLY GENERATION AND WHOLESALE MARKETS (G&WM)	ESB NETWORKS	NORTHERN IRELAND ELECTRICITY NETWORKS (NIE NETWORKS)	ELECTRIC IRELAND (PART OF CUSTOMER SOLUTIONS DIRECTORATE)	OTHER SEGMENTS
DESCRIPTION	ELECTRICITY GENERATION	ELECTRICITY TRANSMISSION AND DISTRIBUTION		ELECTRICITY SUPPLY	INNOVATION AND INTERNAL SERVICE PROVIDERS
REVENUE	€1,491m	€1,138m	€302m	€1,835m	€310m
CAPITAL EXPENDITURE**	€299m	€590m	€171m	€14m	€91m
REGIONS OF OPERATIONS	 ROI, NI, GB	 ROI	 NI	 ROI, NI,  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	4 OFFICE LOCATIONS IN ROI AND NI	41 OFFICES AND STORES ACROSS ROI, NI, GB AND INTERNATIONALLY
AVERAGE EMPLOYEE NUMBERS	1,009	3,440	1,206	420	1,799
STRATEGIC FOCUS	DEVELOPING A LOW CARBON PORTFOLIO, CREATING CLEANER POWER USING SUSTAINABLE GENERATION	BUILDING SMARTER MORE RESILIENT NETWORKS. PUTTING THE CUSTOMER IN CONTROL OF THEIR ENERGY. FACILITATING THE CONNECTION OF RENEWABLES.		BRINGING SUSTAINABLE AND COMPETITIVE ENERGY SOLUTIONS TO ALL OUR CUSTOMERS	BRINGING LEADING EDGE ENERGY SOLUTIONS TO ALL OUR CUSTOMERS. INNOVATING FOR THE FUTURE


1.3 HIGHLIGHTS

ENVIRONMENT

ESB SETS 2030 CARBON INTENSITY TARGET OF 200GCO2/kWh, SIGNS BITCI LOW CARBON PLEDGE



2.2TWh TWH RENEWABLES GENERATED

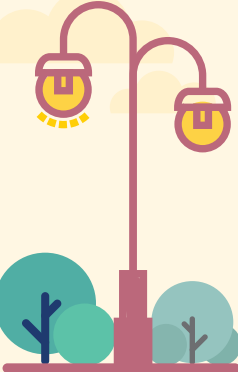


78MW NEW WIND FARMS CONNECTED

CUSTOMERS


ENDURING SAVING OF UP TO 8.5% TO RESIDENTIAL ROI CUSTOMERS LAUNCH OF ALL ELECTRIC DISCOUNT TARIFF AND SMARTER HOME

DELAY OF REQUIRED ELECTRICITY PRICE INCREASES UNTIL AFTER THE WINTER BILLS



SHAREHOLDERS

RE-AFFIRMED CREDIT RATING A-




ACHIEVED B- CDP DISCLOSURE SCORE

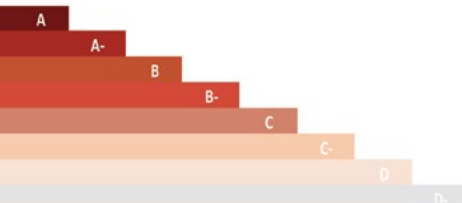

IRISH ECONOMY

ESB INVESTED OVER €900 MILLION IN ENERGY INFRASTRUCTURE AND OTHER INVESTMENTS DURING 2018

ESB CONTRIBUTES ALMOST €1.7 BILLION ANNUALLY TO THE IRISH ECONOMY

OVER €2 MILLION WAS DISBURSED ACROSS A RANGE OF COMMUNITY INITIATIVES





CDP SCORE MANAGEMENT B-
Sector average: C
Regional average: C

1.4 BUSINESS MODEL

Our Purpose is to 'Create a Brighter Future for the customers and communities we serve, by leading the transition to reliable, affordable, low-carbon energy.'

CAPITAL INPUTS

Manufactured Capital

- 5,564 MW of generation capacity
- Over 229,000 kms of network across ROI and NI

Financial Capital

- A- credit rating
- Total net assets €3.6 billion
- Liquidity of €1.6 billion

Intellectual Capital

- Promotion of innovation
- Corporate governance structure

Human Capital

- 7,874 employees
- Employee development programmes
- Safety Leadership Strategy

Social and Relationship Capital

- Over 1.3 million customers

Natural Capital

- 816 MW of renewable generation

GENERATE

ESB develops, operates and trades the output of ESB's electricity generation assets. The portfolio consists of 5,564 MW of thermal and renewable generation assets across ROI, NI and GB, with a further 158 MW under construction

TRANSMIT

ESB builds, manages and maintains the transmission and distribution network in ROI and NI. Over 229,000 KM of Network.

SUPPLY

Supplying electricity, gas and energy services to customers in ROI, NI and GB.

OUTPUTS

Customers

- Customer satisfaction 85%
- 33% market share
- Enduring residential customer savings up to 8.5%
- 38% generation market share

Shareholder

- Dividend of €1.4 billion over the last decade
- Return on capital employed 4.5%
- €1.2 billion EBITDA

Irish Economy

- Invested over €900 million
- Contributes €1.7 billion to economy
- Over €2 million disbursed over a range of community based initiatives



WE'RE
COURAGEOUS

EVERY ONE OF US HAS A RESPONSIBILITY AND THE OPPORTUNITY TO SHAPE ESB INTO A BUSINESS WE CAN ALL BE PROUD OF

WE'RE
TRUSTED

WE WANT TO LOOK THE NEXT GENERATION IN THE EYE KNOWING THAT WE HAVE DONE ALL WE CAN TO LEAVE A POSITIVE LEGACY AND HAVE BUILT A BRIGHTER FUTURE FOR EVERYONE

WE'RE
CARING

WE DO OUR VERY BEST TO MAKE A GENUINE DIFFERENCE FOR OUR CUSTOMERS, OUR COLLEAGUES AND OUR COMMUNITIES, CONTINUOUSLY LOOKING FOR WAYS IN WHICH WE CAN IMPROVE OUR SERVICES TO THEM

WE'RE
DRIVEN

TRUST IS PRECIOUS – WE MUST CONTINUE TO EARN AND BE WORTHY OF IT



PUT CUSTOMERS' CURRENT AND FUTURE NEEDS AT THE CENTRE OF ALL OUR ACTIVITIES



PRODUCE, CONNECT AND DELIVER CLEAN, SECURE AND AFFORDABLE ENERGY



DEVELOP ENERGY SERVICES TO MEET EVOLVING MARKET NEEDS



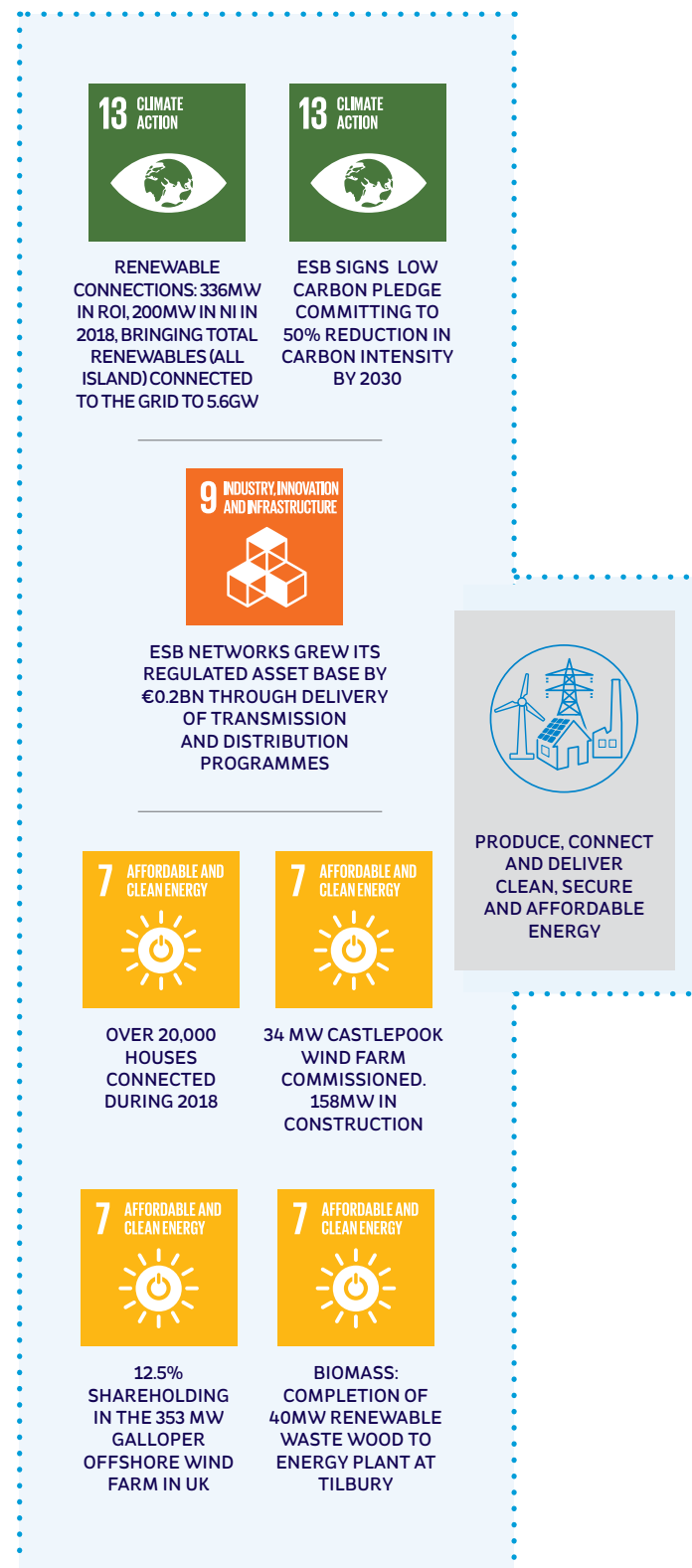
GROW THE BUSINESS WHILE MAINTAINING ESB'S FINANCIAL STRENGTH



DELIVER A HIGH-PERFORMANCE CULTURE THAT SUPPORTS INNOVATION AND COLLABORATION

1.5 STRATEGY AND PROGRESS

ESB's Brighter Future Strategy puts sustainability at the heart of our strategic objectives and our purpose as an organisation. With the ambition to 'Create a Brighter Future for the customers and communities we serve, by leading the transition to reliable, affordable, low-carbon energy', our progress during 2018 in putting this into action has begun to deliver on that ambition. Aligning our activities and progress to the broader global efforts to deliver the Sustainable Development Goals, allows ESB to demonstrate its contribution to the global purpose and climate action focus that underpins the SDGs.



1.6 GOVERNANCE

ESB is committed to the highest standards of corporate governance to manage risk and support sustainability and growth. ESB has put in place measures to comply with the Code of Practice for the Governance of State Bodies (2016). In addition, ESB complies, (on a voluntary basis to the maximum extent possible as a statutory corporation), with the UK Code of Corporate Governance 2016 and the Irish Corporate Governance Annex.

A revised UK Corporate Governance Code was issued by the Financial Reporting Council (FRC) in July 2018 and applies for periods commencing on or after 1 January 2019. ESB is completing a detailed review in relation to compliance with the revised UK code. ESB is already compliant with certain aspects of the revised UK code such as the requirement for Board engagement with the workforce, which is addressed in ESB through four Worker Director positions on the Board. In this way, ESB adheres as closely as possible to listed company governance standards.

FULL DETAIL ON CORPORATE GOVERNANCE IN ESB IS AVAILABLE IN OUR 2018 ANNUAL REPORT;
<www.esb.ie/who-we-are/investor-relations/annual-reports>

Delivering a high performance culture is one of ESB's five strategic objectives. We do this by applying and developing the values which have characterised ESB for over 90 years.

Today, we express our values by saying we are courageous, caring, trusted and driven. The Board of ESB supports these values by engaging directly with staff, through holding board meetings at ESB locations throughout the country and by regular consideration of cultural indicators such as staff surveys, diversity initiatives and, of course, safety performance metrics.

ESB continuously reviews and updates its policies and procedures to ensure compliance with the State Code and reports annually on such compliance to the Audit and Risk Committee. Maintaining best practise governance arrangements is an important aspect of ESB business performance.

ESB has adopted its own Code of Ethics, which sets out our approach to responsible and ethical business behaviour. The underlying principle of The Code of Ethics is that employees best serve ESB by adhering to the highest standards of integrity, loyalty, respect, fairness and confidentiality and by meeting all legal and regulatory requirements. The Code of Ethics is reviewed annually by the Board and published on the ESB intranet. Group Internal Audit investigates any reported breaches and updates the Audit and Risk Committee.
<https://www.esb.ie/who-we-are/corporate-governance/esbs-code-of-ethics-and-practice>

ESB respects human rights and expects all suppliers/contractors providing goods, services

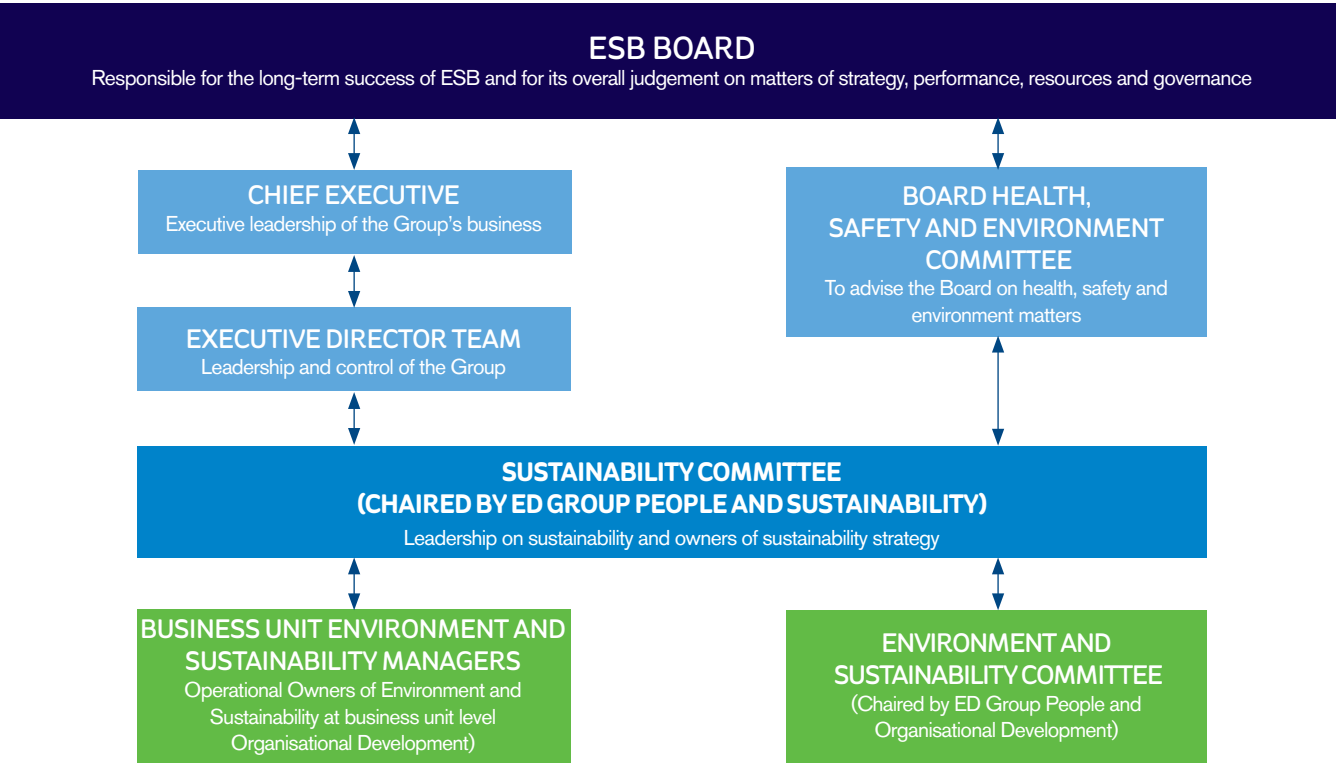
or works to ESB and/or on behalf of ESB to conduct their business in an honest and ethical manner, in accordance with all applicable laws, and to respect internationally recognised human rights. Our procurement policies are available here: <https://www.esb.ie/who-we-are/procurement/procurement-policy>

GOVERNANCE OF SUSTAINABILITY

The Board Committee on Health, Safety and Environment oversee and provide governance on the implementation of environment and sustainability objectives and facilitate detailed consideration of environment and sustainability matters on behalf of the Board.

An Environment and Sustainability Committee is chaired by the Executive Director Group People and Organisational Development and made up of senior managers from each business unit. The Environment and Sustainability Committee is responsible for approval of the environment and sustainability programme to deliver on the corporate strategy and for providing leadership on environment and sustainability in each business unit.

The committee meets four times a year to review progress and overall group performance. The committee also oversees assurance on environmental management through receiving reports from an Environment and Sustainability Management Group, made up of the business unit Sustainability and Environmental Co-ordinators and Managers.



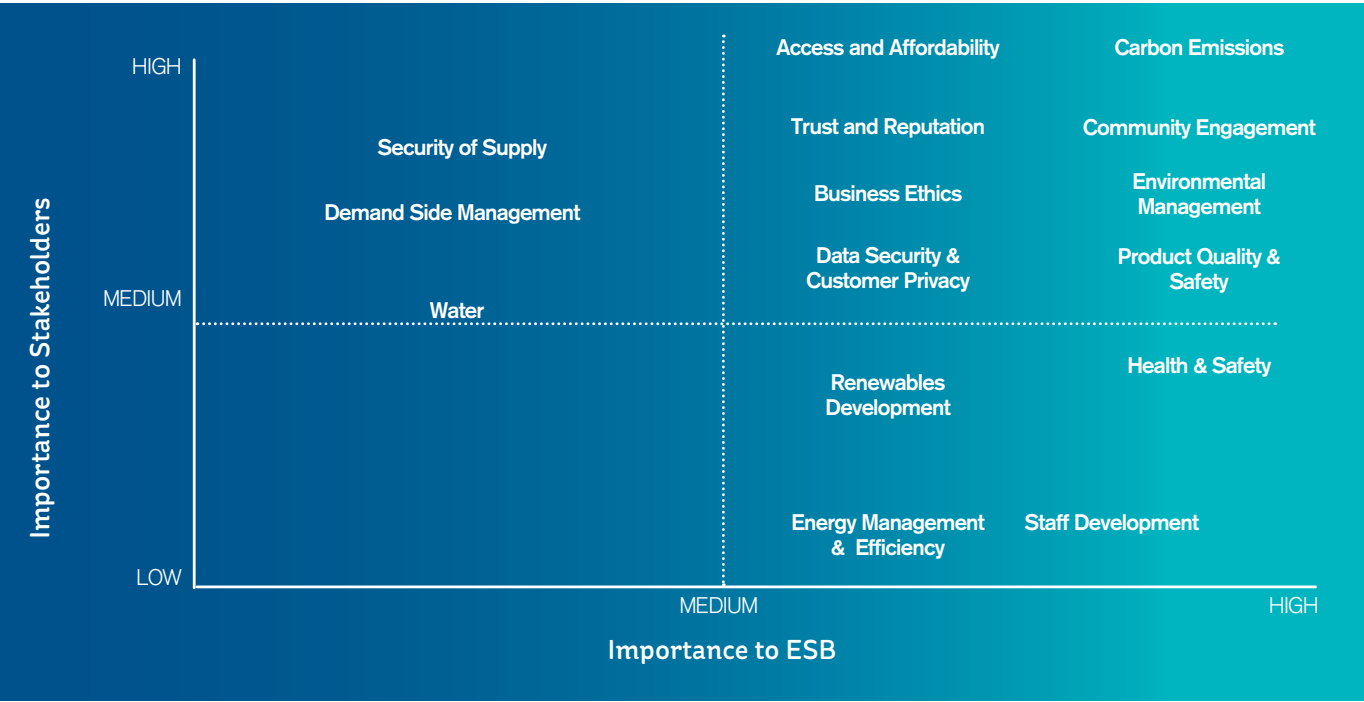
1.7 MATERIALITY APPROACH

ESB works in the very heart of every community across Ireland. Being embedded in this way, brings a broad span of exposure to and engagement with a wide range of stakeholders. In our purpose of creating a brighter future for the people we serve, we recognise that electricity is an enabler of societal and economic wellbeing and a pathway to a decarbonised society. Understanding the expectations, concerns and interests of our stakeholders is front and

centre in delivering our services and to help shape a brighter future. From the consolidated engagements and inputs into the various stakeholder channels and a formal stakeholder engagement process, we identify the most material topics raised by these internal and external stakeholders. The stakeholder groupings that we engage with are detailed in section 1.8 of this report. From this process, the most material topics are identified and form the bulk of the disclosures in this report, as per

the materiality matrix below. Disclosures focus on the most material issues identified in the top right quadrant. As robust reporting and data sets are established, disclosures will expand to include other issues of importance within the matrix and newly emerging material issues.

Materiality Matrix 2018



STAKEHOLDER ENGAGEMENT

As a business we transmit and distribute electricity to every business and household on the island of Ireland. This means that we have a strong and visible interface with every community to which we provide electricity. Stakeholder engagement is central to the success of our business activities. Stakeholder engagement takes place at all levels, from the policy makers right down to the local community group and ranges in focus from national to community level interests. From the consolidated engagements and inputs into the

various stakeholder channels and the formal stakeholder engagement process outputs, members of the stakeholder engagement group, together with the Sustainability Committee, hold a materiality workshop every two years to help prioritise the issues emanating from the various external and internal stakeholder engagement channels and to formulate the issues output from these engagements into a list of prioritised material issues.

1.8 STAKEHOLDER MATRIX

STAKEHOLDER GROUPING	MEANS OF ENGAGEMENT	SUBJECTS OF ENGAGEMENT	MOST IMPORTANT ISSUES RESULTING
Key Ministers & Government Depts DCCAE, DfE, DAERA, DPER (New ERA), DTTAS	Policy meetings, consultations	Energy policy, policy and regulatory issues, regulatory consultation processes, strategy	Energy policy, maintaining financial strength
Regulatory Bodies (CRU, UR, OfGEM, OEIC, EPA, HSA, DoE, NPWS, SEAI, SIPO/ DPC/ComReg/RSA (UK and NI equivalents))	Price review meetings, regular scheduled meetings, programme meetings, partnerships	Setting and compliance with licence and permit conditions, pricing and price reviews, work programmes, environment information appeals, planning issues, safety at work	Electricity price, legal compliance, delivery of work programmes, revenue levels, emissions, construction activities, land, buildings, public safety, water conservation and waste
Network Operators (Eirgrid, SONI, National Grid)	Scheduled meetings, planning process	Grid connections, work programmes, planning, facilitating renewables	Renewables, network stability, continuity of supply
Industry NGOs (Eurelectric,, Ibec, AEP, IETA, EAI, Chambers Ireland, British Irish Chamber of Commerce, NI Chamber of Commerce, Dublin Chamber, Cork Chamber)	Consultation processes, programmed meetings	National and EU Energy policy, climate and sustainability policy development, consultations	Policy positions, global climate change issues, competitiveness, security of supply
Sustainability / non-industry NGOs (BITCI & NI, CDP, IIEA, IWEA, IFA, Coillte)	Scheduled meetings, focus groups, member fora, surveys	Land access, work programme, CR programme, performance disclosures	Emissions, corporate responsibility, renewables, planning
Energy Authorities (SEAI)			
Engineering & Scientific Research (UCD, ERC, UL, DIT, TCD, NUI, EPRI, SEAI, VGB, QUB, UCC)	Industry fora, partnerships, conferences, technical collaborations, ongoing dialogue	Technology, skills pool, research partnerships, technology deployment	Technical innovation, market disruption, energy efficiency, availability of suitable skills
Public representatives, local authorities	Scheduled meetings, planning process, ongoing dialogue	Planning concerns, building community support	Community engagement, legal compliance
Ratings Agencies	Scheduled review meetings	Economic performance, Performance to Plan, Strategy, funding rounds, Growth programme	Rating, ability to raise debt at manageable interest rate, financial performance
Staff	Team and one-to-one meetings, surveys	Business performance, safe working environment, fair employment and trading practices	Staff engagement, reward and recognition, development
Customers (domestic, commercial, industrial)	Social media, customer contact centres, surveys, via business development team	Price, continuity and quality of supply, energy efficiency services, disconnections	Energy price, disconnections policy, energy efficiency
Suppliers	Tender process, contract review meetings, preliminary market consultations, Meet the Buyer events	Contractual Terms & Conditions, corporate social responsibility, sustainable procurement opportunities / initiatives, Contractor Employments Standards compliance	Contractor Employment Standards compliance. Sustainable procurement opportunities / initiatives

1.9 ASSOCIATIONS AND EXTERNAL INITIATIVES

CHARTERS TO WHICH THE ORGANISATION SUBSCRIBES

- Code of Practice for the Governance of State Bodies
- Bettercoal Code
- UK Corporate Governance Code
- Irish Corporate Governance Annex
- The Prompt Payment Code of Conduct
- The Energy Engage Code

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
- British Irish Chamber of Commerce
- Business in the Community NI
- Chambers Ireland
- Chartered Institute of Professional Development
- CHAdeMO Association
- Corporate Leadership Council
- Confederation of British Industry (CBI)
- Diversity Charter of Ireland
- Edison Electric Institute
- 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 Conference Board
- The Society of Motor Manufacturers & Traders (SMMT)
- The Mediators Institute of Ireland.

1.10 SIGNIFICANT CHANGES TO ORGANISATION

Organisational Re-structuring

During the year ESB carried out an organisation restructuring following an Organisation Effectiveness Review (OER) in order to ensure that the structures and processes in ESB are aligned with the delivery of the 2030 Brighter Future strategy, which aims to lead the transition to a low-carbon energy future.

Implementation of the new organisation commenced on 30 October 2018, but there will be a period of transition required in terms of people moves, processes and systems configurations to embed the new organisational structure.

The segmental information included in the financial statements reflects the previous organisation structure, which applied for

financial management throughout 2018.
The key features of the new organisation are:

- A single face to the customer, bringing all our retail / business customers offerings together under Customer Solutions
- Strategically focused business units and functions, working with Engineering and Major Projects (E&MP) and enhanced shared services through Enterprise Services with improved end-to-end processes and capabilities
- Driving innovation at every level across ESB, with clearer innovation roles and a centralised innovation function managing pre-commercial opportunities up to business hand over stage
- An empowered ESB-wide trading capability with better connections to our customers
- A structured approach to talent across ESB,

- reinforced by centres of excellence and increased collaboration
- Common standards and processes across ESB whenever possible that can be adapted quickly to give us competitive advantage
 - Strong, focussed digital and analytics capability delivering on business priorities, enabling greater use of data and adoption of digital technologies to empower employees
 - The organisation restructure involved the rebranding and re-organising of existing business units; a summary of the changes in the organisation structures can be found below:

OVERVIEW OF CHANGES

OLD	NEW
Electric Ireland	Customer Solutions: consolidation of the customer-facing brands (including Electric Ireland, Smart Energy Services, ecars and Telecoms) into one business
Generation and Wholesale Markets	Generation and Trading (GT): sets and delivers long-term strategy to maximise profits from both existing and new assets
ESB Networks	Networks Customer Delivery: strong customer focus and safe delivery of projects and programmes Networks Assets: focus on network strategy and investment
Business Service Centre	Enterprise Services: delivery of strategic advisory and core business services to support all business units in strategy delivery
Innovation	Customer facing parts of Innovation such as ecars, Smart Energy Services ecars, and Telecoms have moved to Customer Solutions ESB International is now part of Engineering & Major Projects New innovation products and business lines are now part of the Strategy, Innovation & Transformation (SIT) business unit
	Engineering and Major Projects (E&MP): develop cross-company engineering and technical capability to deliver major projects and engineering services across the ESB Group. This business unit includes ESB International Engineering consultancy business
	Strategy, Innovation and Transformation: set and manage strategic direction, influence energy policy and manage enterprise risk to deliver ESB's ambition for a low-carbon future. This business unit includes investments in NIE Networks, investment in SIRO, NovusModus Investments and innovative pre-commercial projects

2 SECTION 2

ECONOMIC PERFORMANCE

- 2.1 Introduction
- 2.2 Investing for the Future
- 2.3 Indirect Economic Impacts
- 2.4 Pension Obligations (GRI 201-3)
- 2.5 Procurement Practices (GRI 204-1)
- 2.6 Anti-corruption (GRI 205-1)



IN 2018 ELECTRIC IRELAND LAUNCHED ITS **SMARTER HOME PRODUCTS**, ENABLING OUR CUSTOMERS TO USE TECHNOLOGY TO HAVE MORE CONTROL OVER WHEN AND HOW THEY USE THEIR HEATING AND HOT WATER APPLIANCES. SMARTER HOME **GIVES OUR CUSTOMERS CONTROL**, CONVENIENCE AND INSIGHTS OVER THEIR ENERGY USAGE ALL FROM THEIR SMART DEVICE.

2.1 INTRODUCTION

In 2018, in the context of challenging market conditions, we delivered a satisfactory performance with Earnings Before Interest, Tax, Depreciation, Impairment, Amortisation and Exceptional Items (EBITDA) of €1,175 million, Operating Profit before exceptional items of €455 million, and capital investment of €1,165 million, with gearing at a moderate level of 56%. In 2018, ESB, Ireland's leading energy utility, retained its stable business profile with over two-thirds of its earnings, assets and capital investment accounted for by regulated electricity networks in Ireland under established and transparent regulatory frameworks.



ESB's Strategy to 2030 is anchored in it's ambition to create a brighter future by leading the transition to reliable, affordable, low-carbon energy. It sets out a path to achieve this ambition in a way that will also ensure that ESB continues to grow as a successful business and maintains the financial strength to invest in a low-carbon future at the necessary pace and scale. It also recognises the potential for new business growth arising from the transition.

The Strategy highlights the importance of being adaptable, responsive and opportunistic in an era of unprecedented uncertainty and to have a presence of scale across the utility value chain, with a mix of regulated and unregulated businesses, while maintaining a strong investment grade credit rating.

Since its establishment in 1927, ESB has been characterised by a commitment to driving society forward and creating opportunities for the communities it serves. The challenge for ESB today is to be a leader in the transition to reliable, affordable, low carbon energy and to serve it's customers better and achieve sustainable growth.

2.2 INVESTING FOR THE FUTURE

Investment Programme (GRI 203-1)

Capital expenditure totalled €1,165 million in 2018, an increase of €298 million on 2017. The 2018 Capex figure is gross of supply contributions in line with IFRS 15 'Revenue from Contracts with Customers', the impact of this change in accounting treatment results in higher network capex of €133 million year on year. Capital investment in the networks businesses continued in 2018 with €761 million (65% of the total capital investment) invested in the networks infrastructure in Republic of Ireland (ROI) and Northern Ireland (NI) in line with agreed regulatory programmes. Expenditure in Generation & Trading in 2018 amounted to €299 million (2017: €128 million). This expenditure primarily related to continued investment in renewable generation, including €127 million in the 353MW Galloper (GB) offshore windfarm, €56 million in the 34MW Castlepook wind farm and €72 million in the construction of 114MW Grousemount windfarm.

LEADING THE WAY TO A BRIGHTER FUTURE

Galloper

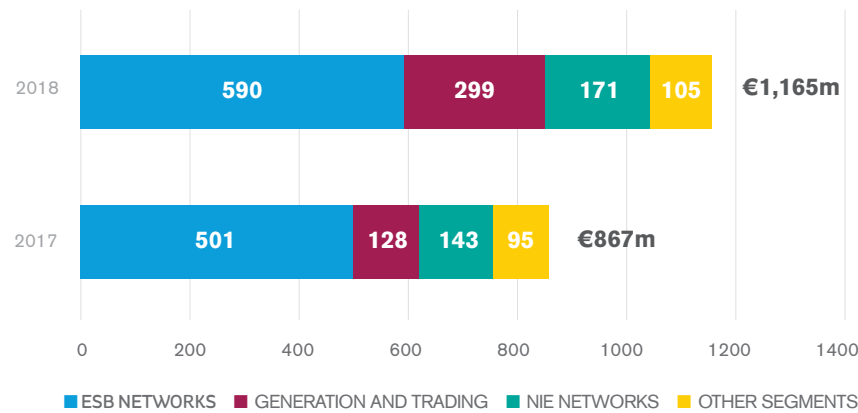
Galloper is a 353MW offshore windfarm located off the south coast of England. This is an ideal location for offshore wind developments given wind speeds, water depths and proximity to areas of electricity demand. It is a joint venture led by Innogy SE (25%) and includes Siemens Financial Services (25%), Sumitomo (12.5%), ESB (12.5%) and a consortium managed by Green Investment Group and Macquarie Infrastructure and Real Assets (25%). The project reached commercial operation in September 2018.

Why did ESB invest in Galloper?

Galloper is ESB's first major investment in offshore wind generation and provides the company with a solid platform from which to build similar developments off the coast of ROI and GB. Galloper is a key enabler to ESB in its efforts to rebalance its portfolio of generation assets and in reducing it's carbon intensity. The development generates enough electricity each year to power approximately 380,000 average GB households.

Capital investment of €105 million in other segments includes various Group projects such as the redevelopment of the Fitzwilliam Street Head Office and IT systems for I-SEM. (see figure 2.1)

FIGURE 2.1: CAPITAL EXPENDITURE



As part of the transition to low-carbon generation ESB invested c.€250 million in renewable generation projects. Notwithstanding the exceptional nonrecurring impairment charge, as outlined in the financial statements for 2018, ESB has delivered a satisfactory underlying financial performance in 2018, with Group EBITDA at €1,175 million, a strong liquidity position of €1.6 billion and credit ratings of A- or equivalent with Standard & Poor's and Moody's (BBB+ standalone).

Regulated Investment

All infrastructure development is subject to appropriate planning authority approval, including the undertaking of Environmental Impact Assessment, as required. Operational procedures for works in and adjacent to SAC's or where particular environmental or biodiversity risks may be identified, are in place and subject to on-going review. Energy infrastructure needs assessment is undertaken as part of the broader regulatory engagement process, which culminates with a price review determination, incorporating specific asset development programmes, which form the basis of investment programmes for our regulated assets, at the scale summarised above. Within our networks' businesses, the capital and maintenance programmes are delivered in accordance with these established regulatory frameworks.

ESB carefully and continuously monitors all of these strategic financial opportunities and challenges and takes prudent financial actions, including management of the significant capital programme, as appropriate, so as to enable the delivery of Strategy 2030 while maintaining ESB's financial strength.

Please see also section 3.4, detailing further how we engage with communities around these investment determinations.

LEADING THE WAY TO A BRIGHTER FUTURE

Tackling climate change is a massive challenge. ESB Networks understands that its role is pivotal to a future where renewable generation displaces the carbon in electricity and where electrification displaces the carbon in transport and heat. Through the Innovation Strategy, ESB Networks are engaging through key partnerships with communities, industry, academic and government agencies to develop a common vision, to deliver the innovation this demands, and to publicise and leverage the learnings. Underpinning this approach is The Dingle Project, which is a primary example of this, aiming to enable and stimulate active energy citizens and communities through digitalisation and deployment of smart technologies. The project has deployed electrified heat, battery storage, solar PV and peer-to-peer trials and smart network devices in over 100 locations on the Dingle Peninsula. These efforts will allow the facilitation of electrification and empower all customers to play their role in the sustainable energy future.

Board Level Oversight

The Board has overall responsibility for risk management and internal control. The main financial risks faced by the Group related to liquidity, foreign exchange, interest rates, commodity price movements and operational risk.

Policies to protect the Group from these risks, and other risk areas, such as credit risk, are regularly reviewed, revised and approved by the Board.

2.3 INDIRECT ECONOMIC IMPACTS

USING OUR PROFITS IN A SUSTAINABLE WAY

INVESTMENT

Investing almost €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

€1,165 MILLION

TAXES

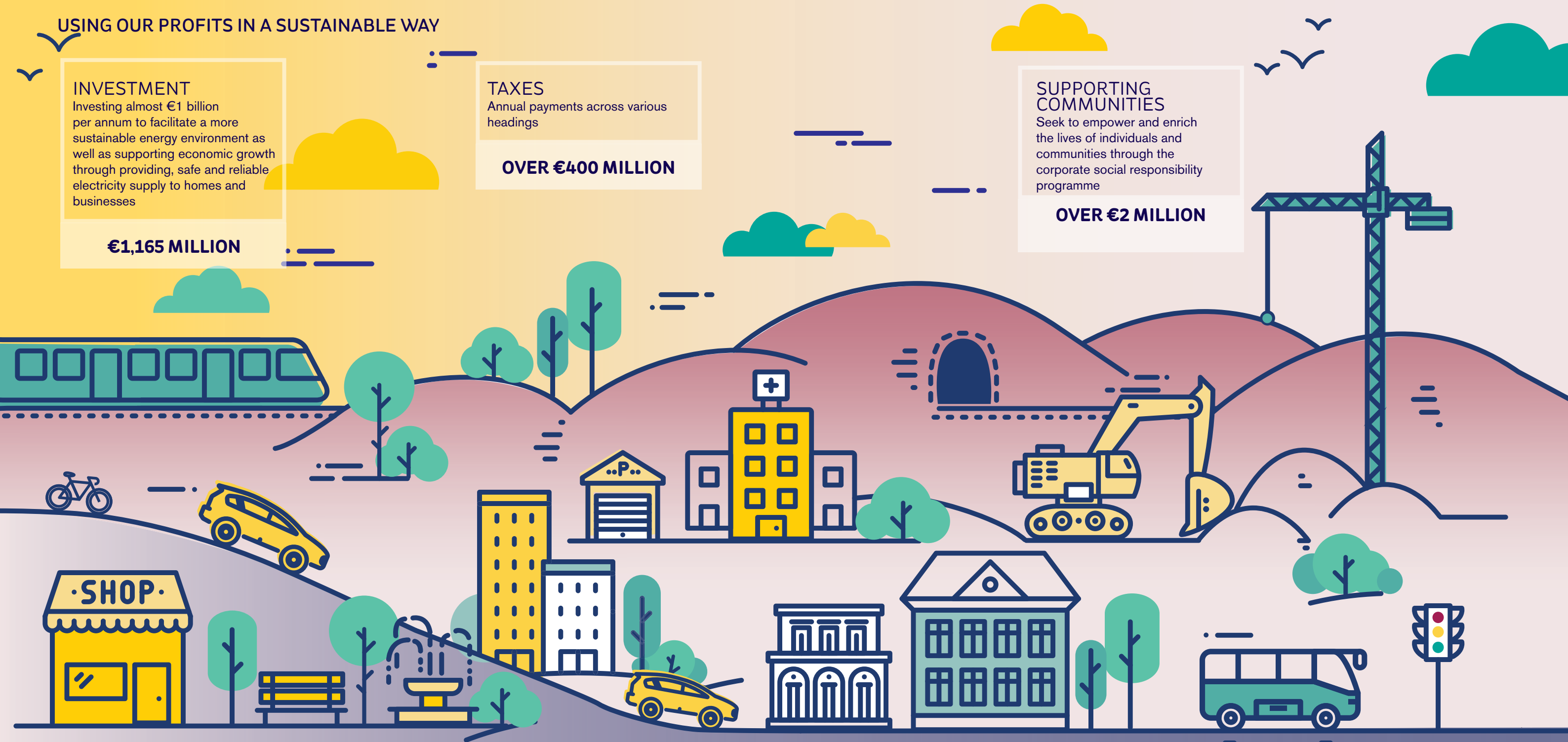
Annual payments across various headings

OVER €400 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.

**149 APPRENTICES
AND GRADUATES
RECRUITED IN 2018**

INDIRECT ECONOMIC IMPACTS (GRI 203.2)

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 RP5 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.

RETURN TO THE SHAREHOLDER

ESB targets an annual dividend of 40% of adjusted profits after tax

€35 MILLION FOR 2018

DEBT INVESTORS

Annual interest and repayments

€1,133 MILLION

RESIDENTIAL CUSTOMER SATISFACTION

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

85%

2.4 PENSION OBLIGATIONS (GRI 201-3)

The ESB Group companies operate various pension schemes in the Republic of Ireland and Northern Ireland, which are funded through payments to trustee administered funds.

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 a deficit arise in the future, the Company 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.

Under the 2010 Pensions Agreement (approved by employees in July 2010 and formally ratified by the Board of ESB on 20 October 2010), ESB agreed to a once-off cash injection into the Scheme, payable over a number of years, which had an agreed valuation for actuarial purposes as at 1 January 2010 of €591.0 million. The fixed contribution rates for the employer and for employees were not changed. Under the Agreement membership of the Scheme has been closed to new joiners.

The obligations to the Scheme reflected in ESB's financial statements have been determined in accordance with IAS 19 Employee Benefits. Given that the Scheme is not a typical "balance of costs" DB Scheme (where the employer is liable to pay the balance of contributions required to fund benefits), the obligations to be reflected in the financial statements require the exercise of judgement. Should a deficit arise in the future, the Company, as noted above, is obliged to consult with the parties to the Scheme. However, ESB has no obligation to increase contributions to maintain benefits in the event of a deficit and the Company does not intend that any further contributions, other than the normal on-going contributions and the balance of the Company's €591.0 million additional contribution (committed to as part of the 2010 Pensions Agreement), will be made. Therefore, ESB has concluded that the financial statements should reflect its obligations to the Scheme, which consist of:

- a.** any remaining amounts to be paid in relation to the once-off contribution agreed pursuant to the 2010 Agreement (€591.0 million in 2010, money to be paid over a number of years);
- b.** pre-existing commitments relating to past service (the present value of the agreed contributions that relates to service prior to October 2010);
- c.** Past Voluntary Severance (VS) Programmes – in 2010 the Company recognised a future commitment in respect of staff that has left the Company under past VS programmes. ESB will make pension contributions in respect of those staff and these are recognised at fair value.

Ongoing contributions (up to 16.4%) are recognised in the income statement as incurred. Any unpaid amounts at year end are recognised as liabilities on the balance sheet.

The ESB Defined Contribution Pension Scheme is a defined contribution scheme and contributions to the Scheme are accounted for on a defined contribution basis with the employers' contribution charged to income in the period the contributions become payable.

2.5 PROCUREMENT PRACTICES (GRI 204-1)

ESB is in compliance with all applicable procurement rules and guidelines as set out in the Utilities Directive and ESB's procurement procedures.

ESB's Supply Chain is key to our business success and meeting ESB's sustainability goals. Corporate policy requires us to ensure that our strategic goals are achieved and corporate governance assured through the application of ESB's Supplier Charter and Requirements for Third Parties Document, which establish clear standards in relation to:-

- Conduct of business
- Health & safety
- Environment
- Ethics, bribery & anti-corruption
- Employment standards and modern slavery.

All relevant procurement policies are made publically available via the ESB Group website; www.esb.ie/who-we-are/procurement

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) in excess of €900m, we rely on a complex and diverse supply chain in order to provide the services necessary to meet our customer's needs. Of this spend approx. 80% is sourced from suppliers within the Republic of Ireland & Northern Ireland, 12% from the UK, and 5% from other EU member states. We currently have approx. 4700 Tier 1 suppliers, ranging from local SME's & micro companies to large multi-national corporations / contractors, with whom we placed 34,528 purchase orders in 2018. Contracts range from standard supply type arrangements for consumable items such as tools & equipment to more complex service / works contracts for generating station and wind farm builds & refurbishments, networks sub-station and overhead line construction, customer billing and metering services and financial and engineering consultancy assignments. 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. Key to the success of ESB's supply chain is ESB's commitment to building strong and sustainable supplier relationships. ESB's standard procurement practice is competitive tendering or other forms of open competition in compliance with applicable procurement law. Where technical considerations allow, we favour the use of functional and performance-based specifications, supported by International/European standards. All significant contracts are advertised in the Official Journal of the European Union.

ESB's aim is to ensure that sustainability is embedded across every function, including procurement where very significant elements of our business operations are transacted electronically with our suppliers. ESB are also committed to complying with the terms of applicable late payments legislation and are signatories to the Prompt Payment Code of Conduct. The standard terms of payment are Nett Monthly Account.

GRI 204-1: Proportion of spending on local suppliers

Location Name	%
Ireland & UK	92%

2.6 ANTI-CORRUPTION (GRI 205-1)

Good governance provides the foundation for long-term value creation and is a core focus for the ESB Board of Directors. In this regard, and in line with the UK Corporate Governance Code 2018 (the UK Code) and the Code of Practice for the Governance of State Bodies 2016 (State Code), their duties include responsibility for the long-term success of the Group, providing leadership and direction for the business as a whole, and supporting and challenging management to get the best outcomes for ESB and its stakeholders.

The Board is satisfied that ESB has complied with the requirements of the State Code in fiscal year 2018. A report is issued annually to the Minister for Communications, Climate Action and Environment 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 EU (disclosure of non-financial and diversity information by certain large undertakings and Groups) Regulations 2017. However, on a voluntary basis, ESB discloses non-financial information. This information is disclosed as part of the 2018 ESB Annual Report as follows - in relation to Safety (page 72), People (page 74), Sustainability (page 76), Energy Usage (page 77), Corporate Social Responsibility (page 78), Board Diversity (page 94) and Modern Slavery Policy (page 107).

ESB has adopted a Code of Business Conduct for Board Members and a Code of Ethics for staff, which sets out our approach to responsible and ethical business behaviour and requires all Board members and employees to maintain the highest ethical standards in conducting business. The underlying principle of the Code of Ethics is that employees best serve ESB by adhering to the highest standards of integrity, loyalty, fairness and confidentiality and by meeting all legal and regulatory requirements. The Code of Ethics is reviewed regularly by the Board and published on the ESB intranet. Group Internal Audit investigates any reported breaches and updates the Audit and Risk Committee. Full details on the governance frameworks practiced within ESB Group are available in ESB's Annual Report 2018.

The Board retains the overall responsibility for internal control and risk management. During 2018, the Board has directly and through the delegated authority to the Audit and Risk Committee, reviewed the effectiveness of the Group's system of internal control covering financial, operational and compliance controls and risk management systems for 2018 and will ensure a similar review is performed in 2019. ESB's internal control framework, including the controls to manage and mitigate the risk of corruption and fraud are detailed in the Audit & Risk Committee Report section of the Annual Report 2018, on pages 98-103. The oversight of this process is exercised by the Board Audit and Risk Committee and reported to the Board. Amongst the issues considered by the Audit & Risk Board Subcommittee in this regard during 2018 were;

DUTY	ACTIVITIES CARRIED OUT IN 2018
Internal Control and Risk Management	<ul style="list-style-type: none">Reviewed and monitored the effectiveness of the Group's system of internal controlReviewed the arrangements for business continuity planning and crisis managementReviewed ESB's Risk Management Policy and Governance Framework, Risk Plan, and regular Risk Reports and recommended them to the Board for approvalConsidered a detailed review of cyber security and the impacts of emerging technologiesConsidered updates on implementation findings of an external review of ESB IT SecurityConsidered updates on Brexit assessmentsConsidered update on approach to outsourcing
Review the effectiveness of internal control and risk management	
Compliance, Whistle-Blowing and Fraud Review the adequacy and security of the arrangements for employees and contractors to raise concerns, in confidence, about possible wrongdoing in financial reporting or other matters	<ul style="list-style-type: none">Reviewed the controls and procedures in place to provide assurance of compliance with statutory obligationsReviewed the procedures and policies for preventing and detecting fraud and were informed of any instances of fraudReviewed the adequacy and security of the arrangements for raising concerns confidentially about possible wrongdoing in financial reporting or other mattersReceived updates on GDPR project following GDPR go live

In addition to compliance with the State Code, ESB also complies with the corporate governance guidelines and other obligations imposed by the Ethics in Public Office Act, 1995, the Standards in Public Office Act, 2001 and the Regulation of Lobbying Act, 2015.

ESB's Code of Ethics guides the behaviour of all employees in all their business dealings. On commencing work with ESB, all employees are inducted on ESB's Code of Ethics and annually employees in key operational directorates are reminded to review the code, make any relevant disclosures and declarations to the company and reaffirm their commitment to abide by the Code of Ethics.

There are additional controls in key risk areas e.g. Procurement, where employees are annually required to confirm no conflict of interest exists, in addition to a requirement for each member of a tender evaluation panel to confirm that no conflict of interest exists in terms of their role of assessing and awarding that specific tender.

2.6.1 SPONSORSHIP OVERSIGHT

As another potentially high risk process, a range of robust controls and governance arrangements have been established in relation to all sponsorship activities, to ensure funding is appropriately and transparently allocated. These include:

- A Sponsorship Policy has been established with criteria for assessing sponsorships and governance structures / authorisation levels;
- A Sponsorship Committee is in place as part of governance structure;
- Controls have been established which require two or more people to approve every sponsorship decision >€3k;
- Due diligence undertaken on all major sponsorships.

Funding is also provided in relation to wind farm developments, where Wind Farm Community Funding has been established. Controls in this case include:

- A Framework, which was approved by the ESB Board in 2011 that governs how ESB manages the Wind Farm Community Funds. The Framework details the governance structure, including roles and responsibilities with respect to the administration and management of the funds. As part of this governance framework, a Project Monitoring Board was established, consisting of a number of senior managers across the business, to govern the complete operation of fund.
- A number of grant making organisations (GMOs) have been appointed to ensure arms-length decision making on all community grants. The GMOs make all grant decisions against a set of agreed criteria. The appointment of the GMO allows the funds to be administered by a group/company with community development knowledge and insight.

Finally, ESB also provides funding and grants through the "Energy for Generations Fund", with additional controls in place including:

- A formal fund management structure has been established with specific roles and responsibilities including a Project Sponsor, Executive Board, Executive Committee including representatives of Business Units, and Administrators and clear approval levels.
- A formal applications process, including assessment by Administrators, review by Executive Committee quarterly meetings and approval as required by the Board.
- Additional payment process controls are in place for payment issue, with a report requested within 12 months of funding and site visits carried out, if required.

ESB has controls in place to ensure compliance with Sanctions Lists. Sanctions are an instrument of a diplomatic or economic nature which seeks to bring about a change in activities or policies, such as violations of international law or human rights or policies that do not respect the rule of law or democratic principles; these are imposed by both the EU and the UN. Financial sanctions are primarily concerned with curtailing the movement of payments and capital. In accordance with EU law, Ireland adheres to the list of sanctioned individuals and entities prescribed by the EU. ESB seeks to comply with sanctions lists obligations in EU, UN, UK and US. A number of controls have been established based on a risk assessment of the exposure of various activities to any sanctions list breach, including briefing of relevant staff, the introduction of tools to streamline checks as part of on boarding of new counterparties, inclusion of obligations included in contractual arrangements with our counterparties and on-going monitoring of alerts (media) regarding sanctions, resulting in manual checks of individuals and entities against sanctions' lists on an exception basis.

In addition, ESB seeks to support activities preventing money laundering and terrorist financing across the EU, complying with the Criminal Justice (Money Laundering and Terrorist Financing) Act. ESB completes a due diligence process for all counterparties on-boarded and completes a re-assessment on an annual basis. In addition, ESB has taken all reasonable steps to ensure it holds adequate, accurate and current information on beneficial ownership, which is documented in our companies' beneficial ownership registers (for subsidiaries). There were no reported incidents of corruption or termination of contracts due to corruption for employees or contractors during 2018.

ESB IS **LEADING** THE
TRANSITION TO RENEWABLE
GENERATION AND IS
WORKING TO **REDUCE THE
CARBON INTENSITY** OF ITS
GENERATION PORTFOLIO BY
OVER TWO THIRDS BY 2030

3

SECTION 3

SOCIAL DISCLOSURES PERFORMANCE

- 3.1 Occupational Health and Safety
- 3.2 Training and Education
- 3.3 Diversity through People
- 3.4 Community Engagement and CSR
- 3.5 Public Safety
- 3.6 Customer Privacy
- 3.7 Risk Management
- 3.8 Energy Utility Sector Specific Disclosures



3.1 OCCUPATIONAL HEALTH AND SAFETY

ESB's Board, management and employees are committed to protecting the health and safety of employees, customers, contractors and the people they serve. 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 its approach to safety across all business activities and is reinforced through strong and visible leadership throughout the Group. This belief is underpinned by ESB's core values of being Courageous, Caring, Driven and Trusted.

Our approach to the management of safety and health governs all activities that are undertaken by employees and/or contractors on ESB Group premises or indeed where work is being undertaken elsewhere on behalf of ESB Group companies.



Caption: ESB Networks crews restore storm damage in the aftermath of ex-hurricane Ophelia



Risk Assessment is the basis for the identification and management of hazards that may occur during the course of work.

The Chief Executive has overall responsibility for the management of health, safety and wellbeing in ESB. The ESB Group Safety Statement, as approved by its Board, sets out the overall policy and general arrangements in ensuring the health, safety and wellbeing of all employees and others affected by our activities. Functional responsibility is shared with all senior management and, in turn, with each manager, supervisor, team leader and employee. The Health, Safety and Environment Committee supports the Board's monitoring and governance of health, safety and wellbeing. ESB has formal agreements in place with trade unions covering all aspects of health and safety responsibilities of ESB and employees.

All ESB employees are represented in formal joint management-worker health and safety committee structures that monitor, advise and respond to health, safety and wellbeing matters.

All ESB business units have safety management systems in place, many of which are externally certified to the OHSAS 18001 standard or equivalent. ESB Policies and Standards are implemented and assurance audited with the aim of achieving and maintaining a safe and healthy work environment.

Each business aims to continuously improve safety, health and wellbeing. Prioritised by risk rating this is achieved through Safety and Health Improvement Plan implementation.

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 employees and contractors working on behalf of ESB receive the following mandatory occupational health and safety training:

Safety Induction, VDU Workstations (for desk based personnel), Manual Handling as determined by Risk Assessment. Training as required to perform specific tasks or

roles safely. All H&S training takes account of differing levels of responsibility, ability, language skills, literacy and risk.

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.

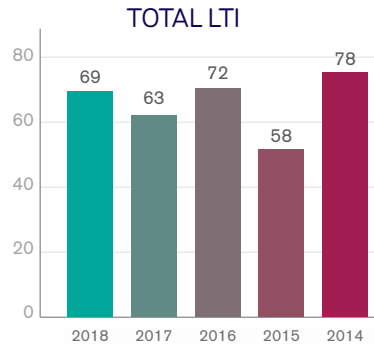
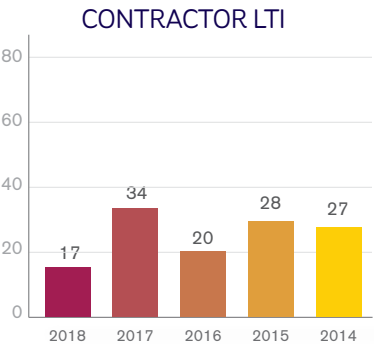
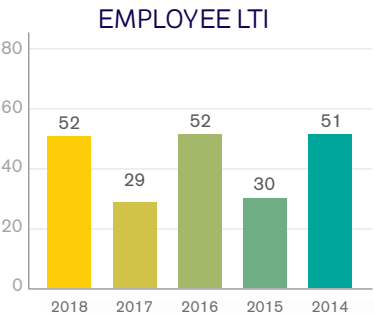
SAFETY PERFORMANCE

Health, safety and wellbeing performance is managed through a key performance indicator (KPI) 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.. This is supported by ESB's Safety Health and Environmental Reporting system (SHIELD), which facilitates the reporting and follow up

actions associated with incidents, and audit assurance programmes. The four Safety KPIs reported to the Chief Executive and Executive Director Team are:

- 1. Good Catch Reporting
- 2. Serious Incident Investigation closure on time
- 3. Serious Incident Action Closure on time
- 4. Senior Manager Safety Conversations

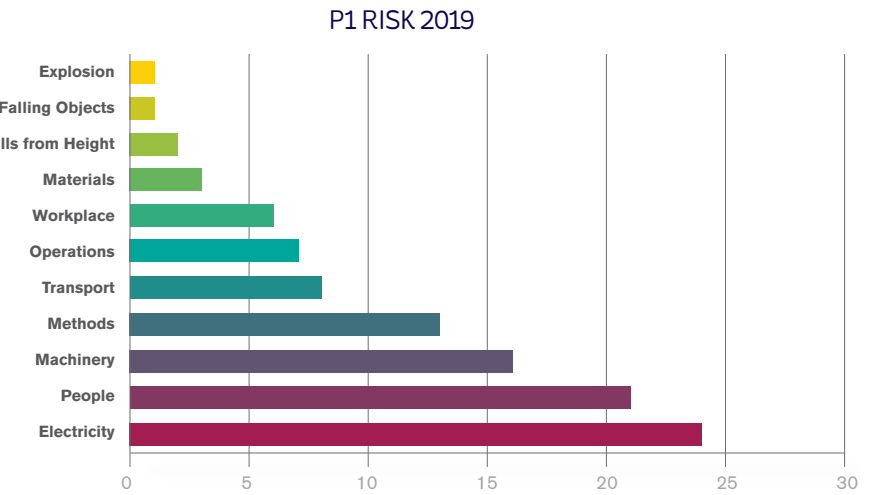
The effectiveness of health and safety management systems is tested on a regular basis via a programme of both internal and independent audits which either focus on a particular risk or general management systems.



The number of lost time injuries (LTIs) in 2018 was 67 compared to 63 in 2017 and 72 in 2016. The outcome was similar to 2016 where the majority of injuries occurred to employees. While the majority of these injuries were of low severity, ESB continues to focus on reducing risks in the business that give rise to injurious incidents. The most common causes of LTIs are loss of control, slips and trips, handling, lifting and body movement. Reducing LTIs continues to be a key focus for the Group.

	2018	2017
Staff Fatalities	0	0
Contractor Fatalities	0	0
Staff Lost Time Injuries (LTI)	50	29
Staff LTI Rate (per 100,000hrs)	0.40	0.24
Contractor Lost Time Injuries	17	34
P1 (High Potential Severity Incidents)	102	162
Absenteeism Rate (avg. days/staff)	8.39	8.03
Days lost due to occupational injury	1415.5	796.5
Public Fatalities due to electricity (Customer side of meter)	0	1
Public Fatalities due to electricity (Network side of meter)	0	0
Safety Incidents on the Network (including Public Safety Incidents)	2,015	1,910

In addition to focusing on LTIs, ESB categorises all injurious incidents and near misses with a particular focus on high potential incidents that could lead to more serious outcomes. These high potential incidents are known as P1 incidents. In 2018, 102 P1 incidents were recorded. Although this is a high number, the rate at which these incidents are occurring is lower compared to 2017 (163) and 2016 (255). All P1 and Lost Time Incidents are investigated to determine their root causes. The most significant safety risks associated with high potential incidents for ESB during 2018 were electricity, people, machinery & equipment, methods and transport & driving. The most prevalent injurious incidents (loss of control and slips and trips) are not the most prevalent serious incident. This is why it is important for ESB to continue its focus on reducing the risks associated with P1 incidents.



WORKERS WITH HIGH INCIDENCE OR HIGH RISK OF DISEASES RELATED TO THEIR OCCUPATION (403-3)

There is currently no evidence for either occupational health or occupational injury reporting that indicates that any particular worker or working group is at a higher risk or incidence of disease due to their occupation. All employees undergo health screening prior to employment and at regular intervals, where they may be at risk of exposure in an industrial environment. All employees are offered a health screening programme and projects that require significant contractor workforce involvement cater for health and wellbeing promotion and health screening on a voluntary basis. Action levels and maximum exposure levels exist within legislation to ensure potential health risks such as noise, dust and vibration are actively managed through risk assessment and mitigated for through exposure limits, PPE, regular surveillance and monitoring.

HEALTH AND SAFETY COMMITTEES

ESB has formal agreements in place with trade unions covering all aspects of health and safety activities and responsibilities of ESB and employees (i.e. 100%). All ESB employees are represented in formal joint management-worker health and safety committee structures that monitor, advise and respond to health and safety matters. Safety Representatives are appointed to represent employees in any required discussions with management. Employee representation on formal H&S committees is also a requirement of legislation.

KEY INITIATIVES AND PROGRAMMES
IMPLEMENTED OR CONTINUED IN 2018

- All ESB business units have health and safety management systems in place, many of which are externally verified and certified to the International OHSAS 18001 standard or equivalent.
- ESB continued to progress and monitor leading indicators of safety and health performance.

These are Good Catch, Leadership Conversations, P1 Investigation and P1 Action closure.

- The Safety Culture Transformation project is up and running with the first Implementation groups in Networks and Generation and Trading. Because of its success, this programme, now known as Safe and Sound, will be implemented across all of ESB. Detailed implementation plans have been developed to cover the next 2 years.



- ESB continued to make progress in 2018 on improving its safety performance through delivery of key improvement projects in ESB Networks and Generation and Trading.
- ESB established a company-wide safety assurance process that commenced during the year.
- In recognition of the diversity of employees and their wellbeing needs, ESB developed a new Health and Wellbeing Strategy. A Wellbeing Handbook was developed and launched during European Health and Safety Week.
- ESB has eight centres of competency to cover its key risks. These are Road Safety, Electrical Safety, Safe Work at Height, Health and Wellbeing, Workplace Safety, Contractor Safety, Process Safety and Public Safety. A number of actions were driven out by each centre of competency during 2018.
- Cross company reviews were carried out in relation to Fire Safety and Contractor Safety with recommendations being actioned.
- Delivery of the Public Safety Strategy and Action Plan continued in 2018 with active engagement with stakeholders in the farming, construction and emergency services sectors. New safety materials including videos were developed to help raise awareness of electricity safety for construction workers

and emergency services personnel. The independent Public Safety Audit confirmed on-going compliance with public safety licence conditions. Public safety communications ranged across all media including TV, radio, digital and press to educate and raise public awareness of the dangers of fallen wires especially during storms and to highlight the risks associated with operating tall machinery and transporting high loads.

EMPLOYEE HEALTH AND WELLBEING
ESB is committed to creating and maintaining a culture that enables and supports everyone's health and wellbeing. ESB's health and wellbeing team helps its employees to reach their full potential in the workplace through proactive, preventative and early intervention health and wellbeing services.

The team provides support, information and advice to employees to help them create and maintain a healthy lifestyle. The health and wellbeing team's approach is to ensure they deliver best practice proactive and preventative services while continuing to provide confidential supports to employees who may be experiencing physical, mental or personal challenges.

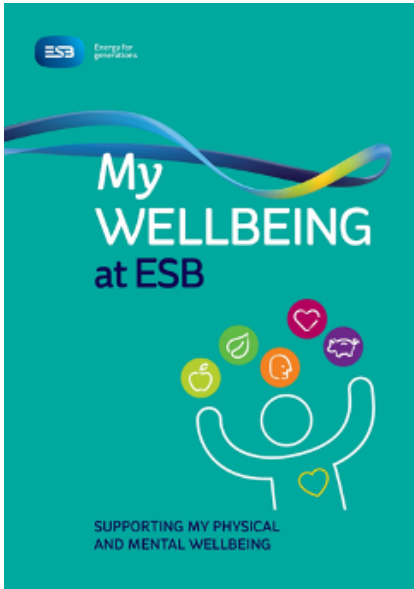
This support is provided through a range of avenues from occupational health service, employee assistance programme, an independent counselling service and health promotion/proactive services.

- The teams focus for the year has been:
- Achieving the Keepwell Mark in one business unit. The Keepwell Mark, an evidence based accreditation from IBEC, was awarded in November 2018. The accreditation allows companies an opportunity to demonstrate their commitment to the health and wellbeing of their workforce. The process includes benchmarking and assessment against recognised standards in workplace health, safety and wellbeing. This was completed in conjunction with the Engineering and Major Projects business.
 - The promotion of a mobile enabled health and wellbeing digital resource called POWR was extended to all employees with over 1800 employees engaging with the resource during the year. A series of handbooks on MyWellbeing at ESB were launched and circulated.
 - A Health and Wellbeing theme was chosen for European Safety Week.

EMPLOYEE ASSISTANCE PROGRAMME (EAP)
EAP officers provided ongoing confidential support and information to more than 800 employees.

PROACTIVE HEALTH PROGRAMME
Proactive health has provided seminars and workshops to many areas within the organisation. Proactive Health programmes focus on encouraging employees to make small changes which will encourage a healthier lifestyle.

There was an increased focus in the area of sleeping for recovery and positive mental health workshops throughout the year. Over 2,150 employees availed of these workshops.



3.2 TRAINING AND EDUCATION

2018 has been a hugely important year for ESB and for our people. We have reshaped our organisation to enable us to deliver our strategy and ensure the capability to realise our success. 2018 saw us build on the work we undertook in 2017. We carried out an Organisation Effectiveness Review in order to reshape ESB to best meet our strategic goals. Through this review we critically examined the capabilities we will require as we progress in a changed energy industry. This led to the redesign of our organisation over the course of 2018 to a fit for-purpose ESB, focused on delivering our Strategy for a Brighter Future. Engaging our employees around the vision for this new ESB has been a key feature for 2018. Along with explaining why we need to change, we also talked about staying true to the values that have shaped everything we are today – courageous, caring, driven and trusted. As we move forward and deliver our ambition for a low-carbon future powered by clean electricity, our values will guide the behaviours we need to succeed.

Ensuring we have the skills needed to deliver on that Brighter Future is central to ESB's success in delivering the low carbon transition. There are a number of integrated human resource processes embedded in the organisation which ensures that ESB delivers its Brighter Future strategy to 2030:

- Strategic Resource Planning - The process identifies the resource numbers, skills and capabilities necessary for the successful delivery of Strategy 2030
- Employee and Manager Development - ESB's Performance and Development Process is focused on building capability and a high performance culture, and provides a platform for the identification and delivery of targeted learning and development solutions
- Graduate and Apprentice Recruitment and Development - ESB continues to recruit across a number of key areas to ensure the capability needed to deliver Strategy for a Brighter Future

WORKFORCE RENEWAL ACROSS ESB
Over 2018, ESB continued to recruit across a number of key areas to ensure the capability needed to deliver Strategy for a Brighter Future.

- Through the Graduate Recruitment Programme ESB recruited 77 people across Engineering, Finance, HR, IT and Business
- The Networks Apprentice Programme to develop Network Technicians for ESB Networks, brought 72 people at a variety of levels and graduates into their first year of the four-year programme
- 95 new Network Technicians were recruited in 2018 - 63 from the ESB Networks Apprentice Programme and 32 from outside industry
- 290 experienced personnel were recruited across all capability areas.

PERFORMANCE AND CAREER DEVELOPMENT REVIEWS
All employees (100%) are part of an annual performance management process, goal setting and career development process, which is deployed across the business.



In 2018, ESB recruited 12 women out of a total of 72 into the craft apprenticeship programme. This is significant within the industry for the craft area and has been achieved through a focused programme to engage with schools and a marketing campaign showing our female craft employees.

3.3 DIVERSITY THROUGH PEOPLE

ORGANISATION EFFECTIVENESS REVIEW (OER) – CREATING STRATEGIC ALIGNMENT

2018 saw People and Organisation Development lead an Organisation Effectiveness Review to enable ESB to reshape the organisation in support of delivering ESB’s Strategy for a Brighter Future. Through this process ESB critically examined the capabilities it will require as it moves forward in a changed energy industry. ESB has designed an organisation that is fit for purpose, with a structure, processes and interfaces through which it will deploy its capability to realise its strategic ambition. This new organisation came into effect on the 30 October with people transitioning to their roles in the new organisational context.

ENGAGING PEOPLE IN A SHARED VISION FOR THE FUTURE

Building employees’ understanding of the need to make this change, while building their support and involvement is critical to ensuring ESB can transform its business. Over the course of 2018, ESB continued to talk about its purpose and where this now takes ESB as it leads the transition to a low-carbon future. ESB engaged its people across the company in the story of its past, its present and its future. ESB explained the industry and how it is changing and how ESB has positioned its business to succeed in this new context so that ESB can continue to serve the customers and communities who trust and depend on it.

PEOPLE AND ORGANISATION DEVELOPMENT LOOKING TO THE FUTURE

Through the OER process, ESB redesigned its approach to HR through the design of the People and Organisation Development function. The People and Organisation Development function represents a significant step forward in the development of ESB’s One HR model; a single, enterprise-wide and strategy-led approach to human resource management. A key change in this approach is the inclusion of the Safety, Health and Wellbeing team into the People and Organisation Development function. This important decision reflects the way forward to achieve injury-free workplaces, which involves a significant refocus on manager and employee behaviours.

ESB’s core purpose is to work across the business to ensure that its people have the capability and motivation to deliver the strategy. In doing so we recognise the importance of the overall employee experience, of allowing people reach their full potential and of ESB’s responsibility to create a safe working environment. The design brings focus to a business partnering model providing strategic people advisory to the businesses, centres of excellence focused on the key strategic themes for ESB, in the current and future context, and quality HR services delivered through efficient and digitally enabled processes.

BUILDING AN INCLUSIVE AND VALUES-LED CULTURE

ESB’s Strategy for a Brighter Future calls out a high performance culture as critical to its success in delivering this strategy. Shaping the organisation around the delivery of the strategy, aligning the activities of all its people with strategic objectives and creating workplaces where people can perform and be their best will enable ESB’s success. ESB recognises the power of a diverse workforce when leveraged through an inclusive culture, where people can be at their best because they can be themselves. Building inclusion through understanding and supporting difference continued to be a key activity in 2018.

DEVELOPING THE CAPABILITY TO DELIVER OUR STRATEGY

The behaviours of its leaders are critical to ensuring ESB builds employee engagement to enable high performance and delivery of the strategy. In 2018, ESB completed delivery of its Future Leader Programme, in which over 200 managers company-wide participated. The programme focused on building self-awareness among participants to better understand impact on people as a manager. The programme was designed around ESB’s core values of being courageous, caring, driven and trusted and is integral to ensuring ESB builds a values-led culture through values-led leadership. Understanding the capability requirements of the strategy over the coming years will be important to ESB’s success. Changing capabilities and new ways of resourcing led ESB to develop a focus on Future Workforce in the new organisation design. This, along with Strategic Resource Planning will ensure it has the appropriate capability at every point in the journey to 2030.

DIVERSITY AND EQUAL OPPORTUNITY

ESB’s firm commitment to working towards a more consciously inclusive workplace continues.

Having a diverse and inclusive work environment plays an increasingly important part in ESB’s ability to attract, retain and develop key skills and talent. ESB’s diversity and inclusive policies are regularly reviewed, in line with legislation and best practice and aim to support a culture of inclusion, respect and dignity for the individual in the workplace and for the customers it serves. We understand that the quality of our workplaces are key to a highly engaged workforce. Inclusion is critical to a positive work environment and a key enabler of diversity. Over the past two years we have been focussed on increasing employee awareness of inclusion by raising awareness of the different communities. Understanding that employees have different needs at different life stages has also been important to the inclusion conversation.

ESB’S CODE OF ETHICS

	2018	2017
Number of Employees	7,874	7,790
Female	24%	23%
Management Level Female	25%	21%
Full Time	93%	93%
Employee with Disabilities	3%	4%
Permanent Contract	99%	99%
Temporary Contract	1%	1%
Skilled Craft and General	42%	42%
Non Craft and General	58%	58%
Female Board Members	36%	36%
Third Party Contractor Staff working on behalf of business	3,100	3,100

STAFF BY REGION

Republic of Ireland	80.5%	80.5%
Northern Ireland	17.5%	17.5%
Europe	0.1%	0.1%
Middle East	1.4%	1.4%
Asia	0.03%	0.03%
Africa	0.01%	0.01%
Nationalities Employed	35	35

At ESB, all our board members and staff adhere to a Code of Ethics, which outlines our approach to responsible business behaviour. The main premise of our codes 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 employees can use to report suspected wrongdoing. This Helpline operates 24 hours a day, 7 days a week. The Helpline offers a safe, confidential and, if necessary, anonymous means of reporting wrong-doing for staff who may otherwise feel uncomfortable coming forward to their line manager.

GOVERNANCE

ESB’s Joint Equality Council, which represents all Business Units and Group of Unions, reconvened and continues to raise awareness to ensure our workplaces are inclusive, where equality of opportunity exists for all and where the diversity of our people drives innovation and creative problem solving to better serve ESB’s customers.

DIVERSITY OF ESB BOARD OF DIRECTORS

The Board, both for itself and the Group as a whole, is fully committed to diversity as a key value in itself and as important to achieving ESB’s business objectives. The Board is committed to achieving the optimal balance of skills, experience and diversity among its members. In relation to Board diversity, the Chairman of the Board, in assisting the Department of Communications, Climate Action and Environment (DCCAE) in drawing up the specification for Board appointments has regard for the benefits of diversity on the Board, as provided for under the State Code of Practice Guidelines and the related "Guidelines on Appointment to State Bodies". Of the 12 members of the Board, 4 are female. There are also 4 Worker Board members as part of the 12 member board. Full details of the Board membership are available in ESB’s Annual Report 2018, page 84.

NON-DISCRIMINATION AND PROTECTED DISCLOSURES

ESB will not tolerate any penalisation of any person who raises a concern to an appropriate person in the reasonable belief that it intends to show a wrongdoing. Under the Protected Disclosures Act 2014 ESB is required to have procedures for dealing with any protected disclosures that may be made by its employees and others. A protected disclosure relates to information about a wrongdoing in the workplace which a staff member reasonably believes has taken place. ESB’s Policy on Fraud and Other Unlawful Activities sets out the procedures in place in ESB to ensure that staff can bring their genuine concerns to the attention of the company in the knowledge that those concerns

will be dealt with appropriately and without being penalised for doing so.

Section 22 of the Protected Disclosures Act 2014 requires ESB to publish an Annual Report relating to protected disclosures made under the Protected Disclosures Act 2014. In accordance with this requirement, ESB confirms that as at 31 December 2018 one protected disclosure was made to ESB and was subject to investigation by the Group. All at ESB have a duty to uphold the Dignity and Respect at Work Charter, embrace the values and behaviours it sets out and ensure a working environment that is free from bullying, harassment and sexual harassment. ESB’s Respect and Dignity for the Individual Policy details both the process to be followed and the confidential supports available to employees in the event of any alleged incidents occurring. Any such incidents that do occur are treated with the utmost confidentiality and are not publically disclosed or commented on.

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. 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.

3.4 COMMUNITY ENGAGEMENT AND CSR

Since its foundation in 1927, ESB has always had a strong sense of social purpose or corporate social responsibility (CSR). It has always supported communities and programmes that enhance the Irish economic and social fabric, helping to bring light and energy to the people it serves, allowing individuals and communities to fulfil their potential in every walk of life.

ENERGY FOR GENERATIONS FUND

ESB is committed to playing a role in addressing some of the key social issues facing the country today. ESB has been involved in formal funding since it established its ElectricAid Ireland Fund in July 2005. In 2014, the ElectricAid Ireland Fund was rebranded to the Energy for Generations Fund. The aim of the Energy for Generations Fund is to maximise the impact of the investment by taking a more strategic approach to drive change. In 2018, over €2 million was disbursed by ESB across a range of community and issues-based initiatives.

Nearly €1 million of this was direct funding through a quarterly fund, managed by a cross-ESB committee, to 94 charities (across 105 projects) working in the areas of suicide, homelessness and education access and support. These projects are rooted in communities across Ireland and aim to improve the quality of life for those living in the community.

EDUCATION MATTERS

Like many other Irish companies, ESB needs access to employees with strong science, technology, maths and literacy skills and all of these are based on getting young children off to the best educational start possible. The support of programmes such as Time to Read, TechSpace and Science Blast allows ESB to do this, while also providing employees with a meaningful volunteering opportunity.

ESB is pleased to continue to support An Cosán's Virtual Community College, Ireland's first virtual adult education platform, which aims to increase access to further and higher education nationwide and address social inequality through online and mobile technology.

In 2018 ESB continued its commitment to support the Dublin Institute of Technology's (DIT) Access to Apprenticeship programme, which aims to address the current obstacles faced by young people from areas of socio-economic disadvantage in securing an apprenticeship. ESB's support will provide local youth with the essential skills and knowledge they need to begin a rewarding career through an apprenticeship.

SUICIDE PREVENTION

ESB has been committed to supporting suicide prevention programmes since 2005. Over the past 13 years, one of the key areas of work has been in suicide prevention and support. To reflect this, ESB has given over €6.5 million towards suicide services since 2005. Suicide is a very serious issue that has touched every community in the country, and ESB has identified the need to support robust, resilient services and capacity building in this sector. By aligning CSR efforts with national policy, ESB is committed to playing a key role in contributing to the broader improvement of Irish society.

ESB joined forces with Aware in a 3-year partnership to support the nationwide roll-out of their Life Skills for Schools programme for Transition Year students. This 4-week intensive programme aims to teach young people how to manage their feelings, anger and irritation, and how to deal with many challenges that may come during adolescence, to improve their wellbeing. Since its launch in 2016 the programme has reached over 4,000 students aged 15–18.

In 2018, ESB continued its support for Jigsaw's My World Survey 2, the largest research study of its kind ever undertaken in Ireland, aimed at mapping today's youth mental landscape. The study will improve the collective knowledge in the area of youth mental health so that they can see the world through the eyes of young people and identify how best to support them.

EMPLOYEE VOLUNTEERING SUPPORT

ESB recognises that funding is only part of the story and ESB need to leverage the skills and knowledge that are within ESB to bring about more sustainable and positive outcomes. ESB encourages volunteerism by its employees and local community support and the Energy for Generation Fund runs a comprehensive volunteering programme and provides support to ESB employees who volunteer in their communities.

Any employee who volunteers for over 20 hours with a charity can request that ESB donates €250 to that organisation. In 2018, €25,000 was donated through employees volunteering support to a range of charities including Alone, COPE Foundation, Special Olympics Ireland and St Vincent de Paul (SVP).

HOMELESSNESS

ESB, through its Energy for Generations Fund, is committed to fighting homelessness. Throughout 2018, the Fund donated €231,840 to organisations working to end homelessness in Republic of Ireland and Northern Ireland.

WIND FARM COMMUNITY FUND

ESB is committed to being a good neighbour and supporting the communities in which our subsidiary wind farm companies operate. This is part of our commitment to ensure clear and lasting benefits in the communities which surround the wind farms. In making over €1.1 million available to groups close to wind farms across the Republic of Ireland (ROI), Northern Ireland (NI) and Great Britain (GB), the community funds are contributing to the development of essential infrastructure and services, and the creation of a Brighter Future for the residents of neighbouring rural communities. Since 2015, we have expanded our funding efforts into the development and construction phase of a number of projects, which were integral to the expansion of our portfolio through the introduction of The Wind Farm Development Fund. The purpose of this fund was to give back communities located close to the construction works and transport routes associated with our wind farm projects. To date, 29 projects have been supported across four wind farm projects.

SPONSORSHIP

The Group manages an active sponsorship portfolio including the following:

- Promoting young people in sport through the Electric Ireland GAA All-Ireland minor championship and Ireland's under-20s rugby
- Proud supporter and sponsor to the Pieta House Darkness into Light annual event
- Supporting the arts and music through sponsorships of Feis Ceoil, Electric Picnic and the National Gallery of Ireland
- Supporting the development of skills in science, technology engineering, art and maths (STEAM) through partnerships with TechSpace, Science Blast and Engineers Ireland.

ENERGY FOR GENERATIONS FUND



3.5 PUBLIC SAFETY

Safety is fundamental to everything we do in ESB Group and we are committed to protecting the safety, health and wellbeing of our employees, contractors, customers, members of the public and others who may be affected by our work activities. The key focus of our public safety programme concerns the risk management of people coming into contact with our network, plant and equipment. Our on-going network refurbishment programme continues to have a significant and beneficial impact on public safety. While ESB is not responsible for public safety beyond the customer's meter, we deliver regular public safety campaigns to alert the general public to the potential dangers posed by electricity.

Public awareness around the dangers of coming into contact with live electricity are regularly promoted. With the increasing frequency of extreme weather events, risks associated with fallen power lines in particular are emphasised. Our Public Safety Advertising Campaigns - 'Are You Sure It's Safe?' and "Stay Safe, Stay Clear" - continued throughout 2018 to continually remind the public of the need to be aware of the dangers of electricity. 2018 was

the fourth year of our 'Safe Family Farms' partnership with the Irish Farmers Journal. New online farm safety videos were added to complement regular editorial safety pages and full-page public safety advertisements to raise awareness of electrical safety on farms. ESB Networks distributed high visibility vests to 88,000 junior infants in September as part of our 'Stay Safe, Stay Clear' programme, in partnership with the Road Safety Authority. We developed a new electricity video for construction workers for use in the Safe Pass training programme which is provided to 90,000 workers annually.

Case Study:
Connecting with the Self Build Show

NIE NETWORKS' connections specialists attended the Self Build Show in Belfast recently to take customers through the connections process and advise them about competition in connections. Over 40,000 visitors attend the Self Build Shows each year to get ideas, inspiration and creative advice on creating their dream home.



Pictured (l-r): Sammy Ewart, Niall Cassidy, Philip Irwin and Jonny Kerr, connections specialists from NIE Networks, attend the Self Build Show.

3.6 CUSTOMER PRIVACY

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 known as Personal Data. ESB is subject to various legal requirements protecting the rights of data subjects.

ESB regards the responsible handling of Personal Data as a key value in its customer-centric strategy, in addition to compliance with its legal obligations. ESB respects the rights

and freedoms of our customers, employees and others who trust us with their Personal Data. Protecting the privacy and security of this information is a top priority for ESB. The policy also applies to all information systems used by ESB, including all undertakings in which ESB has a controlling interest, wherever located and for whatever purpose used, and whether operated by ESB or by an outside processor on its behalf. All suspected or actual personal data breaches must be immediately reported in accordance with ESB's data breach management process, where they are subject to investigation and

review in line with the governance structures of the organisation, including reporting to the Board Audit and Risk Committee

SUBSTANTIATED COMPLAINTS CONCERNING BREACHES OF CUSTOMER PRIVACY AND LOSSES OF CUSTOMER DATA (418-1);

- i. complaints received from outside parties and substantiated by the organization; 0
- ii. complaints from regulatory bodies; 0
- iii. Total number of identified leaks, thefts, or losses of customer data; 26

3.7 RISK MANAGEMENT

APPROACH TO RISK MANAGEMENT

The effective management of risks and the pursuit of opportunities supports the development of ESB's strategy while protecting the interests of its stakeholders. ESB is exposed to a number of risks and opportunities which could have a material impact on its performance and long-term development. The effective identification, management and mitigation of these risks and opportunities is a core focus of the ESB Group. Full details are reported in **ESB's Annual Report 2018, page 16.**

HOW ESB MANAGES RISK

The Board has overall responsibility for risk management and internal control. The current UK Corporate Governance Code 2016 (the UK Code) and related guidance sets out the Board's responsibility for determining the nature and extent of the principal risks it is willing to take in achieving its strategic objectives. The Code of Practice for the Governance of State Bodies (Section 7.2) also refers to the Board's oversight of risk management including the requirement to "approve the risk management plan and risk register at least annually". The Board ensures that the Group's risk exposure remains proportional to the pursuit of its strategic objectives and longer term shareholder value. It has adopted a Risk Management Policy and Governance Framework to support its oversight of risk throughout the Group. The Board delegates responsibility for oversight of its principal and emerging risks to Board Committees in accordance with the Committees' Terms of Reference

and their respective areas of expertise. The Committee Chairs report to the full Board on key developments and matters requiring further discussion and consideration. The Audit and Risk Committee has overall responsibility for ensuring that enterprise risks and opportunities are properly identified, assessed, reported and controlled on behalf of the Board and advises the Board on its consideration of the overall risk appetite, risk tolerance and risk strategy of the Group. The details of the activities undertaken by the Board and the Audit and Risk Committee during 2018 in respect of their risk responsibilities are outlined in **ESB's Annual Report 2018, page 98.**

ESB's approach combines a top-down strategic assessment of risk and risk appetite which takes account of the external business environment and any changes to the business model along with a bottom-up operational identification and reporting process, arising from a review and assessment of the business unit risk registers. ESB's Risk Management Policy and Governance Framework was further enhanced during 2018 ensuring consistency of approach to risk management across the Group. Enhancements to the Governance Framework included updates to the Group Outsourcing Risk Guidelines, the development of a new Reputation Risk Guideline and a manual to assist businesses with external inspections. These resources are provided to support the businesses in their management of different aspects of risk. The Quarterly Risk Reporting packs provided to the Audit and Risk Committee were refreshed during the year to support the

committee with its oversight responsibilities.

FOCUS DURING 2018

In early 2018, the Audit and Risk Committee reviewed and recommended to the Board the Group Risk Plan for 2018 which set out the Principal and Emerging Risks facing the Group. The Plan also included a comprehensive Work Plan for the Committee detailing its risk oversight activities for the year. The Committee identified a number of specific topics they wished to focus on during the year including:

- Cyber Risk
- Data Protection
- Brexit
- Technology and digital developments
- Outsourcing

The Committee held a full day off-site workshop to which all members of the Board were invited to examine these topics in more detail. External speakers provided additional insights for the Board members. A full review of the Group's High Impact Low Probability (HILP) Risks was undertaken in 2018. HILPs are a class of risks with the potential to cause long-term, catastrophic damage to the business. This review resulted in a number of new HILPs being included in the Register. Group Risk, Group Internal Audit and Group Finance functions continued to meet quarterly to review internal control and risk reporting. This ensures alignment between the functions, better information-sharing and opportunities to identify areas for improvement in the overall internal control framework.

3.8 ENERGY UTILITY SECTOR SPECIFIC DISCLOSURES

EU1 INSTALLED CAPACITY, BY ENERGY SOURCE AND REGULATORY REGIME

Installed capacity by regulatory regime & primary energy source in MW.

Year	Republic of Ireland	Northern Ireland	Great Britain
	Gas		
2017	2,025	402	1,231
2018	2,025	402	1,231
	Coal		
2017	855		
2018	855		
	Peat		
2017	226		
2018	226		
	Oil		
2017		53	
2018		53	
	Wind		
2017	293	100	125
2018	327	100	169
	Hydro¹		
2017	512		
2018	512		
	Solar		
2017		1	
2018		1	

Note 1: Hydro included pumped storage capacity

EU2 NET PRIMARY OUTPUT BY ENERGY SOURCE AND REGULATORY REGIME

ESB does not disclose net primary output by energy source and regulatory regime in GWh. 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 below, as is required by legislation in Ireland.

OPERATIONAL ENERGY CONSUMPTION

Thermal Generation (GWh)	2018	2017
Coal	5,683	10,091
Natural Gas	22,925	21,981
Oil	205	300
Peat	4,045	4,253

Operational (Primary Energy equivalent in kWh)*	2018	2017
Electricity	53,489,805	64,539,479
Thermal	4,986,783	2,827,693
Transport	56,146,927	54,148,236

Energy Performance Indicator (EnPI)		
kWh/FTE Employee	20,852	22,692

* Operational Primary Energy Equivalent (non Generation) as reported to Sustainable Energy Authority of Ireland, Annual Report 2018 on Public Sector Energy Efficiency Performance.

EU3 NUMBER OF RESIDENTIAL, INDUSTRIAL INSTITUTIONAL CUSTOMERS

Connections to the Network	2018	2017
Republic of Ireland ¹		
Residential	2,057,339	2,041,325
Small Business	184,621 ²	184,747
Medium Business	92,074 ³	89,358
Large Energy User (distribution connected)	1,779	1,527
Transmission connected	18	28
Transmission connected with embedded generation	60	46
New Connections	26,954	24,463
Northern Ireland		
Total Customer connections	881,492	860,000
Residential	92.65%	92%
Commercial & Industrial	7.35%	8%
Disconnections (Republic of Ireland)		
Number of Disconnections	2,200	2,650
Disconnection Rate	20 per 10,000 customers	24 per 10,000 customers
Vacant Disconnections	35%	35%
Reconnection within 48 hours	100% of non-vacant	100% of non-vacant
Customer Minutes Lost		
ESB Networks ⁴	148.3	144
NIE Networks ⁴	94.2	124
Access to Electricity Supply		
Republic of Ireland	100%	100%
Northern Ireland	100%	100%
Complaints		
-ESB Networks	2,905	2,761
-NIE Networks ⁵	1	1
-Electric Ireland	1,948 ¹	1,948

Notes on Customer Disclosures;

1. Reporting a year in arrears

2. Includes Embedded Generation

3. Including Embedded Generation and Public Lighting

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

5. Complaints classified as stage 2 to Consumer Council NI

EU4 LENGTH OF ABOVE AND UNDERGROUND TRANSMISSION AND DISTRIBUTION LINES BY REGULATORY REGIME

NETWORK INFRASTRUCTURE

ESB Networks (Length in Kms)	2018	2017
Distribution		
– LV-OHL	39,045	38,238
- LV- Underground	13,807	13,372
-10kV - Overhead	37,462	37,465
-10kV - Underground	8,270	8,146
-20kV - Overhead	46,071	45,730
-20kV - Underground	1,688	1,583
-38kV - Overhead	5,756	5,751
-38kV - Underground	1,112	1,016
-110kV-Overhead	414	537
-110kV - Underground	240	240
NIE Networks		
Distribution	47,000 (34% underground)	47,000 (34% underground)
Transmission	2,200 (5% underground)	2,200 (5% underground)

ESB IS **LEADING** THE
TRANSITION TO RENEWABLE
GENERATION AND IS
WORKING TO **REDUCE THE**
CARBON INTENSITY OF ITS
GENERATION PORTFOLIO BY
OVER TWO THIRDS BY 2030



4

SECTION 4 ENVIRONMENTAL TOPICS

- 4.1 Energy Management
- 4.2 Biodiversity
- 4.3 Emissions
- 4.4 Effluents and Waste
- 4.5 Environmental Compliance

4.1 ENERGY MANAGEMENT

Energy Management and energy efficiency aid economic competitiveness, whilst helping to lower our greenhouse gas (GHG) emissions. Energy efficiency is the foundation of a sustainable economy and is at the heart of many of the efforts being undertaken across the ESB Group to address aspects of energy efficiency. ESB Group delivers energy efficiency programmes to new and existing energy customers via our retail businesses Electric Ireland and ESB Energy and via Smart Energy Services for industrial and commercial customers. These programmes enable customers to improve the energy performance of their homes and businesses to reduce both running costs and environmental impact. For the regulated network businesses, ESB Networks and NIE Networks, energy efficiency programmes on the network assets are subject to and part of regulatory price review work programmes, which are agreed at set time periods in conjunction with the respective energy regulators.

ENERGY EFFICIENCY PROGRAMME

In ESB Group, energy efficiency is identified as a strategic priority within the Brighter Future strategy. It is cascaded into business unit business plans, factored into long-term asset planning, incorporated into our customer-facing energy services offerings, included in our regulatory price review submissions, as part of the multifaceted approach across the breadth of the business. For employees, energy efficiency is brought to life through our focus on energy efficiency within our operations and how behavioural change can contribute to energy efficiencies in both building energy and vehicle fuel consumption. During 2018 ESB joined the SEAI ISO50001 Accelerator programme, with a view to developing our energy management system towards full certification to the ISO50001 standard in 2019. As a commercial semi-state owned entity (95% state owned), ESB is committed to supporting and being 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. These strategies and actions are helping ESB deliver this obligation. To the end of 2018, ESB Group has delivered a 35% improvement over baseline and against the 33% target (GRI 302-4).

DELIVERING ENERGY REDUCTIONS FOR CUSTOMERS

The Irish Government has enlisted the assistance of Energy Suppliers in meeting the national requirements of the EU Energy Efficiency Directive to deliver a 20% Energy saving by 2020 and has introduced an Energy Efficiency Obligation scheme (EEOS). The Energy Efficiency Incentive, first introduced in 2014, is designed to incentivise customers to install energy efficiency measures to SEAI standards by giving them a credit on their energy bill. This incentive, along with SEAI's grants make it even more cost effective for home owners to install energy efficiency measures.

Thermal Generation (GWh)	2018	2017	
Coal	5,683	10,091	
Natural Gas	22,925	21,981	
Oil	205	300	
Peat	4,045	4,253	
Operational (Primary Energy equivalent in kWh)			Baseline ¹
Electricity	53,489,805	64,539,479	95,785,331
Thermal	4,986,783	2,827,693	
Transport	56,146,927	54,148,236	
Energy Performance Indicator (EnPI)			
kWh/FTE Employee	20,852	22,692	30,414
% improvement towards 2020 33% target	35%	31.6%	0%

Table Notes and Clarifications:

¹Baseline 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.

LEADING THE WAY TO A BRIGHTER FUTURE

Electric Ireland is rewarding customers who undertake measures to improve the energy efficiency of their homes through its Energy Efficiency Incentive Scheme, which gives customers additional discounts on their bills. Electric Ireland has also pioneered the introduction of Smart Heating Controls, offered as part of price plans to assist customers in managing their energy requirements. Electric Ireland also delivers energy savings as part of the National Energy Efficiency Obligation Programme. In 2018, Electric Ireland assisted local authorities and housing associations around the country to improve the energy efficiency of social housing through a variety of measures including attic and wall insulation, heating system improvements and heating control upgrades.

ESB Smart Energy Services (SES), established to help large industrial and commercial energy users to reduce their energy use and costs through energy management and efficiency projects, delivers in excess of 100GWh Primary Energy Equivalent (PEE) savings to the non-residential sector annually. As a customer services business, SES endeavours to grow its energy services offerings and customer base in Ireland and the UK through broadening its expertise and offerings to large energy users.



4.2 BIODIVERSITY

MANAGING OPERATIONAL IMPACTS ON BIODIVERSITY

As set out in ESB's Group Policy Statement on Environmental Management and Sustainability, ESB activities comprise electricity generation, transmission, distribution and supply and the 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 work that has 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. All proposed operational and maintenance activities are screened at an early stage of planning to determine whether a Natura Impact and/or Environmental Impact Assessment are required. Biodiversity impacts are considered in all areas where existing assets or new assets are planned within close proximity to special areas of conservation and designated sites, as set out by national, regional or EU legislation. Correspondingly, specific work instructions and methods exist to ensure the conservation of biodiversity incorporating all habitats and species inside and outside of designated sites, during and following any such works.

THE MANAGEMENT APPROACH TO BIODIVERSITY AND ITS COMPONENTS 103-2

ESB Group has a duty to protect habitats and species, not just those in designated areas in the course of its day-to-day operations, and has a management process in place as part of its Environmental Management System to enforce this. The network of designated sites in the Republic of Ireland includes Special Areas of Conservation (SAC), Special Protection Areas (SPA), candidate Special Areas of Conservation (cSAC) and proposed Special Protection Areas (pSPA). A number of initiatives have been developed to address biodiversity considerations, including incorporating biodiversity aspects into existing environmental management systems, the adoption of biodiversity guidelines for HV substations, biodiversity action plans, the preparation of Networks job aids addressing design work in close proximity to designated sites and the ongoing preparation, with EirGrid (Transmission System Operator), of draft ecology guidelines for electricity power lines. If a project or plan (either new development or works to existing structures) is located within or adjacent to a designated site) then screening for Appropriate Assessment is mandatory.

NIE Networks has around 3,500 kilometres of 11kV (or below) overhead line in natural heritage protected sites which are all mapped on its systems. NIE Networks mapping tools have recently been extended to include historic environment sites in Northern

Ireland. NIE Networks liaises with the NIEA regularly to receive the required consent and to agree the necessary processes to be followed on such sites to ensure they and their features are protected and mismanagement is avoided.

Helping employees become more 'Wildlife Aware'

NIE Networks continued its focus on biodiversity in 2018 building on its partnership with Ulster Wildlife. We have hundreds of employees working in the countryside every day and all of them need to be aware of how to identify protected species such as nesting birds, badgers and wild orchids. With this in mind the company, leveraged Ulster Wildlife's in depth knowledge of Northern Irish flora and fauna to produce a Wildlife Aware guide for its employees. All 1,200 employees were then trained on how to use the guide which provides information and images on where, when and how to identify particular species. For example, the different six different types of nests built by birds and where to look for them. The creation of the 'Wildlife Aware' booklet is the start of a more focused approach to biodiversity with employees and contractors to highlight the key species of plants, birds and animals in the local countryside.



Celebrating the launch of the 'Wildlife Aware' booklet, Kevin McDowell, Head of Health, Safety & Environment pictured with Vickie Chambers, Supporter Relationship Manager at Ulster Wildlife.

EVALUATING THE EFFECTIVENESS OF THE MANAGEMENT OF BIODIVERSITY

The estimated extent of ESB Group assets within designated sites in Republic of Ireland and Northern Ireland is set out in the table below. Where required development projects and activities are audited to ensure effectiveness of biodiversity processes.

Examples of these types of site include Areas of Outstanding Natural Beauty (AONB), Areas of Special Scientific Interest (ASSI), Special

Protection Areas (SPA) and Special Areas of Conservation (SAC).

Where conditions are imposed, these will be followed to ensure there is minimal disturbance or potential of pollution within the area while work is carried out. ESB continues to assess the impact of its operations in accordance with its obligations.

Republic of Ireland (assets inside SAC, SPA, NHA, PNHAs)	2018	2017
Lands under ESB control (km ²)	90.7	96.7
LV Stations (No.)	249,000	260,425
38kV to 400kV OHL (km)	12,330	12,667
38kV to 400kV Cable (km)	1,319	1,591
Northern Ireland (Assets inside SAC, SPA, ASSIs)	2018	2017
11kV or below (km)	3,500	3,500

OPERATIONAL SITES OWNED, LEASED, MANAGED IN, OR ADJACENT TO, PROTECTED AREAS AND AREAS OF HIGH BIODIVERSITY VALUE OUTSIDE PROTECTED AREAS 304-1

The vast majority of ESB Group assets are not located within designated sites. The estimated extent of ESB Group assets within designated sites in Republic of Ireland and Northern Ireland is set out in the table above.

SIGNIFICANT IMPACTS OF ACTIVITIES, PRODUCTS, AND SERVICES ON BIODIVERSITY 304-2

Developments and activities are designed and planned so as to avoid impacting on biodiversity. Where there is a potential of significant impacts on biodiversity measures are undertaken to avoid and reduce impacts to a minimum.

IUCN RED LIST SPECIES AND NATIONAL CONSERVATION LIST SPECIES WITH HABITATS IN AREAS AFFECTED BY OPERATIONS

Where an IUCN Red list species or species of national conservation concern is identified as being potentially impacted by a project at assessment stage e.g. ecological impact assessment, environmental impact assessment or Appropriate Assessment under the Habitats Directive, appropriate mitigation measures are put in place to avoid, redesign or reduce significant impacts, as well as implementing operational phase monitoring of protected species, such as birds or butterflies.

4.3 EMISSIONS

EMISSIONS COMMITMENT

ESB Group is committed to delivering carbon-neutral electricity in Europe by 2045 in line with the Eurelectric commitment to this and to ensuring a competitively priced, reliable electricity supply throughout the integrated European energy market. We believe that it is essential that EU climate change policy supports competitiveness by promoting reductions of greenhouse gas emissions in a cost-effective manner through the use of the EU Emissions Trading Scheme (ETS) market mechanism. ESB supports a strong EU ETS system as the best way to provide affordable, reliable and sustainable electricity to the EU economy.

ESB is committed to finding a secure and affordable transition away from the use of coal and peat for power generation. CO₂ output from GT's SEM generation plants remains lower than 2005 (baseline) by approximately 43%, and the carbon intensity of generation reduced by 32% to 454 g/kWh. Since 2009, ESB has disclosed it's carbon emissions through CDP, a global disclosure not-for-profit charity that runs the carbon disclosure system for investors, companies, cities, states and regions to manage their environmental impacts, representing the most comprehensive collection of self-reported environmental data globally. ESB's 2018 disclosure scored B- on the CDP scoring methodology.

carbon economy and reduce carbon intensity by 50% by 2030. ESB's carbon intensity target for 2030, Scope 1 emissions is set as 200gCO₂/kWh.

REDUCING EMISSIONS

Our aim is to deliver a balanced low carbon generation portfolio with an increasing proportion of the capacity accounted for by renewables such as on and off shore wind, solar PV and biomass. The strategy envisages growth and asset renewal in the UK and Ireland. ESB's thermal generation portfolio operates within the confines of the EU Emissions Trading Scheme (ETS) and Scope 1 generation emissions are subject to an operating licence, external verification and reporting to the relevant competent authority, which is dependent on the jurisdiction that the plants operate in. The relevant competent authorities are the Environmental Protection Agency (EPA) in the Republic of Ireland, Northern Ireland Environmental Agency (NIEA) and the Environmental Agency for England and Wales (EA).

In terms of the management of any emissions related complaints, each business unit operates an independent Environmental Management System (EMS), which is certified to ISO 14001 and subject to external verification auditing. A management process is established within each EMS to manage the organisational response to complaints of an environmental nature.

issued by the competent authority once they are satisfied that an operator can comply with the legislation and is capable of monitoring and reporting emissions. The monitoring and reporting of CO₂ 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. The methodology used for determining CO₂ emissions is based on a calculation approach which primarily uses fuel usage and fuel analysis. The source of the emission factors is derived from Ireland's Specific Emission Factors or back calculated from the CO₂ calculation.

FUTURE OUTLOOK (SS EU 10)

ESB's position as Ireland's leading energy utility, its stable business profile and its solid financial position ensures it is well positioned to meet the challenges that lie ahead and to support its strategic ambition to lead the transition to reliable, affordable low-carbon energy for the benefit of its customers. ESB continues development of its renewables capacity through Grousemount 114MW and Oweninny 89MW wind farms as working in conjunction with Coriolis and REG Holdings on up to 700MW of wind generation is Scotland, of which 100MW is now fully consented.

A significant focus in 2018 was preparation of I-SEM go-live, the launch of the new market on the island of Ireland which went live on 1 October. The introduction of trading in the day-ahead, intra-day and balancing markets, as well as the introduction of a new capacity market and changes to the system services market, are fundamental shifts in the market.

SCOPE 1 GHG EMISSIONS (GRI 305-1)

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. No biogenic CO₂ is reported for 2018, as Tilbury Port 40MW waste wood biomass plant had yet to enter commercial operation.

SCOPE 2 GHG EMISSIONS (GRI 305-2)

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.

Indirect Emissions Location-Based (Scope 2)	11,243 tonnes
Indirect Emissions Market- Based (Scope 2)	9,548 tonnes
No significant changes in emissions recalculations for 2018.	

EU5 ALLOCATION OF CO₂e EMISSIONS ALLOWANCE BY CARBON TRADING FRAMEWORK

AIR EMISSIONS

GHG Emissions Scope 1 (tonnes CO ₂ e) from Thermal Generation ¹	2018	2017	Baseline (2005)
Ireland	5,704,932	7,070,714	14,630,000
Northern Ireland	803,553	971,186	
Britain	1,766,836	1,724,095	

GHG Emissions Scope 1,2 & 3 (tonnes CO ₂ e)	2018	2017	Baseline (2015)
Scope 1			
Premises Energy	833	983	38,596
Vehicle Transport	17,216	17,216	
Gaseous Emissions SF ₆	20,520 ²	23,605	
Scope 2			
Premises Energy	11,243	12,888	13,754
Scope 3			
Premises Energy	757	875	10,393
Vehicle Transport	5,314	5,132	
Travel	4,024	4,169	
Total GHG emissions (tonnes CO ₂ e)	8,335,228	9,830, 912	

Other Emissions (tonnes)	2018	2017	Baseline (2006)
NO _x	5,061	6,050	21,585
SO _x	1,308	2,621	25,400
Dust	159	219	1,127
Carbon Intensity from Generation	454g CO ₂ e/kWh	536g CO ₂ e/kWh	670g CO ₂ e/kWh (2005)

Notes on Emissions

- All Generating emissions are subject to verification under EU ETS and are reported to national environmental agencies annually.
- Sulphur hexafluoride (SF₆) is used in a significant portion of high and medium 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. In 2018, approximately 707kg of SF₆ emissions were reported for ESB Networks, 193kg for NIE Networks, due to equipment faults.
- Emissions table addresses GRI Standards 305-1, 305-2, 305-3, 305-4, 305-5, 305-6, 305-7
- GWP Source - IPCC AR5 Conversion Factors



Brian O'Kennedy, CDP Ireland presenting Brian Gray, with ESB's CDP Scorecard for 2018. Also pictured, Pat Naughton, Executive Director and Cormac Madden, Manager Environment & Sustainability.

During 2018, ESB joined 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

EMISSIONS BASELINES

The baseline year chosen for reporting of the CO₂ emissions is 2005, the year when the formal reporting for the EU Emission Trading Scheme (ETS) started. Each installation operates in accordance with a greenhouse gas permit which authorises the site to emit greenhouse gases (CO₂). This permit is

4.4 EFFLUENTS AND 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.

Waste type	Hazardous (tonnes)	Non-Hazardous (tonnes)	Total (tonnes 2018)
Reuse	0.00	582.00	582.00
Recycling	2,379.20	8,390.61	10,769.81
Composting	0.00	126.44	126.44
Landfill	506.45	145.96	652.41
Disposed of directly by the organization or otherwise directly confirmed ₄	0.00	172,634	172,634
Total 2018	2,885.65	181,879.01	184,764.66

Notes to Waste Disposal data provided;

1. Zero waste reported for the following categories of disposal method (Recovery, including energy recovery, incineration (mass burn), deep well injection, on-site storage, organisational defaults of waste disposal contractor)
2. Information provided by the waste disposal contractors for the purposes of collating waste volumes and categories

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 CO₂ emissions associated with waste management. Carbon emissions associated with waste disposal for 2018 totalled 862 tonnes (Scope 3).

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.

4.5 ENVIRONMENTAL COMPLIANCE

ESB is committed to the highest standards of environmental management and to proactively addressing the challenges of climate change. 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

Responsibility for environmental management in ESB proceeds 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 Health Safety and Environment Committee are responsible for oversight of company strategy, policy and compliance in health, safety 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.

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.

SPILLS AND SPILL RESPONSE (GRI 306-3)

FLUID FILLED CABLES

During 2018, 39,507 litres of cable insulating fluid (linear alkyl benzene (LAB)) leaked from

ESB's High Voltage Cable network, representing eleven circuits leaking, five of which were repaired during 2018. ESB Networks has completed a preliminary assessment of each fluid filled cable leak, these assessments have been submitted to the relevant Local Authority. The root cause of this cable fluid leakage is generally due to degradation of the cables outer sheath attributable to the age of these legacy cables, vegetation intrusion (tree roots) or 3rd party damage. The breakdown of the fluid leaks was as follows:

- 220 kV Cable Network = 3,161 litres
 - 110 kV Cable Network = 19,358 litres
 - 38 kV Cable Network = 16,988 litres
- 47 % of the entire 2018 cable fluid leakage was attributable to one circuit, namely Harold's Cross to Ringsend 110 kV Cable, which leaked 18,717 litres in 2018. This cable leak was located and repaired in November 2018.

Three new leaks occurred on the 38 kV Cable Network, one new leak occurred on the 110 kV Cable Network and no new leaks occurred on the 220 kV Cable Network in 2018.

The use of tracer detection equipment significantly improves our ability to identify leak sites and implement repairs.

ACCESS TO INFORMATION ON THE ENVIRONMENT

Electricity Supply Board (ESB) is a public authority for purposes of the European Communities (Access to Information on the Environment) Regulations 2007-2014 (the "AIE Regulations"). Under the AIE Regulations you are entitled to request access to information on the environment that is held by or for ESB. ESB and ESB Networks DAC are separate public authorities under Access to Information on the Environment regulations.

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 and code of practice, a complaints handling procedure, all with clear performance expectations stated publicly, as well as a regulatory obligation to report in certain circumstances. During 2018, one environmental complaint was received and handled by the business.

HANDLING COMPLAINTS

ESB NETWORKS LTD

ESB Networks has a customer charter outlining 12 customer distribution service guarantees. A National Customer Care Centre also acts as a first point of contact.

<https://www.esbnetworks.ie/help-centre>

NIE NETWORKS

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

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

Other avenues to register complaints or environmental complaints include reporting to local authorities and the Environmental Protection Agency for IPPC licensed generating stations.

AIE Requests 2018	ESB	ESB Networks DAC
Requests carried over from 2017	0	0
New requests received in 2018	18	4
Requests brought forward to 2019	2	1
Granted / Part Granted	11	3
Refused	7	1
Transferred (Part of an ESB request transferred to ESBND)	1	0
OCEI Appeal (B/F from 2017)	1	0



5 SECTION 5

APPENDICES

- 5.1 Independent GRI Standards Option Check
- 5.2 GRI Standards Cross Referencing Table
- 5.3 Glossary of Terms

5.1 INDEPENDENT GRI STANDARDS OPTION CHECK

GRI Standards Option Check Independent Assessment

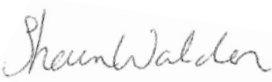
DNV GL Business Assurance Services UK Ltd. ('DNV GL') was engaged by the Electricity Supply Board ('ESB') to carry out an independent assessment of ESB's Responsible Business Report 2018 ('the Report') against the Global Reporting Initiative ('GRI') Standards 2018 and the GRI Electric Utilities Sector Supplement.

The Report has been independently assessed by DNV GL as being in accordance with the 'Core' option of the GRI Standards 2018. DNV GL's independent assessment confirms that the required disclosures for the 'Core' option have been addressed in ESB's Report. The GRI Standards Cross Referencing Table within the Report's appendices demonstrates a valid representation of the disclosures, in accordance with the GRI Standards 2018 requirements.

This independent assessment does not provide an opinion on ESB's sustainability performance in 2018 nor on the quality of information disclosed in the Report.

DNV GL was not engaged by ESB on any other commitments in 2018 which could compromise the independence of our assessment of ESB's GRI reporting.

22 May 2020, London
For and on behalf DNV GL Business Assurance Services UK Ltd



Shaun Walden
Principal Consultant



5.2 GRI STANDARDS CROSS REFERENCING TABLE

GENERAL STANDARD DISCLOSURES			
Reference	Disclosure	Location	Notes on Disclosure
102-1	Report the name of the organisation.	Sec. 1.1	
102-2	Report the primary brands, products, and services.	Sec. 1.2, 1.3	
102-3	Report the location of the organisation's headquarters.	GRI Cross Reference Table, Cover	ESB Head Office, Gateway Two, East Wall Rd., Dublin D03 A995, Ireland
102-4	Report the number of countries where the organisation operates, and names of countries where either the organisation has significant operations or that are specifically relevant to the sustainability topics covered in the report.	Sec.1.2, 3.3	
102-5	Report the nature of ownership and legal form.	Sec. 1, page 5	
102-6	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).	Sec. 1.2, 1.3	
102-7	Report the scale of the organisation: Total number of employees Total number of operations Net sales (for private sector organisations) or net revenues (for public sector organisations) Total capitalization broken down in terms of debt and equity (for private sector organisations) Quantity of products or services provided	Sec. 1.2, 3.3	
102-8	Workforce detail disclosure	Sec.3.3	
102-9	Describe the organisation's supply chain.	Sec. 2.5	
102-10	Report any significant changes during the reporting period regarding the organisation's size, structure, ownership, or its supply chain, including: ▪ Changes in the location of, or changes in, operations, including facility openings, closings, and expansions ▪ Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organisations) ▪ Changes in the location of suppliers, the structure of the supply chain, or in relationships with suppliers, including selection and termination	Sec.1.10	2018 saw a significant organisational effectiveness review and subsequent restructuring being undertaken.
102-11	Report whether and how the precautionary approach or principle is addressed by the organisation.	Sec.3.7	
102-12	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organisation subscribes or which it endorses.	Sec. 1.9	
102-13	List memberships of associations (such as industry associations) and national or international advocacy organisations in which the organisation: ▪ Holds a position on the governance body ▪ Participates in projects or committees ▪ Provides substantive funding beyond routine membership dues ▪ Views membership as strategic This refers primarily to memberships maintained at the organisational level.	Sec. 1.9	
102-14	Statement from the most senior decision-maker of the organisation	Sec. 1.1	
102-16	Values, principles, standards, and norms of behaviour	Sec.1.4, 3.3	
102-18	Governance structure	Sec. 1.6	
102-40	Provide a list of stakeholder groups engaged by the organisation.	Sec. 1.8	
102-41	Report the percentage of total employees covered by collective bargaining agreements.	Sec. 3.3	

GENERAL STANDARD DISCLOSURES			
Reference	Disclosure	Location	Notes on Disclosure
102-42	Report the basis for identification and selection of stakeholders with whom to engage.	Sec. 1.8	
102-43	Report the organisation's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	Sec. 1.8	
102-44	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.	Sec. 1.8	
102-45	a. List all entities included in the organisation's consolidated financial statements or equivalent documents. b. Report whether any entity included in the organisation's consolidated financial statements or equivalent documents is not covered by the report.	Annual Report 2018	Note 34 to Financial Statements, ESB Annual Report 2018 (pg218) lists all subsidiary, equity accounted investees and associate undertakings.
102-46	a. Explain the process for defining the report content and the Aspect Boundaries. b. Explain how the organisation has implemented the Reporting Principles for Defining Report Content.	Sec.1	
102-47	List all the material Aspects identified in the process for defining report content.	Sec. 1.7	
102-48	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	None	No restatements of information made in 2018 report
102-49	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.	Sec. 1.10	No significant changes. The Organisational Effectiveness Review realigned the business to be best placed for delivery of the Brighter Future strategy
102-50	Reporting period (such as fiscal or calendar year) for information provided.	Sec. 1	Calendar Year 2018
102-51	Date of most recent previous report (if any).	Sec. 1	Sustainability Report 2017
102-52	Reporting cycle (such as annual, biennial).	Sec. 1	Annual
102-53	Provide the contact point for questions regarding the report or its contents.	Sec. 1	
102-54	Report the 'in accordance' option the organisation has chosen.	Sec. 1, Sec. 5	
102-55	GRI Content Index	Sec. 5	Appendix, GRI Table
102-56	Report the organisation's policy and current practice with regard to seeking external assurance for the report..	Sec. 1	

SPECIFIC STANDARD DISCLOSURES			
103-1, 103-2, 103-3 In direct Economic	Generic Disclosures on Management Approach	Sec. 2.2,2.3	
203-1	Development and impact of infrastructure investments and services supported	Sec. 2.2, 2.3	
203-2	Significant indirect economic impacts, including the extent of impacts	Sec. 2.3	

SPECIFIC STANDARD DISCLOSURES			
Reference	Disclosure	Location	Notes on Disclosure
103-1, 103-2,103-3 Direct Economic	Generic Disclosures on Management Approach	Sec. 2.1, 2.2	
201-3	Defined benefit obligations and other retirement plans	Sec. 2.4	% salary contributions are confidential between ESB and the individual employee. All permanent staff are members of either the Defined Benefit Plan or another retirement plan.
103-1, 103-2,103-3 Procurement	Generic Disclosures on Management Approach	Sec. 2.5	
204-1	Proportion of spending on local suppliers	Sec. 2.5	
103-1, 103-2,103-3 Anti Corruption	Generic Disclosures on Management Approach	Sec. 2.6	
205-1	Operations assessed for risks related to corruption	Sec. 2.6	
103-1, 103-2,103-3 Health & Safety	Topic Boundary, Explanation and Evaluation	Sec. 3.1	
403-1	Occupational health and safety management system	Sec. 3.1	
403-2	Hazard Identification, risk assessment and incident investigation	Sec. 3.1	
403-3	Occupational health services	Sec. 3.1	
403-4	Work participation, consultation and communication	Sec. 3.1	
403-5	Worker training on occupational health & safety	Sec. 3.1	
403-6	Promotion of worker health	Sec. 3.1	
403-8	Workers covered by SMS	Sec. 3.1	
403-9	Work related injuries	Sec. 3.1	
403-10	Work related ill health	Sec. 3.1	
103-1, 103-2,103-3 Training & Education	Topic Boundary, Explanation and Evaluation	Sec. 3.2	
404-3	% of employees receiving regular performance and career development reviews	Sec. 3.2	
103-1, 103-2,103-3 Community Engagement	Topic Boundary, Explanation and Evaluation	Sec. 3.4	
413-1	Operations with local community engagement, impact assessments and development programmes	Sec. 3.4	
103-1, 103-2,103-3 Products and Services	Topic Boundary, Explanation and Evaluation	Sec. 3.5	
416-1	Assessment of health & safety impacts of product and service categories	Sec. 3.5	
416-2	Incidents of non-compliance concerning health & safety impacts of products and services	Sec. 3.1, 3.5	
103-1, 103-2,103-3 Customer Privacy	Topic Boundary, Explanation and Evaluation	Sec. 3.6	
418-1	Substantiated complaints concerning breaches of customer privacy	Sec. 3.6	

SPECIFIC STANDARD DISCLOSURES			
Reference	Disclosure	Location	Notes on Disclosure
103-1, 103-2,103-3 Energy Management	Topic Boundary, Explanation and Evaluation	Sec. 4.1	
302-1	Energy Consumption within the organisation	Sec. 4.1	
302-2	Energy Consumption outside the organisation	Sec. 4.1	Conversion Factors used are set annually by SEAI and DEFRA
302-4	Reduction of energy consumption	Sec. 4.1	kWh/FTE is the indicator reported on
302-5	Reduction in energy requirement of products and services	Sec. 4.1	
103-1, 103-2,103-3 Biodiversity	Topic Boundary, Explanation and Evaluation	Sec. 4.2	
304-1	Operational sites owned, leased, managed in or adjacent to protected areas	Sec. 4.2	All areas detailed are terrestrial protected areas.
103-1, 103-2,103-3 Emissions	Topic Boundary, Explanation and Evaluation	Sec. 4.3	
305-1	Direct (Scope 1) GHG emissions	Sec. 4.3	
305-2	Energy Indirect (Scope 2) GHG emissions	Sec. 4.3	
305-3	Other Indirect (Scope 3) GHG emissions	Sec. 4.3	
305-4	GHG emissions intensity	Sec. 4.3	
305-6		Sec. 4.3	SF6 Included in disclosure
305-7		Sec. 4.3	
103-1, 103-2,103-3 Effluents and Waste	Topic Boundary, Explanation and Evaluation	Sec 4.4	
306-2	Hazardous and Non Hazardous Waste by Disposal Method	Sec. 4.4	
306-3	Significant Spills	Sec. 4.5	

ENERGY UTILITY SECTOR SPECIFIC DISCLOSURES			
Reference	Disclosure	Location	Notes on Disclosure
EU1	Installed capacity, broken down by primary energy source and by regulatory regime	Sec. 3.8	
EU2	Net energy output broken down by primary energy source and by regulatory regime	Sec. 3.8	
EU3	Number of residential, industrial, institutional and commercial customer accounts	Sec. 3.8	
EU4	Length of above and underground transmission and distribution lines by regulatory regime	Sec. 3.8	
EU5	Allocation of CO2E emissions allowances or equivalent, broken down by carbon trading framework	Sec. 4.3	All generating emissions are subject to verification under EU ETS and are reported to national environmental agencies annually
G4-10	Total contractor workforce	Sec. 3.3	Contractor workforce numbers are not gathered for all individual contracts. Numbers reported reflect regular contractors working on ESB networks sites, NIE networks sites, major construction and overhaul projects and facility service providers
G4-11	% Contractor employees covered by collective bargaining agreements	Sec. 3.3	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 entities
EU10	Planned capacity against projected electricity demand	Sec. 4.3	Future outlook
EU12	Transmission & distribution losses as a % of total energy	GRI cross reference table	ESB networks and NIE networks are the licenced distribution system operators and are not responsible for operation of the transmission system. Losses reported by ESB networks (6.69%, comprising technical at 6.19% and commercial at 0.5%) are a key part of the work programme agreed with the energy regulator in ROI, the CRU. NIE networks programme of works agreed with UReg, does not include a significant works programme for rural upgrading of network to reduce losses, and is therefore deemed not to be material to NIE networks
EU25	Number of injuries and fatalities to the public involving company assets, incl judgements, settlements and pending legal cases of diseases	Sec. 3.1	Public liability claims have decreased over the past 10 years, however, disclosure on the number of incidents is commercially sensitive and is not disclosed.
EU26	% of population unserved in licensed distribution service areas	GRI cross reference table	100% of the population of ROI and NI have access to an electricity supply
EU27	Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime.	Sec. 3.8	
EU28	Power outage frequency	Sec. 3.8	Reported as Customer Minutes Lost (CML) in ROI, as required by the CRU. In NI, System Average Interruption Frequency Index (SAIFI) is employed as required by URegNI
EU29	Average power outage duration	Sec. 3.8	Reported as Customer Minutes Lost (CML) in ROI, as required by the CRU. In NI, System Average Interruption Frequency Index (SAIFI) is employed as required by URegNI
EU30	Average plant availability factor by energy source and by regulatory regime	GRI cross reference table	ESB does not disclose average plant availability or outage schedules publicly due to the nature of all island electricity 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.

5.3 GLOSSARY OF TERMS

GLOSSARY OF TERMS	
Abbreviated Term	Explanation
BWR	Business Working Responsibly Award
CCGT	Combined Cycle Gas Turbine
CDP	Carbon Disclosure Protocol
CER	Commission for Energy Regulation
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
DCCAE	Department of Communications, Climate Action and Environment
DfE	Department for the Economy (NI, replaces DETI)
DAERA	Department of Environment and Rural Affairs (NI)
DTTAS	Department of Transport, Tourism and Sport
EAI (NEAI)	Electricity Association of Ireland
Eirgrid	Republic of Ireland System Operator
EPA	Environmental Protection Agency
EPRI	Electricity Power Research Institute
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
HSA	Health and Safety Authority
IBEC	Irish Business and Employer Association
IFA	Irish Farmers Association
IPPCL	Integrated Pollution Prevention and Control Licence
IWEA	Irish Wind Energy Association
LTI	Lost Time Injury (in ESB defined as being absent from work on the next planned shift/day)
OER	Organisational Effectiveness Review
NOx, SOx,	Nitrous Oxides, Sulphur Dioxides,
NHA/PNHA/SAC/SPA	National Heritage Area, proposed NHA , Special Area of Conservation, Special Protection Area
NPWS	National Parks and Wildlife Service
RAB	Regulated Asset Base
SEAI	Sustainable Energy Authority of Ireland
SONI	System Operator Northern Ireland
UR	Utility Regulator of Northern Ireland
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