Energy for generations

Empowering Low-Carbon Living

2021 ESB ANNUAL REPORT & FINANCIAL STATEMENTS

ABOUT ESB

ESB was established in 1927 as a statutory body under the Electricity (Supply) Act, 1927. With a holding of 96.5%, ESB is majority owned by the Irish Government. The remaining 3.5% is held by the trustees of an Employee Share Ownership Plan. As a strong, diversified utility, ESB operates across the electricity market, from generation through transmission and distribution, to supply of customers in addition to using our networks to carry fibre for telecommunications. ESB is a leading Irish utility with a regulated asset base of approximately €10.9 billion (comprising ESB Networks €8.8 billion and NIE Networks €2.1 billion), a 33% share of generation in the all-island market and supply businesses supplying electricity and gas to over 1.9 million customer accounts throughout the islands of Ireland and Great Britain. As at 31 December 2021, ESB Group employed over 7,800 people.

EMPOWERING LOW-CARBON LIVING

ESB is making a stand for the future, a future powered by clean, reliable and affordable electricity. We are investing and innovating across our business to make this a reality; generating and connecting renewable energy, providing back-up generation and services to support energy security and resilience, and developing infrastructure to enable the widespread electrification of other sectors, including transport and heating. We are also developing solutions that will empower everyone in society to live low-carbon electric lives so that all of society can enjoy the benefits of a more secure, healthy and sustainable future.

Denis Galvin pictured at his farm in Lispole, Co. Kerry

Denis Galvin
DINGLE PROJECT AMBASSADOR

Denis Galvin runs a dairy farm on the Dingle Peninsula in Lispole, Co. Kerry. Denis was selected to be an ambassador for ESB Networks' Dingle Project.

Each of the Dingle ambassadors had a range of low-carbon technologies installed in their homes and businesses, with each receiving:

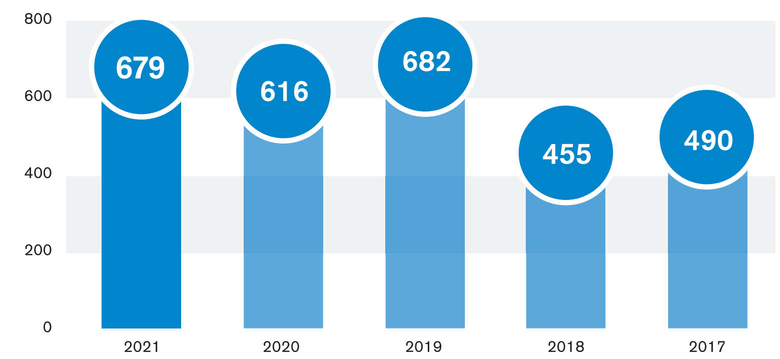
- Solar PV Systems
- Battery Management Systems
- Air Source Heat Pumps (ASHP)
- Electric Vehicles and Smart EV Chargers
- Home Energy Monitoring Systems

Denis lives with his wife and five children in their house beside the farm. Their house was fitted with solar/photovoltaic panels, an air-source heat pump and a battery management system as part of the Dingle Project. Denis was also given an electric vehicle for a year.

Denis estimates that they have made significant energy savings in their home and have seen a reduction in the weekly costs of running a car.

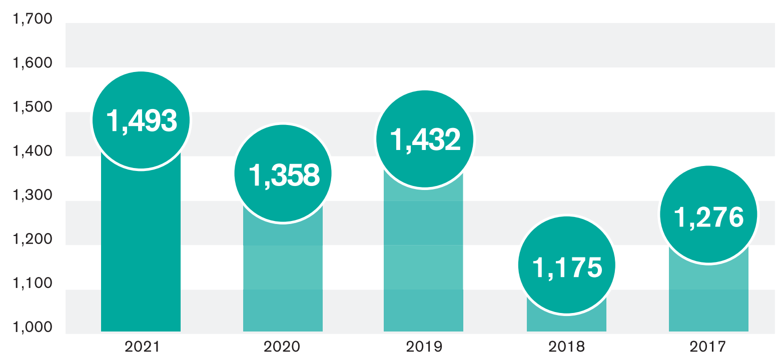
Key Facts & Figures

Operating Profit* €'M



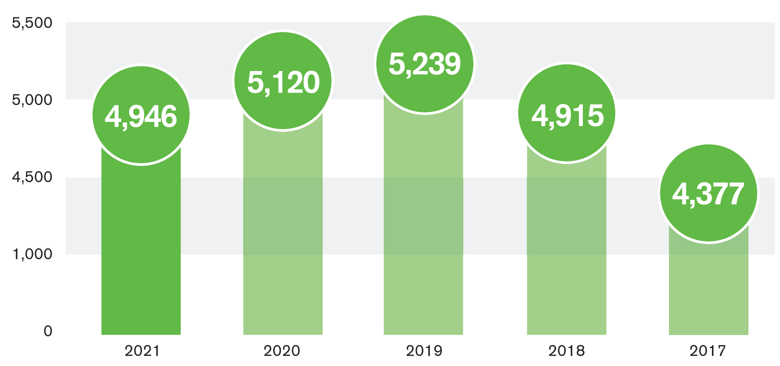
*Before exceptional items. See Financial Review page 54.

EBITDA* €'M

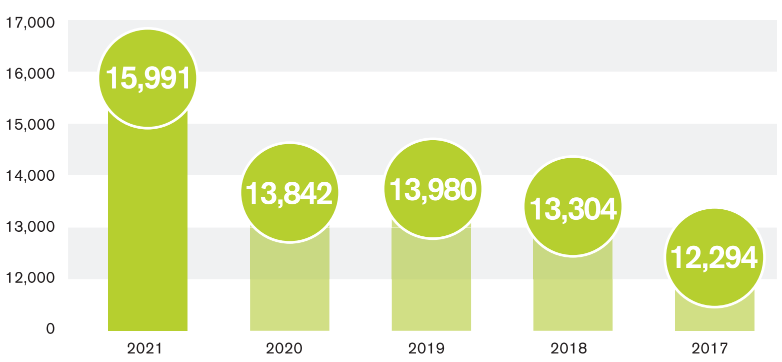


*Before exceptional items (non-impairment). See Financial Review page 54.

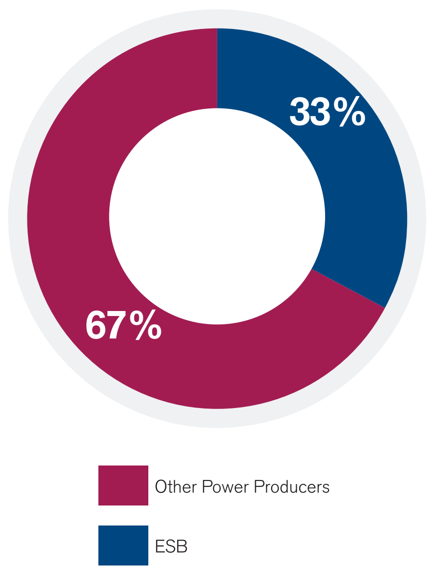
Net Debt €'M



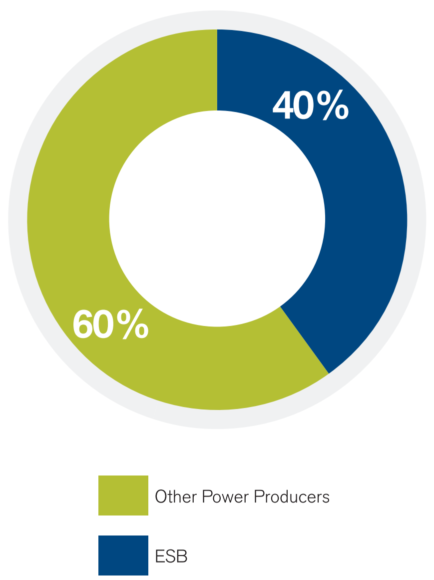
Total Assets €'M



Generation All-Island Market Share



Supply All-Island Market Share



Contents

CHAPTER 1

STRATEGY AND PERFORMANCE

Nuala Gleeson
ELECTRIC IRELAND SUPERHOMES

Nuala Gleeson and her husband live in Nenagh, Co. Tipperary. With the help of Electric Ireland Superhomes, their home was retrofitted which has made it warmer, more energy efficient and has vastly reduced its carbon emissions.

Previously, the house had a very poor heating system and inadequate insulation. An Electric Ireland Superhomes engineer rigorously assessed the house and recommended a number of energy upgrades to improve her home's warmth, energy performance and Building Energy Rating.

According to Nuala, the house is now 100% different to what it was like before the Electric Ireland Superhomes retrofit. "We had underfloor heating installed, we put in triple glazed windows. Before the retrofit, every room in the house had a fireplace so these were removed, and the chimneys were sealed. We insulated the house internally and externally, and installed an air to water heating system. The heating in all of the rooms is now very effective – delivering a warm, comfortable home. The new BER is A2 – a huge improvement from the original G rating. It's great to know that we are lowering our carbon footprint. Our electricity costs have also significantly reduced. Electric Ireland Superhomes were extremely helpful right from the start of the retrofit."

Electric Ireland Superhomes customer Nuala Gleeson pictured inside her home in Nenagh, Co. Tipperary

Non-Financial Information

As a statutory body ESB is not subject to the disclosure requirements prescribed in the European Union (Disclosure of non-financial and diversity information by certain large undertakings and Groups) Regulations 2017. ESB seeks to follow best practice and discloses a wide range of non-financial information under the GRI (Global Reporting Initiative) standard in its Sustainability Report. The guide below illustrates where to find the required non-financial information and non-financial KPIs within this annual report in addition to the ESB Group policies which underpin these areas.

Requirement	Relevant Policies	Section(s) in Annual Report
Environmental	Environment and Sustainability Policy	Environment and Sustainability
Employee and Social	Cultural Diversity Policy Group Procurement Policy ESB Equal Opportunities and Diversity Code of Practice Health & Safety Policy Whistleblowing and Protected Disclosures Policy ESB Code of Ethics and The Way We Work	Responsible Business Report Board Members' Report
Human Rights	ESB Human Rights Policy Modern Slavery Policy ESB Code of Ethics	Board Members' Report
Anti-Corruption and Bribery	Anti-Bribery Corruption and Fraud Policy ESB Code of Ethics and The Way We Work	Audit and Risk Committee Report
Business Model		Business Model
Principal Risks	Risk Management Policy Risk Management and Governance Framework Policy	Risk Report
Non-Financial KPIs		Key Performance Indicators (KPIs) Environment and Sustainability EU Taxonomy Regulation

The Group also publishes a comprehensive "ESB Sustainability Report" which details ESB's sustainability strategy, corporate social responsibilities and commitments to social matters. The 2021 Sustainability Report will be published on the ESB website.

Business Overview

Chairman's Statement

I am delighted as Chairman to present the 2021 Annual Report and Financial Statements for ESB.

Financial Performance Highlights and Dividend

In what was a challenging year for energy markets, ESB delivered an operating profit of €679 million and a profit after tax of €266 million in 2021 (both before exceptional items). We also maintained our Credit Ratings at A-/A3 (BBB+ standalone). These strong ratings are critical for our ambitious investment programme as we lead the transition to a low-carbon energy future over the next decade.

In line with ESB's dividend policy, the Board is recommending a dividend of €126 million for 2021 bringing the total dividends paid to €1.2 billion over the last decade.

Climate change

Climate change, energy market volatility and security of supply featured heavily on the Board's agenda in 2021. The Conference of the Parties (COP 26) met in Glasgow to agree actions that will determine whether we pass a habitable planet to future generations. Economies representing at least 70% of the world's GDP set targets for net-zero carbon emissions for their societies by 2050. With its Green Deal, the EU has taken far-reaching steps to make this happen, including placing prescribed environmental reporting on a par with financial reporting for companies.

The Irish Government announced Ireland's Climate Action Plan 2021. This ambitious plan of action aims to halve Ireland's greenhouse emissions by 2030, with up to 80% of Ireland's electricity being generated from renewable energy, 500,000 homes to be deep retrofitted and almost one million electric vehicles being driven on Irish roads. In Northern Ireland, NIE Networks worked collaboratively with the Department for the Economy and other stakeholders on the development of Northern Ireland's *The Path to Net Zero* energy strategy. We also welcome the UK's commitment to climate action outlined in its *Net Zero Strategy: Build Back Greener*.

Decarbonising our economy and societies will be a massive undertaking requiring significant levels of new investment. ESB will have a pivotal role to play, and the Board is determined that the full extent of the company's resources and capabilities will be marshalled to support delivery of our climate ambitions.

Strategy

In the context of this rapidly changing external context, the Board devoted significant time in 2021 to a review of our purpose led Brighter Future strategy. In December 2021, the Board approved our 2040 Strategy – *Driven to Make a Difference: Net Zero by 2040*. The strategy sets a clear direction for ESB that directly supports the achievement of the UN's Sustainable Development Goals for ensuring access to affordable, reliable, sustainable and modern energy for all (Goal 7), building resilient infrastructure (Goal 9) and taking urgent action to combat climate change and its impacts (Goal13).

The views of stakeholders and voices of the younger generation were fully considered in the development of the revised strategy. Working collaboratively with partners and stakeholders to accelerate the pace and scale of change, we are focusing on three priorities:

- Connecting and generating clean, renewable electricity
- Providing resilient infrastructure for a secure, sustainable and reliable electricity system
- Empowering, supporting and enabling customers and communities to live zero carbon lives

We are committing to a science-based target by 2030 in line with the Paris Agreement and by 2040, we will achieve net zero

In the strategy review, the Board has agreed that a refreshed Purpose Statement reflecting the greater importance of Environmental, Social and Governance (ESG) is appropriate for our business. Through our focus on social and environmental responsibility, we will cultivate a safe, sound and sustainable ethos in line with our values, and act in the best interests of people and planet.

Decarbonising society will require a combination of deeper electrification and greater levels of renewable energy, as well as the deployment of new energy technologies on a massive scale. Innovation and collaboration will continue to be to the forefront of our efforts. In that context, we announced in April 2021, that ESB's Moneypoint site is to be transformed into a green energy hub, where a range of renewable technologies will be deployed over the next decade with the capacity to power 1.6 million homes.

The Board looks forward to engaging on the refreshed strategy in 2022 and delivering on our climate commitments.

Achievements in 2021

Much has already been achieved. A total of 6.5 GW of low-carbon energy has been connected to our networks in Ireland and Northern Ireland. ESB Networks installed in excess of 380,000 smart meters in 2021 bringing the total number of smart meters installed since September 2019 to 620,000. A further 500,000 smart meters will be installed in 2022.

Electric Ireland is offering customers smart meter services, giving them more choice and better insights and control of their energy usage. Over 30,000 Electric Ireland customers have already signed up for smart meter services.

Change is happening on our roads too. The volume of electric vehicle charging transactions has tripled since the beginning of 2021 and now stands at 70,000 per month on average. Investment in the electric vehicle charging network is continuing with €20 million being spent across Ireland, part funded by the Government's Climate Action Fund. In Northern Ireland, a programme to replace 30 public standard chargers and some fast/rapid chargers has been completed. Funding has also been secured under the UK Government's Levelling up fund for further investment in Northern Ireland's charging network.

The Board approved new investments in Phase 2 of the Oweninny Windfarm (83 MW) in County Mayo and in battery storage technologies at Poolbeg and South Wall in Dublin. The Board was delighted that our new 50:50 joint venture with Coillte - FuturEnergy Ireland - was cleared by the Competition and Consumer Protection Commission in 2021. Two commercial semi-state companies have joined forces for an exciting new venture in renewable energy development in what is a major boost to Ireland's Climate Action agenda. FuturEnergy Ireland is looking to actively drive Ireland's transition to a low carbon economy by developing 1 GW of wind energy projects by 2030, enough to power more than 500,000 homes. We look forward to a successful partnership with Coillte.

Offshore wind offers us huge potential to achieve our decarbonisation targets. We are progressing our Galloper, Inch Cape and Neart na Gaoithe projects off the east coast of Great Britain. While an impairment charge has been recognised in 2021 due to the challenges experienced on the Neart na Gaoithe project, we remain confident that the project will deliver long term value for ESB and contribute significantly to our offshore wind ambitions. The Board welcomes the enactment of the Marine Planning Development Act 2021, which will be a key enabler of decarbonisation of Ireland's energy sources and the development of Ireland's offshore energy resource. ESB looks forward to accelerating our investment plans for Irish offshore wind projects.

Partnerships

ESB has a successful track record of partnering with investors and developers on major infrastructure projects.

One of the lessons from COVID-19 is the greater reliance placed on internet connectivity for many essential areas, including work, healthcare and education. In 2021, the Board was delighted to approve Phase 2 of SIRO's (our joint venture with Vodafone) broadband rollout following which SIRO successfully raised €620 million in debt finance from external lenders including the European Investment Bank to fund its continued business expansion. This decision by the Board supports our strategy of exploiting our network assets to further connect the customers and communities we serve.

As previously reported, one of our partners in offshore wind development, Equinor, decided to cease its early phase offshore wind activities in Ireland. While the Board was disappointed by the announcement, it in no way diminishes our ambition to deliver an offshore wind portfolio of scale in the home market. The Board is confident that new partners will come on board to work with us to deliver our offshore wind ambitions.

We were also delighted that Electric Ireland Superhomes (a joint venture with the Tipperary Energy Agency) launched in May 2021 with the ambition of becoming Ireland's leading home retrofit one stop shop, guiding Irish homeowners to warmer, healthier and lower carbon homes while helping Ireland achieve its 2030 climate action targets. This ambition aligns very well with our strategy of enabling customers and communities to live zero-carbon lives.

ESB and ESG

A key topic of conversation at the Board in 2021 was the rapid evolution of matters related to Environmental, Social and Governance (ESG) for businesses. ESB has always been driven by a strong sense of social purpose, so these developments are both timely and beneficial, particularly in the context of the revised strategy. ESB already tracks and publishes its direct and indirect carbon emissions. Board level oversight of climate action has been clearly defined. We are well positioned to meet the requirements of the new Corporate Sustainability Reporting Directive.

The Board also recognises the importance of maintaining a financially strong business while meeting our climate and environmental commitments. Flexibility will be required to deliver net zero by 2040. We will report on our performance and periodically explain our progress, the challenges encountered and our strategic intent for the benefit of all our stakeholders.

ESG will continue to be a focus of the Board's agenda in 2022.

Energy Markets and Security of Supply

2021 has been characterised by high commodity and carbon prices and unprecedented volatility in energy markets, against a backdrop of electricity system tightness.

Unfortunately, the impact has been felt in rising energy bills for our customers. Electric Ireland, our retail business, raised standard ROI residential electricity tariffs twice during the year by a cumulative 19%. The Board is very conscious of the impact that the increases have for all our customers. However, Electric Ireland remains committed to rewarding loyal customers with enduring discounts, competitive standard unit rates, excellent customer service and innovative products.

The volatility in energy markets and the impact of the energy price cap has also adversely impacted our GB Retail business performance. Profound impacts have been felt by the industry more generally in GB resulting in successive supplier exits. OFGEM, the energy regulator, is currently consulting on changes to the calculation of the energy price cap to ensure it appropriately reflects the costs, risks and uncertainties facing suppliers. The outcome will be closely monitored by ESB.

In terms of production, ESB's generation plant has been reliable throughout 2021 as the pandemic continued to unfold. ESB is committed to playing our part and exploring all options to mitigate security of supply risks, in a manner consistent with ESB's mandate (and in the context of the market rules and requirements).

ESB will continue to respond constructively and engage positively with all stakeholders to provide reliable and affordable electricity for our customers and the economy as we continue to drive the transition to a low-carbon future.

CEO Succession

In June 2021, the Board announced the appointment of Paddy Hayes as our new Chief Executive. Paddy's appointment followed an exhaustive selection process for this key leadership role. He takes up the baton from Pat O'Doherty who was an outstanding Chief Executive for the last ten years, transforming ESB beyond all recognition and repositioning the company for a completely new era for the energy industry.

Paddy brings proven industry and energy markets experience, a strong track record of delivery and a positive and inclusive approach to the position of Chief Executive. With Paddy in position, we will remain focussed on delivering a brighter future for the customers and communities we serve on the journey to net zero. A number of other executive appointments were made in 2021, strengthening the leadership team for the challenges ahead.

Board Changes

During the year, Noreen Wright retired from the Board after 10 years of excellent service to the company. Noreen brought a wealth of experience from the energy industry in Northern Ireland and legal and corporate governance expertise to the board table during her time on the Board of ESB. I want to thank Noreen for her contribution as Board member.

I am delighted to welcome Sara Venning to the Board. As current Chief Executive Officer of Northern Ireland Water and having previously held senior roles in NIE Networks, Sara will bring significant utilities experience to the Board, and I look forward to working with her over the coming years.

Finally, I want to congratulate Alf Smiddy and Paul Lynam on their re-appointments to the Board by the Minister for a second term in December 2021.

Conclusion

On behalf of the Board, I would like to thank the employees and management of ESB for their outstanding efforts during a period of significant change and uncertainty associated with COVID-19 and for keeping us on track towards a brighter future.

In accordance with the ESB Acts 1927-2014, the Board presents the Annual Report and Financial Statements for the year ended 31 December 2021.

Terence O'Rourke, Chairman
01 March 2022

Terence O'Rourke
Chairman, ESB

Chief Executive's Review

ESB Chief Executive, Paddy Hayes, discusses the challenges and achievements of 2021 and the steps ESB is taking to create a brighter, more sustainable, energy future.

Having just been appointed CEO in August, what is your vision for ESB and do you envisage any changes in strategic direction?

It's an exciting and important time for the energy sector. Climate change is the challenge of a generation and at ESB we're driven to make a difference. Our strategy remains focussed on delivering a brighter future, creating and connecting sustainable, reliable and affordable energy and supporting the customers and communities we serve to live zero-carbon lives.

What were the key developments for ESB in 2021 and how have these affected the delivery of your strategy?

NIE Networks published their strategy report on *Networks for Net Zero* and ESB Networks began a five-year programme (PR5) to invest over €5 billion on the electricity networks. This includes *National Network Local Connections*, to transform the electricity distribution system to support local micro- and mini-generation and storage and facilitate the electrification of heat and transport in line with the Ireland's Climate Action Plan. In Generation, we announced plans for Green Atlantic @ Moneypoint, a renewable energy hub with facilities to bring offshore wind energy ashore, and our synchronous condenser project is well into construction. In the UK, we acquired a majority shareholding in So Energy, a green energy supplier with 560,000 gas and electricity accounts. SIRO, ESB's joint venture with Vodafone, announced a €620 million expansion of its gigabit fibre broadband network which will almost double its footprint to 770,000 homes and businesses around Ireland.

How has ESB adapted to meeting changing customer needs over the past year?

During 2021, we developed new customer-led products and services to create value and empower low-carbon living. Electric Ireland launched Home Electric+, a range of plans enabling customers to benefit from smart meters. Electric Ireland partnered with Tipperary Energy Agency to create *Electric Ireland Superhomes* offering domestic home energy retrofit services in Ireland. To support increased adoption of electric vehicles, ESB e-cars continued to upgrade its EV charging networks with support from the Climate Action Fund in Ireland and the Levelling Up Fund in Northern Ireland. ESB Smart Energy Services invested €4.2 million across 25 projects to help business customers reduce energy use and carbon emissions. Meanwhile, the installation of 620,000 smart meters to date by ESB Networks on behalf of the Commission for the Regulation of Utilities will enable customers to play their part in the clean energy transition.

How is ESB positioned as the COVID-19 pandemic continues?

The pandemic highlights the critical importance of reliable, sustainable electricity in supporting social and economic activity. Throughout the pandemic, ESB has been guided by our purpose and values - caring for colleagues, customers and communities, and maintaining essential services. During 2021, we worked with a number of charity partners who make a vital contribution to the communities we operate in. These included Pieta, whose Darkness into Light walk for suicide prevention is supported by Electric Ireland, and UNICEF, who we supported as they work to extend the COVID-19 vaccination programme to countries around the world.

What measures have you taken to support customers experiencing hardship this year?

High commodity prices and volatility in energy markets have led to electricity price increases in all of the markets in which we operate. While our prices have risen, we have endeavoured to maintain competitive tariff offerings in each of our markets, passing on the benefit of hedging to customers where possible. We also supported customers by extending our moratorium on disconnections, offering flexible payment options and establishing a €2 million COVID hardship fund. We also spent €1.4 million during the year on community-based energy efficiency schemes supporting people experiencing fuel poverty.

How has ESB maintained staff engagement over the past year?

Teams across ESB have been engaged in supporting the customers and communities we serve. In another challenging year, our colleagues have been exceptional, providing continuity of essential services despite the pandemic. Their flexibility and ability to adapt has been supported by our Accelerate Digital programme, facilitating smarter, more inclusive ways of working, enabled by technology.

What progress has ESB made in reducing carbon emissions during 2021?

ESB's strategy is specific about achieving a science-based target by 2030 and net zero by 2040. During 2021, the carbon intensity of our electricity generation activities rose as it was necessary to increase output from Moneypoint to reliably meet national electricity demand. This measure to support national energy security does not take away from our decarbonisation commitments. During the year, with our partners Bord na Mona, we reached financial close on Oweninny 2, a €150 million wind farm in County Mayo, and secured approval from the Competition Authority to proceed with FuturEnergy Ireland, a joint venture with Coillte which will invest up to €1 billion in onshore wind in Ireland over the next decade.

What impact will Government commitments to addressing climate change have on ESB's strategy?

ESB welcomes recent commitments to climate action made by governments in Ireland, Northern Ireland and Great Britain, including the Irish Government's Climate Action Plan, Northern Ireland's *The Path to Net Zero* energy strategy – and the UK's *Net Zero Strategy: Build Back Greener.* ESB's strategy reflects a similar ambition to tackle climate change, making a difference by innovating and investing in low carbon and renewable energy solutions for the benefit of customers and communities.

What steps has ESB taken to improve safety in 2021?

Safe and Sound is ESB's transformation programme designed to build a safety culture and environment that is sustainable over time. It aims to create an inclusive, values-based culture where safety is central to everything we do, where people make good choices about safety and take responsibility for the safety of themselves and others. It also encourages people to speak up, and know they are appreciated for their contribution. A similar programme, Safer Together, is underway in NIE Networks. Safely maintaining operations and programmes in the midst of the COVID-19 pandemic required particular care and focus from teams across ESB throughout 2021.

Environmental, Social and Governance (ESG) issues are becoming an increasingly important topic for investors and other stakeholders, how is ESB addressing these issues?

While these matters have always been important, ESG is now directly called out in ESB's strategy. Our strategy is built on three of the UN Sustainable Development Goals; Affordable and Clean Energy; Industry, Innovation and Infrastructure; and Climate Action. During 2021, ESB retained its leadership scoring performance as assessed by the Climate Disclosure Project (CDP), scoring an A-. We also adopted the Taskforce on Climate Related Financial Disclosures (TCFD) framework to report on climate risk and continued to work with an inhouse team of ecologists to manage the impact of our operations on nature and the environment.

To what extent is the delivery of ESB's low-carbon strategy dependent on maintaining financial strength?

Delivering our net zero strategy will require significant capital investment in renewable generation, enhancing electricity networks, and supporting the customers and communities we serve. Maintaining ESB's financial strength enables us to make these essential investments in a low carbon future.

In 2021 ESB's performance was strong with EBITDA of €1,493 million and operating profit of €679 million (both before exceptional items), maintaining strong investment grade credit ratings.

During the year, ESB invested over €1,223 million in capital infrastructure projects including €927 million on networks projects and €115 million on renewable generation and system services projects. In addition, over €100 million was advanced by way of shareholder loans to our joint venture projects, the majority of which related to our continued investment in offshore wind.

What challenges does ESB face in achieving its strategic objectives over the next year?

Our plan involves a significant and sustained increase in capital investment so we have worked hard to continue to build essential infrastructure despite the pandemic. We will need more people to help deliver our strategy so attracting, developing and retaining key capabilities remains essential. In the longer term, developing the capability to match electricity consumption and low-carbon generation at scale and for long durations is a massive challenge. It's essential that this is achieved - and it will take innovation, imagination and the support of many players in the energy sector and beyond.

What opportunities do you see ahead for ESB?

There are real opportunities for ESB to make a positive difference to society, whether that's by developing and connecting renewables to decarbonise electricity systems, supporting customers and communities to achieve net zero or by enhancing the resilience of low-carbon electricity networks. Through our various generation, networks and customer solutions businesses we are embracing those opportunities to make a difference, driven by our commitment to deliver a brighter future.

Any final comments?

I would like to acknowledge the important contribution made to ESB by Pat O'Doherty who's term finished during the year. During a decade as Chief Executive, Pat steered ESB successfully through unprecedented change, repositioned the organisation around a vital purpose and set ESB on a clear pathway towards a low-carbon future.

I also want to acknowledge and appreciate the immense capability and commitment of ESB employees who worked under very difficult circumstances through 2021 to progress our strategy, deliver on our commitments and maintain essential services for the customers and communities we serve.

Paddy Hayes, Chief Executive
01 March 2022

Paddy Hayes
Chief Executive, ESB

ESB at a glance

Business Segment	ESB Networks	Northern Ireland Electricity Networks (NIE Networks)	Generation & Trading (GT)	Customer Solutions	Other Segments
Revenue	€1,312m	€330m	€2,134m	€3,055m	€488m
Operating profit/(loss)*	€409m	€74m	€184m	(€19m)	€31m
Capital expenditure	€734m	€193m	€209m	€26m	€61m
Average employee numbers	3,339	1,209	692	726	1,904
Link to other sections in the report	See page 60 ESB Networks Operational Review	See page 62 NIE Networks Operational Review	See page 64 GT Operational Review	See page 66 Customer Solutions Operational Review	See pages 68 and 69 Engineering & Major Projects and Enterprise Services

See note 3 (Segment Reporting) in the financial statements for further detail.
* Before exceptional items (see note 6 in the financial statements for further detail).

Highlights

SHAREHOLDERS

Dividend of
€126 million
for 2021

Return on Capital Employed (ROCE)
of 5.6%

Re-Affirmed
Credit Rating A-/A3

CUSTOMERS

The launch of a
COVID-19 Hardship Fund
supporting customers affected by the pandemic

The launch of
Electric Ireland Superhomes,
a one stop shop for home energy refits

Customer satisfaction of
81%

Over 38,000
New Customer Connections

Over 380,000
smart meters installed

IRISH ECONOMY

Over
€1 billion
investment in infrastructure

Over
7,800
employees

Over
€2.0 billion
contribution to Irish economy

Over
€2.5 million
disbursed across a range of community initiatives

ENVIRONMENT

A-

ESB is designated as an
A-listed company
by the Carbon Disclosure Projects, remaining in the leadership category for the second year in a row

Carbon intensity
of 440g CO_2/kWh
reduction of
34%
(on baseline year 2005)

Strategy, Business Model, Risk Report and Key Performance Indicators (KPIs)

Strategy

During 2021, the Board undertook a review of ESB's strategy (originally approved in 2017 – "ESB Strategy 2030") to test and validate the underlying assumptions, evaluate the overall strategic direction of the Group and extend the planning horizon beyond 2030. Based on this analysis, ESB adopted a revised strategy in December 2021 - *Driven to make a difference: Net Zero by 2040.*

ESB's Business Environment

The external factors summarised in Figure 1 have emerged since ESB's strategy was developed in 2017. These factors informed the assessment and update of ESB's Strategy which took place during 2021.

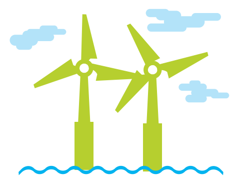
Figure 1 - New and Accelerated External Factors Impacting ESB Strategy

Radical Shifts in Direction in Post-2017 Period

a **Net Zero**
Moving climate targets since 2017

b **Transformed & Expanded Role of Networks**
New growth opportunities alongside a greater delivery imperative

c **SEM Offshore Wind**
Creation of a large but competitive market



d **Energy Services**
Consumer adoption lower than expected

e **GB Energy Policy & Market**
Leader on CO_2 and technology but regulatory challenges

f **Stakeholder Expectations**
Increasing stakeholder expectations (e.g. ESG, energy security)

g **Increased Competition**
Level of competitive pressure has accelerated

h **Digitalisation and Data**
Faster pace but with new major use cases (e.g. smart working, active system management for networks)

a **Net Zero:** Since 2017, there have been major shifts on climate and energy policy and sentiment at global, European and national levels (for example: European Green Deal, Ireland's Program for Government, Ireland's Climate Action Plans). The target for climate and energy policy, for those economies representing at least 70% of the World's GDP, is now net-zero greenhouse gas emissions for their societies whereas in 2017, the EU direction of travel was an 80% reduction by 2050. The complete decarbonisation of societies will require a combination of deeper electrification (increasing demand for electricity) and greater levels of renewable energy than were envisaged in 2017. One effect of net-zero policies, combined with the deployment of large volumes of zero marginal intermittent renewable power, has been more investment in renewables than in dispatchable generation providing power market structures with the challenge of sustaining back-up generation capacity or other options to support the system at times of low wind. This also provides potential opportunities for the deployment of new energy technologies such as large–scale storage including hydrogen.

b **Transformed & expanded role of Networks:** Electricity networks will be key to enabling the mass adoption of low-carbon demand technologies (such as electric vehicles and heat pumps), enabling customers and communities to generate and trade their own energy and connecting greater levels of renewable energy. Combined with new projections for housing and economic development, these factors are expected to result in a requirement for 40% more capital investment in Networks than envisaged in 2017.

c **SEM Offshore Wind:** Since 2017, a policy target for Irish offshore wind capacity has been set at 5 GW by 2030. This represents an aggregate capital investment requirement of the order of €15 billion by the end of this decade. Both Ireland and Northern Ireland have increased the target for renewable energy in electricity to 80% and 70% respectively. Given the longer-term requirement for deeper electrification and the potential need for 'green hydrogen' produced with renewable electricity, some scenarios suggest that Ireland may require up to 20-25 GW of offshore wind generation by 2040. In strategic terms, this creates a major new growth opportunity that did not exist in 2017 – albeit in a sector that remains extremely competitive.

d **Energy Services:** In 2017 consumer, technology and policy trends were seen as creating strategic opportunities in energy services. Although the advent of the "connected home" and the rise of the "prosumer" were seen as particularly important factors in creating this opportunity, consumer adoption has been slower than envisaged. However, the intermittency of renewables has driven a growing requirement for systems services provided to EirGrid, SONI and National Grid.

e **GB Energy Policy & Market:** Since the 1990s, the Great Britain electricity market has played an important part in ESB strategy – serving as an opportunity for ESB to achieve scale beyond the Single Electricity Market (SEM). Britain has also been a global pioneer in introducing competition and de-regulation into its electricity sector as well as more recently serving as an international trend setter in decarbonisation – often leading the adaption of technologies and business models. However, in the period since 2017, Brexit has reduced the likelihood of an integrated 'All Islands' market. The introduction of a retail price cap in 2019 altered the dynamics of Britain's supply market and, more recently, has negatively impacted many supply companies operating in GB. As of 2020, Britain was the world's largest offshore wind market with over 24 GW of capacity installed, continuing to provide opportunities for further investment in offshore wind.

f **Stakeholder Expectations:** In 2017, ESB was a pioneer in terms of developing a purpose-led strategy. In the period since, societal and stakeholder expectations have risen in relation to the role and contribution of commercial companies in general and utilities in particular. This trend is confirmed by greater reporting requirements and public focus on enterprise performance in the realm of ESG (Environmental, Social and Governance) performance since 2017.

g **Increased Competition:** Since 2017 the level of competitive pressure has accelerated in many areas with a number of large and capable companies seeking to invest in clean electricity generation. Additionally, new start-up players – based on digital platforms - are developing disruptive business models, particularly in the area of electricity retail.

h **Digitalisation and Data:** Since 2017, progress and consumer adoption with regard to Connected Home/Internet of Things has been slower than energy companies envisaged. However, there are also new and increasingly important use cases for digital – some of which have been accelerated by COVID-19. Agile players are leveraging digital platforms to reduce their cost to serve and enhancing their customer processes and experience. Smart working represents an important new priority spurred by COVID-19 and leveraging digital. ESB Networks' important National Network Local Connections programme and Smart Metering project – which aim to enable distribution communities and customers to increase their level of engagement with electricity and to accommodate greater levels of microgeneration and low-carbon technologies - will be enabled by digital platforms.

Driven to make a difference: Net Zero by 2040

ESB strategy is anchored in ESB's ambition to make a difference - delivering a brighter future by creating and connecting sustainable, reliable, affordable energy, and grounded in ESB's enduring purpose to support the customers and communities ESB serve to achieve net zero. It aims to achieve this by decarbonising electricity, connecting the renewable generation needed, making its networks smarter to enable the electrification of heat and transport and providing the solutions to support its customers in making their own transition. This will be done in a way that will ensure that ESB continues to grow as a successful business while maintaining the financial strength to invest in a low-carbon future at the necessary pace and scale. It also recognises the potential for growth and investment opportunities arising from the transition.

The Strategy highlights the importance of being adaptable, responsive and opportunistic in an era of unprecedented uncertainty and having 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 enabling society 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 its customers better and achieve sustainable growth.

ESB'S Values

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

Figure 2 – ESB Values

Figure 3: SDG contribution underpinning ESB Strategy

Strategic Framework

The revised Strategic Framework for ESB's strategy will ensure that ESB's strategic objectives, which are outlined further below, are commercially driven and are consistent with ESB's overarching purpose and values, as described above.

In 2017, ESB was a pioneer in adopting a purpose-led approach to the development of its strategy – an approach which has since gained wider usage. Given this, it was decided to critically evaluate, and if appropriate, propose amendments to the current ESB Purpose Statement so that it can form the basis for subsequent decisions.

Consistent with the practice of ESB's peers, this step included a consideration of the potential role of ESB in linking its strategy to the delivery of broader societal objectives as embodied in the United Nations *Sustainable Development Goals* (SDGs). This assessment informed an update of ESB's purpose statement, aligned to SDGs, as set in Figure 4. This reflects a strong commitment to net zero, a reaffirmation of ESB's role in delivering this societal outcome as well as ESB's broader societal role alongside commitment to customers and communities.

Figure 4 – ESB Strategic Framework

Strategic Objectives

ESB's strategy sets out the following 7 Strategic Objectives. 3 objectives relate to what ESB will do, underpinned by 4 foundational capabilities.

Decarbonised Electricity | Resilient Infrastructure | Empowered Customers | Our People | Digital & Data Driven | Financially Strong | Sustainable & Socially Responsible

What we will do

Develop and connect renewables to decarbonise the electricity system by 2040

Consistent with the societal goal of achieving net-zero emissions. This conveys our intentions across the group to deliver this by both generating renewable electricity and by enabling the connection of renewable generation to our electricity networks.

Provide resilient infrastructure for a reliable low-carbon electricity system

Conveys the fundamental and increasing importance of stable and robust infrastructure to ensure a secure and reliable electricity system. This includes reliable and resilient networks, the provision of system services to support renewables, together with dispatchable generation combined with storage assets to meet society's need for electricity at times of low wind.

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

Communicates the importance of supporting and working alongside customers and communities to achieve net zero. This includes Electric Ireland Superhomes for domestic retrofits and the repurposing of distribution networks to underpin widespread electrification.

Foundational Capabilities

Ensure we have the people capability to deliver our strategic objectives with a strong values-based and inclusive culture

Reflects the critical role of people and the importance of inclusion and strong values as we deliver our purpose.

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

Communicates the opportunity to adapt our businesses and ways of working to leverage data, digital and related technologies in the interests of the customers and communities we serve.

Maintain the financial performance and strength required to deliver our purpose

Reflects ESB's commercial mandate to provide shareholder value and the fact that strong and consistent financial performance is necessary to the funding of the significant capital investments required to implement our strategy.

Step forward on social and environmental responsibility, cultivating a safe, sound and sustainable ethos in line with our values

Responds to increasing stakeholder expectations particularly with regard, but not limited to, Environmental, Social and Governance (ESG) performance.

Selected Strategic Performance Indicators (SPIs)

Strategy in Action – See pages 60 to 69 for details of progress on strategic objectives by Business Unit

Strategic Performance Indicators (SPIs)

Strategic Objective	Indicator	2021	2030 Target (unless otherwise stated)
Develop and connect renewables to decarbonise the electricity system by 2040	ESB Renewable Generation	983 MW	>5,000 MW
	Scale of Low-Carbon Energy Connected to Our Networks	4.7 GW in ROI 1.8 GW in NI	> 15 GW in ROI 2 GW in NI
Provide resilient infrastructure for a reliable low-carbon electricity system	Networks Regulated Asset Base	ESB Networks: €8.8bn NIE: €2.1bn	ESB Networks: €13 - 14bn NIE: €3 - 3.5bn
	Carbon Intensity of the Electricity ESB produce	440g CO_2 / kWh	140g CO_2 / kWh
Empower, enable and support customers and communities to achieve net zero	Share of ESB Generation Output from Zero Carbon Sources	14%	63%
	Number of smart meters installed	620,000	2.6m
	Electrification of Transport Network: Public EV Chargers	1,700 (island of Ireland and GB)	3,000 Total
Ensure we have people capability to deliver our strategic objectives with a strong values-based and inclusive culture	Employee Engagement (Our Voice Staff Survey)	7.0	7.3
Leveraging data and technology, transform ESB to a data driven digital utility	% of Customer Engagements that are Digital	Digital customer engagement measure to be reported in 2022	Top quartile (by 2026)
Maintain the financial performance and strength required to deliver our purpose	Strong Investment Grade Credit Rating	Credit ratings of A- or equivalent and BBB+ on a standalone basis	BBB+ on a standalone basis
	Return on Capital	5.6%	ROCE >WACC
Step forward on social and environmental responsibility, cultivating a safe, sound and sustainable ethos in line with our values	ESB Greenhouse Gas Emissions	Will be included in ESB's Sustainability Report which will be published in 2022.	Net Zero by 2040 An externally accredited Science Based Target by 2030

See pages 60 to 69 for short-to-medium term priorities in the busines units.

Business Model

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

Capital Inputs

Manufactured Capital
- 5,404 MW of generation capacity
- Over 233,000 km of Network across ROI and NI

Financial Capital
- A-credit rating
- Total net assets €4.1 billion
- Liquidity of €1.9 billion

Intellectual Capital
- Carbon management
- Environmental management and expertise
- Promotion of innovation - founding member of 'free electrons'
- Corporate governance structure

Human Capital
- Over 7,800 employees
- 'Our Code'
- Employee development programmes
- Diversity and inclusion strategy
- Safety leadership strategy and transformation programme

Social and Responsible Capital
- Over 1.9 million customer accounts

Natural Capital
- 983 MW of renewable generation

Generate

ESB develops, operates and trades the output of ESB's electricity generation assets The portfolio consists of 5,404 MW of thermal and renewable generation assets across ROI, NI and GB and a further 438 MW under construction.

See page 64 for further details.

Supply

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

See page 66 for further details.

Transmit & Distribute

ESB builds, manages and maintains the transmission and distribution network in ROI and NI. Over 233,000 KM of Network.

See page 60 and 62 for further details.

Financial Strength

ESB has a strong balance sheet and liquidity position, the maintenance of financial strength is key to support the investment required to deliver a low-carbon energy future.

Output

Customers
- 81% customer satisfaction
- 40% supply market share
- 33% generation market share

Shareholders
- Dividend of €1.2 billion over the last decade
- Return on capital employed 5.6%
- €1.5 billion EBITDA (before exceptional items)

Irish Economy
- Invested over €1 billion
- Contributed over €2 billion to economy
- Over €2.5 million disbursed

Environment
- Carbon intensity reduced by 34% since 2005
- CDP 'A-' score

WE'RE COURAGEOUS

WE'RE CARING

WE'RE DRIVEN

WE'RE TRUSTED

Decarbonised Electricity

Resilient Infrastructure

Empowered Customers

Our people

Digital & Data Driven

Financially Strong

Sustainable & Socially Responsible

Risk Report

Approach to Risk Management

The effective management of risks and the pursuit of opportunities supports the development and implementation of ESB's strategy while protecting the interests of its stakeholders and shareholders.

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.

How ESB Manages Risk

The Board has overall responsibility for risk management and internal control. The current UK Corporate Governance Code 2018 (the UK code) (Clauses 28, 29 and 31) 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 is 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 2021 in respect of their risk responsibilities are outlined on page 108.

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.

Risk Oversight Activities during 2021

In early 2021, the Audit and Risk Committee reviewed and recommended to the Board the Group Risk Plan for 2021 which set out the Principal and Emerging Risks facing the Group, including the controls and mitigating actions proposed to manage the risks over 2021. The Committee was provided with quarterly reports which considered the status and impact of implementing the identified controls and mitigating actions which provided assurance to the Committee of a robust risk management process.

The Group Risk Plan also included a comprehensive work plan for the Committee detailing its risk oversight activities for the year. The Committee identified Environmental, Social and Governance (ESG) and cyber security as major components of ESB's risk environment and areas they wished to focus on during the year. The Committee wanted to understand developments in these areas as a whole as well as gain an understanding of their potential impact, and ESB's approach to managing these impacts. This included:

- Linking ESG and cyber security to the Enterprise Risk Management process in ESB and specifically to its relevance to ESB Group Principal and Emerging Risks as well as the company's High Impact Low Probability (HILP) Risk Register
- Understanding of their potential impacts (risks and opportunities) and ESB's approach to managing impacts
- Understanding of key external and internal developments in these areas

The Committee held a virtual workshop, to which all members of the Board were invited, to examine these topics and others that became more material over 2021 in more detail. External speakers as well as demonstrations of ESG in action in ESB provided additional insights for the Board Members.

In addition, to facilitate the Committee in remaining up to date with movements in the risk landscape that are relevant to ESB, a range of additional publications and papers on key risk topics were provided to the Committee over the year. These considered topics such as the National Risk Assessment 2020[1] report and The World Economic Forum's Global Risk Report 2021, in addition to reviews of material external incidents relevant to ESB, such as the ongoing impact of the COVID-19 pandemic, the HSE ransomware attack, the Colonial Pipeline attack and the Texas power failure event.

During 2021, ESB sought to identify and report on a range of key performance indicators for the Committee to aid them in monitoring the efficiency and effectiveness of their risk oversight activities.

ESB also identifies and seeks to mitigate a range of High Impact Low Probability (HILP) risks relevant to the Group. HILPs are a class of risks with the potential to cause long-term, catastrophic damage to the business. A full review of HILPs is completed on a biannual cycle. The last review was undertaken in 2020 in order to identify any changes to the overall risks outlook.

Group Risk, Group Internal Audit, Group Finance and a number of other key second line functions met during the year in relation to internal control and risk management matters. This ensures alignment between the functions, better information-sharing and opportunities to identify areas for improvement in the overall internal control framework.

Under the Code of Practice for State Bodies and ESB's own risk Policy and Framework, ESB is required to conduct periodic external reviews of the effectiveness of its Enterprise Risk Management (ERM) framework and processes. To that end, an external review of ESB's risk management processes was completed during 2021 with some recommendations for improvement made. Given ESB's commitment to continuous improvement and maintaining an ERM Framework aligned with best practice, an improvement process has been put in place with some of the recommendations already implemented.

Risk Culture

ESB's risk culture determines the way in which employees identify, understand, discuss and act on the risks they take and are faced with on a daily basis.

To enhance risk awareness, ESB's values continue to be a focus for discussions with all employees to ensure we create a clear and consistent understanding of how we work. To support the embedding of risk culture, ESB has adopted policies (such as ESB's code of ethics, "Our Code") which facilitate and encourage an environment where people can feel comfortable raising issues and where management treat concerns seriously, professionally and in accordance with legal obligations that apply under the Protected Disclosures Act 2014.

Decision making is supported by having clear authority levels, the conduct of rigorous risk analysis as part of business/project planning and consideration of the alignment between investments and our risk appetite detailed for all Board approved submissions. Specific training is provided for high-risk activities including cyber risk awareness, network operations, data privacy and energy trading activities. This approach has ensured that risks and uncertainties are highlighted at an early stage so that prompt action can be taken to minimise any impact they might have on employees and other stakeholders.

The Board is ultimately responsible for setting the tone at the top of the organisation. The approaches outlined have provided the Board with assurance that the risk culture supports the effective management of enterprise risk. A Culture Dashboard provides updates to the Board, through the Safety, Environment and Culture Committee on the effectiveness with which the desired culture, aligned to ESB's values, has been embedded throughout the organisation.

Risk Appetite

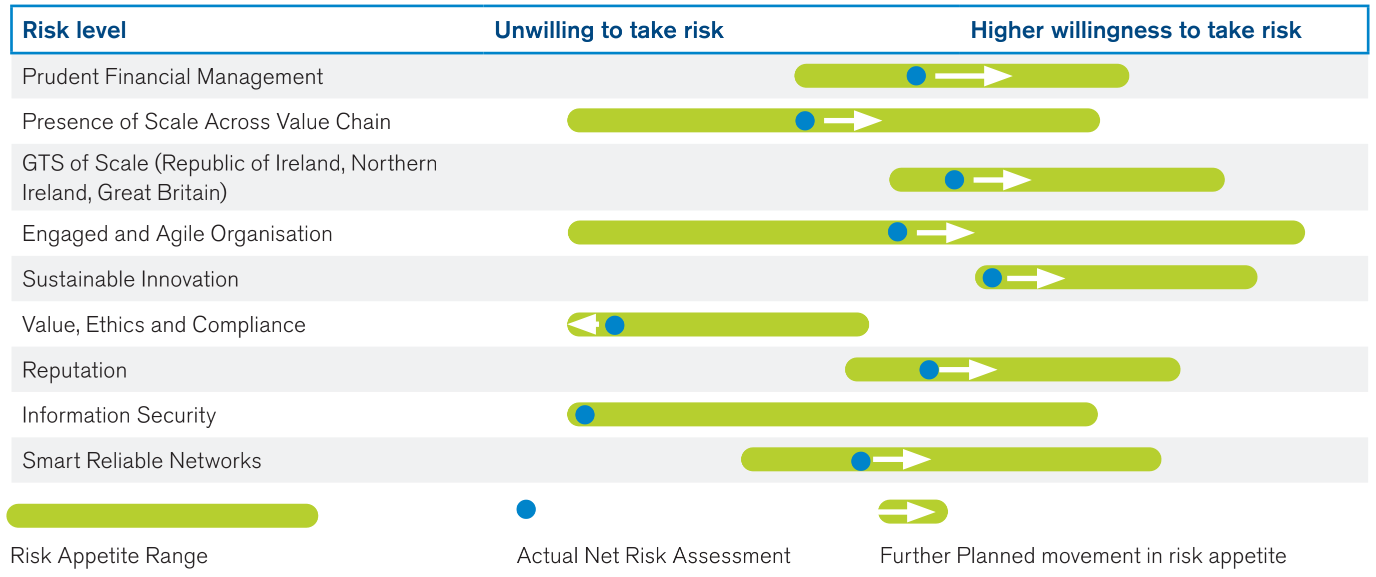
ESB's Risk Appetite Framework is focussed on setting the risk appetite at the Group level across different risk dimensions and provides the basis for communicating risk appetite down through the organisation. Consideration is given to its presence across all aspects of the industry value chain, its commitment to prudent financial management and the strong ethical approach to how ESB does business.

Risk appetite guides the annual business planning process by defining the desired forward-looking risk profile of the group in achieving strategic objectives. It is embedded in day-to-day risk management decisions through the use of risk tolerances and limits for material risk types (e.g. energy trading and treasury operations). This ensures the risk profile remains aligned with risk appetite by balancing risk and returns.

The Group Risk Appetite Statement is approved by the Board on the advice of the Audit and Risk Committee. ESB's strategy is consistent with the Risk Appetite Statement signed off by the Board in 2017 in terms of focus of investment, geographies, technology and customer focus. The principal risks continued to be monitored by reference to the approved Risk Appetite Statement throughout 2021.

During 2021, significant work has been undertaken in relation to ESB Risk Appetite. In Q4 2021, the Audit and Risk Committee reviewed ESB's Risk Universe which represents a mapping of the major sources of risk faced by the Group. This was a result of an extensive, inclusive and robust process that delivered a range of considered and objective outputs. The Audit and Risk Committee also reviewed and recommended a Risk Appetite Framework approach to the Board. A full review of ESB Risk Appetite, aligned with, and informed by, ESB's new strategy (which was finalised in December 2021) is being undertaken by the Board for completion in 2022. ESB's current risk appetite is shown below.

Current Risk Appetite



Group principal risks 2021

The 2021 Group Risk Plan takes at its starting point ESB's strategy. Additional external considerations included *Gartner's Audit Plan Hotspots 2021 and Gartner's 2021 Top Ten Emerging Risks* and the Institute of Risk Management's *Risk Predictions for 2021*, external market developments and other legal and regulatory considerations that can impact the business model. Emerging risks are included, insofar as this is possible, for the period 2022 to 2025, to help identify exposures as early as possible.

The Principal Risks for 2021 are set out on page 30. These risks are considered material to understanding how ESB creates value. A number of Principal Risks remained constant over 2021, such as health and safety, financial strength and COVID-19. Other risks, as detailed below increased during the year.

As part of the Mid-Year Risk Review Process, two additional principal risks were introduced in 2021, one in relation to ESB's industrial relations environment and the other in relation to electricity system and market wide capacity issues. As with ESB's well established process for the assessment of Principal Risks, the Mid-Year Risk Review was an inclusive and robust exercise that delivered a range of considered and objective outputs. Risks were identified and measured, appropriate controls and risk mitigations to reduce the probability of risks emerging and recovery mechanisms to reduce the impact of an event are in place. Reviews were also conducted by the relevant oversight committees.

The Group Risk Plan for 2021 was designed to provide adequate assurance that:

- specific consideration has been given to the risk of achieving ESB's strategic objectives
- risks have been properly identified and assessed on a bottom-up basis by the businesses and key functions and also adequately challenged and reviewed on a top-down basis by Group Risk, the Risk Management Committee and the Executive Director Team Risk Forum. Risks have also been challenged and reviewed by the Audit and Risk Committee and the Board.
- risks and risk appetite have been aligned
- appropriate controls and risk mitigations to reduce the probability of risks emerging and recovery mechanisms to reduce the impact of an event are in place
- emerging risk developments over time are being tracked
- management preparedness to manage risk is understood
- responsibility for risk is allocated to ensure accountability
- a communications plan is in place to apprise the Board and the relevant sub-committees on key risk topics throughout the year

Financial Risks

The main financial risks faced by the Group relate to liquidity, foreign exchange, interest rate, capital intensity (capital expenditure relative to EBITDA), commodity (electricity and fuel) price volatility/movements and delivering appropriate returns on the capital expenditure invested. 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 (and the details are outlined in note 29 of the financial statements).

Climate Risks

ESB has identified the main transition and physical climate risks and opportunities across the Group. This list of Group Climate Risks will be monitored and reassessed each year. The overall level of transition climate risk and physical climate risk identified will be linked to Enterprise Risk Management through the addition of principal risks covering climate change transition and in 2022 a new physical climate change principal risk. Three climate risk scenarios have been developed for use in the regular reviews of ESB's corporate strategy: one physical scenario, based on the IPCC (Inter Governmental Panel on Climate Change) representative carbon pathway 4.5 and two transition scenarios, one based on the Irish Government's 2019 Climate Action Plan and the second on the climate goals in the recent, more ambitious 2021 Climate Action Plan. For more detail, please see the Environment and Sustainability section on page 82.

Emerging Risks

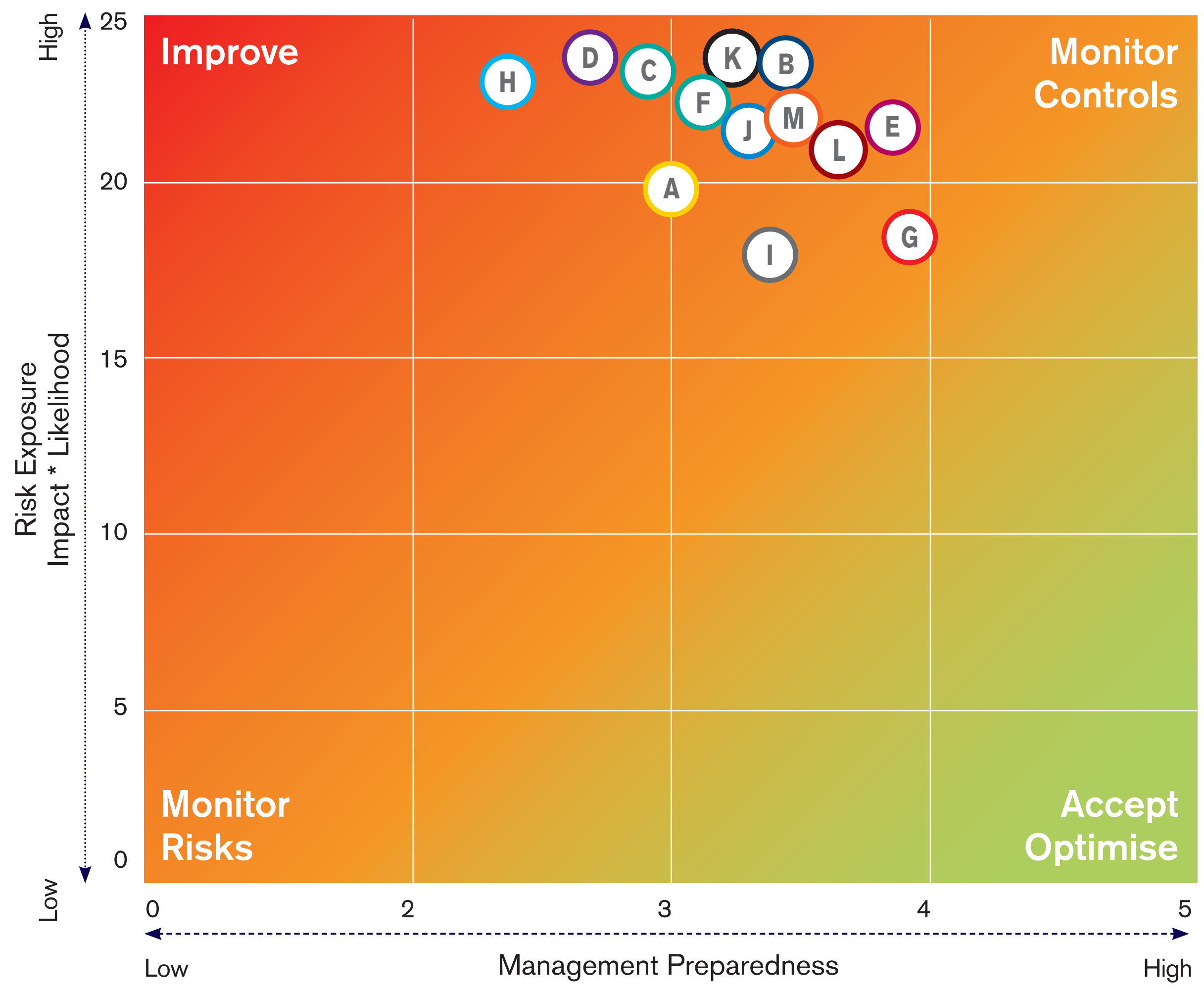
The risk management framework enables the Group to identify, analyse and manage emerging risks to help identify potential exposures as soon as possible. This is managed as part of the same process that identifies the principal risks. These are monitored and reviewed in conjunction with principal risks. While a core element of ESB's strategy seeks to address climate change challenges, an emerging risk recognises that the pace of change is accelerating, particularly in the context of an increasing number and range of obligations.

Business Continuity

ESB is responsible for the provision of critical infrastructure and disruptions to certain services and operations are potentially damaging to the economy, to society and to ESB's business. ESB has in place a robust set of business continuity plans and processes to ensure that our responses are well managed and executed. In 2021, ESB continued to manage its response to the COVID-19 pandemic, ensuring that the key lessons learned arising from the response to the pandemic in 2020 were incorporated in the Business Continuity Plans. Due to COVID-19, a restricted annual test plan for 2021 was exercised and its findings captured in the 2021 Business Continuity Report to the Audit and Risk Committee (which was presented in January 2022).

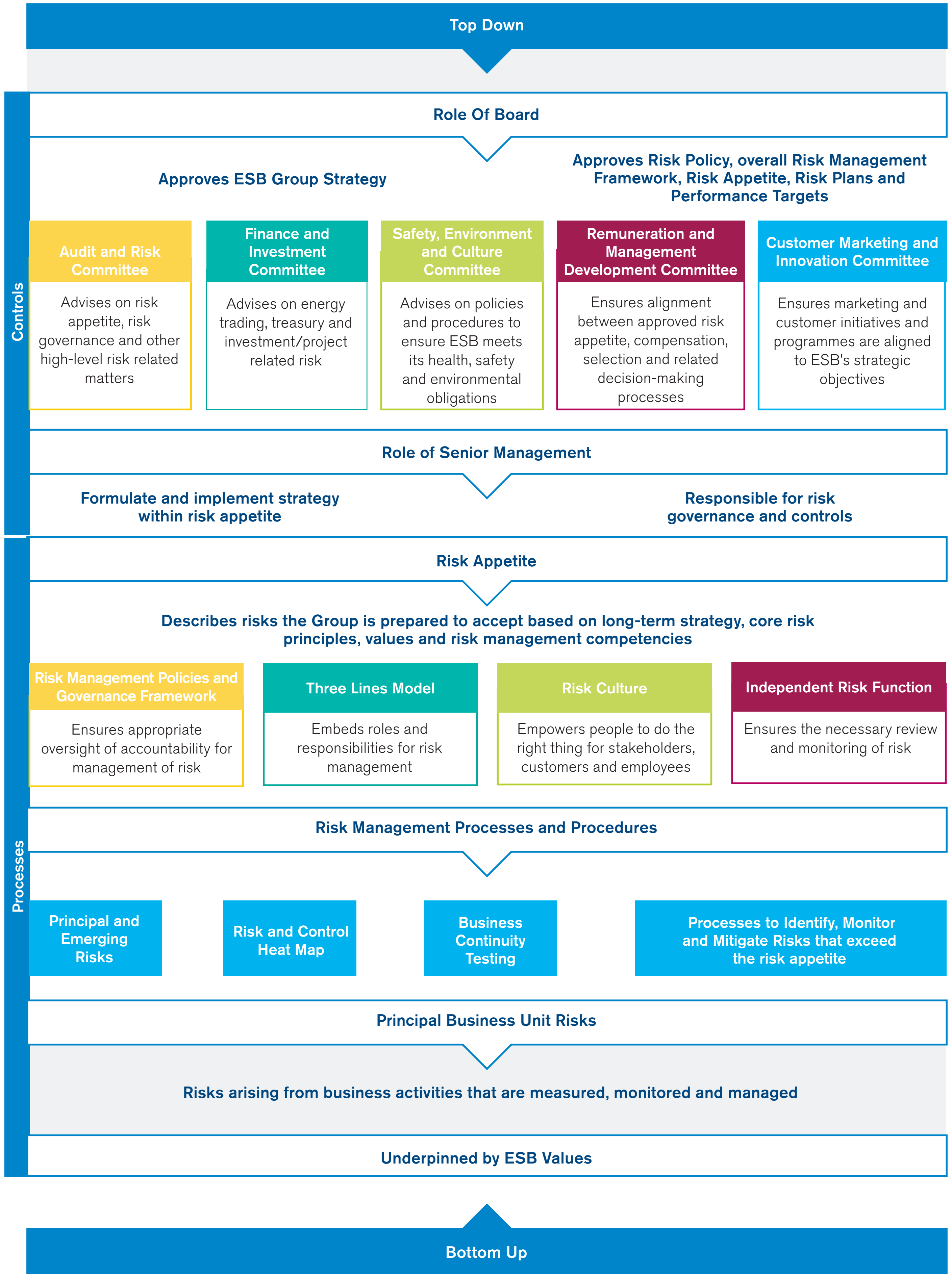
[1] Published by Department of Defence March 2021

Risk and Control Heat Map



- A Health And Safety
- B Financial Strength
- C Growing Competitive Intensity In Generation And Retail/Services Markets
- D Uncertain International Geopolitical/ Economic Environment
- E System Outage Or Cyber Attack
- F Brand Or Reputation
- G Challenges Associated With COVID-19 Pandemic And Impacts
- H Compliance Failure With Applicable Legal Obligations
- I Insufficient Organisational Agility And Speed Of Change
- J Inadequate Response To Climate Change Policy
- K Delivery Of Growing And Complex Networks Infrastructures And Systems
- L Industrial Relations Environment
- M Electricity System And Market Wide Capacity Margin Issues

Risk Management Framework



Principal Risks

The principal risks and opportunities that have the potential to significantly impact the Group's strategic objectives are set out below, together with an indication of the current strategic objective(s) to which they relate, any change in the risk climate during the year, who is responsible for monitoring the risk, the principal mitigations, developments in relation to the risk during 2021 and the areas of focus for 2022.

STRATEGIC OBJECTIVES

Decarbonised Electricity | Resilient Infrastructure | Empowered Customers | Our People | Digital & Data Driven | Financially Strong | Sustainable & Socially Responsible

A. HEALTH AND SAFETY

Risk Climate ↔

Oversight: Safety, Environment & Culture Committee

What is the risk?

Serious injury or death to staff, contractors or the public

Risk Drivers

- Inadequate policies and procedures (systems of work)
- Inadequate competence (training, knowledge and experience) (people)
- Lack of compliance with standards and procedures (behaviour)
- Lack of maintenance (workplace; tools, plant and equipment)
- Lack of awareness, knowledge or due care and attention by a member of the public (people; behaviour)

Mitigations

To prevent the risk materialising:

- Group wide and business standards
- Risk assessments, safe systems of work including safety rules, supervision as required, process and operational safety
- Detailed training, development and approvals process
- Safety culture transformation programme. Engagement programmes e.g. briefings, safety alerts, good catch, public awareness, contractor safety programmes etc.
- Maintenance Management Systems, equipment inspection and certification, statutory inspections, public safety programme
- Assurance and audit process (external and internal)
- Externally certified Safety Management System (SMS)
- Adaptive leadership/open culture
- Public safety strategy and associated work programmes

If the risk materialises:

- Critical incident management and response procedure and scenario testing
- Crisis management process, pandemic response
- Business continuity processes
- Occupational Health and Wellbeing services
- Incident investigation standard and procedures
- Monitoring, tracking and reporting of serious incident action completions
- Feedback and resolution, to support continuous improvement and learning

Developments in 2021

- Pandemic response processes maintained throughout the year
- Challenge is to keep people safe and sound during COVID-19. Local Leadership Teams, Business Unit Leadership Teams, coaches etc. all working remotely on this challenge
- Ongoing safety precautions associated with the COVID-19 pandemic has impacted on non-essential in-person training and assurance auditing
- A review of P1 incidents and the learning from them was undertaken
- Two large construction projects, Project Fitzwilliam and the Glasshouse project have largely concluded. This will reduce the safety risk exposure until further large-scale projects are implemented

2022 Area of Focus

- Health and Safety will continue to be a central focus for the Group in 2022 and ESB strive to embed a high-performance culture as part of ESB's strategy
- Pandemic response processes will be maintained for the duration of the pandemic. This will include safety and health while on site, while homeworking and while in the office, in compliance with 2022 national guidelines
- Maintain focus on Safety and Wellbeing, in particular the risks associated with human factors, asset integrity and systems of work. Extend Safe & Sound to remaining business areas. Learn from employee survey findings to improve engagement with Health & Wellbeing supports

B. FINANCIAL STRENGTH

Risk Climate ↔

Oversight: Finance and Investment Committee

What is the risk?

Failing to maintain ESB's financial strength, due to pressures on performance, available investment returns and growing capital intensity

Risk Drivers

- Failure to deliver capex and opex within ESB Networks and NIE Networks regulatory allowances and/or failure to deliver Key Performance Indicator (KPI) targets in the financial incentive mechanism set out in the final determination for Price Review 5 (PR5)
- Failure to deliver Group EBITDA Performance Improvement targets required to underpin financial strength
- Increases in the competitive environment in supply businesses in Ireland and GB which compresses margins or results in lower customer numbers
- Failure to secure an adequate renewable development project pipeline (with acceptable risk/return profile) to transform the Generation portfolio at the required pace to meet the strategy targets for Generation portfolio growth
- Sustained reductions in thermal generation market revenues in Ireland and GB due to the dilutive impact of increased levels of renewables on the system
- The risk of a material breach of trading limits, either inadvertent or deliberate and/or unforeseen movement in trading collateral
- Change in credit rating methodology and/or thresholds

Mitigations

To prevent the risk materialising:

- Develop and implement a comprehensive PR5 delivery plan including all aspects from project management, supply chain, contractor management and internal resourcing
- Accelerated delivery of the Performance Improvement Strategic Initiative
- Proactive monitoring of competitor behaviour and agile adjustments to customer pricing strategies to ensure a profitable market share of acceptable scale is sustained
- Thorough and comprehensive monitoring of market developments for low-carbon generation acquisition opportunities with acceptable risk/return profiles
- Optimise the generation position in the capacity and DS3 markets and trading and plant performance in the energy market
- Exit non-profitable business lines
- Robust trading and risk management framework in place

If the risk materialises:

- Defer/reduce planned capex if rating metrics under threat/pressure
- Implement financial flexibility measures to reposition capital in more attractive investment opportunities
- Implement aggressive cost reduction programmes to restore competitiveness
- Consider alternative funding and financial partnership options to deliver capital intensive projects (if and when required)

Developments in 2021

- Higher prices in wholesale markets in ROI and GB have improved short term Generation and Trading profitability – it is uncertain if this environment will continue
- Recent announcements on the consenting regime for offshore wind in Ireland should bring greater clarity to timelines
- GB retail business hit by a combination of high and volatile energy prices coupled with an inflexible regulated price cap

2022 Area of Focus

- Ongoing regulatory and stakeholder engagement in respect of delivery of ESB Networks' Regulatory Programme (PR5)
- Delivery of business plans and exploring financial flexibility options
- Delivering a high-performance culture that supports innovation and collaboration
- Continued focus on identifying new businesses/ technologies and developing a pipeline of generation assets options to drive future growth opportunities
- Investor and credit rating agency focus on climate risk continues to be of relevance and will require continued monitoring and focus by ESB
- General inflation and energy market volatility are likely to have implications and will be actively monitored

STRATEGIC OBJECTIVES

Decarbonised Electricity | Resilient Infrastructure | Empowered Customers | Our People | Digital & Data Driven | Financially Strong | Sustainable & Socially Responsible

C. GROWING COMPETITIVE INTENSITY IN GENERATION AND RETAIL/SERVICES MARKET

Risk Climate

Oversight: Audit and Risk Committee

What is the risk?	Risk Drivers	Mitigations	Developments in 2021	2022 Area of Focus
Growing competitive intensity in generation and retail/services markets impacting ESB's ability to deliver its strategy at the required pace	• Failure to secure support for hybrid connection strategy and/or early West Coast offshore wind • Uncompetitive finance costs • Selection of incorrect technology choices for generation • Delayed roll out of renewables supports by Ireland or UK leading to reduced market opportunities • Insufficient capital available for investment • Loss of/reduced stakeholder support for ESB's investment strategy • Failure to secure sufficient investment opportunities • DS3 income reduction • Declining margins in energy retail driving an ever-greater need for lower cost operating models in order to remain competitive. • Growing pace of market disruption in customer demands in respect of sustainable solutions, products and services • Increasing customer engagement and expectations - driving a greater need for more digital capability and agile IT systems • Increasingly active regulators, driving switching (auto-switching), price caps, compliance surveillance, monitoring and limiting margins • Growing competition from adjacent sectors - oil/gas, auto, digital/IT, investment funds • Growing prevalence of different business models incorporating joint ventures/partnerships	**To prevent the risk materialising:** • Alignment of ESB strategy investment goals with Government Climate Action Plan goals • Proactive engagement with stakeholders, regulators and policymakers in respect of developing the market and competitive landscape that best enables ESB to deliver on its strategic ambitions and business targets • Maintain a clear investment strategy linked to ESB's strategic objectives • Deliver Performance Improvement to maximise investment capital for growth • Secure financial flexibility options to improve financing competitiveness • Build sectoral experience and industry alliances becoming an effective investment partner • Delivery of competitive price offerings and innovative products • Explore options in respect of fully decarbonising product offerings • IT strategy under development - business and customer needs led programme • Innovation framework in place through New Markets and Business team to support the ideation and adoption of new businesses, products and services. • Aligning the capability of ESB's workforce to evolving business requirements • Proactively monitor consumer trends, competitor behaviour and external market evolution **If the risk materialises:** • Review target markets to identify wider market opportunities • Align organisation and overheads to emerging business model • Identify alternative sources of capital through selective disposals or other means • Explore alternative business models that don't require significant capital requirements such as engineering, operations & maintenance and trading • Price changes to recover targets • Defer/reduce planned investment • Explore further performance improvement options e.g. increased outsourcing • Exploring benefits and ability for partnership models and/or acquisitions • Accelerate adoption of learnings from GB challenger model development • Explore adoption of a digital partner model • Consider headcount reduction and redundancy programme to tackle cost base • Consider exiting business lines where ESB cannot scale sufficiently or quickly • Ultimately consider exiting and realising the value in current profitable businesses	• Residential customer numbers have returned to growth over the second half of the year • Business market volumes have also increased significantly over the course of 2021 • Joint venture with Coillte completed • Thermal strategy updated • Renewable projects prepared for upcoming auctions in SEM and GB	• Continue to monitor and review key external strategy drivers • Ensure 2022 Business Unit strategic plans are developed which reflect recent changes to the ESB strategic environment • Board strategy review days to be held during 2022 as well as a series of updates throughout the year on key emerging issues • The longer-term supply company trends associated with customer service, customer centricity, digitalisation and lower cost operating models need to remain in sharp focus in order to maintain relevance and deliver growth and profitability

D. UNCERTAIN INTERNATIONAL GEOPOLITICAL/ ECONOMIC ENVIRONMENT

Risk Climate

Oversight: Audit and Risk Committee

What is the risk?	Risk Drivers	Mitigations	Developments in 2021	2022 Area of Focus
Uncertain international geopolitical/economic environment (e.g. Brexit) with potential to impact ESB's financial performance and cause business and supply chain disruption	• Continued global and European recession - stemming from COVID-19, vaccination difficulties and other geopolitical/trade uncertainties • Brexit: Failure to mainstream the Trading and Cooperation Agreement between the EU and the UK and the Ireland/Northern Ireland Protocol • Brexit: Continued logistical challenges associated with the UK/EU trade deal if business and authorities fail to adapt to new trade regime • Brexit: Second order political implications of Brexit lead to a deterioration in East/West and North/South political relations • Brexit: GB political uncertainty including Scottish election during 2021, combined with negative sentiment towards Brexit, increases impetus towards Scottish independence • Potential for continued high-levels of unemployment in Ireland and the UK and emerging fiscal pressures on the Irish Government • Growing populist sentiment/increasing public concern on Climate Change leads to regulation that damages ESB's business or public sentiment that damages ESB's reputation • Second order implications of continued global recession may lead to greater pressure on EU solidarity and on the Eurozone • Volatility in commodity, fuel and power prices stemming from post-COVID recovery and shortages – combined with retail price cap in GB	**To prevent the risk materialising:** • ESB's Brexit and COVID-19 groups in place to address related risks, plan for worst case and monitor preparedness • Stakeholder engagement plan with policymakers and Regulatory Authorities • Regulation teams monitoring developments closely • Monitor economic developments closely. Support Government plans. Deliver on ESB promises • Continued engagement to ensure high quality relationship with Government • Reputation management and stakeholder management structures in place to identify and respond to potential threats • Continue to review the external economic environment through the strategic planning and integrated business planning process (e.g. scenario analysis where appropriate) • Maintain ESB's commitment to strong standalone credit rating so as to maximise future potential to access funds in the event of any crisis • Maintain a presence across the electricity value chain to ensure company has a physical hedge against fuel and electricity price movements • Robust trading risk management in place **If the risk materialises:** • Alternative arrangements may need to be developed/implemented. Critical counterparties have moved operations from the UK to Europe, facilitating continued trading of financial products • React swiftly to decisions negative to ESB. Seek trade-offs where necessary. Will inform policymakers of best options • Decide on viability of businesses and take strategic decisions in light of any changes • Implement regular strategic reviews taking macro-economic climate into account. Respond strategically and operationally as required. • Ensure that ESB is treated fairly and that the more stringent approach applies equally across the market. Activate appeals mechanism if decisions are unjust or suspect • Monitor, assess and decide • Continue to exercise prudent financial policies	• Economic forecasts have been revised upwards significantly since the start of 2020 • ESB was not materially impacted by a relatively hard Brexit - although risks remain if Trade and Co-Operation Agreement between the UK and EU is compromised • Broader international tensions over trade and corporate taxation were a feature of the year - particularly between the United States and China • Q4 developments include growing political tensions between Russia and the Ukraine, constrained and vulnerable gas supplies. Threats to energy security became more salient • 2021 also saw a significant increase in inflation • COVID-19, combined with trade tensions and a rapid recovery in demand, has led to supply chain issues in many non-fuel areas (e.g. microprocessors, metals) • Significant increase and volatility in fuel, carbon and power prices during late 2021. Combined with the GB retail regulatory regime, this resulted in challenges for ESB's retail business	• ESB will continue to proactively monitor regulatory, political and economic developments over 2022 in order to ensure that ESB is positioned to mitigate any risk that materialises and leverage any related opportunities • Key focus areas are likely to include gas supply, the impact of inflation on the business and the approach to addressing market volatility

STRATEGIC OBJECTIVES

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E. SYSTEM OUTAGE OR CYBER ATTACK

Risk Climate ↑

Oversight: Audit and Risk Committee

What is the risk?

Extended outage of critical Information/ Operational Technology (IT/OT) systems arising from non-malicious infrastructure failures or successful cyber attacks and/or significant data leakage

Risk Drivers

- Successful cyber attack, including ransomware or phishing attack
- Malicious or non-malicious breach of personal or commercially sensitive data
- Significant hardware issue, software error or networking failure, resulting in failure of IT or OT infrastructure/systems affecting critical business processes
- Inadequate process and controls in place to manage the IT/OT risks appropriately across ESB (internal and with 3rd party providers)
- Increased threats due to COVID-19 and extent of remote working

Mitigations

To prevent the risk materialising:

- Cyber policies, strategy and governance model in place and continued development of cyber IT/OT operating model as threat landscape and ESB's technology footprint grow
- Cyber operating model in place to manage first line and second line of defence for IT and OT
- Data protection policies and operating model in place
- Cyber security and GDPR awareness and training across the organisation
- Governance and approach to Network and Information Systems (NIS) compliance agreed between National Cyber Security Centre (NCSC), Chief Information Officer (CIO), IT Delivery, Generation and Networks
- Testing and simulation exercises for critical response plans
- Group Internal Audit and external bodies manage third line of defence for Cyber, GDPR and IT Operations
- COVID-19 Risk Radar process now in place to monitor additional threats due to COVID-19 and extent of remote working

If the risk materialises:

- Cyber response to COVID-19 threats, vulnerabilities and associated challenges
- Crisis Management and Business Continuity Plans
- Cyber Incident Response and Disaster Recovery Plans
- Breach management process, including trend and root cause analysis, in place for data protection incidents
- Continue to strengthen Cyber IT and OT response and recovery capability, including developing responses to new threats
- IT incident management process in place including incident review and lessons learned

Developments in 2021

- NCSC advisories, arising from the HSE ransomware attack, have now been implemented
- Ongoing monthly meetings with the NCSC have now been established
- Improvements in staff awareness of cyber threats as a result of ongoing awareness training programme run throughout 2021
- Crisis Management Plan and the Cyber Response Plan have both been reviewed and updated in 2021
- System Availability percentage has been maintained at 99.8% or higher throughout 2021
- IT Policies have been reviewed and updated as part of a cyclical review plan
- Cybersecurity strategy refreshed and implementation project now up and running

2022 Area of Focus

- Cyber improvement implementation plan for each asset (NIS Cybersecurity Compliance)
- Further enhance cybersecurity awareness
- Evolve ransomware controls and response readiness
- Systemic approach to OT cybersecurity
- Define and implement Cybersecurity Compliance Plan

F. BRAND OR REPUTATION

Risk Climate ↑

Oversight: Customer, Marketing and Innovation Committee

What is the risk?

Damage to Brand or Reputation

Risk Drivers

- Gap between expectations of ESB and stakeholder experience of material Environmental, Social and Governance (ESG) issues
- Failure to effectively manage communications with customers and stakeholders in a crisis
- Environmental damage/safety issues caused by legacy infrastructure or faulty equipment
- Increased national and local resistance to public infrastructure projects resulting in poor community relations
- Failure to take appropriate action to support the delivery of the Clean Energy Package and the National Climate Action Plan
- Failure to proactively engage with politicians, policymakers and other key stakeholders/ inappropriate engagement with politicians on relevant issues
- Inadequate response following damage to the network arising from adverse weather conditions (particularly in the context of COVID-19)
- Found to be in breach of legal, licence or planning obligations, including GDPR/privacy breaches
- Damage to reputation through partnership or association with third parties

Mitigations

To prevent the risk materialising:

- Steering committee in place to coordinate messaging, identify reputation risks and oversee brand governance
- Stakeholder forum to coordinate and drive stakeholder engagement.
- Brand and sponsorship programs in place to drive community support
- Media relations strategy in place. Press Office and agency support in place to proactively manage media relations.
- Crisis Communications plans in place and activated for major events, including cyber attacks, pandemics and storms
- Certified maintenance procedures in line with industry best practice to mitigate risks associated with legacy infrastructure
- Stakeholder listening and materiality research undertaken and ESG reporting framework being developed
- Regular brand tracking, media monitoring and social listening tools in place to identify emerging issues
- Digital Content Manager in place

If the risk materialises:

- Activate relevant emergency plans, storm action plans, crisis and stakeholder management/ communications plans, as appropriate
- Supplement resources of Corporate Communications Team in a crisis situation, if required
- Timely, accurate response to issues with the fullest information possible within the "Golden Hour"
- Ensure response to any Crisis is consistent with ESB's purpose and values

Developments in 2021

- Strong performance on Reptrak (corporate reputation management). ESB to remain vigilant of potential negative impacts in 2022
- Ongoing support for customers and communities impacted by COVID-19
- Brand and sponsorship programmes in place to drive community support and communicate values
- Continued to engage with relevant stakeholders in relation to all principal and emerging risks

2022 Area of Focus

- ESB will strive to further enhance its reputation in 2022 through: continued investment in brand and sponsorship initiatives, leading the conversation about the transition to a low-carbon energy future and further developing excellence in stakeholder engagement
- External focus on energy pricing/ costs, security of supply in SEM and climate is likely to continue. A proactive approach to climate and ESB deliverables is required

STRATEGIC OBJECTIVES

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G. CHALLENGES ASSOCIATED WITH COVID-19 PANDEMIC AND IMPACTS

Risk Climate

Oversight: Board

What is the risk?

Challenges associated with the COVID-19 pandemic and its impact on staff, customers, supply chain, vendors, markets and financial performance

Risk Drivers

- Failure to establish controls and arrangements to ensure that staff, contractors and customers are protected to the maximum extent possible
- Inadequate pandemic response and business continuity arrangements established, or arrangements not invoked appropriately
- Loss of key leadership roles (e.g. CEO) and other critical roles
- Failure to maintain an efficient and effective remote working capability
- Failure to identify and mitigate all pandemic related exposures for the business and establish appropriate responses
- Failure to manage supply chain challenges, in particular in relation to PPE and hygiene products
- Failure to establish a process to identify the longer-term impacts on business plans, or strategy or business plans/ strategy are not adjusted appropriately
- Failure to manage costs effectively
- Failure to engage with stakeholders or customers to ensure concerns are appropriately addressed and managed

Mitigations

To prevent the risk materialising:

- Maintain the arrangements envisaged under the Pandemic Preparedness Plan, Crisis Management Plans and Business Continuity Plans, with particular focus on arrangements for ensuring response efforts are aligned
- Establish the controls and supports required to minimise any risk to the safety, health and wellbeing of all ESB employees and contractors, their families, customers, and the public at large
- Immediately identify critical employees and alternates for all key processes, including the Executive team, and ensure stringent arrangements are established for the protection of these employees where appropriate
- Engage with key stakeholders regarding essential service status
- Instigate a review to identify ESB's critical contracts to ensure that risks of supply shortages are minimised and to identify risks and additional mitigations that may be required arising from the pandemic
- Identify exposures and establish any additional mitigations required in relation to ESB's financial position, to ensure ESB continues to service its financial commitments during the pandemic
- Maintain a scenario planning exercise in the context of the COVID-19 pandemic, identifying potential scenarios for the various phases of the pandemic
- Review Business Continuity Plans to ensure they are fit for purpose in the context of any learnings identified and in the event of multiple/co-ordinated crystallisation of risks

If the risk materialises:

- Seek to establish and implement arrangements for the acceleration of testing for critical employees
- Seek to establish arrangements to prioritise vaccination for critical staff
- Activate plan for alternates (with consultation with the Chairman if it involves the CEO or Executive team)
- Discontinue non-essential activities and focus on essential services only. Escalate to national level
- Immediately identify the specifics in relation to any failures arising, investigate at speed, establish and implement any additional response efforts required and communicate/ record any learnings arising
- Proactively engage with staff, shareholders, stakeholders, customers and the public at large in an open and transparent manner
- Identify and address implications for ESB's Business Plan and strategy
- Develop plans for worst-case scenarios where critical staff who are infected may be asked to attend work

Developments in 2021

- The beginning of 2021 saw an increase in employee cases, in line with public health, due to the Delta variant of the virus
- With the successful roll out of the government's vaccination programmes and the gradual relaxation of restrictions across ESB jurisdictions, the risk for COVID-19 reduced during the course of the year
- Increase in cases associated with the new Omicron variant

2022 Area of Focus

- For 2022, ESB remains fully committed to ensuring the continued safe and secure supply of electricity and other services to all customers, in addition to ensuring the safety and wellbeing of employees and contractors
- ESB will continue to monitor and review its health and safety approach in line with jurisdictional guidance
- As governments across ESB jurisdictions begin to ease restrictions in 2022, ESB will focus on a phased reopening of its workplaces in line with ESB's Smart Working journey, ensuring all workplaces continue to remain safe. The possibility of new variants emerging could potentially delay reopening of ESB workplaces

H. COMPLIANCE FAILURE WITH APPLICABLE LEGAL OBLIGATIONS

Risk Climate

Oversight: Board

What is the risk?

Failure to comply with applicable legal obligations whether imposed by law, regulation or licence (e.g. significant breach of environmental law)

Risk Drivers

- Increasing levels of legal obligations - volume, complexity and interconnectivity
- Increasing expectations regarding compliance standards and scrutiny of ESB's activities by regulatory authorities aligned with increased risk of enforcement action(s) being taken which may include enforcement notices, sanctions and/or fines
- Culture of compliance - risk of tone not being set and driven from the top
- Policy framework fails to keep up with pace of change
- Lack of clarity in roles and responsibilities to support culture of compliance
- Compliance fatigue increases likelihood of governance failure
- Inadequate competence due to lack of training and awareness of obligations
- Risk that legitimate concerns raised by staff are not adequately addressed
- Lack of compliance with legislation (safety, planning and environmental legislation), licences or permits and/or poor compliance monitoring due to inadequate systems of work or behaviours
- Erosion of health, safety and environment related technical competence in-house or contractors working to a standard below expectations
- Potential failure of ageing assets (process, workplace, tools and plant and equipment)
- Inadequate system of interaction and reporting between ESB and statutory and regulatory authorities (systems of work)

Mitigations

To prevent the risk materialising:

- Separate compliance function established to develop a more formalised framework for compliance, based on external best practice and ESB requirements
- Completion of Governance/Risk/Compliance Review and implementation of its findings, including a Compliance Policy and Compliance Assurance Map
- Framework for Group Policies to be enhanced and supported by the Compliance Function and overseen by the Ethics and Policy Management Committee
- Arrangements to be established in Second Line functions, overseen and advised by Group Compliance/Group Legal, to monitor the external environment for new or changing legislative requirements on an ongoing basis, and to assess the implications for ESB
- Ongoing engagement with relevant external stakeholders, including Regulatory Authorities
- Submission of ESB perspectives into consultations regarding licence or legislation changes, where possible and appropriate
- Confidential reporting mechanisms and investigation procedures in place

If the risk materialises:

- Regulatory Inspections Manual in place, investigation teams identified in each Business Unit
- Finalisation of the investigation guidelines, which will support managers in investigating incidents of non-compliance
- Ongoing monitoring of reportable incidents for patterns of events that may signify an underlying issue or exposure
- Formal investigation of any breaches, including lessons learned review
- Engagement with relevant external stakeholders, including Regulatory Authorities
- Seek advice from subject matter expertise from in-house legal function, or from external panel
- Incident management and response procedure
- Business Continuity processes
- Monitoring, tracking and reporting of serious incident action completion
- Addressing any management system major non-conformances in an adequate and timely manner
- Lessons learned and shared

Developments in 2021

- External scrutiny and monitoring in this area has continued to increase
- Core to mitigating this risk is successful delivery of the Governance/Risk/Compliance Review (GRC). A Project Initiation Documentation (PID) plan has been developed

2022 Area of Focus

- Growing scrutiny and increasing external requirements and expectations in this area are likely to continue as trends
- ESB will continue to evolve and strengthen its compliance arrangements to ensure they are sufficiently robust to meet current and emerging obligations
- ESB will continue to monitor this area with a view to ensuring ESB continues to meet its legal obligations, engaging with stakeholders as appropriate

STRATEGIC OBJECTIVES

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I. INSUFFICIENT ORGANISATIONAL AGILITY AND SPEED OF CHANGE

Risk Climate

Oversight: Safety, Environment And Culture Committee

What is the risk?

Insufficient organisational agility and speed of change leading to failure to keep pace with trends within the sectors in which ESB operates, leading to inability to meet the evolving expectations of stakeholders or achieve our strategic objectives

Risk Drivers

- Failure to keep pace with modern work practices and Employee Value Proposition (EVP) impacting negatively on employer branding and on organisational efficiency relative to others
- Organisation culture stifles the ability to effect change in a timely manner
- Failure to continuously develop capability to keep pace with changing business needs
- Difficult Industrial Relations (IR) environment impacts performance, engagement and ability to change
- Speed of decision-making with regard to emergent businesses in new markets (i.e. beyond core markets)
- Risk of failing to adopt and leverage new digital technologies

Mitigations

To prevent the risk materialising:

- Maintain strategic focus on future workforce trends through the People and Organisational Development team
- People Capabilities Transformational programme 2020/2021 focused on delivering the future capability requirements to deliver the strategy
- Appropriate resourcing model (total workforce) in place to ensure delivery of strategic intent
- Ongoing engagement between management, staff and Group of Unions (GoU) to maintain relationships. Proactive engagement on key people strategic initiatives
- Completion of Accelerate Digital project
- Digital Investment Framework in place to support a more agile/ empowered investment decision making process
- Completion of Smart Working project
- Innovation Strategy and Framework in place
- Continue with horizon scanning, innovation radar (assessing emerging technologies)
- Continue with innovation programmes to develop innovative thinking /opportunities across ESB

If the risk materialises:

- Utilise the framework developed through the People Experience Strategy to get on track
- Diagnose the specific cultural issues at play and identify path to recover and get back on track
- Diagnose issue at play and revisit capability, resourcing and learning as required
- Operation plan in place to deal with large scale industrial unrest
- Adopt an experience led transformation to move ESB Networks' resourcing model from IR agreement to effective change management plan
- Consider alternative models for emergent businesses

Developments in 2021

- Accelerate Digital project has progressed across all Business Units throughout 2021. The programme is supporting the growth of ESB's digital capability on a number of fronts. The programme also continues to work closely to ensure the appropriate level of governance is in place that will enable delivery of the value identified across the Group
- The Smart Working programme has progressed well across culture, tools and environment, working closely with the crisis and pandemic teams
- A people capability review has been completed
- Emerging Technology Insights report published
- All key innovation programmes are progressing

2022 Area of Focus

- Developments in the internal and external operating environment will likely continue to require high levels of organisational agility. ESB will continue to monitor organisational agility to ensure it efficiently and effectively supports delivery of ESB strategy

J. INADEQUATE RESPONSE TO CLIMATE CHANGE POLICY

Risk Climate

Oversight: Audit and Risk Committee

What is the risk?

Inadequate ESB response to capture opportunities and manage challenges presented by policy measures to address climate change along with growing public, customer and investor concerns

Risk Drivers

- Offshore wind: Failure to achieve early market position due to lack of appropriate regulatory or policy regime change/clarity
- Failure to track and influence changes in EU and national legislation, regulation in response to climate change
- Delay in preparing for a strategic trend due to decarbonisation
- Adverse external decisions (regulatory, economic, financial, environmental) that negatively impact SEM rules
- Reduced opportunity due to too slow a pace of decarbonisation in Ireland due to delay in implementing the EU Green Deal at EU level and to revising and implementing Climate Action Plans to keep within the national carbon budget
- Failure to anticipate the full extent and pace of storms and floods due to climate change
- Underestimation of the impact of change in EU and national legislation and regulation in response to climate change
- Escalating public concern on climate change leads to regulation damaging to business viability

Mitigations

To prevent the risk materialising:

- ESB offshore wind strategies being refined at Group level and within Business Units
- Contribute positively and effectively to policy and regulation development
- Keep abreast of EU and national policy, regulatory and legislation developments
- Ensure communication of potential impacts discussed across ESB
- Maintain the Group list of climate risks and opportunities and regularly review and track indicators
- Work with Business Units to incorporate climate risk and opportunity into plans and programmes
- Stakeholder engagement plan with policymakers and Regulatory Authorities
- Maintain strong strategic intelligence through external information sources
- Investigate and pilot promising new generation and other technologies
- Address identified risks to network infrastructure via regulatory submissions

If the risk materialises:

- Research the approach of successful early adopters. If feasible for ESB, set objective to become a 'fast follower'
- Reassess and improve ESB's scanning of the external business and policy environment
- Review and, if necessary, reset the relevant strategic objective
- Ensure that ESB is treated fairly and that the more stringent approach applies equally across the market. Activate appeals mechanism if decisions are unjust or suspect. Seek trade-offs where necessary
- Reprioritise investment and business plans
- If physical risk materialises, review and revise asset investment plans and operational plans for resilience
- Consider sale/closure of businesses rendered unviable by political/ regulatory factors
- React swiftly to decisions negative to ESB. Will seek trade-offs where necessary. Inform policymakers of best available options

Developments in 2021

- In Ireland, a new Climate Action Plan was published in November which increased national ambition on renewable energy and decarbonisation
- Other major developments include the Northern Ireland Energy Strategy (published in December 2021) and Eirgrid's Shaping our Electricity Future consultation on the future of Ireland's renewable sector and transmission network
- Following a Government decision, it was announced that EirGrid, which currently operates and plans the onshore grid, will be appointed as the Transmission System Operator and the Transmission Asset Owner for offshore grid assets in the Republic of Ireland

2022 Area of Focus

- 2022 will see a continuation of the core measures monitored in 2021
- Monitoring of the Climate Action Plan and Northern Ireland's energy strategy will be important to follow
- The EU's Fit for 55 legislative package will progress in 2022 and this will require monitoring by ESB
- Consideration is being given to ESB's own pathway to zero emissions including the setting of a science-based target for 2030

STRATEGIC OBJECTIVES

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K. DELIVERY OF GROWING AND COMPLEX NETWORKS INFRASTRUCTURES AND SYSTEMS

Risk Climate ↑

Oversight: Audit and Risk Committee

What is the risk?

Failing to deliver the growing and increasingly complex network infrastructures and systems required to meet future customer and societal needs, particularly in the areas of accommodating more renewables, supporting wholesale electrification, and distributed energy services

Risk Drivers

- Lack of available internal and external qualified resources (capability and numbers) to plan and deliver required works
- Failing to deliver all aspects of the Networks' Resourcing project
- Poor optimisation of end-to-end process including deployment of resources, approvals, standards, designs, materials and work/programme readiness and planning integration
- Not having the right systems and processes in place to efficiently deliver major projects and engineering solutions
- Requirement for meeting Enduring Connections Policy (ECP) deadlines for grid connection offers as well as accelerated delivery of grid connections as result of the RESS Auction(s)
- Difficulties securing land access, planning permission as well as objector activity
- Potential capital constraints
- Security of supply may prevent TSO and DSO giving outages to deliver works
- System limitations in relation to increasing renewable energy output
- Lack of capacity on the low voltage Network to accommodate the large scale uptake of wholesale electrification

Mitigations

To prevent the risk materialising:

- Integrated Business Planning, which informs Strategic Resource Plan and succession planning
- EMP initiative to hire additional staff
- Contractor strategy and procurement strategy as well as putting framework contracts in place for designers to be mobilised and in place for Q2 2022. Contingent labour frameworks in place
- Delivery and implementation of Networks' Resourcing project
- Developing a prioritised Multi-Year Work Programme (MYWP)
- Implementation of ESB Project Management Methodology to efficiently deliver all major projects
- Stakeholder management plans prepared and early local and national interaction with key stakeholders
- Engagement with the Transmission Outage Planning Process and Distribution Outage Planning Process
- The National Network, Local Connections programme is being established, to deliver the capabilities needed in ESB Networks (people, processes and systems) to fundamentally change how the electricity distribution system is developed and managed, so as to meet the requirements identified in the Clean Energy Package and the Climate Action Plan

If the risk materialises:

- Short-term redeployment of resources to critical roles
- Review options for short-term resourcing (e.g. contracting or partnering) for critical capabilities or skill sets, at the risk of increased cost or loss of core competencies
- Stakeholder engagement
- Critical incident management procedures and incident investigation procedures for any safety or environmental issues

Developments in 2021

- Work on the National Network, Local Connections programme is progressing. It is being established to deliver the capabilities needed in ESB Networks (people, processes and systems) to fundamentally change how the electricity distribution system is developed and managed, so as to meet these requirements identified in the Clean Energy Package and the Climate Action Plan
- Engagement in relation to Shaping our Electricity Future 2030 indicates significant work for ESB Networks

2022 Area of Focus

- The growing and strong demand for network infrastructure and systems will likely continue – and has been defined in PR5 and subsequent policy
- ESB will continue to proactively monitor and manage developments throughout 2022
- Focus areas will include issuing ECP connection offers, advancing ESB Networks' transformation project and the National Network, Local Connections project

L. INDUSTRIAL RELATIONS ENVIRONMENT

Risk Climate ↑

Oversight: Audit and Risk Committee

What is the risk?

Industrial unrest within the ESB Networks Business impacting on brand/reputation, delivery of network infrastructures, customers and societal needs

Risk Drivers

- Failure to agree a collective agreement on work delivery
- Emergence of a union not affiliated to ICTU and outside the established ESB Group of Unions (GoU)

Mitigations

To prevent the risk materialising:

- Maintain a strong working relationship with ESB Group of Unions (GoU)
- Visibly engage with the GoU in addressing and delivering for their members through ESB's established dispute resolution processes

If the risk materialises:

- Engage with the GoU in line with ESB's established dispute resolution processes

Developments in 2021

- Following the Independent Workers Union (IWU) industrial action earlier in the year, the intensity of industrial actions has reduced and is being kept under review

2022 Area of Focus

- Participate in any formal dispute resolution or conciliation processes (e.g. labour court, Workplace Relations Commission (WRC))
- Continue to proactively manage any grievances through established processes
- Continue to build employer/employee relationship through ongoing engagement across ESB Networks

M. ELECTRICITY SYSTEM AND MARKET WIDE CAPACITY MARGIN ISSUES

Risk Climate ↑

Oversight: Audit and Risk Committee

What is the risk?

Electricity system and market wide capacity margin issues which increases the likelihood of demand management measures, impact on ESB's reputation with stakeholders and security of supply issues for ESB's distribution customers

Risk Drivers

- Increased demand due to ongoing electrification of transport/heat, post COVID-19 economic rebound, pent up demand and addition of new data centres to the system
- Distribution customers disconnected as demand reduction required
- For some customers (transmission and distribution) demand curtailment application for the first time
- Distribution system response to an emergency event does not proceed per plan
- Reduced availability of thermal generation in SEM (both ESB and non-ESB assets)

Mitigations

To prevent the risk materialising:

- Mandatory demand curtailment methodology applied to customers
- CRU approved DSO Load Shedding Plan
- Engagement with large DSO customers and DSO critical infrastructure customers e.g. HSE, Irish Water, Irish Rail etc.
- Engagement with stakeholders/regulators
- Continued strong asset management focus on systems
- Continued use of ESB's Project Management System to manage outage duration(s)

If the risk materialises:

- ESB Networks Emergency Response plan implemented
- Joint communications plan agreed with system operator implemented

Developments in 2021

- Since the risk emerged, a number of generators have returned to service. However, the underlying capacity issues remain and seasonal factors have meant that the system remains tight and risk of outages remains
- Significant engagement work completed in 2021, the DSO Load Shedding Plan was revised in late 2021, reapproved and published. A range of stakeholder engagements have taken place

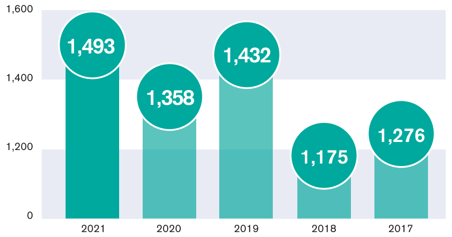
2022 Area of Focus

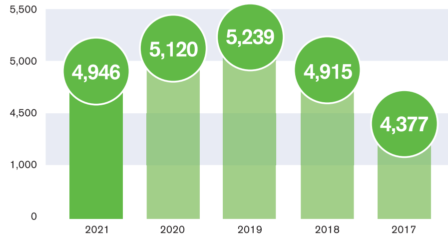
- Moneypoint running is a major focus. Long Term Asset Plan (LTAP) review ongoing following increased running hours projection
- Normal LTAP/investment/ performance drivers
- As the CRU Security of Supply programme of work progresses in 2022 there will be requirement to engage and refine the DSO procedure further and also to input into this programme of work as appropriate

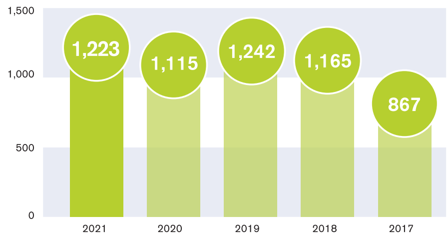
Key Performance Indicators (KPIs)

ESB employs financial and non-financial key performance indicators (KPIs), which signify progress towards the achievement of ESB's strategy. Each business unit has their own KPIs, which are in direct alignment with those of the Group.

FINANCIAL

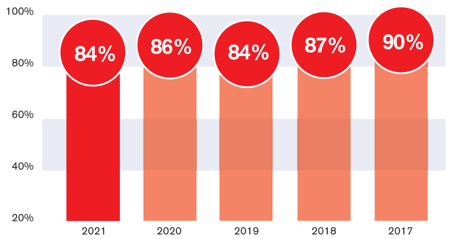


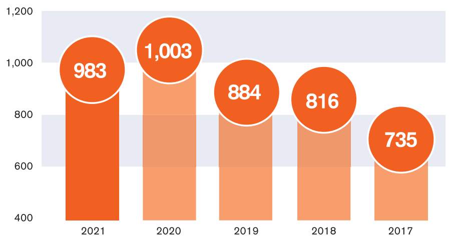


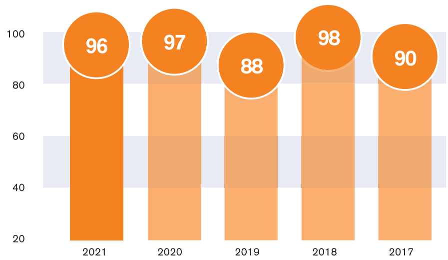


KPI	Definition	Strategic Relevance	Performance	Strategic Priority
EBITDA	Operating profit before interest, taxation, depreciation, impairments (including non-trading net impairment losses on financial assets), amortisation and revenue from supply contributions.	EBITDA is a key measure of the cash generated in the Group during the year which is then available for strategic investments, repayment of debt and dividend payments.	The increase in EBITDA is driven by factors impacting on operating profit. For further detail see financial review on page 54.	
Net Debt	Borrowings and other net debt of cash and cash equivalents. 2019 to 2021 includes the impact of IFRS 16 Leases which became effective 1 January 2019.	Net debt is a measure of how leveraged the Group is and if it is line with its key covenants. Net debt will continue to grow as ESB partly funds its capital investment programmes with borrowings.	Net debt had decreased reflecting positive EBITDA and collateral cash on hand at year end offset by the impact of strengthening of GBP on sterling denominated debt, continued capital investment, finance costs, dividends and tax payments. For further detail see financial review on page 54.	
Capital Expenditure	Additions for property, plant and equipment, intangible assets and financial asset investments. The 2017 figure is net of capital contributions, from 2018 onwards Capital expenditure is shown gross of capital contributions in line with IFRS 15 'Revenue from Contracts with Customers.'	ESB is in a period of significant capital investment for both its networks businesses and Generation and Trading (GT). This is so that ESB can develop the electricity network and compete within the all-islands environment.	The increase in capital expenditure primarily reflects significant capital investments in GT. For further detail see financial review on page 54.	

OPERATIONAL

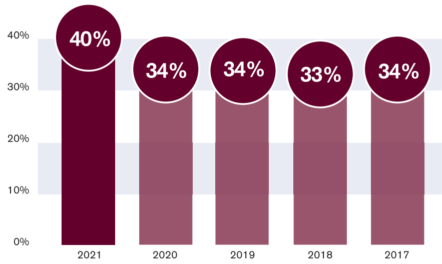


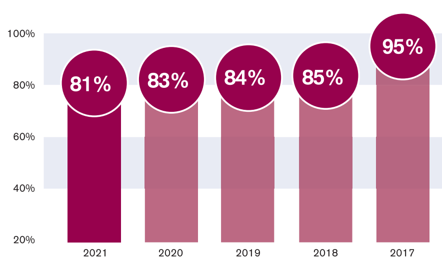


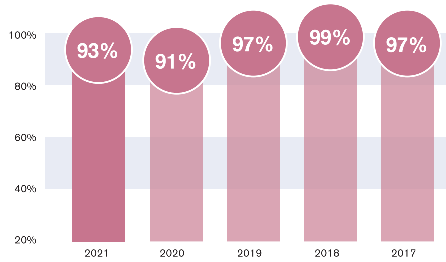


KPI	Definition	Strategic Relevance	Performance	Strategic Priority
Plant Availability	Percentage of the time in the year that generation plant was available to produce electricity, whether they generated or not.	Delivering strong operational performance across ESB's generation plant through best practice operations and maintenance and timely completion of overhauls is critical to ESB's commercial performance.	Plant availability decreased in 2021 reflecting a higher number of scheduled outages. For further detail see GT business unit section page 64.	
MW Renewable Operational	Total MW's of renewable generation where the assets have reached their commercial operation date includes wind, hydro and solar.	Renewable generation is key to ESB's objective to reduce the carbon intensity of its generation fleet.	The decrease primarily relates to the disposal in 2021 of ESB's shareholding in Tilbury Green Power Holdings Limited.	
Customer Minutes Lost (CMLs) ESB Networks	The average duration of unplanned interruptions for all customers during the year.	The reliability of the grid and minimising interruptions to customers is of key importance to ESB.	The improvement in CMLs in 2021 is due to benefit from network reliability investment and more benign weather than usual. For further detail see ESB Networks business unit section on page 60.	

CUSTOMER AND MARKET

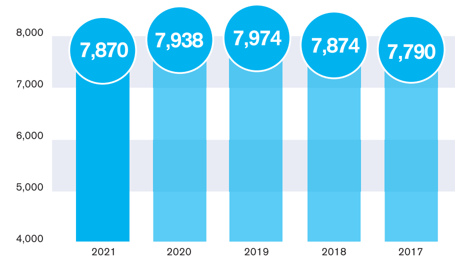


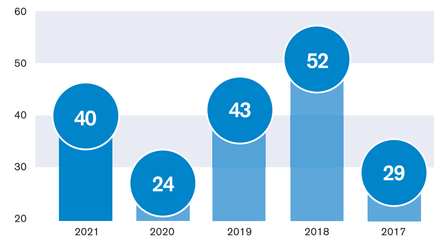




KPI	Definition	Strategic Relevance	Performance	Strategic Priority
Retail Market Share	Total Single Electricity Market (SEM) all-island market share.	Retention and growth of market share is key to ESB so that it can compete within the all-island competitive environment.	Overall market share has increased above 2020 levels driven by growth within the industrial market sector. 2021 residential market share has remained consistent with 2020. For further detail, see Customer Solutions business unit on page 66.	
Residential Customer Satisfaction	Provides a measure of residential customer satisfaction (Source: Research Perspective Monthly Survey Results). The methodology for calculating this KPI was updated in 2018.	ESB strive to provide excellent customer service and introduce new initiatives to improve the customer experience in order to retain market share.	Residential customer satisfaction reduced slightly in 2021 due to a combination of the COVID pandemic producing a significant increase in call centre traffic and the backdrop of increasing energy costs impacting the industry as a whole. However, Electric Ireland continues to maintain a strong competitive position in 2021.	
Brand Awareness	Awareness of Electric Ireland as an Energy Supplier (Source: Amarach Research Monthly Brand and Advertising Tracker).	Maintain the Electric Ireland brand as the leading energy supply brand in Ireland.	Awareness of the Electric Ireland brand increased to 93% during 2021 and continues to be one of the most recognised energy brands in Ireland. This is due to increased marketing to promote key products and services including acquisition programmes, smart meters, EV offers and sponsorships such as Darkness into Light and the GAA Minor and Hurling Championships. These campaigns continue to be promoted under the brand framework "Brighter Together" and maintained high levels of recognition and engagement.	

PEOPLE





KPI	Definition	Strategic Relevance	Performance	Strategic Priority
Headcount	Average number of employees in the year including temporary employees employed by ESB.	The delivery of the strategy will require an organisation that is of a certain scale and is flexible, highly motivated and adaptable.	Headcount has decreased in 2021 due to staff exits in GT and ESB Networks offset by the acquisition of So Energy in Customer Solutions. For further detail, see note 10 of the finanical statements.	
Employee LTIs	Employee LTIs are work-related injuries that involve an absence of at least one day (not including the day the injury occurred).	Safety is at the centre of what we do. ESB continues to focus on reducing risks in the business that gives rise to injurious incidents. For further detail, see safety on page 76.	In 2021 the total number of employee Lost Time Injuries (LTI) was 40. While this appears to be a significant increase on the outcome of 2020 (24), it is more in line with pre COVID-19 years and an indicator that 2020 was an outlier. The most prevalent cause of LTI was slips and trips on the level, followed by movements of the body including manual handling.	

Decarbonised Electricity | Resilient Infrastructure | Empowered Customers | Our People | Digital & Data Driven | Financially Strong | Sustainable & Socially Responsible

Operating and Financial Review

Executive Team

The Executive team focuses on the execution of the ESB Strategy, technological and commercial developments, programme execution, financial and competitive performance, people development, governance, organisational development and Group-wide policies.

Paddy Hayes

Chief Executive

Appointed: August 2021

Career experience: Prior to his current role, Paddy headed up two of ESB's main operating divisions as Executive Director of ESB's Generation & Wholesale Markets business and then as Managing Director of ESB Networks. A Chartered Engineer, he holds a master's degree in engineering from University College Dublin and an MBA from the University of Warwick. Paddy worked with British Steel in the UK before moving to the energy sector in 1999, to lead the Synergen joint venture between ESB and Statoil.

Jerry O'Sullivan

Deputy Chief Executive

Appointed: October 2014

Career experience: Prior to his current role, Jerry was Managing Director of ESB Networks DAC. Jerry was appointed Chairman of ESB Networks DAC in 2010. He joined ESB in 1981 and held a number of positions in power station construction, distribution and transmission, retail, contracting, marketing and customer service. He was appointed Head of Network Services in 2002 and Head of Sustainability and Network Systems in 2008. He holds a degree in civil engineering from University College Cork (UCC), is a Fellow of Engineers Ireland and a member of the UCD Energy Institute Advisory Board.

Pat Fenlon

Executive Director, Group Finance & Commercial

Appointed: July 2016

Career experience: Prior to his current role, Pat held a number of senior financial and general management positions across ESB including General Manager of Electric Ireland, Corporate Change Manager and Group Finance & Commercial Manager. He is a fellow of Chartered Accountants Ireland and worked with PwC in Dublin before joining ESB in 1993.

Marguerite Sayers

Executive Director, Customer Solutions

Appointed: November 2014

Career experience: Prior to her current role, Marguerite was Managing Director of ESB Networks DAC. Marguerite has worked in various technical and managerial positions in ESB since 1991, including Generation Manager and Head of Asset Management for ESB Networks. She has a degree in electrical engineering from University College Cork (UCC), a diploma in accounting and finance from University of Limerick and a diploma in project management from UCC. She is a chartered engineer and a Fellow and past president of Engineers Ireland.

Jim Dollard

Executive Director, Generation and Trading

Appointed: July 2013

Career experience: Prior to his current role, Jim was Executive Director for ESB's Business Service Centre and Electric Ireland. A chartered management accountant, Jim began his career at ESB in 1992 and has held a number of senior management positions throughout the Group. Jim holds a bachelor's degree in commerce and a master's degree in business studies from University College Dublin. He completed the Advanced Management Program at Harvard Business School in 2017.

Geraldine Heavey

Executive Director, Enterprise Services

Appointed: June 2018

Career experience: Geraldine Heavey was appointed to the position of Executive Director, Enterprise Services in June 2018. Prior to this she held the role of Group Finance & Commercial Manager. She has worked in various finance and managerial positions in ESB since 1993, including Financial Controller, Business Service Centre (BSC) and Electric Ireland, Manager, ESB Trading and Financial Controller, ESB Power Generation. She is an accountant and holds a master's degree in business administration (MBA) from Dublin City University (DCU). Geraldine is an external member of DCU's Commercial Board and chairs its Audit Committee.

Nicholas Tarrant

Managing Director, ESB Networks DAC

Appointed: June 2018

Career experience: Nicholas Tarrant was appointed Managing Director of ESB Networks in September 2021. Prior to this he was Executive Director, Engineering and Major Projects. Nicholas has held a number of senior management positions including Managing Director, Northern Ireland Electricity Networks, and Generation Manager with responsibility for ESB's power generation portfolio. He is a chartered engineer at the Institute of Engineers of Ireland and a chartered director. He holds an MSc (management) from Trinity College Dublin (TCD) and completed the Stanford Executive Program in 2014.

Pat Naughton

Executive Director, People & Organisational Development

Appointed: June 2012

Career experience: A mechanical engineer, Pat has worked in a variety of roles since joining the Group in 1978. He previously held senior positions as HR Manager in ESB Energy International, Manager Strategy and Portfolio Development, ESB Energy International and Manager of Hydro Stations, ESB Power Generation. He completed the Advanced Human Resources Program at Michigan University in 2012. Pat is a member of the Board of the Institute of Public Administration (IPA) and chairs its Audit and Risk Committee. Pat is retiring from ESB in 2022.

Denis O'Leary

Executive Director (Acting), Engineering and Major Projects

Appointed: September 2021

Career experience: Denis O'Leary was appointed Acting Executive Director, Engineering and Major Projects in September 2021. Denis joined ESB in 1980 and has held a number of Senior Management positions across Networks Operations, Asset Management, Regulation and Telecoms. He is presently the Head of Innovation for ESB. Denis also represents ESB on the Research Advisory Council of EPRI in the US, and also serves as Chairman of SIRO, ESB's joint venture with Vodafone.

Marie Sinnott

Company Secretary

Appointed: August 2019

Career experience: Marie Sinnott is ESB Group Company Secretary, supporting the Chairman, Board, CEO and executive management in their strategic, governance and compliance responsibilities. Previously, Marie was ESB's Group Head of Compliance and Enterprise Risk Management. During her career in ESB, she has held a number of other senior management roles in project management, change management and procurement areas. A UCD commerce graduate, she holds an MSc in Economic Policy Studies from TCD and a Postgraduate Diploma in Corporate Governance from UCD Smurfit School. Marie is also a member of the DCU Governing Authority and a director of the Institute of International & European Affairs.

Market Structure and Operating Environment 2021

1.(a) Overview of the Electricity Markets Structure in the Republic of Ireland (ROI) and Northern Ireland (NI)

The structure of the electricity market in ROI and NI can be divided into four segments: generation, transmission, distribution and supply. Electricity generation and supply are open to full competition throughout ROI and NI. Electricity transmission and distribution are regulated monopolies in ROI and NI, with the respective regulator determining the allowed revenue for the price review period.

Energy Policy and Regulation

Energy policies are set by the Minister for the Environment, Climate and Communications in ROI and the Department for the Economy in NI. Energy policy and regulation are heavily influenced by European Union (EU) law.

The Commission for Regulation of Utilities (CRU) is the independent regulator of the energy market in ROI. The Utility Regulator (UR) is the independent regulator of the energy market in NI.

Single Electricity Market (SEM/I-SEM)

The Single Electricity Market (SEM), which began operation in 2007, migrated to a new set of trading arrangements known as the Integrated Single Electricity Market (I-SEM) on 1 October 2018.

The I-SEM market arrangements incorporate Day-Ahead, Intraday and Balancing Markets as well as a competitive capacity remuneration mechanism and comply with EU harmonised arrangements for cross-border trading of wholesale energy across Europe and with EU State aid guidelines for capacity remuneration. The process for remunerating capacity in I-SEM involves an auction where generators compete for capacity contracts and also imposes reliability penalties on the holders of those contracts (if called upon to deliver capacity and are unable to do so). Generators primarily compete for Reliability Options on a four (T-4) year ahead basis with additional adjustment auctions occurring on a one (T-1) and two (T-2) year ahead basis as necessary.

T-4 auction results for delivery in October 2024 were announced in May 2021. The clearing price was €47.82/kW with 6,168 MW of existing capacity receiving one-year contracts and 452 MW of new capacity awarded contracts for ten years. All existing ESB units that entered the auction were successful, totalling 2.1 GW. Moneypoint units did not take part as they did not pre-qualify to participate, as they did not meet the emission requirements.

T-1 provisional auction results for delivery in October 2022 were announced in November 2021. The clearing price was €46.15/kW with 1,120 MW of capacity receiving a one-year contract, with Moneypoint unit 2 and Coolkeeragh GT8 receiving contracts.

Renewable Energy Support Scheme (RESS)

Following EU State aid approval, a new, technology neutral, renewable support mechanism (RESS) was introduced under the programme for Government in ROI, with the aim now of achieving 80% renewable electricity by 2030 (similar targets have also been announced for NI). It is expected that at least four RESS auctions will take place between now and the end of 2027 with 15,000 GWh auctioned, mainly for onshore and offshore wind and solar. Successful participants in the auction will secure 15-year contracts.

While the first of these auctions (RESS-1) took place at the end of July 2020, RESS-2 has been pushed back to 2022 where there will be up to 3,500 GWhs of renewable energy procured, covering both wind and solar energy. This follows on from the Climate Action Plan where there is a goal of up to 80% of electricity generation from renewable sources by 2030.

Electricity Networks

The electricity transmission system is a high-voltage network for the transmission of bulk electricity supplies at 110 kV or higher voltages. The distribution system delivers electricity to individual customers at 110 kV or lower. In ROI, ESB owns the transmission and distribution system network and operates the electricity distribution system network, while EirGrid operates the transmission system network. In NI, NIE Networks, owned by ESB owns the electricity transmission and distribution system network and operates the electricity distribution system network. The System Operator for Northern Ireland (SONI) operates the transmission system network.

Interconnection

For geographical reasons, the electricity transmission systems on the island of Ireland are isolated compared to systems in mainland Europe and GB. The Moyle Interconnector links the electricity grids of NI and Scotland through submarine cables running between converter stations in NI and Scotland; this link has a capacity of 500 MW. There are however restrictions on exporting (NI to GB) on this interconnector due to transmission constraints in Scotland, with a lower limit of 80 MW and an upper limit of 400 MW in 2021. This limit can vary by the hour and is generally dependent on wind levels in the region. The East-West Interconnector (EWIC) links the electricity transmission system in ROI to the electricity transmission system in Wales, enabling two-way transmission of electricity. The East-West Interconnector runs between Deeside in north Wales and Woodland, County Meath in ROI. Approximately 260 km in length, the underground and undersea links can transport 530 MW. The total interconnection capacity with GB is about 1,000 MW.

In 2021, SEM was a net importer of electricity from GB due to increased demand, lower wind volumes and long-term outages on some large plants.

Electricity Generation

The I-SEM generation sector comprises approximately 16 GW of capacity connected to the system on an all-island basis. The capacity connected to the system includes a mix of older generation plants alongside modern gas fired CCGT plants and renewable energy sources such as wind power. These stations generate electricity from fuels such as gas, coal and oil as well as indigenous resources including hydro, wind, peat and biomass.

I-SEM has 5,585 MW of wind installed, with plans to expand on both this and solar power as part of the aim to have up to 80% of electricity generation from renewable sources by 2030, as outlined in the Climate Action Plan 2021. 2021 was a low wind year across Europe, including SEM. Wind contributed 30% of generation in 2021, (35%: 2020), with a maximum wind output of 4,471 MW being recorded on 12 February 2021. ESB had a 33% generation market share in I-SEM in 2021, slightly up on the 2020 generation market share of 29%[1].

2021 saw 68% availability of baseload thermal generation in I-SEM. While gas was the primary fuel in the market, coal had a much larger significance than last year, due to long-term outages on major plants and rising gas prices, making coal generation more economical.

Energy Trading

The electricity and gas markets in GB, ROI and NI are linked in two ways; through gas being used for electricity generation and through the physical interconnection of electricity and gas networks. In common with a number of other companies in the Irish market, ESB is active in both Irish and GB markets in gas and electricity.

In addition to ESB's generation interests, ESB is active in all sectors of the gas market, from residential to large commercial and is one of the biggest gas shippers on the island.

1.(b) Overview of the Electricity Markets Structure in Great Britain (GB)

The structure of the electricity market in GB can be divided into four segments: generation, transmission, distribution and supply. Electricity generation and supply are open to full competition throughout GB. Electricity transmission and distribution are regulated monopolies in GB, with the Office of Gas and Electricity Markets (OFGEM), the regulator of the energy market in GB, determining the allowed revenue for the price review period.

Energy Policy and Regulation

Energy policies are set by the Secretary of State for Business, Energy and Industrial Strategy (BEIS). OFGEM is the regulator of the energy market in GB.

British Electricity Trading and Transmission Arrangements (BETTA)

BETTA is the wholesale electricity market operating in GB. Unlike I-SEM, trading can take place between generators and suppliers either bilaterally or through exchanges, and both physical and financial contracts can be struck to manage price volatility, for time scales ranging from several years ahead to intra-day trading markets. National Grid, acting as the Electricity System Operator (ESO) is responsible for balancing supply and demand in real time, by utilising the Balancing Mechanism (BM) and other system services. BETTA operates a capacity remuneration scheme, where generators are awarded capacity contracts based on the outcome of an auction, that enable them to receive payments for the provision of generation capacity while also incurring penalties for non-delivery during scarcity events.

Contracts for Difference scheme

The main support mechanism for low-carbon technologies is with Contract for Difference (CfD); awarded through a competitive auction process. The first round of CfD auction (called AR1) took place in 2015 which included solar, onshore and offshore wind technologies; AR2 and AR3 took place in 2017 and 2019 respectively and were mainly for offshore wind. To date, offshore wind has dominated the CfD auction, with a total capacity of about 7 GW awarded from AR1 to AR3. In contrast, only about 700 MW onshore wind and 70 MW of solar PV have been awarded. Offshore wind auction clearing prices have also dropped significantly, from around £115/MWh in AR1, to around £40/MWh in AR3.

The process for the next CfD auction, AR4, has commenced from late 2021. The government has stated an intention to procure around 12 GW of renewable capacity. However, ultimately the capacity procured depends on the competitiveness and parameters of the allocation round. This is the first time since 2015 that established technologies, including solar PV and onshore wind, are able to compete in a CfD allocation round.

Electricity Networks

In GB, the transmission network is owned by Scottish Hydro Electricity Transmission Limited (SHETL), Scottish Power Transmission (SPT) and National Grid Electricity Transmission (NGET). However, the entire transmission network is operated by one National Electricity Transmission System Operator called the Electricity System Operator (ESO). The statutory obligation of the ESO is to economically balance supply and demand near and at real time. At distribution network level, the network is owned and operated by various regional distribution companies.

Interconnection

In addition to interconnection with Ireland, GB is interconnected with France, Belgium, the Netherlands and more recently with Norway. An additional interconnector with France, named IFA2, with a capacity of 1,000 MW was commissioned in early 2021. A new interconnector with Norway, named the North Sea Link, with a capacity of 1,400 MW was also commissioned in October 2021. This brings the total GB import/export capacity to 7,400 MW. Despite Brexit, a significant number of new interconnector projects are being planned, including further interconnections with France, Ireland and Norway, as well as new interconnections with Denmark and Germany.

2. OPERATING ENVIRONMENT

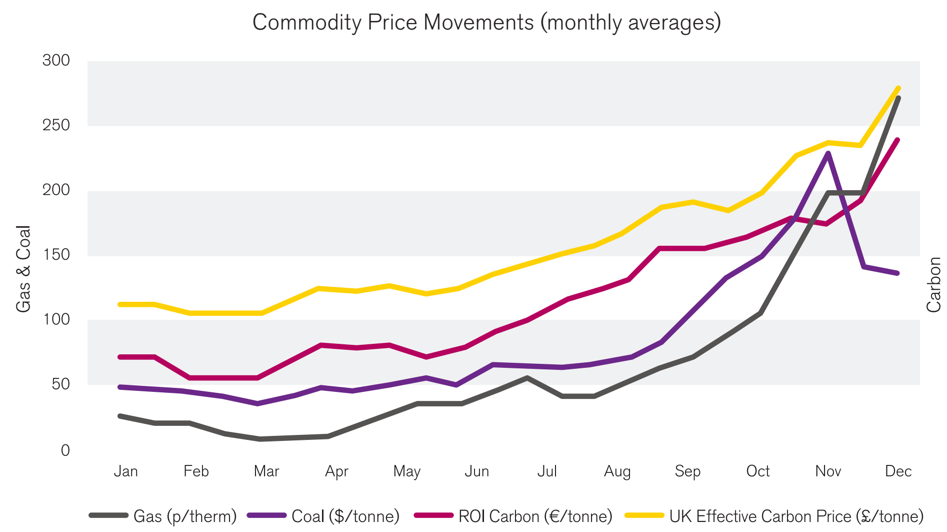
2.(a) Commodities - The Global Energy Markets

There are a number of factors that influence the price of electricity in the wholesale markets, and the profitability of the generating plant. The cost of the underlying fuels used to generate the electricity is critical to both, and is driven by international markets which are discussed below.

Gas Prices

Gas prices began rising from March 2021 with demand recovering from lower levels seen during the height of the COVID-19 pandemic. Storage capacity filled to seasonally low levels in Europe combined with high demand in Asia also led to sharp growth from September onwards. The annual average gas price was 114.43p/therm, significantly up from 24.91p/therm in 2020. The monthly average gas price in January 2021 was 59.17p/therm, the price then gradually dropped hitting an average low of 45.33p/therm in March before rising from then on to an average of 272.93p/therm in December.

Figure 1: Gas, Coal And Carbon Prices



[1] Wind share of generation is defined as total wind generation as a percentage of positive metered generation and an estimated 2 TWhrs embedded generation. ESB Market share in I-SEM is being defined in terms of positive metered generation from ESB generation plant only (i.e. no reduction in the figures to account for pumping at Turlough Hill), as a percentage of Total SEM Demand, where Total SEM Demand is based on demand values from EirGrid, plus an estimated 2 TWhrs of embedded generation. The 30% figure stated is different to Figure 3 on page 50 which is inclusive of interconnectors and includes SEM market participants only.

Coal Prices

Coal prices were c.$67/tonne in January, remaining relatively steady until April when it was c.$72/tonne. There was strong growth until August where prices averaged c.$149/tonne, and very strong growth from then until October, where prices were c.$230/tonne. Prices then dropped off to an average of c.$139/tonne in December. The sharp increase in gas prices has seen coal plants come back into merit, despite the high carbon prices. This has resulted in more run hours for coal plants and a subsequent rise in demand. Coal prices averaged $121.27/tonne in 2021, significantly up from $50.37/tonne in 2020.

Carbon Prices

Within the EU ETS, generators are required to buy carbon allowances for the carbon that they emit while generating electricity. Carbon prices were on average over €33/tonne in January, growing consistently to a high of over €79/tonne in December. The annual average carbon price for 2021 was €53.30/tonne, up significantly from €24.79/tonne in 2020. The drive towards decarbonisation is behind the upward pressure on the carbon price

A UK Emissions Trading Scheme (UK ETS) replaced the UK's participation in the EU ETS on 1 January 2021. This means that the UK has its own cap and trade scheme with carbon auction prices being cleared independently from the EU ETS. The UK ETS auction started in May 2021, which sets UK carbon prices in place of EU ETS prices. The UK carbon price, plus the Carbon Price Support (CPS) tax, currently set at £18/tonne, is the effective carbon price for electricity generators. Since the start of the UK ETS auction, UK and EU carbon prices have diverged and converged throughout the remainder of 2021.

2.(b) Operating Environment - SEM

Demand

COVID-19 had a notable effect on power demand in 2021 but overall power demand remained close to 2020 in the early part of the year when restrictions were in place, with growth coming later in the year as these restrictions were gradually lifted. By the end of March, demand was slightly up on 2020 levels. By mid-April relative demand growth picked up and continued over the course of the year, where total demand was up over 5% on 2020 levels and almost 5% on 2019 levels. See Figure 2.

I-SEM Wholesale Electricity Market

I-SEM consists of Day-Ahead, Intraday Auctions (IDA) and Balancing Markets. The most liquid of these markets has been the Day-Ahead Market (DAM), but the MWhr volume has dropped to c.85% of all market trades, down from 93% last year. This is primarily a result of the decoupling of the ISEM and GB markets in the DAM since January as a result of Brexit, while remaining coupled in IDA1 and IDA2. This offers assetless units opportunities to take advantage of price differentials between the two markets as well as further opportunities for suppliers

Figure 2: ISEM Electricity Demand (GWh)

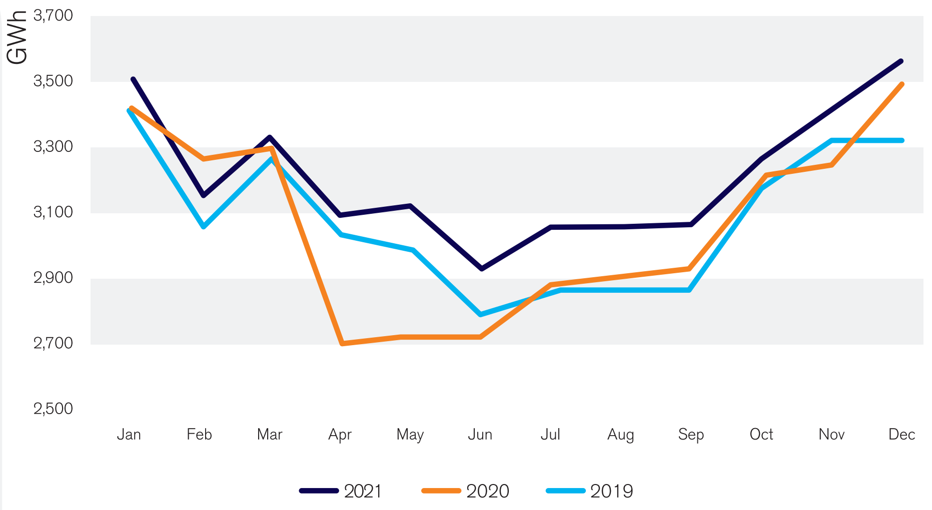


Figure 3 Electricity Generation in I-SEM by Fuel Type[2]

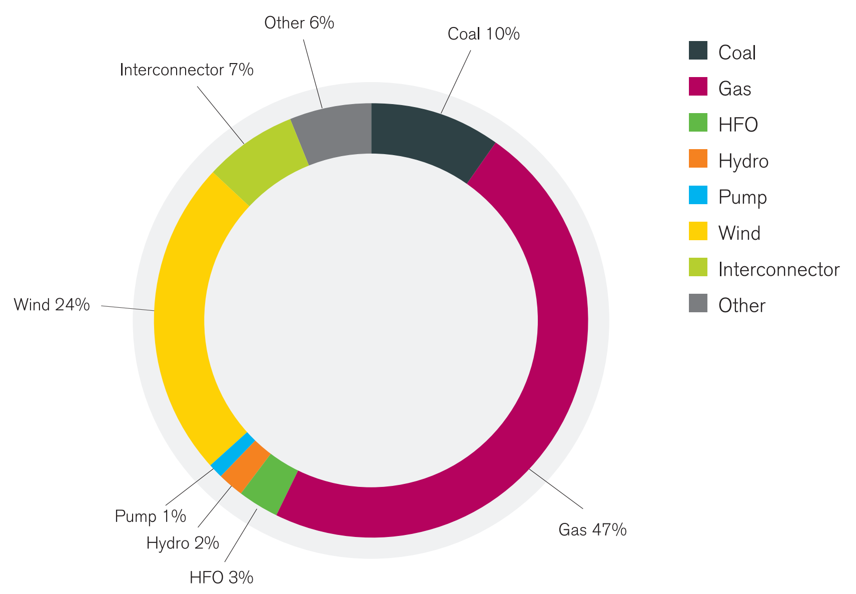
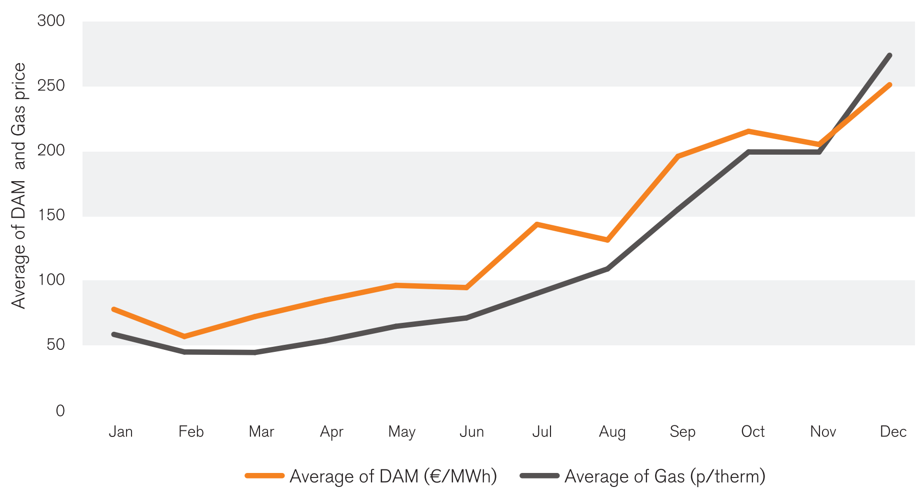


Figure 4 DAM versus Gas Price 2021



[2]Electricity generation in I-SEM by fuel type is defined as the percentage of generation by units in the market grouped by fuel type, including interconnectors as a distinct group. The 24% referenced in Figure 3 above is inclusive of interconnectors and SEM market participants only. The 30% referenced on page 48 is inclusive of both market and non-market wind generators and also 2 TWhrs of embedded generation.

and generators, explaining the growth of the intraday markets.

In 2021, 64% of metered generation (Figure 3) in I-SEM was met by fossil fuels. While this was primarily gas, despite the increase in carbon prices, coal fired generation has come back into merit during the year due to higher gas prices. Despite the increase in coal generation this year, gas fired units make up the bulk of thermal generation on the system and the electricity price has historically been closely linked to the wholesale gas price. Under I-SEM, the Day-Ahead Market (DAM) price on average has not shown any notable change in this behaviour and is still fundamentally driven by the gas price as can be seen from Figure 4, which shows how the monthly average DAM price has tracked gas prices across the year. Although, on a day-by-day basis, much greater variability between DAM price and gas price is observed where for example, zero or negative DAM price periods sustained over several hours coincide with periods of high wind/low demand (i.e. night-time) or high demand and low plant availability coincide with very high DAM prices.

Year on year, the DAM price has increased by 262% to an average value of €136.05, from €37.63 in 2020. This was driven by a sharp increase in gas prices and a pick-up in demand, while 2020 had a drop in both gas prices and demand.

The lowest monthly average DAM price was €57.56 in February, with the DAM price generally following the trend of rising gas prices as the year progressed, with some slight deviations depending on the level of wind penetration during the month. Prices hit a monthly average high of €250.40 in December, with high commodity prices, increased demand and some long-term plant outages all being factors.

I-SEM Balancing Market

The balancing market provides the Transmission System Operator (TSO) with the flexibility it needs to secure the system. Under the balancing market, the TSO takes control (after generators and suppliers have transacted) to ensure that supply meets demand when there is a deviation from the demand forecast or a change in generator output. Participation in the balancing mechanism (BM) is mandatory for all generators who must submit bids and offers that allow the TSO to move them from contracted positions if required to maintain system integrity.

Volatility continues to be a feature of the balancing market in 2021, as can be seen in daily average BM prices in comparison to DAM prices, Figure 5. During individual half-hourly periods prices reached lows of minus €325/MWh and highs of over €862/MWh. Trading periods in which the price exceeds the strike price are deemed scarcity events and trigger pay-outs from all generators holding Reliability Option contracts. The strike price to date has been set at €500, but was increased

Figure 5: Day Ahead Versus Balancing Market Price

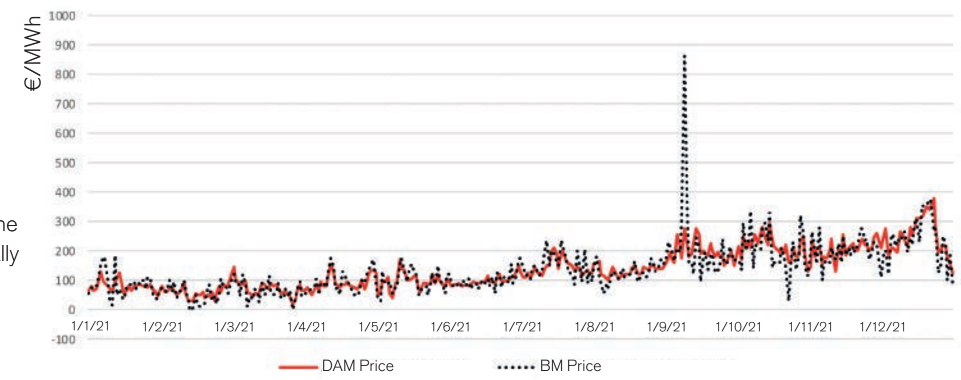
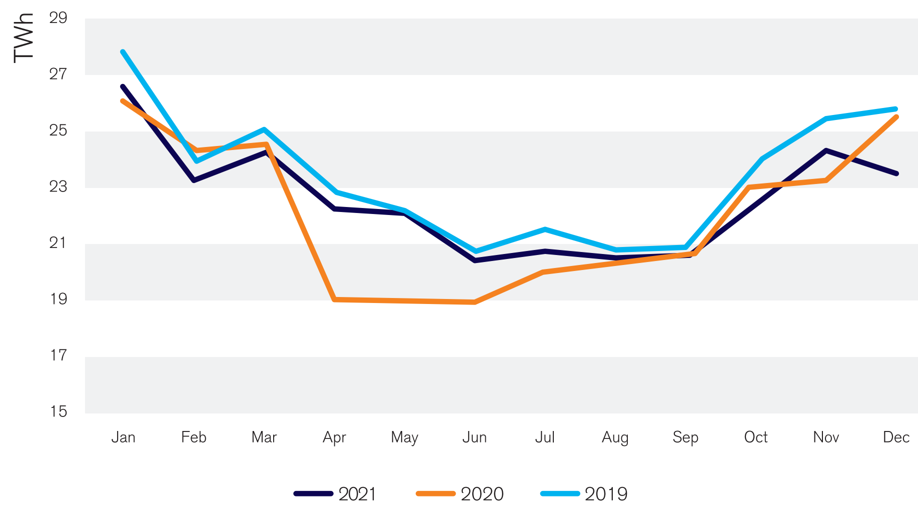


Figure 6: GB Electricity Demand (TWh)



to €739.55 for October €539.01 for November and €749.71 for December due to higher gas prices. There were very few instances of the balancing market price exceeding the strike price in 2020, but this became more common in 2021, primarily due to TSO trades over the interconnector to reverse exports during periods of system tightness. However, due to a rule change during the year, TSO trades that exceed the strike price now no longer feed into the imbalance price.

2.(c) GB Electricity Market and Prices

Demand

The COVID-19 pandemic reduced electricity demand for 2020 significantly. The reduction in electricity demand is persisting in 2021, although the reduction has been less pronounced than in 2020, reflecting less severe COVID-19 restrictions.

The total annual demand in 2021 is c.2% higher than 2020, however, this is still lower than the 2019 levels by c.4%. Figure 6 presents the 2021 GB electricity demand compared to the previous two years.

Generation Mix

Figure 7 shows GB generation mix in 2021, with 26% of generation coming from wind and solar. Despite having higher installed wind capacity, generation output in 2021 has been lower due to lower average wind speed. Wind generation in 2021 was about 9% lower than 2020. Similarly, 2021 saw total solar generation decrease by 5% despite increasing installed capacity.

Gas-fired generation contributed 38% of overall generation in 2021, up from 35% in 2020. This was mainly driven by the supply tightness which required more gas-fired plants to operate to meet demand.

The UK government has decided to close all coal generation plants by 2025. The two remaining coal units in Drax Power Station stopped burning coal in March 2021. As at the end of 2021, there are only two coal stations remaining in GB (Ratcliffe and West Burton Power Stations) with a total capacity of c.3 GW. Notwithstanding this, more coal has been burnt in the summer of 2021 compared to 2020 due to soaring prices for natural gas and the supply tightness. Coal generation increased 14% in 2021 compared to 2020.

In 2021, GB was a net importer of power from continental Europe as power prices were generally higher in GB. There were some periods when GB exported power to Europe, typically during

Figure 7: GB Generation Mix

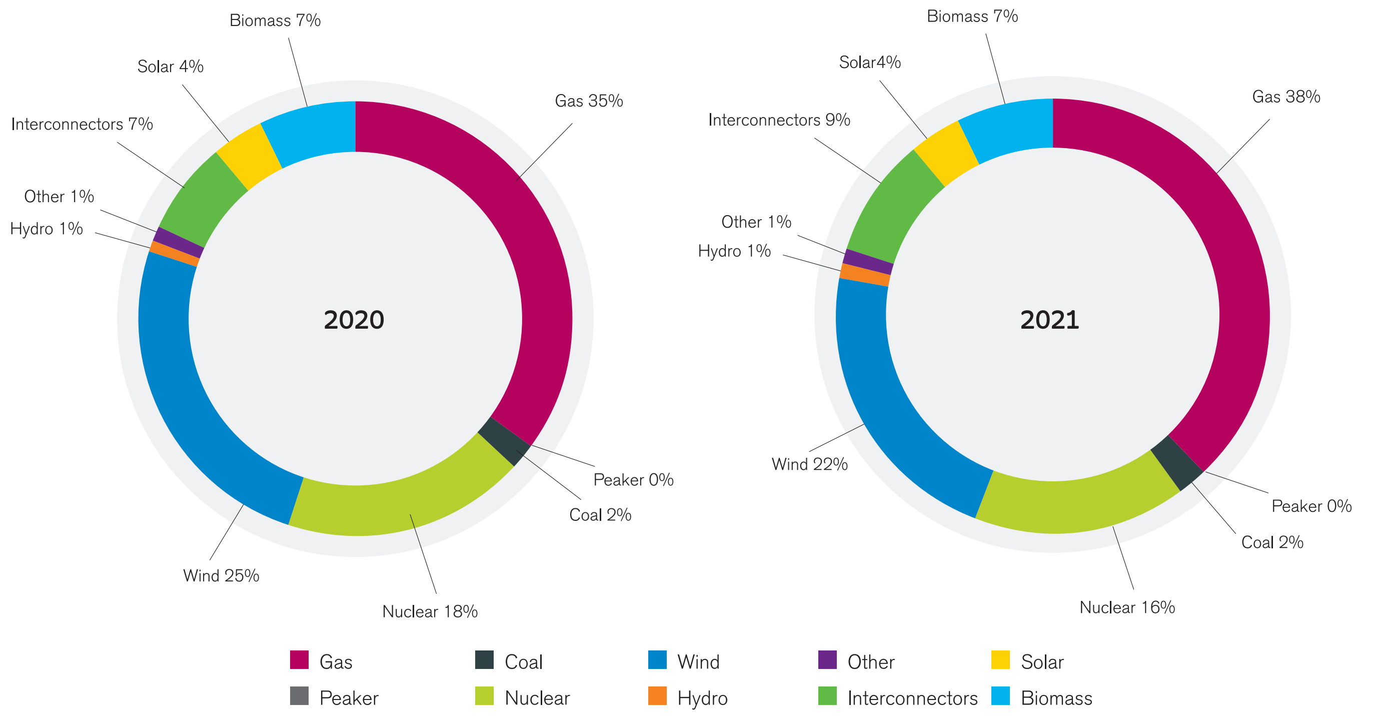


Figure 8: GB Net Monthly Power Exchange 2021

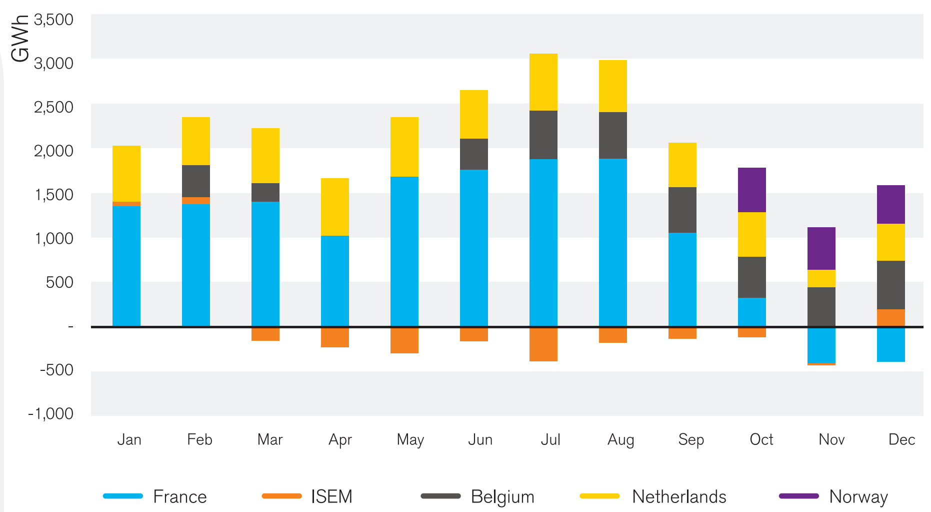


Figure 9: GB Baseload Power Prices (£/MWh)

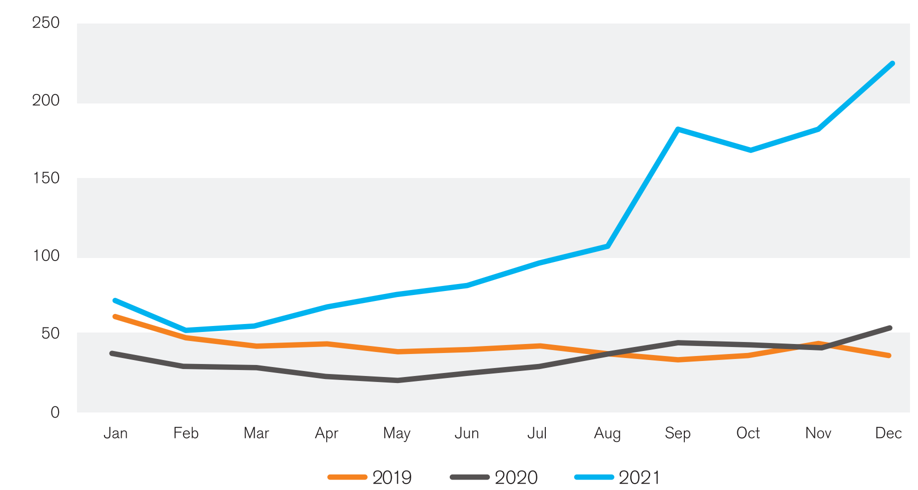


Figure 10: NBP Natural Gas Price (p/therm)

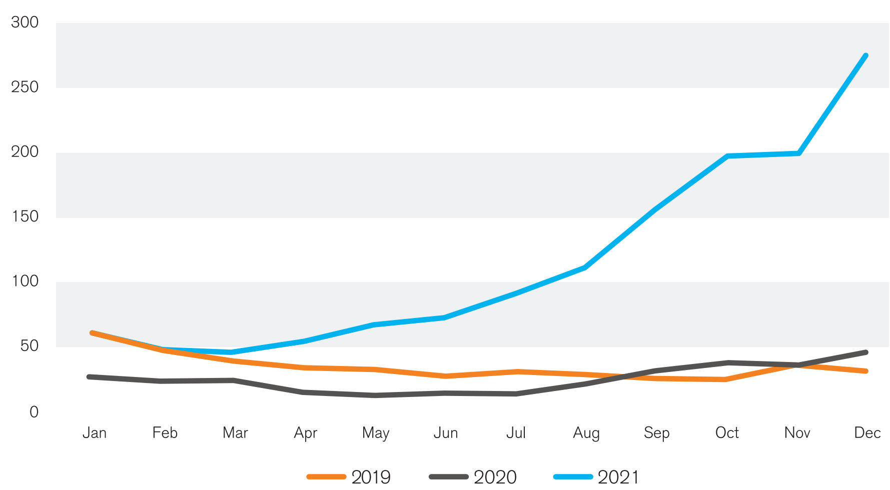


Figure 11: UK Effective Carbon Price (£/Tonne)

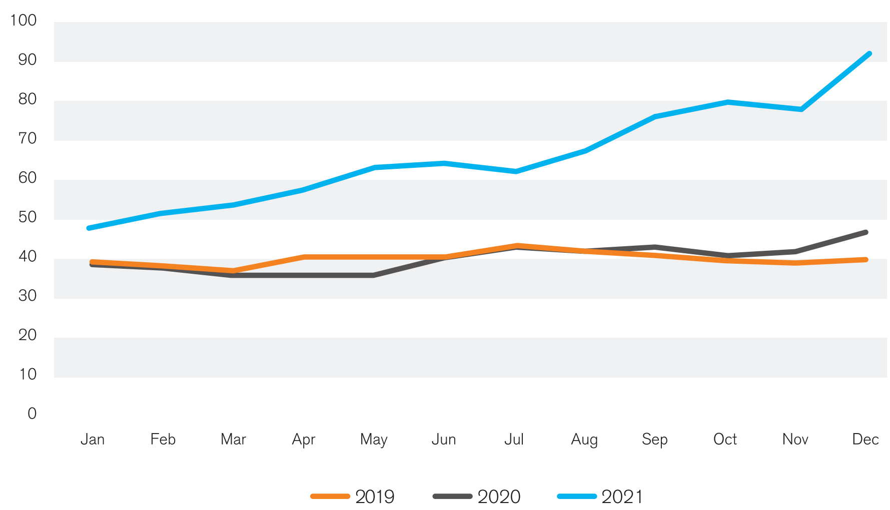
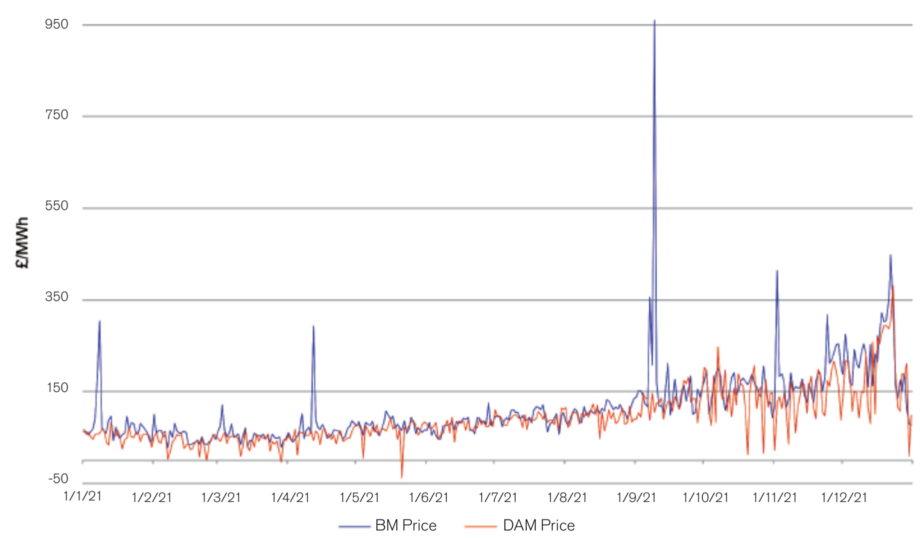


Figure 12: GB BM versus DAM Price (Daily Average)



periods of high renewable generation in GB or other events such as low nuclear plants availability in France. GB became a net exporter of power to France in the last two months of 2021, which was driven by tight supply in France due to high nuclear plant outages. Flows between GB and Ireland are much more balanced, however with GB having a slight net export to Ireland in 2021. Flows between GB and Norway have only started trial operation in October 2021 at around half of its full capacity of 1400 MW. Flows were mainly from Norway to GB as prices in Norway are much lower due to the significant portion of hydro generation. Figure 8 shows net monthly flows with connected regions, with positive values indicating imports to GB and negative exports from GB.

Power Markets and Prices

2020 was characterised by low electricity demand, coupled with high renewable generation and low gas prices, resulting in very low average day-ahead prices of £35/MWh. In contrast, 2021 has been characterised by extremely high electricity prices. Day-ahead electricity prices started significantly higher in 2021 with the average price for January at £71/MWh. Prices were trending upwards throughout 2021, with prices in the last quarter averaging at £192/MWh. Figure 9 presents the monthly day-ahead prices for 2021 compared to the previous two years.

The high and volatile prices in 2021 were driven by two main factors:

- High commodity prices – natural gas prices reached historical highs in 2021 due to extremely tight supply in Europe. The UK Emission Trading Scheme (UK ETS) carbon price has also increased significantly in 2021. As the GB system is still heavily reliant on gas-fired plants, the higher gas and carbon cost has fed into higher power prices. Gas and carbon prices for 2021 are presented in Figures 10 and 11 respectively, compared to the previous two years.
- Reduced available generation capacity – 2021 has seen a high level of outages among thermal, nuclear and interconnectors, as well as low wind generation due to lower average wind speed.

BETTA operates an auction-based capacity market. The GB Capacity Market auctions in recent years were generally oversubscribed, leading to downward pressure on auction clearing prices. These have out-turned at a wide range of price levels, driven by the evolving supply and demand balance of each auction. With the exception of the 2021/22 auction, T-1 auction clearing prices have been lower than the prices observed in T-4 auctions. This has been driven mostly by an oversubscribed market, falling levels of demand, and existing capacity intending to stay online and therefore being able to bid at lower prices.

The clearing price in the last T-4 auction for delivery in 2024/25 of £18/kW was slightly higher compared to last year, reflecting the expectation of tightening capacity margins as coal, old gas and nuclear plants retire. Existing plants alone were not sufficient to meet the auction's capacity requirements, as multiple large thermal generators failed to prequalify or exited the auction early. Three new Drax-owned OCGTs (Progress Power, Millbrook Power, and Hirwaun Power) secured 15-year capacity agreements with a combined capacity of 900 MW. The remainder of the capacity was allocated to embedded generators or small scale (battery) storage.

As in SEM, GB operates a Balancing Mechanism (BM) market. The GB BM market is important to dispatchable and relatively flexible plants such as Carrington CCGT. The BM price, often referred to as cash-out price, reflects the system marginal cost within the BM market time frame (near to real time). Generally, the BM prices spike when the system is short and the ESO calls on expensive plants to generate. This is a significant opportunity for flexible plants to earn additional revenue, especially when they are not in-the-money to run in the DAM. Average monthly BM prices have been largely trending according to commodities prices. Figure 12 presents the daily average system prices compared to day-ahead prices. BM system prices tend to be more volatile than DAM prices. System prices in 2021 reached historical highs and were highly volatile, driven by the same factors that drove high Day-Ahead prices. Half-hourly BM prices reached a peak of over £4,000/MWh on 9 Sep 2021, with an average daily price reaching almost £1,000/MWh.

Financial Review

Q How would you describe financial performance in 2021?

During a year of significant volatility in energy markets, ESB delivered a positive performance in 2021 with Earnings before Interest, Tax, Depreciation and Amortisation (EBITDA) before exceptional items of €1,493 million, an operating profit before exceptional items of €679 million and capital investment of €1,223 million.

Our 2021 performance reflects the following progress in our main business units:

- ESB Networks and NIE Networks businesses continued to deliver significant progress on their regulated capital and maintenance programmes to ensure safe and reliable networks. Notably, ESB Networks commenced its regulatory Price Review 5 (PR5) programme which runs until 2025. PR5 includes a significantly increased capital programme to enhance the electricity network to support the continued transition to a low-carbon economy.
- Generation and Trading (GT) continued to develop its renewable portfolio, notably through continued investment in onshore and offshore wind projects both in Ireland and Great Britain and the launch of the Green Atlantic @ Moneypoint programme. The GT business also contributed strongly to maintaining electricity security of supply in Ireland throughout 2021 as increased demand, low wind yields and forced outages of non-ESB gas plant were notable challenges for the electricity system. 2021 also saw dramatically escalating commodity costs (notably gas, coal and carbon) and the hedging policy of GT was important in satisfactorily managing this exposure.
- In spite of the very significant impact of increasing wholesale energy prices, Customer Solutions remained committed to offering the best possible value to customers. In Great Britain, the operating environment was challenging with the Government imposed price cap alongside dramatically increased wholesale energy costs leading to the exit of numerous companies from the market. Following the acquisition of So Energy, these market conditions significantly impacted ESB's GB retail business which was loss-making in 2021.

Operating profit (before exceptional items) has increased by €63 million on 2021 primarily due to the timing of regulated network tariff changes, increased electricity demand, positive foreign exchange movements and improved energy margins and wholesale market running for our generation plant in Great Britain. Energy margins for our generation plant in the Irish wholesale market (SEM) were broadly in line overall with 2020. These positive movements were offset by significant losses incurred in ESB's supply business in GB and a higher depreciation charge relating to the growing and changing nature of the asset base, notably in our networks businesses.

Exceptional Items

In 2021 we recognised a number of exceptional charges as follows:

- In June 2021, we successfully completed the sale of a 47% stake in Tilbury Green Power, a waste wood energy plant in Great Britain. A gain on sale of €82 million has been recognised in the Income Statement in respect of this transaction, most of which is accounted for as a reversal of previous impairment charges (including €43 million accrued interest) on ESB shareholder loans to the project.
- ESB is a joint venture partner with EDF Renewables in the Neart na Gaoithe project, a 448 MW offshore wind farm development off the east coast of Scotland. Delays to the project (due to challenges experienced in the delivery of the foundations package) and an expectation of additional construction costs have caused an exceptional impairment charge of €154 million.
- Following the successful completion of the development of the Fitzwilliam Street Head Office complex in Dublin, a gain on sale of €70 million has been recognised relating to the sale of one of the 2 distinct blocks.
- As a result of the significant challenges experienced in our GB supply business (due to soaring wholesale prices and the Government imposed price cap), an onerous contract provision of €16 million along with an impairment of the goodwill arising on the acquisition of So Energy €45 million have been recognised.

Pat Fenlon

Executive Director, Group Finance & Commercial

Capital Investment

ESB invested over €1.2 billion of capital expenditure in 2021. Approximately 75% of this was invested in our two networks' businesses in line with agreed regulated capital programmes, including almost €150 million on the roll-out of smart meters in ROI. ESB invested c.€115 million in new renewable generation and systems services projects (including batteries) as well as c.€81 million in maintaining its existing generation fleet to ensure the reliability of electricity supply to customers during the ongoing transition to low-carbon generation. In addition, over €100 million was advanced by way of shareholder loans to joint venture projects, the majority of which related to our continued investment in offshore wind.

EU Taxonomy Regulation Reporting

For the first time in 2021, ESB has included disclosures in the Annual Report under the EU Taxonomy Regulation outlining the proportion of ESB's turnover, OpEx and CapEx which relate to Taxonomy-Eligible activities. Approximately 88% of ESB's capital investment relates to Taxonomy-Eligible activities as we continue to invest in renewable generation and the enhancement of the electricity networks in both ROI and NI. See page 87 for the full EU Taxonomy Regulation disclosure.

Outlook

As Ireland's leading energy utility, ESB has a stable business profile with approximately 70% of earnings and assets accounted for by regulated electricity networks in Ireland under established and transparent regulatory frameworks. ESB has a strong balance sheet at 31 December 2021 with net assets of over €4.1 billion. We continue to deliver strong operating profits (before exceptional items) and maintain a strong liquidity position of c.€1.9 billion. We have a moderate gearing level of 52% at the end of 2021 and credit ratings of A- and A3 with Standard & Poor's and Moody's respectively, both reaffirmed during 2021.

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

HIGHLIGHTS

€1,493 MILLION
EBITDA before Exceptional Items

€679 MILLION
Operating Profit before Exceptional Items

€266 MILLION
Profit after Tax before Exceptional Items

€1,223 MILLION
Capital Expenditure

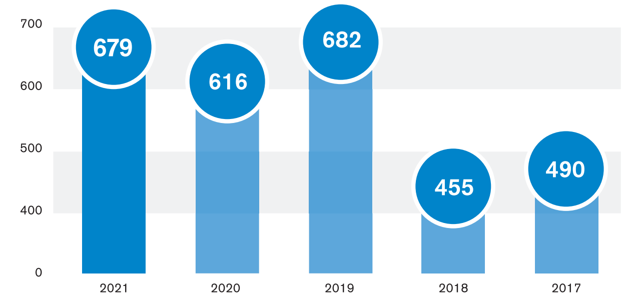
€126 MILLION
2021 Dividends

5.6%
Return on Capital Employed

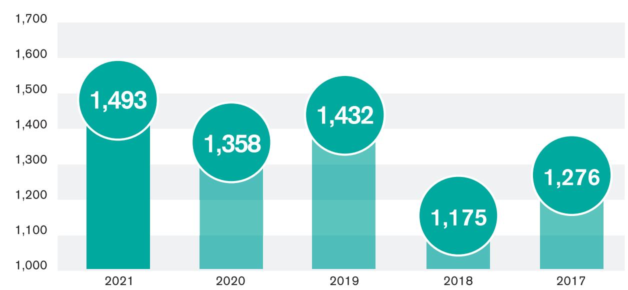
52%
Gearing
(Net debt divided by the sum of net assets and gross debt (excluding joint ventures))

Figure 1: Five-year summary

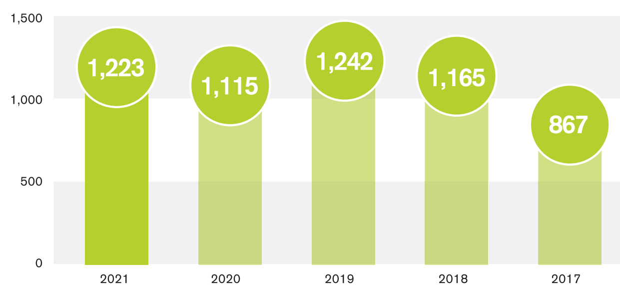
OPERATING PROFIT BEFORE EXCEPTIONAL ITEMS[1] €'M



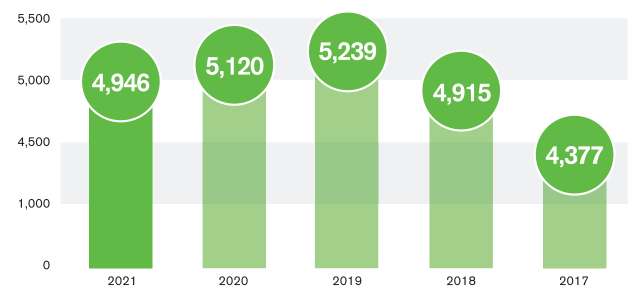
EBITDA BEFORE EXCEPTIONAL ITEMS €'M



CAPITAL EXPENDITURE[2] €'M



NET DEBT[3] €'M



[1] Before the following exceptional items: 2021: Profit on asset sales (including impairment reversals) €152 million, Neart na Gaoithe impairment (€154 million), So Energy impairment of goodwill and onerous contract provision (€61 million). 2020: Impairment charge (€188 million) and increased Asset Retirement Provisions (€59 million). 2019: Severance and associated costs (€60 million) and impairment charge (€34 million). 2018: impairment charge (€140 million). 2017: impairment charge (€276 million).

[2] 2018 – 2021 capital expenditure is gross of customer contributions for network connections (in line with IFRS 15 'Revenue from Contracts with Customers'). Capital expenditure in 2017 is net of customer contributions of €106 million.

[3] 2019 - 2021 net debt includes lease liabilities recognised in accordance with IFRS 16 'Leases'. 2021: €120 million, 2020: €125 million, 2019: €132 million. It excludes ESB share of debt associated with investments in joint ventures and associates all of which are equity accounted.

Figure 2: Summarised Income Statement

	2021	2020
	€'m	€'m
Revenue and other operating income	5,267	3,750
Operating costs*	(4,588)	(3,134)
Operating profit	**679**	**616**
Exceptional items	91	(247)
Operating profit after exceptional items	**770**	**369**
Net finance costs	(125)	(142)
Fair value movements on financial instruments	(127)	(50)
Exceptional impairment of equity accounted investees	(154)	-
Share of equity accounted investees (loss)/profit	(76)	9
Profit before tax	**288**	**186**
Tax charge	(97)	(60)
Profit after tax	**191**	**126**

*Includes non-exceptional impairments (see note 8)

REVENUE

Revenue and other operating income before exceptional items at €5,267 million has increased by €1,517 million compared to 2020 (€3,750 million).

The increase is primarily driven by higher revenue in Generation and Trading due to higher wholesale electricity prices and higher plant running, increased volumes (mainly large energy users) and customer prices in Customer Solutions (as a result of higher wholesale costs) compared to 2020, as well as tariff changes in the regulated networks businesses.

OPERATING COSTS

Overall operating costs before exceptional items at €4,588 million have increased by €1,454 million.

- Fuel and other energy costs have increased by €1,476 million reflecting significantly higher commodity costs in 2021 and increased volumes in Customer Solutions and GT in SEM and GB.
- Depreciation is higher primarily in ESB Networks due to the growing and changing nature of the asset base.
- Employee costs are down €18 million as additional payroll costs were capitalised in 2021. In 2020, restrictions in the capital programme (mainly in the networks businesses) due to COVID-19 led to more costs being charged to the Income Statement.
- Operating and maintenance costs have decreased by €76 million primarily due to a non-cash foreign exchange translation gain on sterling denominated intercompany positions and reduced Asset Retirement Obligations (ARO) costs in GT.
- Impairment of financial assets is in line with 2020.

A breakdown of the operating costs by business segment is provided in note 3 to the financial statements.

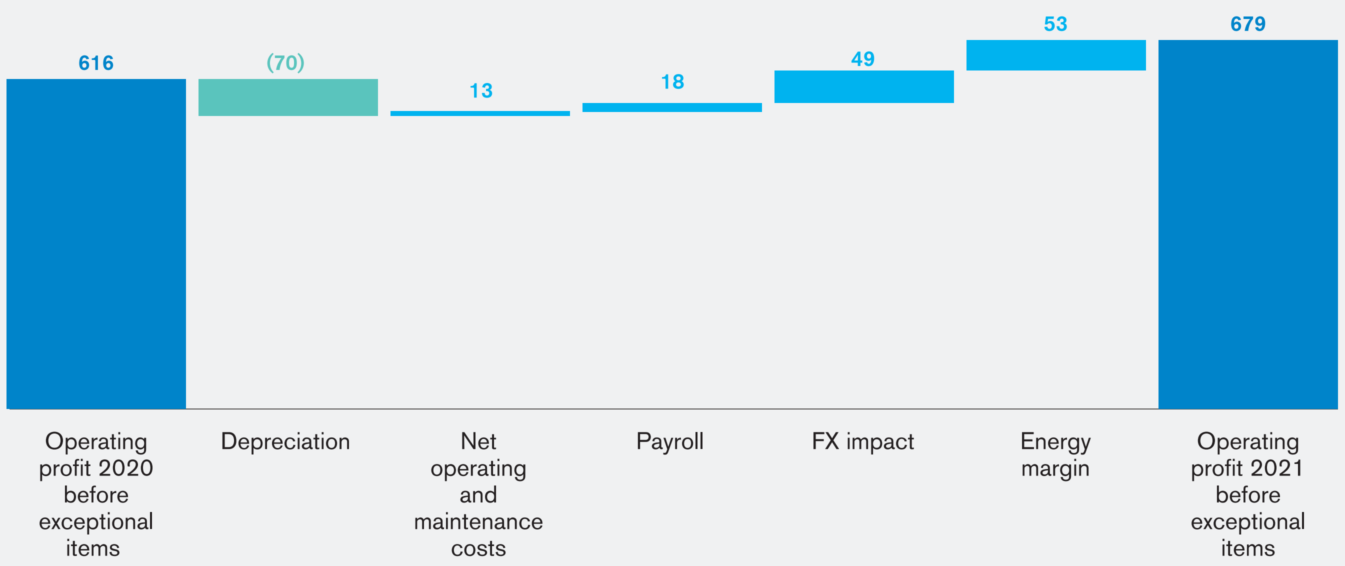
Figure 3: Operating Costs (Before Exceptional Items)

	2021	2020
	€'m	€'m
Fuel and other energy related costs	2,746	1,270
Depreciation and amortisation	877	807
Employee costs	476	494
Operating and Maintenance costs	449	525
Net impairment losses on financial assets	22	25
Impairment (before exceptional items)	18	13
Total operating costs	**4,588**	**3,134**

EXCEPTIONAL ITEMS

See Finance review on page 54 and note 6 of the financial statements for further details on exceptional items.

Figure 4: Reconciliation of Operating Profit 2020 to 2021



EBITDA

	2021	2020
	€'m	€'m
Operating Profit	770	369
Impairments (including non-trading net impairment losses on financial assets and impairment gains)	(16)	201
Depreciation	877	807
Revenue from supply contributions	(81)	(78)
EBITDA	**1,550**	**1,299**
Exceptionals (non-impairment)*	**(57)**	**59**
EBITDA before exceptionals	**1,493**	**1,358**

* Exceptional items (non-impairment) 2021 – gain on sale of Fitzwilliam €70 million, onerous contract provision (€16 million), gain on sale of Tilbury (excluding impairment gain) €3 million. 2020 – increase in ARO provision €59 million.

Figure 5: Reconciliation of adjusted profit before taxation

	2021	2020
	€'m	€'m
Profit Before Taxation	288	186
Exceptional Items	63	247
Fair value movement on RPI linked interest rate swaps	113	47
Fair value movement on JV swaps	89	(11)
Adjusted profit before taxation	**553**	**469**

Figure 6: Total Finance Costs

	2021	2020
	€'m	€'m
Net interest on borrowings	119	125
Financing charges	13	19
Finance income	(7)	(2)
Net finance costs	**125**	**142**
Fair value movement on RPI linked interest rate swaps	113	47
Fair value losses on financial instruments	14	3
Total finance costs	**252**	**192**

Figure 7: Summarised Cash Flow Statement

	2021	2020
	€'m	€'m
EBITDA	1,550	1,299
Provision Utilisation and other Movements	230	3
Interest and Tax	(222)	(223)
Net cash inflow from operating activities	**1,558**	**1,079**
Disposal proceeds	25	27
Capital expenditure	(1,186)	(996)
Other (including FX)	1	2
Net cash outflow from investing activities	**(1,160)**	**(967)**
Net cash (outflow)/inflow from financing activities	**(128)**	**10**
Net increase in cash	**270**	**122**

OPERATING PROFIT

Operating profit before exceptional items has increased by €63 million. The movement in operating profit between 2020 and 2021 is set out in Figure 4.

EBITDA

Earnings before interest, taxation, depreciation, impairments (including non-trading net impairment losses on financial assets), amortisation and revenue from supply contributions.

ADJUSTED PROFIT BEFORE TAXATION

Adjusted profit before taxation for 2021 is €553 million (2020: €469 million). The variance relates to higher operating profit, lower exceptional items and higher non-cash fair value movements (see figure 5).

TOTAL FINANCE COSTS

Total finance costs for 2021 are €60 million higher than 2020.

The net finance costs are lower than 2020, reflecting a reduction in weighted average interest rate on Group borrowings.

The movement in inflation (RPI) linked interest rate swaps reflects an increase in inflation rate assumptions underpinning the fair value of these instruments and additional costs related to the refinancing of these swaps during 2021.

Further detail is included in note 9 to the financial statements.

SHARE OF EQUITY ACCOUNTED INVESTEE PROFIT/(LOSS)

This reflects ESB's share of the profits from its equity accounted investments. The loss in 2021 primarily relates to ESB's 50% share of negative mark to market movements on inflation linked swaps in Neart na Gaoithe offshore wind farm project which do not qualify for hedge accounting.

TAXATION

The tax charge of €97 million is higher than 2020. ESB's effective tax rate on profits before exceptional items has increased on 2020 mainly due to higher deferred tax charges reflecting the announcement in March 2021 of an increase in the UK tax rate from 19% to 25% from April 2023. Further detail is included in note 21 to the financial statements.

SEGMENTAL PERFORMANCE

The Group is organised into five main reportable segments or strategic divisions, which are managed separately. Details on the financial performance of the business segments are included in the business unit review sections pages 60 to 69 and in note 3 to the financial statements.

NET DEBT AND GEARING

Net debt has decreased to €4.9 billion in 2021 from €5.1 billion in 2020. Borrowing levels are higher than 2020 with additional capital expenditure and negative movements on the translation of sterling denominated debt into euro (due to the strengthening of sterling in 2021) being offset by increased EBITDA. The reduction in net debt is due mainly to increased cash on hand including €0.3 billion net cash collateral amounts received as set out in the liquidity and funding activities section below.

The gearing level has decreased from 55% to 52% reflecting the lower net debt and collateral cash on hand at year end.

CAPITAL INVESTMENT

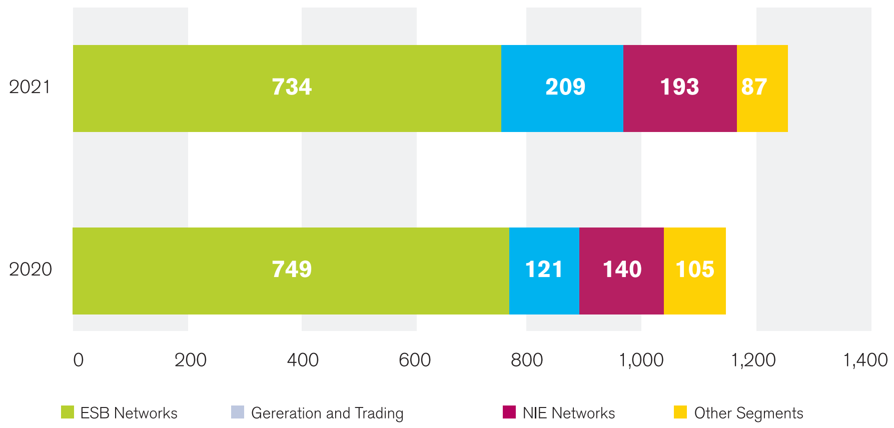
ESB invested €1,223 million of capital expenditure in 2021, an increase of €108 million on 2020.

Generation and Trading invested €209 million in 2021 including the investment in 50% of FuturEnergy Ireland, a joint venture with Coillte, and an investment in battery technology. Expenditure in 2020 included the acquisition of the Inch Cape (GB) offshore windfarm project.

Capital expenditure in ESB Networks includes the increased spend on the Smart Metering project (c.€150 million in 2021 compared to c.€110 million in 2020) as well as the continued investment in the network in line with the PR5 determination. In NIE Networks, the increase in capital expenditure is primarily due to the lifting of COVID-19 related restrictions which had an impact on the delivery of the NIE capital programme.

Capital investment of €87 million in other segments includes various group projects such as the re-development of the Fitzwilliam Street Head Office and investment in IT and digital projects.

Figure 8: Capital Expenditure



TREASURY MANAGEMENT FRAMEWORK

ESB Group Treasury manages treasury related risks on behalf of ESB. Group Treasury's purpose is to enable ESB deliver on its strategy by providing best funding and risk management solutions and maintaining ESB's strong financial standing. The risks managed by Group Treasury may be further broken down as follows:

- Liquidity availability and maintenance of access to the debt capital markets
- Foreign exchange volatility
- Interest cost exposures on the Group's current and future debt requirements
- Inflation movements, which have the potential to erode financial performance over time
- Counterparty credit exposure and counterparty risk generally
- Operational risk, including risk of misappropriation of funds, through fraud or error
- Compliance with financial regulations

Group Treasury is responsible for the day-to-day treasury activities of the Group, and therefore for the management, in whole or in part, of each of these risks. Some of these risks can be mitigated using derivatives. Where this is the case, such instruments are executed in compliance with the Requirements and Conditions of the Minister for Finance issued under the Financial Transactions of Certain Companies and Other Bodies Act, 1992. ESB does not enter into derivative contracts which are speculative in nature, but rather only to hedge underlying economic risks.

The Finance and Investment Committee of the Board is updated on an ongoing basis on key treasury matters. Group Treasury's approach to the management of the key financial risks of ESB is set out in more detail within the Financial Risk Management and Fair Value note 29 in the financial statements.

LIQUIDITY AND FUNDING ACTIVITIES

Group Treasury's funding activities are of strategic importance to the Group, supporting ESB's capital expenditure programme, the refinancing of maturing debt, and the maintenance of an appropriate liquidity buffer to guard against future economic shocks which may have an impact on cash flows and financial markets.

In February 2020, ESB negotiated a €1.4 billion Sustainability-Linked Revolving Credit Facility with a group of fourteen international banks. This facility currently extends to February 2027, as ESB exercised the first of two 1-year extension options in February 2021 and the second in February 2022. The cost of this standby liquidity facility is directly linked to the delivery by ESB of specific decarbonisation targets aligned with ESB's strategy. This facility (€1.4 billion) was undrawn at 31 December 2021.

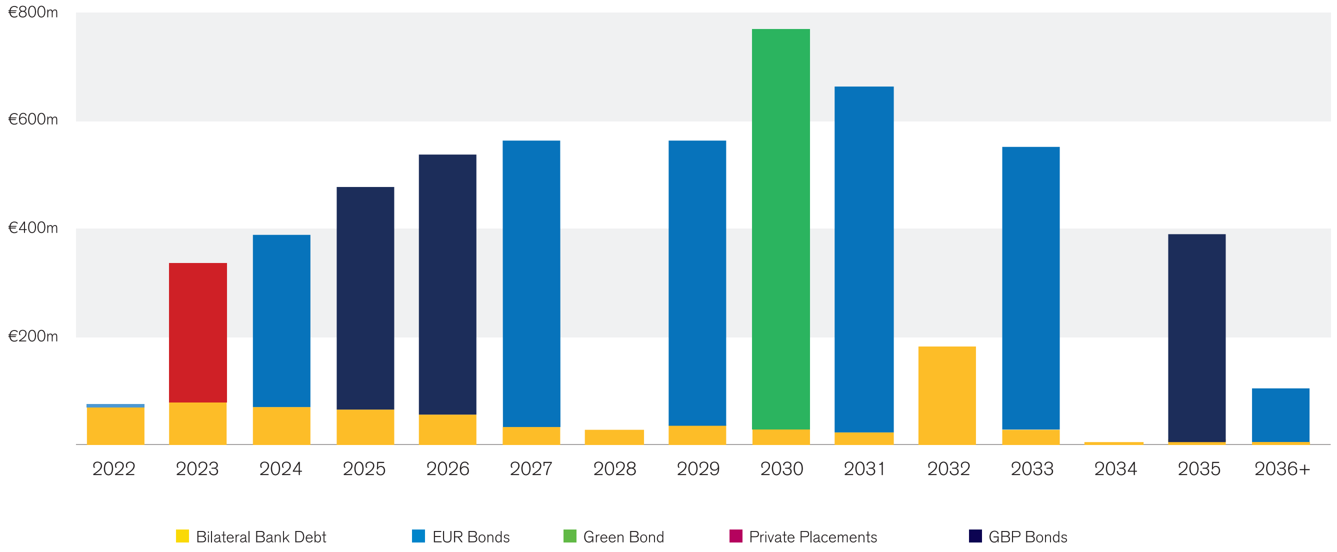
In April 2021 the mandatory breaks on a series of RPI-linked swaps, held by NIE Networks with a variety of bank counterparties, with a nominal value of GBP £550 million were either removed or extended. The swaps with maturities of 2026 (£200 million), 2031 (£200 million) and 2036 (£150 million) each had a mandatory break at June 2022. The breaks on the 2026 and 2031 swaps have been removed with the breaks on the 2036 swaps extended to December 2025.

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

Throughout 2021, Group Treasury continued to effectively manage the cash flows of the Group particularly in light of unprecedented commodity and energy wholesale market price volatility which has been a feature of the market during 2021 and continues into 2022. This has impacted the associated cash collateral positions required in relation to exchange traded gas, carbon and power hedging contracts entered into by ESB.

At 31 December 2021, ESB had €1.9 billion of available liquidity, comprising over €0.5 billion of cash on hand and the Sustainability-Linked Revolving Credit Facility of €1.4 billion (undrawn). Included in the cash on hand is c.€0.3 billion relating to the net cash collateral amounts received in relation to exchange traded gas, carbon and power contracts. As illustrated by the debt maturity graphic above, this is greatly in excess of scheduled debt repayments due over the next 3 years.

Debt Maturity* profile at 31 December 2021 (excluding non-Recourse Project Finance debt held in Joint Ventures):



*cash flows reflect hedging arrangements in place

The weighted average interest rate on the Group's portfolio of outstanding borrowings at 31 December 2021 had fallen to 2.6% (31 December 2020: 2.7%). In recent years the Group has been able to issue longer dated (10 to 20 year) bonds, reducing medium term refinancing risk. The average duration of the Group's debt portfolio is consistent with the long-term nature of Group assets. During the year, Standard & Poor's and Moody's both reaffirmed ESB credit rating at A- and A3 respectively.

FOREIGN EXCHANGE AND INTEREST RATE RISK MANAGEMENT

The Group's business is primarily located in the Republic of Ireland and the United Kingdom (UK). Accordingly, the majority of operating and investing cash flows are denominated in euro or sterling. The main exceptions to this are coal purchases, which are generally denominated in US dollars. ESB's policy is to hedge any material foreign currency exposures as they arise using currency derivatives such as FX forwards, at competitive rates in the market.

The Group's policy is to finance its euro denominated business by borrowing directly in euro or to convert any foreign currency borrowing to euro using derivative instruments, such as cross currency swaps. Investments in the UK (including NIE Networks) are generally funded by debt either issued in, or swapped to, pounds sterling. At 31 December 2021 approximately 69% of ESB's underlying debt is denominated in euro, with the remaining 31% in sterling.

Under the Board approved interest rate policy, ESB has a preference for fixed interest rate debt, and will target to have a significant majority of its debt at fixed (or inflation linked) interest rate to maturity, with a minimum of 60% fixed maintained at all times. At 31 December 2021, almost 100% of Group borrowings were fixed to maturity (or inflation linked). The Group is however exposed to future interest rate movements which may have an impact on the cost of future borrowing requirements, particularly as existing fixed rate debt matures, and is refinanced. Group Treasury monitors market conditions closely in this regard and may seek to pre-fund or pre-hedge future funding requirements if appropriate, subject to the necessary Board and Shareholder approvals.

COMMODITY PRICE RISK

Generation and Trading and Customer Solutions have separate teams responsible for the management of commodity and energy price risks in their business units.

Fuel and carbon prices paid by ESB in connection with its electricity generation and supply activities can exhibit volatility, depending on market conditions. The exposures to fuel price movements on future earnings are managed by ESB on a selective-hedging basis. ESB has entered into forward commodity price contracts in relation to power, gas, coal and carbon emissions allowances for up to three years ahead in order to reduce the Group's exposure to movements in wholesale electricity prices arising from such commodity price fluctuations.

2021 was a year of significant volatility in wholesale energy markets with increases in international commodity prices (gas, coal and carbon), causing a sustained spike in wholesale energy prices. This has continued into 2022. While ESB's hedging policies helped to protect its earnings, this was challenging, particularly in the Group's supply business, given the unprecedented nature of the market conditions experienced in 2021 (see Customer Solutions page 66).

COUNTERPARTY RISK

The Group is exposed to credit risk in respect of the counterparties with which it holds its bank accounts and trades with in financial and commodity markets. ESB policy is to limit exposure to counterparties based on credit risk assessments and security arrangements (where appropriate). Exposures and credit limits are subject to ongoing review and monitoring in each business unit and, at Group level, by the Group Trading Risk Committee (GTC). Dealing activities are controlled by establishing dealing mandates with counterparties.

Counterparty credit limits set by the GTC are closely linked to their credit ratings as determined by the leading credit rating agencies, although other factors, including security provided and the legal structure of the transaction, may also be considered. The limit set for a counterparty is the amount by which the sum of the settlement amount, the mark to market value and the potential future exposure may not be exceeded. These positions are reviewed on a regular (in some cases daily) basis. During 2021 the majority of the Group's fuel commodity trades by value were transacted through energy market exchanges, rather than bilaterally. Exchange trading in general reduces, although it does not eliminate, counterparty risk, as well as providing trading liquidity and pricing transparency. Group Treasury hedging (regarding foreign exchange, interest rate, and inflation risk), continues to be carried out bilaterally with rated relationship banks, through bilateral Over The Counter (OTC) contracts.

FINANCIAL REGULATION

The regulatory environment for trading in financial and energy markets has become more complex in recent years, and the Group's capability in this regard has increased accordingly. As part of the market led interest rate benchmark reform, Group Treasury began the transition of GBP LIBOR (London Inter Bank Offer Rate) to SONIA (Sterling Overnight Index Average) in 2021, adhering to the LIBOR ISDA protocol and updating relevant loan documents.

ESB Networks

Nicholas Tarrant

Managing Director, ESB Networks

KPI	Operating Profit*	Capital Expenditure	Regulated Asset Base (RAB)
2021	€409 million	€734 million	€8.8 billion
2020	€368 million +€41 million	€749 million (€15 million)	€8.4 billion +€0.4 billion

* excludes exceptional items of €Nil (2020 - €59 million)

What were the key achievements for ESB Networks in 2021?

Key achievements in 2021 were as follows:

- The total volume of renewables connected to date to 4.7 GW of which over 4.3 GW is wind. In addition, 249 MW of new large-scale battery storage was connected to the network in 2021.
- ESB Networks has been busy processing 86 generator applications totalling c.730 MW under ECP2.1 which will help support customers prepare their bids for the RESS-2 auction in May 2022.
- ESB Networks made over 29,000 connections this year and installed 380,000 smart meters.
- In October, the National Network, Local Connections programme was launched which will act as a vehicle for enabling electrification of heat and transport and to empower customers in their electricity usage.
- As it has been since the onset of the COVID-19 pandemic, we continued to secure services to our customers while continuing to put in place the necessary measures to safeguard our employees and the public.

How did ESB Networks help ESB fulfil its strategy?

In leading the transition to a low-carbon future powered by secure and affordable clean electricity, ESB Networks continues to:

- Connect greater volumes of renewable generation to decarbonise electricity
- Develop the network to support widespread electrification, so that clean electricity can drive the decarbonisation of transport, heat, and the economy
- Connect and respond to the changing needs of customers
- Reinforce and improve the resilience, performance, and safety of the network
- Maximise network utilisation and value for money for customers
- Reduce the carbon footprint of our operations and progress our Sustainable Grid Charter

OVERVIEW

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

2021 was the first year of the regulatory price review period 5 (PR5) and ESB Networks has made good progress on the approved investment and maintenance programmes despite the impact of COVID-19. ESB Networks invested €280 million in asset replacement and constructing new networks in 2021 whilst €112 million was spent on maintaining the existing network. Good progress has also been made on the Smart Metering roll-out with expenditure of €147 million.

FINANCIAL PERFORMANCE

ESB Networks operating profit before exceptional items for 2021 at €409 million is up €41million on 2020 due to an increase in revenue from regulated tariffs changes partially offset by higher depreciation due to the growing and changing nature of the asset base.

Capital expenditure at €734 million is down €15 million on 2020. Whilst increases have been delivered through the increased roll-out of Smart Meters during Phase 2 of the programme and investment in the transmission network, these have been offset by the inclusion of a provision relating to the retirement of wood poles and higher capital stock in 2020.

CLIMATE ACTION PLAN

ESB Networks welcomed the 2021 revision of the Climate Action Plan and are working towards the implementation of its objectives. The work done in 2021 will enable significant volumes of solar power and battery storage to be connected to the system in 2022. The process of improving network capacity and resilience continued in 2021. Several network development projects were completed and network maintenance was performed to ensure system reliability.

The Smart Metering Project has passed the 620,000 meters installed mark in 2021 and is now connecting in excess of 40,000 smart meters per month.

The National Network, Local Connections programme was established to transform how energy on Ireland's electricity network is managed and consumed at a local level by customers and communities across the country. In Q4 2021 the programme was publicly launched by Minister Eamonn Ryan. The programme overview and 10 design proposals (addressing delivery, customer, market and technology needs) were the subject of public consultation and regulatory consideration during the final quarter of 2021.

ESB NETWORKS' CUSTOMERS

Customers are at the heart of all activities for ESB Networks including all 2.3 million electricity customers that use electricity, those that supply or generate electricity and those that access the network for the provision of services like telecom providers.

Customers interact with ESB Networks across many touchpoints including:

- The Contact Centre: 1.5 million customer contacts (calls, interactive voice response, emails)
- Powercheck: 4.3 million hits
- Over 29,000 new connections were delivered in 2021, 85% of which now come through the online application and tracking service
- ESB Networks' social channels achieved c. 45 million impressions in 2021 with channel growth across all platforms. ESB Networks' LinkedIn channel grew by 50% and now has c. 8,600 followers. ESB Networks also has c. 59,000 followers on Twitter, c. 3,000 on Instagram and c. 38,000 on Facebook

ESB Networks continues to focus on streamlining customer journeys and improvements introduced in 2021 include:

- Powercheck updates so that customers can now search for an outage using their Eircode and request notifications for updates on their power outages
- A new website, improving accessibility and experience for all customers
- A faster microgen application service
- Launch of a number of trials to enable notifications of planned outage by SMS (this will be extended in 2022)

STAKEHOLDER ENGAGEMENT

Throughout 2021, the ESB Networks' Stakeholder Engagement Strategy has been implemented which set out the key areas of engagement for 2021 and provided a listing of engagement opportunities including consultations, publications and hosted stakeholder meetings and events.

The strategic webinar Series "Powering the Change" provided a high-level engagement opportunity on ESB Networks' business strategy and plans. The new External Stakeholder Panels are being used as platforms to enable open discussion and feedback with a broad range of stakeholders from across industry, customers and other sectors. In late 2021 ESB Networks commenced an independent analysis and review of the company's existing stakeholder engagement strategy and approach. As part of this review, ESB Networks engagement strategy will be benchmarked against best practice Distribution Network Operators across England, Scotland, and Wales.

SAFETY HEALTH AND WELLBEING

ESB Networks is committed to protecting the safety, health and wellbeing of all employees, contractors, members of the public and others who may be affected by its activities. ESB's Safety Health and Environment Strategy (2020-2025) creates a line of sight for every employee and contractor under the control of ESB to understand how their individual and collective roles impact safety, health and wellbeing standards.

The ESB Networks Safety Management System (SMS) was independently audited by the National Standards Authority of Ireland (NSAI) during 2021 and they certified the SMS as compliant with the international ISO 45001 standard.

PUBLIC SAFETY

- During 2021, the Public Safety Strategy was reviewed and refreshed. This new strategy builds on the previous strategy and sees the introduction of a management system approach to public safety with continued focus on media messaging to key identified at-risk groups including the farming, construction, and general public sectors
- The ESB Networks 24/7 - 365 emergency response service operated to the highest standards to ensure public safety
- During 2021, an independent audit of the ESB Networks Public Safety Programme (on behalf of the Commission for Regulation of Utilities) confirmed its continuing compliance with the regulatory requirements
- From a communications perspective, public safety continues to be a big focus for ESB Networks and a new campaign launched in October 2021 will run throughout 2022 across TV, radio, and digital channels. The TV advert builds in additional risk scenarios including hanging bunting on electricity poles, building scaffolding near electricity poles and overhead wires, flying drones near overhead wires, and taking care around fallen trees and potential live electricity wires on the ground.

PEOPLE

ESB Networks' c. 3,350 employees are vital to delivering ESB Networks' strategy and meeting customer needs. Key achievements in 2021 were:

- A re-certification of the NSAI Excellence Through People accreditation was awarded to Networks which assessed the standard and quality of people management processes
- 96 1st year apprentices started their apprenticeships in September and October
- A pilot exercise to create a new streamlined external selection process for Network Technicians successfully concluded

SUSTAINABILITY

ESB Networks is committed to supporting the Irish Government's target to reduce CO_2 from the sector by 30% and improve the energy efficiency of ESB buildings by 50% by 2030.

During 2021, ESB Networks continued to operate revised notification protocols in relation to fluid filled cables with the relevant statutory authorities and continued investigations on some historic leak sites. ESB Networks' website www.esbnetworks.ie provides public information in relation to fluid filled cables and is continually updated with new information.

ESB Networks, in common with most electrical utilities, uses sulphur hexafluoride (SF6) as a safe insulator in switchgear. During 2021, ESB Networks reduced the SF6 leakage amount and continues to work to contain, reduce and minimise the use of SF6.

Empowering Low-Carbon Living

ESB Networks' 2030 strategy recognises climate action as one of the most important challenges of this generation and identifies the critically important and central role of ESB Networks to enable the transition to low carbon. ESB Networks has a clear mandate under PR5 to deliver a business plan to meet the needs of a transforming and developing Irish society over the coming years. This plan is in line with the aims of the Climate Action Plan and its delivery will be critical to enable a low-carbon future for customers through the electrification of heat and transport and achieving the 80% renewables target by 2030.

Update on 2021 Priorities and Priorities for 2022

2021 Priority	2021 Progress	2022 Priority
Operational		
Continue to deliver the ESB Safety Health & Environment Strategy 2020-2025 and continue to prioritise the delivery of the Safe and Sound culture transformation programme	▪ Increased focus on all aspects of electrical safety ▪ Continued to prioritise the ESB Networks COVID-19 response as an essential service provider ▪ Developed, approved, and published both the ESB Networks Public Safety Strategy and Road Safety Strategy	▪ Continue to deliver the ESB Safety Health & Environment Strategy 2020-2025 with a focus on psychological/ behavioural safety ▪ Ensure ESB Networks' essential service provision continues in a safe and healthy way for all staff considering COVID-19, mental wellbeing including stress, anxiety etc.
Continue the focus on reducing ESB's carbon footprint while communicating the importance of environment across Networks and working to achieve the environmental articles of the European DSO Charter	▪ Publication of CRU report on website ▪ Further reductions in SF6 emissions	▪ Progress further implementation of the EDSO charter objectives ▪ Further promote transparency in the communication of environmental information inside and outside of ESB Networks
Engage with renewable customers to develop connections to the transmission and distribution systems and support their successful development as part of the Climate Action Plan goals	▪ 249 MW of new battery storage was added ▪ Whilst the number of renewable projects energised in 2021 is less than previous years, primarily due to the gap between REFIT and RESS support auctions, ESB Networks has been using the opportunity to complete advanced enabling works for delivery of RESS-1 during 2022 and 2023 ▪ Engineering design works for 38 of the 54 DSO RESS-1 projects commenced, 8 of which progressed into the physical construction phase	▪ Delivery of RESS-1 projects will be a key priority for 2022. Currently 47 DSO projects are programmed to be energised before 2022 year-end ▪ Design and construction works will continue the delivery of the 10 TSO connected RESS-1 projects ▪ 4 Renewable projects connecting through the use of Corporate Power Purchase Agreements are expected to energise in 2022
In line with PR5 contract, commence changes to retail market processes and supporting IT systems to enable smart prepayment services in 2023	▪ Following CRU consultation and publication of the prepayment policy document in Sept 2021, ESB Networks are engaging with all market participants to identify and agree the changes required to the electricity retail market systems to support smart prepayment services	▪ Confirm the changes required to the electricity retail market processes to deliver smart prepayment services, agree delivery plan with all market participants and commence detailed design and build activities
Facilitating more e-heat and e-transport across society in line with the National Climate Action Plan by developing the low voltage network	▪ Following a public consultation, published the Strategy for the Electrification of Heat and Transport which focuses on 3 themes (i) removing ESB Networks policy barriers (ii) engage-enable-empower customers to electrify and (iii) ensuring network readiness ▪ Progressed 36 initiatives directly linked to the implementation of the strategy ▪ Stood-up the LV network readiness plan to deliver targeted enhancement of the LV network to facilitate the seamless electrification of transport without impacting continuity or power quality ▪ Progressed the 'LV vision' workstream to ensure that areas of the LV network with customer demographics that might see increased LCT uptake are suitably visible to ESB Networks and identifies network readiness work	▪ Continued implementation of the strategy including the delivery of new tools and solutions to strengthen the network to cater for increased electrification
Strategic		
Enabling customer transition to low-carbon by transforming the role of the DSO with a focus in 2021 on establishing a Networks Active System Management Project to act as a vehicle for this transformation for the coming years	▪ In Q4 2021 the programme was publicly launched as the National Network, Local Connections Programme by Minister Eamonn Ryan ▪ The programme overview and 10 design proposals (addressing delivery, customer, market, and technology needs) were the subject of public consultation and regulatory consideration in Q4	▪ Pending regulatory decisions in early 2022, phase 2 of the programme will commence ▪ Throughout 2022, detailed design activities will progress, along with the development, testing and deployment of the first demand side flexibility pilot, to go live in Q4 2022 in up to 6 locations nationwide ▪ Delivery of increasingly advanced power system studies to inform the development of long-term flexibility services and the procurement of a programme solution partner and of a technology vendor to deliver the primary operational technologies required
Safely install 500,000 smart meters during 2021 **Continue delivering against National Climate Action Plan actions through PR5 plans**	▪ Successfully installed a total of 380,000 smart meters in 2021, bringing the overall total to 620,000 ▪ Successfully delivered changes to the electricity retail market processes and supporting IT systems to enable electricity supply companies to offer smart services from February 2021 ▪ Commenced remote reading of smart meters significantly reducing the number of estimated bills.	▪ Safely install 500,000 smart meters in 2022 which will bring the total number of meters installed to in excess of 1 million

Northern Ireland Electricity Networks (NIE Networks)

Jerry O'Sullivan

Deputy Chief Executive

KPI	Operating Profit	Capital Expenditure	Regulated Asset Base (RAB)
2021	€74 million	€193 million	£1.8 billion
2020	€85 million (€11 million)	€140 million +€53 million	£1.6 billion +£0.2 billion

What were the key achievements for NIE Networks in 2021?

2021 saw NIE Networks continue to deliver on its commitments to customers with a further investment of over €193 million in the network alongside a continued strong performance on network availability with Customer Minutes Lost (CML) remaining close to historically low levels, despite COVID-19 continuing to impact on activities.

2021 was also marked by the twin challenges of rebuilding the economy after the initial impact of the COVID-19 pandemic and transforming society to achieve net-zero carbon by 2050. NIE Networks is playing an active role in both those challenges, making practical proposals to stakeholders including the NI Executive that could contribute to creating higher paying jobs; developing a highly skilled and agile workforce; and delivering a more regionally balanced economy, as part of a green recovery.

In 2021, NIE Networks launched its Vulnerable Customer Strategy, outlining how it aims to treat all customers fairly and recognising that vulnerability is not always visible. The strategy outlines over 20 tailored ways that NIE Networks offer help and support to vulnerable customers, including areas where the company plans to improve services.

How did NIE Networks help ESB fulfil its strategy?

NIE Networks published its Networks for Net Zero report which outlines NIE Networks' aim of delivering a sustainable energy system for all customers. The report details how NIE Networks plans to facilitate increased renewable energy on the network and how it intends to enable an increasing uptake of low-carbon technologies such as electric vehicles, solar photovoltaics and electric heat pumps.

NIE Networks worked collaboratively with the Department for the Economy and other NI stakeholders on the development of a future energy framework for NI which was published in December 2021, and is working with customers to provide faster, cheaper and smarter connection solutions. The business continues to develop additional innovative solutions to create additional capacity on the distribution network at a lower cost than traditional reinforcement solutions and can be deployed much faster in response to the forecast changes in demand.

NIE Networks has been a significant contributor to ensuring that over 40% of Northern Ireland's electricity consumption is produced from renewable sources. This milestone has continued to be achieved since 2019 (with some variability based on the time period measured) and is now the accepted baseline as we move towards the much more challenging target laid out in the NI Energy Strategy of 70% by 2030. This has been supported through the connection of approximately 1.8 GW of renewable capacity to the network by NIE Networks, with a further 0.2 GW capacity committed to be connected by 2023.

NIE Networks has also made significant progress in 2021 on its journey to evolve into a Distribution System Operator (DSO) meaning NIE Networks will be better placed to manage and optimise the network for the future energy market in NI. NIE Networks completed a public consultation on potential options for the role of the DSO and has begun preparing its systems to enable these requirements as well as initiating the FLEX trial to engage customers to support demand management on the network.

OVERVIEW

NIE Networks is the owner of the electricity transmission and distribution networks in NI, transporting electricity to over 900,000 customers including homes, businesses and farms. NIE Networks' employees maintain and extend the electricity infrastructure across NI, connect customers to the network and ensure that equipment is safe and reliable. Approximately 9,000 new customer connections were delivered in 2021. NIE Networks also provides electricity meters and metering data to suppliers and market operators. NIE Networks develops and reconfigures the electricity network to facilitate the connection of further renewable generation.

NIE Networks does not supply electricity but provide services to all of the electricity suppliers operating in Northern Ireland.

As required under its regulatory licences, NIE Networks is an independent business within ESB with its own Board of Directors, management and employees.

SAFETY

NIE Networks is fully committed to protecting the health and safety of all employees, contractors and customers with an ambition of providing a zero-harm working environment where risks to health and safety are assessed and controlled. While a target of zero lost time incidents (LTIs) continues to be set, there were two LTIs during the year (2020: two LTIs and one fatality). All such incidents are thoroughly investigated to improve future safety.

The Company's "Safer Together – Our Pathway to Zero Harm" programme was developed as an enabling action plan to improve adherence to the safety value, reduce the risk of harm and improve the wellbeing of staff within the organisation. It was developed using feedback from safety focus groups held in October 2020 and the wider organisation learning arising from inquiries into a number of serious incidents and a fatal incident at Drumnakelly Main substation in August 2020.

The Safer Together Programme has had ongoing input and engagement with staff across the business and a particular feature has been an open and transparent conversation on the safety culture and how it can be improved across the business.

A significant number of initiatives have been identified across the Company and the implementation of these has been a business priority in 2021 and will continue to be so into 2022.

In September 2021 an individual was fatally injured while carrying out tree cutting in close proximity to an overhead line. NIE Networks has reviewed and investigated the incident and provided its findings to the Health and Safety Executive Northern Ireland which is conducting an inquiry into the incident. NIE Networks continues to promote public awareness of the hazards associated with electricity.

FINANCIAL PERFORMANCE

NIE Networks' operating profit for 2021 at €74 million is down €11 million on 2020 due to a decrease in revenues associated with the Public Service Obligation, offset by non-recurrence of additional costs incurred in 2020 as a result of the COVID-19 pandemic.

Capital Expenditure at €193 million is up € 53 million, reflecting a return to normalised levels following the impact of COVID-19 on the ability to deliver work programmes in 2020. Investment in the network was in line with the level of expenditure required to successfully deliver the physical outputs required in the current price control. 2021 capital expenditure was primarily related to the refurbishment and replacement of worn transmission and distribution assets to maintain reliability of supply and ensure the safety of the network.

OPERATING ENVIRONMENT

In 2021, NIE Networks has been focused on implementing its RP6 plan, with 68% of the outputs from the Network Investment Plan delivered to date which is in line with targets set in the current price control.

NIE NETWORKS' CUSTOMERS

NIE Networks has continued to manage outages in order to minimise the length of time that customers are off supply, which is particularly important with a greater number of customers now working from home. The average number of customer minutes lost due to planned interruptions to supply was 38 (2020: 33). The average number of minutes lost

due to faults in the distribution network was 42 (2020: 41). No complaints were taken up by the Consumer Council for NI (CCNI) on behalf of customers during the year (2020: 2).

Despite the continued positive performance on network availability, NIE Networks has seen an increase in customer complaints in the year, primarily due to the impact of necessary planned outages on customers working from home as a result of COVID-19. Working with customers to ensure the impact is minimised will continue to be a focus alongside supporting the most vulnerable customers.

In the event of a power cut or planned interruption to supply, NIE Networks offers a telephone information support service to customers who are dependent on life supporting medical equipment. Over 12,000 people are currently registered on NIE Networks' Medical Customer Care Register.

PEOPLE

NIE Networks employs a highly skilled workforce of 1,209 people ranging from lines persons to meter readers, jointers to electrical engineers, and finance professionals to human resource experts. NIE Networks is an accredited 'Investors in People Gold' Company.

NIE Networks is committed to a working environment which enables employees to realise their maximum potential and to be appropriately challenged and fully engaged in the business, with opportunities for skills enhancement and personal development. Human resources policies are aligned with key business drivers including performance and productivity improvement; clearly defined values and behaviours; a robust performance management process; and a strong commitment to employee development. In consultation with employee engagement groups, NIE Networks developed a new agile working policy in 2021 to reflect different working patterns developed during the COVID-19 pandemic.

Through increasing awareness of STEM subjects and partnerships with industry bodies, including Women in Business and the Institute of Directors, NIE Networks is striving to increase awareness of the careers on offer within the energy industry and attract more female employees. In 2021, NIE Networks retained its Bronze Diversity Charter Mark for its work in promoting gender diversity.

SUSTAINABILITY

NIE Networks has developed a Sustainability Action Plan 2021-2024 which outlines its commitments to reducing its business carbon footprint, electrifying c. 30% of its small fleet and improving buildings' energy performance during the period. NIE Networks has joined the United Nations' Race to Zero campaign and has committed to a 50% reduction in its carbon emissions by 2030.

NIE Networks has reduced its non-network carbon emissions by 10.1% during 2021 against the 2019 base year through a range of measures including improving the energy efficiency of work locations and leveraging technology to reduce the need for business travel.

NIE Networks has successfully cumulatively connected around c.21,000 customers who provide renewable generation capacity to the network, significantly adding to the available market capacity.

NIE Networks achieved Platinum level accreditation for the NI Environmental Benchmarking Survey for the fifth consecutive year in 2021. The survey recognises and rewards those organisations that are going above and beyond their legal requirements to improve their environmental impacts and better manage their resources.

Empowering Low-Carbon Living

As a member of the Energy Strategy Electricity Stakeholder Group and as an active participant in four of the thematic Working Groups led by the Department for the Economy ('Dfe'), NIE Networks contributed to the development of NI's Future Energy Strategy which was published in December 2021.

NIE Networks is working collaboratively with other stakeholders to assess a range of different pathways to 2050 net zero by considering deployment of various technologies such as renewables, electric vehicles, photovoltaic cells, energy storage and demand management.

NIE Networks welcomes the publication of the Energy Strategy and the aims included therein, many of which align with the Networks for Net Zero strategy published by the Company in June 2021, which highlighted the following priorities to support a low-carbon future for Northern Ireland:

- Joining up policy and regulation
- Accelerating investment in renewables
- Bringing forward network infrastructure investment
- Improving the planning process
- Modernising building regulations

Update on 2021 Priorities and Priorities for 2022

2021 Priority	2021 Progress	2022 Priority
Operational		
Ensure the health and safety of employees, contractors and the general public and achieve a zero-harm work environment through implementation of the Safer Together programme	▪ Safer Together programme advanced with initiatives identified and implementation commenced ▪ Retained relevant ISO accreditations	▪ Continue to progress Safer Together programme with emphasis on culture and people-centred approach to safety
Deliver a sustainable reduction in our internal carbon footprint by embedding low-carbon behaviours and practices	▪ Sustainability Action Plan 2021-2024 launched ▪ 10.1% reduction in internal carbon footprint	▪ Support delivery of Sustainability Action Plan
Deliver strategy to achieve RP6 service commitments while delivering a modern customer service through Customer Service Action Plan	▪ Launch of Vulnerable Customer Strategy ▪ Ongoing customer engagement through Customer Engagement Advisory Panel ▪ Continued management of outages to reduce customer minutes lost	▪ Continue to deliver strategy to achieve RP6 service commitments ▪ Develop and deliver Customer Service Action Plan to enhance customer service
Operate successfully in a contestable connections market while responding to the changing shape of the market post COVID-19	▪ Launch of online tool to enable customers to track their connection job ▪ Retained significant market share while facilitating active competition and customer choice	▪ Continue to operate successfully in a contestable connections market while responding to the changing shape of the market
Deliver RP6 programme within allowances while maintaining a safe and secure network and adapting to any practices and restrictions imposed by COVID-19 **Adapt RP6 Programme to respond to the delays imposed by Covid-19 to ensure all outputs delivered over programme term**	▪ Substantial capital investment (€193 million) during 2021 with spend incurred in line with allowances ▪ Working practices updated to address COVID-19 risks	▪ Review business plans to 2024 and take necessary steps to ensure NIE Networks remains on track for successful delivery of RP6 ▪ Submit RP7 business plan
Strategic		
Invest in employees through effective employee development and increased employee engagement with focus on encouraging continuous improvement as well as responding to the changes in work practices arising from COVID-19	▪ Renewed focus on Employee Engagement Board and Industrial Voice forums ▪ Detailed Safety Culture Assessment carried out across the business ▪ Development of Agile-Working policy ▪ Investors in People Gold re-accreditation	▪ Continue investment in employees through effective employee development and increased employee engagement with focus on encouraging continuous improvement as well as responding to changes in work practices and Safer Together programme
Effective engagement with key stakeholders to aid development and implementation of NI's Future Energy Strategy as well as the development of NIE Networks' RP7 Price Control submission **Engage on key policy decisions and processes required for RP7 Price Control**	▪ Significant engagement with DfE and other stakeholders in 2021 ▪ Preparation for RP7 Price Control submission progressed, including engagement with UR	▪ Continue effective engagement to ensure NIE Networks understands and can meet stakeholder needs ▪ Development of NIE Networks' RP7 Price Control submission to meet societal, customer and business needs ▪ Engage on key policy decisions and processes required for RP7 Price Control
Monitor funding market conditions to assess optimal timing for next fundraising	▪ Funding requirements reviewed on a regular basis	▪ Continue to monitor funding market conditions to assess optimal timing for next fundraising
Contribute to the development of a new energy policy for NI appropriate to achieve net-zero carbon by 2050 **Engage with DfE and the NI Executive to pursue investment consistent with Green Recovery options**	▪ Publication of "Networks for Net Zero" strategy ▪ Actively involved in shaping NI energy policy ▪ Obtained regulatory approval to progress additional low-carbon projects ▪ Commenced FLEX network demand management trial	▪ Continue to engage and influence on energy policy issues to support decarbonisation and electrification ▪ Contribute to the implementation of NI's Future Energy Strategy ▪ Initiate accelerated deployment of LCT solutions in line with Green Recovery programme
Engage with stakeholders to begin implementation of DSO activities in line with public consultation	▪ Investments for DSO transition initiated following public consultation	▪ Engage with stakeholders to begin implementation of DSO activities in line with public consultation ▪ Working with regulated funding to implement DSO practices

Generation and Trading (GT)

Jim Dollard

Executive Director, Generation & Trading

KPI

	Operating Profit*	Capital Expenditure
2021	€184 million	€209 million
2020	€108 million +€76 million	€121 million +€88 million

*before exceptional items of € 82 million (2020: -€188 million)

What were the key achievements for Generation and Trading in 2021?

There were two key achievements for Generation & Trading (GT) in 2021:

1. Major progress in the delivery of GT's renewable strategy.
ESB intends to have at least 5 GW of renewable energy assets by 2030 and 2021 has seen GT investing in building a pipeline of renewable energy assets across a range of technologies to meet its renewables target.

- In April 2021, ESB launched its ambitious Green Atlantic @ Moneypoint Programme in County Clare. During the coming decade the site will be transformed into a green energy hub, helping Ireland to become a leader in green energy production. Green Atlantic @ Moneypoint is a multi-billion euro programme of significant investments on the site over the next decade.
- Significant growth in ESB's footprint in offshore wind. In 2020, ESB acquired a 50% shareholding in Inch Cape (IC), a 1,080 MW offshore wind farm development project, located off the east coast of Scotland. The project is progressing well through the development phase with a number of geotechnical surveys completed during the year. Commercial Operation is targeted for 2026.
- Construction continued on the 448 MW Neart na Gaoithe offshore wind project, also off the east coast of Scotland. While significant progress has now been made, challenges have been experienced in the delivery of the foundations package which will result in the project being delayed and additional construction costs are expected to be incurred. An impairment charge of €154 million has been recognised, reflecting the impact of this delay.
- Offshore wind in Ireland remains a key focus for ESB through continued partnering with Parkwind in the development of the Oriel and Clogherhead wind farms, both located off the coast of Co. Louth.
- ESB and Equinor had commenced the co-development of several offshore wind projects in Ireland. Following a change in strategic focus, Equinor has chosen to cease further offshore development in Ireland. However, ESB retains the rights to all work to date on the projects involved and intends to develop them further.

Development of a significant future pipeline of onshore wind assets:

- In partnership with Bord na Mona, construction commenced on the 83 MW Oweninny Phase 2 wind farm in north Mayo.
- FuturEnergy Ireland, a joint venture between ESB and Coillte to develop up to 1,000 MW of onshore wind in Ireland on Coillte lands commenced operations.
- Ongoing optimisation of wholly owned solar and wind farm developments in preparation for RESS auctions in 2022.

2. Contributing to energy security of supply in Ireland.
During 2021 the combination of rapidly increasing fuel commodity prices and continued growing demand for electricity in Ireland, has highlighted the need for adequate levels of reliable and dispatchable electricity generation capacity on the system. This is key to supporting the transition to a net-zero electricity system, and supporting the electrification of heat and transport, which is central to decarbonising our society.

As one of several players in the electricity generation sector in Ireland, ESB has a role to play in helping to maintain electricity security of supply.

- Output from Moneypoint increased in 2021 which was driven by the forced outages at non-ESB plants, 2021 being a low wind year and extremely high gas prices in the second half of the year in particular. The Moneypoint plant will cease coal burning by 2025 and before the end of the decade it is intended the site will be fully repurposed as a green energy hub as part of the Green Atlantic project.
- GT has commenced construction of four battery projects (Inchicore, Aghada, Poolbeg and Ringsend), totaling 154 MW. It is expected that all four will be in operation by Winter 2022/23.
- GT is also developing three separate gas generation projects which together can contribute approximately 190 MW of new generation capacity in the Dublin region. These projects originally secured 10-year contracts in a Capacity Remuneration Mechanism (CRM) auction in 2019 for capacity year 2022/23. However, ESB encountered delays in the development process which resulted in these capacity contracts being terminated in May 2021. ESB continued to develop the projects and has now secured planning on all three sites. In February 2022, the provisional outcome of the T-3 auction 2024/25 saw the three projects successfully securing 10 year capacity contracts.

How did Generation & Trading help ESB fulfil its strategy?

ESB has a strategic objective to support the decarbonisation of the electricity sector. To meet this goal, as described above, GT is investing in renewable energy assets across a range of technologies to meet its renewables target. GT is also developing assets that will support the grid in transitioning to a low-carbon future, such as battery and storage assets, synchronous compensators and flexible gas fired units that respond quickly to system demand, which will be key to facilitating large scale renewables in the future.

OVERVIEW

The GT business develops and operates ESB's portfolio of wholly and jointly owned electricity generation assets. It also has a significant owned asset and 3rd party asset energy trading portfolio. The generation fleet consists of 5,404 MW of generation assets across Single Electricity Market (SEM) and Great Britain (GB) including 983 MW of renewable assets, with a further 438 MW under construction in renewables and storage capacity. With a strong focus on safety, GT delivers value by:

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

FINANCIAL PERFORMANCE

GT's operating profit, before exceptional items, at €184 million is up €76 million on 2020. This is mainly due to higher energy margin in GB driven by a "tight" electricity system (the gap between available generation and customer demand being narrower than normal), higher prices and lower net operating costs.

Two exceptional items were recognised in 2021:

- In June 2021, ESB successfully completed the sale of its 47% stake in Tilbury Green Power, a waste wood energy plant in Great Britain. An exceptional gain of €82 million arose on the asset disposal, including the reversal of previous impairment charges.
- GT has incurred an exceptional impairment charge of €154 million in the year on the Neart na Gaoithe Offshore wind farm development.

Capital expenditure of €209 million in 2021 primarily relates to ESB's continued investment in renewable assets, including the acquisition of a 50% interest in the FutureEnergy Ireland joint venture with Coillte, additional investment in the Neart na Gaoithe offshore wind farm and the continued investment in the overhaul and maintenance of existing assets.

OPERATING ENVIRONMENT

The generation business is changing rapidly, in particular the thermal plants in the market. Competition, regulation and decarbonisation have significantly changed the landscape, creating a challenging operating environment, particularly for thermal plants. Several factors have contributed to system tightness in SEM in 2021, including forced outages of 2 non-ESB gas plants, lower wind load factors and significant maintenance outages which were deferred from 2020 due to COVID-19. Portfolio running in 2021 was ahead of 2020 and GT will continue to evolve and adapt the thermal portfolio so that its commercial performance is maximised.

The wholesale electricity markets have experienced considerable volatility in 2021, largely driven by movements in commodity prices such as gas, coal and carbon, but also through certain market issues such as wind variability, plant outages and overall system supply/demand balance. ESB has managed these exposures through significant margin hedging.

GT CUSTOMERS

GT continues to offer a variety of traded contracts to all supply companies in SEM, on a non-discriminatory basis, via an over-the-counter trading platform in weekly trading windows. These trading windows provide suppliers with the opportunity to hedge their power exposures to mitigate against market volatility risk for their customers.

PEOPLE

Employee numbers in GT of 692 are reduced from 796 in 2020. GT continues to focus on maintaining the safe and effective performance of its asset base while delivering on ESB's strategy.

Health, safety, and wellbeing is of fundamental importance and GT's 2021 safety improvement programme was directed at continuing to deliver our Safe System of Work programme, embed the process safety programme and deepen the approach to behavioural safety through the Safe and Sound Programme. In respect of wellbeing, in particular given COVID-19, GT actively promoted greater awareness of health and wellbeing, including encouragement of uptake in ESB's Mental Health First Aid training programme and ESB's dedicated Health & Wellbeing week, focused through local Health & Wellbeing Champions.

All locations within GT operate and maintain safety management systems that are certified and externally audited to recognised international standards, for which accreditation was maintained in 2021. Additionally, all GT locations have now succeeded in moving accreditation from the OHSAS 18001 standard to the replacement ISO 45001 standard.

Employee engagement continues to be key to successful performance for the GT business, even more so during the COVID-19 pandemic. Using the employee survey results and other feedback, GT has embedded a tailored programme of engagement to support managers, share innovative thinking and keep people connected, healthy and safe.

SUSTAINABILITY

GT operates its business with a focus on minimising environmental impact, aiming to significantly increase renewable generation and reduce the overall carbon intensity of electricity generation. ESB is committed to leading a secure and affordable transition away from the use of coal and peat for power generation with the closure of its peat plants in 2020. CO_2 output from GT's generation plants is lower than 2005 (reference date) by approximately 46%, and the carbon intensity of generation reduced by 34% to 440 g/kWh.

Update on 2021 Priorities and Priorities for 2022

2021 Priority	2021 Progress	2022 Priority
Operational		
Continue to maintain a healthy and injury-free workplace	▪ A continued heightened focus on learning from incidents, greater emphasis on wellbeing in COVID times	▪ Continue to maintain a healthy and injury-free workplace with a sustained focus on lessons learned from incidents
Commence phase 2 of Safe System of Work whilst continuing to broaden and deepen the Safe and Sound Programme	▪ Both Phase 2 (full roll-out) of Safe System of Work and broadening and deepening the safe and sound programme in the business have commenced	▪ Continue phase 2 of Safe System of Work ▪ Continue to further broaden and deepen enrolment in Safe and Sound
Strengthening of process safety practices in the business	▪ Further embedding of process safety	▪ Continue to reinforce best process safety practices in the business
Continue to oversee the initial stages of build out of Neart na Gaoithe (NNG) offshore wind farm	▪ Continue to oversee the build out of NNG offshore wind farm	▪ Continue to oversee the build out of NNG offshore wind farm
Oversee the commercialisation of Inch Cape offshore wind farm		▪ Secure a CFD in the AR4 auction and progress the project to financial close
Maintain a high level of performance in both generation and trading	▪ Annual availability of the generation fleet was slightly lower than 2020 due to deratings at Moneypoint in 2021	▪ Maintain a high level of performance in both generation and trading
Continue to evolve and adapt the thermal portfolio so that its commercial performance is maximised	▪ A strong commercial performance in 2021, in which Trading was able to lock-in strong energy margins under its forward electricity contracts and allowing it to prudently manage exposure to unprecedented volatility in the commodity markets	▪ Continue to evolve and adapt the thermal portfolio so that its commercial performance is maximised
Strategic		
Increase the number of opportunities for investment in low-carbon generation including solar and offshore wind	▪ Significant progress made in 2021 with onshore wind projects, specifically Oweninny 2 and the joint venture with Coillte ▪ Continued partnership with Parkwind on development of Oriel and Clogherhead offshore wind farms ▪ Development of four battery projects (Inchicore, Aghada, Poolbeg and Ringsend) ▪ Launched transformation of Moneypoint into a green energy hub	▪ Increase the number of opportunities for investment in low-carbon generation including solar, storage and offshore wind
▪ **Manage the efficient and orderly closure of the peat stations**	▪ Managing the efficient and orderly closure and decommissioning of the peat stations	▪ Manage decommissioning of the peat stations and site restoration in line with EPA Industrial Emissions Licence. Explore further options for the sites to benefit the local community and provide energy security to the grid

Empowering Low-Carbon Living

New technologies are transforming Ireland's energy system, providing opportunities to harness sources such as solar, wind and storage to collectively create a clean electricity mix. ESB are targeting the transformation of Moneypoint into a green energy hub and this will be a major step in deploying a range of renewable technologies over the next decade with the capacity to power 1.6 million homes. These new technologies will encompass four main projects:

1) A synchronous compensator on the Moneypoint site
2) An onshore hub, which will facilitate construction of wind turbine foundations and assembly of the wind turbines before floating them to their sites along the western seaboard
3) An offshore wind project spread across at least two phases totalling 1,400 MW, with the first phase planned for delivery in 2028
4) A medium-term hydrogen facility onsite, which will convert excess offshore wind energy to hydrogen for storage and other uses

Construction of the synchronous compensator commenced in 2021, with commercial operation planned in October 2022. When complete, this compensator will be the first in the country and will incorporate the world's largest flywheel used for grid stability purposes. This will promote the connection of greater volumes of renewable energy on to the electricity system.

Work on the onshore hub is also progressing well. When completed, Moneypoint will become a centre for the construction and assembly of floating wind turbines. A deep-water port already exists at the site, making it an ideal staging ground for the construction of offshore wind farms.

Customer Solutions

Marguerite Sayers

Executive Director, Customer Solutions

KPI

	Revenue	Operating (Loss)/Profit*
2021	€3.1 billion	(€19 million)
2020	€2.2 billion +€0.9 million	€58 million (€77 million)

*before exceptional items of (€61 million) (2020: €Nil)

What were the key achievements in 2021 for Customer Solutions?

During 2021, Customer Solutions through its brands Electric Ireland, ESB Energy, So Energy, Electric Ireland Superhomes, ESB Smart Energy Services, ESB eCars and ESB Telecoms continued to offer exceptional service and excellent value to all its customers.

As the impact of the COVID-19 pandemic continued to be felt throughout the year, each business adapted to the shifting environment to ensure that customers were supported throughout. Our number one priority was to safely provide a reliable retail energy service to over 1.9 million customers in our various markets, with the level of care and service that our customers have come to expect from us. I'm proud to say we have delivered on that commitment.

The launch of a COVID-19 Hardship Fund with our partners in the Saint Vincent De Paul (SVP) and the Money Advice and Budgeting Service (MABS) was a proactive initiative by Electric Ireland in that respect, and we also put in place a moratorium on disconnections for most of the year, as well as an increased range of flexible payment plans.

Delivering on ESB's low-carbon strategy was also a significant focus for Customer Solutions during 2021. The launch of Electric Ireland Superhomes in Ireland and the acquisition of a renewable energy retail company (So Energy) in GB further strengthened our position to deliver for customers. We were also proud to launch a suite of smart tariffs for customers with smart meters, and our customers have really embraced those tariffs - over 70% of the customers who have opted for a smart tariff in Ireland are Electric Ireland customers.

How does the business help ESB to fulfil its strategy?

Engaged, connected, informed customers are key to transitioning to a low-carbon future.

Customer Solutions is pivotal in helping ESB deliver on its strategy and in supporting the delivery of the Climate Action Plan. It does this through products and services that inform customers on energy use and allow them to control and optimise when they use their energy. Electric Ireland's smart tariffs help customers to use energy when it is most beneficial to them and to the system, and green tariffs provide customers with a guarantee that their energy comes exclusively from renewable sources. Both Electric Ireland and So Energy install solar panels, batteries, EV chargers and smart controllers to further help customers with their energy needs. Our new Electric Ireland Superhomes JV provides a one-stop-shop to project manage deep energy retrofits in customer homes. For business customers, Smart Energy Services provides expert advice on Solar PV, process optimisation and low-carbon heating and cooling technologies. Through our eCars business, we are also pivotal to the decarbonisation of transport by providing a national, public EV infrastructure in ROI and NI, and working with a number of organisations and Borough Councils in GB to install charging networks.

OVERVIEW

Customer Solutions brings together all ESB's retail offerings in Ireland and GB, including Electric Ireland, ESB Energy, So Energy, Electric Ireland Superhomes, ESB Smart Energy Services, ESB eCars and ESB Telecoms.

Electric Ireland is the energy retail arm of ESB in ROI and Northern Ireland (NI), supplying electricity and energy services across the island, as well as gas in ROI. With over 1.4 million customers and an electricity all-island market share of 40%, Electric Ireland serves all market segments, from domestic households to large industrial and commercial businesses, in both ROI and NI. It also has 22% of the residential gas market share in ROI.

Since 2018, ESB Energy has been ESB's electricity and gas residential retail business in GB, serving over 160,000 electricity and gas residential accounts. During 2021, Customer Solutions expanded its ESB Energy retail business by acquiring the majority shareholding in So Energy, a retail brand offering 100% renewable energy. The integration of these businesses brings the best of both companies together under the So Energy brand, supplying a total of c.560,000 electricity and gas accounts.

Electric Ireland Superhomes is a "One Stop Shop" which project manages all of the key stages of a home energy retrofit, from retrofit design through to project completion and application for SEAI grant funding.

ESB eCars builds, owns and operates electric vehicles (EV) charging networks for public use across ROI, NI and GB. This network contains over 1,350 charger points on the island of Ireland, as well as over 350 charger points in GB.

ESB Telecoms operates within the wholesale ROI Telecoms market, maintaining and operating c. 420 telecoms transmission structures and over 2,000 km of fibre optic network.

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

FINANCIAL PERFORMANCE

Revenue in Customer Solutions in 2021 was €3.1 billion, an increase of just over 40% compared to 2020. This increase was mainly due to an increased market share in the Irish Large Energy User (LEU) sector, the acquisition of So Energy in GB and the impact of significant wholesale energy price increases.

Despite the increase in total revenue, Customer Solutions reported an operating loss of €19 million (before exceptional items). Financial performance within ROI and NI was largely in line with prior years. However, losses incurred in the GB retail business resulting from increasing costs in the wholesale energy market coupled with regulatory mandated price cap has driven an overall loss for the year 2021.

Given the losses incurred and the market conditions in GB, an onerous contract provision (primarily relating to Standard Variable Tariff customers) and an impairment charge in respect goodwill associated with the acquisition of So Energy have been recognised. This has resulted in an exceptional charge totalling €61 million. Further detail is available in note 6 of the financial statements.

OPERATING ENVIRONMENT

The COVID-19 pandemic continued to define the operating environment for all ESB's businesses in 2021. The scale of the challenges faced by all customers and staff across all sectors and jurisdictions, was significant and unprecedented. Customer Solutions adapted to deliver for customers despite the constantly changing environment and ensured service levels and customer experience were maintained and enhanced during 2021.

The energy retail market in ROI is a dynamic and competitive market with a high level of churn or customer switching. Electric Ireland focusses on rewarding loyal customers with enduring discounts, one of the cheapest standard unit rates in the market, excellent customer service and innovative products. The ROI market, in common with the rest of Europe, was heavily impacted by significant wholesale energy price volatility in 2021. Electric Ireland's effective trading positions ensured its tariff increases were lower than all its main competitors, in both electricity and gas.

In NI, Electric Ireland competes with 6 suppliers in the residential electricity market. The market in NI is also competitive, with all suppliers being proactive with campaigns targeting acquisition and customer retention. Electric Ireland is the fourth biggest supplier in NI.

The GB market is intensely competitive, and had c.70 retailers in the market at its peak in 2018. While there has been significant consolidation in the energy market over the last few years, the last few months of 2021 saw an acceleration in this consolidation with more than 25 electricity supply companies exiting the market in Autumn/Winter, resulting from dramatically increased prices in the wholesale energy market, coupled with a regulatory-mandated price cap. Customer Solutions do not believe that the current price cap mechanism is fit for purpose, particularly in a period of volatile energy prices and are engaging with OFGEM on a number of regulatory consultations to review the price cap mechanism. So Energy believes that it is in a unique position to provide customers with real choice in GB in coming years, offering a renewable, innovative, digital, customer-centric experience for customers.

Climate change concerns, along with the increased availability of digitisation and technology, has resulted in a significant shift in customer expectations over the past number of years:

- For residential customers, green energy plans, smart energy controls, smart security systems, peace of mind services and data analysis tools are all becoming key parts of customer propositions
- The updated Climate Action Plan in Ireland published in November aims to increase the number of EVs in ROI to c.945,000 and deliver c.500,000 home retrofits by 2030
- In GB, the public electricity charging market is also very active, with c. 35 companies offering EV charging
- Large energy users (LEU) across all jurisdictions are also seeking to improve their low-carbon credentials and deliver operational efficiencies, leading to an increase in the number of energy advisory companies operating in the LEU market

CUSTOMER SOLUTIONS' CUSTOMERS

Maintaining a strong connection with customers remained the key concern for Customer Solutions in 2021 as the COVID-19 health emergency continued. All key performance indicators and customer satisfaction levels were maintained throughout 2021, despite having to deliver these services in a virtual manner, with staff almost exclusively working remotely and away from normal office locations.

Supporting communities has always been hugely important for ESB and this was more important than ever in 2021. Electric Ireland's sponsorship campaigns – including the Darkness Into Light event for Pieta House, the GAA Minor Championship and Game Changers (IFA Women's football in NI) showcased how communities show up for each other, and Electric Ireland was proud to be part of those endeavours.

2021 also saw the launch of a €2 million COVID-19 Hardship Fund as part of long-standing partnerships between Electric Ireland, The Society of St Vincent De Paul (SVP) and the Money Advice and Budgeting Service (MABS). This fund seeks to provide support to customers who may have been impacted financially by COVID-19 and are therefore struggling to pay their energy bills. Customer Solutions also agreed to contribute to a hardship fund in NI being co-ordinated by the Utility Regulator and have also agreed to participate in the Warm Home Discount Scheme in GB.

Customer Solutions further enhanced its service offerings during 2021:

- Launch of Electric Ireland Superhomes, a "One Stop Shop" to look after all the key stages of a home energy retrofit, from retrofit design through to project completion and payment of SEAI grant funding
- Electric Ireland's Smart Metering 'Home Electric+' plans to help customers learn more about their energy usage, decrease their overall electricity usage and reduce their bills by availing of cheaper electricity at different times of the day
- Acquisition of a leading UK energy supplier, So Energy, to enhance its position in the UK retail market and continue its commitment to delivering clean, secure and affordable energy to customers. The merger of So Energy and ESB Energy will result in a business serving more than 300,000 customers, the majority of whom are dual-fuel

PEOPLE

Customer Solutions could not meet its strategic and operational targets without the capability, knowledge, dedication and performance of its staff who are enthusiastic about delivering for customers in line with ESB's strategic objectives. A continued strong focus on employee development and targeted recruitment across a range of disciplines linked to the growth strategy will ensure that Customer Solutions continues to be a very attractive place to work, while providing customers with competitive offerings, excellent customer service and new and innovative products to meet changing needs.

SUSTAINABILITY

Electric Ireland is conscious of operating its business in a sustainable and environmentally responsible way and is certified to ISO 14001 standard. Electric Ireland actively works with customers to assist them in improving the sustainability of their homes and businesses through the efficient use of the energy provided to them.

Empowering Low-Carbon Living

Providing customers with excellent services and products has always been integral to the success of ESB. Ensuring all customers are supported with the challenges life throws up today, while working together to transition society to a more efficient and decarbonised future, is the driving force behind everything that Customer Solutions delivers.

Through the establishment of Electric Ireland Superhomes, Customer Solutions has created a service that supports the Climate Action Plan ambition of 500,000 home retrofits by 2030 and enables customers achieve a comfortable, healthy and low-carbon home through a whole house retrofit powered by a renewable energy.

Update on 2021 Priorities and Priorities for 2022

2021 Priority	2021 Progress	2022 Priority
Operational		
Deliver a best-in-class digital customer journey by improving personalisation, online functionality, capability and personalised insights	▪ Personalised insights on energy usage that builds over time are a key feature of the new Smart Metering products launched in 2021 ▪ Ensured all service performance metrics were maintained despite the impact of COVID-19	▪ Deliver additional improvements to the digital customer journeys improving customer service and further empowering customers ▪ Lead the delivery of personalised insights to electricity customers in Ireland as smart meters continue to be rolled out nationally
Strong and robust management of the cost base across Customer Solutions to continue to deliver value for money for all customers	▪ Excellent cost management delivered, facilitating commitment to reward loyal customers with discounts every year	▪ Deliver efficiency across the cost base to ensure Customer Solutions can continue to offer competitive pricing propositions for all customers
Continue to deliver a customer focused but effective credit management strategy and ensure vulnerable customers are protected and excessive debt is not amassed. This will be especially important in the context of the continuing COVID-19 pandemic and increasing wholesale energy costs	▪ Disconnection moratoria proactively put in place for customers during COVID-19 lockdowns ▪ Launch of €2m Covid Hardship Fund with long-standing partners SVP and MABS to support customers ▪ Range of products and payment options coupled with early interaction with customers	▪ Continue to deliver a customer focused but effective credit management strategy and ensure vulnerable customers are protected ▪ Ensure continued engagement with State agencies and charities to support customers
Deliver the roll-out of high-power charging hubs and replacement of standard chargers. This will transform the experience for EV owners across ROI **Deliver a range of solutions for customers' needs through delivery of new services and products**	▪ Over 240 standard chargers (up to 22kW) have been replaced, 35 standard chargers have been upgraded to fast chargers (up to 50kW) and nine high power (up to 150kW) multi-site hubs have been deployed to-date ▪ Over 98% reliability achieved in the public charging infrastructure ▪ Launch of the Heat Pump Service for customers in 2021 to support customers with "All Electric Homes"	▪ Deliver for customers a range of innovative products and services ▪ Deliver the roll out of high-power charging hubs and replacement of standard chargers. This will transform the driver experience for EV owners across ROI & NI
Strategic		
Improving customer experience across all market segments, is of critical importance for Customer Solutions. As a result, there will be ongoing investment and development of digital capability	▪ Launch of a range of innovative smart meter price plans for customers with new options that have not been available in the market previously e.g. "Weekender" and "Night Boost" which offer free Saturdays or Sundays or very low rates at night tailored for the EV drivers in society	▪ Customer Solutions businesses have an ongoing focus on development of the digital service capability across the entire customer experience journey
Customer Solutions will lead the way to a brighter future by focussing on delivering on all energy efficiency targets, as well as offering customers new products and services to encourage more energy efficient behaviours	▪ Launch of Electric Ireland Superhomes - a 'One Stop Shop' which looks after all the key stages of a home energy retrofit, from retrofit design through to project completion and payment of SEAI grant funding	▪ Customer Solutions will lead the way, encourage and reward more energy efficient behaviours ▪ SES and Electric Ireland Superhomes will provide energy services to our commercial and residential customers by delivering solutions to deliver low-carbon heat solutions
Ensure value and price stability for customers by continuing to successfully manage market liquidity and ensure effective hedging of wholesale market risk	▪ Successfully managed market volatility as much as possible to ensure price stability was maintained for our customers to the greatest extent possible ▪ Electric Ireland's residential electricity price increases were the lowest in the market in ROI in 2021	▪ Ensure value and price stability as much as possible for customers by continuing to successfully manage market volatility and ensure effective hedging of wholesale market risk
Grow Customer Solutions' various brands, service offerings and market shares across the NI and GB markets, by delivering value and excellent customer service to customers	▪ Acquisition of a leading UK energy supplier, So Energy, to enhance its position in the UK retail market and continue its commitment to delivering clean, secure, and affordable energy to its customers	▪ Continue to grow Customer Solutions' brands, offerings and market shares across the NI and GB markets ▪ Grow Customer Solutions' residential position in GB through So Energy

Engineering and Major Projects

Denis O Leary

Executive Director (Acting), Engineering & Major Projects (EMP)

What are the key achievements in 2021 for EMP?

Engineering and Major Projects (EMP) purpose is to deliver the major projects and engineering solutions required by ESB and its customers to lead the transition to reliable, affordable and low-carbon energy.

During 2021 EMP worked closely with Generation and Trading (GT) to progress the delivery of GT's growth strategy through development of new renewable generation opportunities including Inch Cape Offshore Limited, a 50:50 joint venture with Red Rock Power Limited to develop a large c.1,080 MW wind farm development off the east coast of Scotland. EMP is also working on a range of other renewable development projects offshore and onshore through ESB partnerships with EdF Renewables on the Neart Na Gaoithe 448 MW wind farm off the coast of Scotland, with Parkwind on the development of the Oriel and Clogherhead wind farms off the East coast of Ireland and with Bord Na Mona on the development of the Oweninny (Phase 2) 83 MW onshore wind farm project in Co. Mayo. EMP is also working with GT to develop and deliver the Green Atlantic @ Moneypoint project which has the objective to create a green energy hub at ESB's Moneypoint site in Co. Clare. The first renewable enablement phase of this project commenced in 2021, with the commencement of the construction by EMP of a synchronous compensator to provide a range of electrical services to the electricity grid to enable higher volumes of renewables on the system. To further support renewables penetration on the system, EMP is also leading a number of construction projects to introduce fast acting batteries and flexible aero technologies on to the grid. EMP also successfully managed the generation maintenance outage programme during 2021 in collaboration with GT and supported the successful sale of Tilbury Power Limited, an Energy from Waste project located in London.

Working with ESB Networks, a number of large projects, including construction delivery of major infrastructure for the transmission network and distribution network, together with connections of major industrial customers, are now under the responsibility of EMP. The delivery of major projects by EMP and other work programmes by ESB Networks will maximise the delivery of the overall ESB Networks' work programme. During 2021, significant work was undertaken to develop and plan the delivery of the major ESB Networks projects required for the PR5 period (2021 to 2025). EMP managed the delivery of over €180 million of large ESB Networks projects in 2021.

Under Group Property and Security, the redevelopment of ESB's head office, Project Fitzwilliam, progressed well during the year with construction completed to the highest standards of sustainability. It is planned that ESB will occupy Fitzwilliam 27 as its head office in quarter 1 2022. As part of this redevelopment the sales contract for Fitzwilliam 28 which was agreed with Amundi Real Estate in 2020 was successfully completed in 2021. Fitzwilliam 28 has been entirely pre-let to the global technology company Salesforce.

ESB International continued to deliver a range of engineering, operations and maintenance solutions and consultancy services to both national and international clients. During 2021, ESB International provided utility management services to the national utility company in Liberia which was funded by the Millennium Challenge Corporation to help develop the performance of the utility to support the wider economic development in Liberia. ESB International also operated the Delimara 4 power plant in Malta through its major maintenance programme and delivered critical transmission projects up to 400 kV and also provides strategic advisory services to clients globally.

How does the business help ESB fulfil its strategy?

Engineering and Major Project delivery brings ESB's strategy to life by delivery of major projects and engineering solutions which enable the production, connection and delivery of low-carbon electricity. EMP aims to provide a centre of engineering excellence and to ensure consistent best practice major project delivery across ESB.

Whether it is new wind farms, electricity transmission or distribution projects, or technologies such as battery storage or flexible power generation, a commercial engineering capability is a core requirement for ESB. This capability also supports the ongoing maintenance of existing infrastructure, ensuring that these generation and network assets perform efficiently throughout their lives to meet customer and market needs.

The aim of a centralised approach to major project delivery is to deliver projects safely and efficiently which supports ESB's financial objectives. This approach is based on having best practice project and contract management capability that can be applied across the Group, while observing regulatory requirements.

OVERVIEW

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

CENTRE OF ENGINEERING

The Centre of Engineering includes civil, environmental and renewable engineering, generation engineering, and transmission and distribution networks engineering and delivery. These engineering functions are involved in new development projects from concept through to construction and commissioning. They also support the operation and maintenance of existing assets across the ESB Group, and work with Group Property and Security and ESB International.

MAJOR PROJECT DELIVERY

Two separate functional areas within EMP have separate responsibility for the delivery of major projects to Generation and Trading and ESB Networks. These work with the respective businesses and are building an enhanced capability to ensure these projects are delivered and that ESB reaches the goals set out in ESB's strategy.

GROUP PROPERTY AND SECURITY

Group Property and Security (GP&S) manages ESB's commercial property portfolio. The flagship project for GP&S is the development of ESB's head office in Fitzwilliam St, Dublin 2, the construction of which was completed in 2021. It is planned that ESB will occupy Fitzwilliam 27 as its head office in quarter one 2022.

This new 45,000 metres squared development will deliver a near-zero energy building, one of the most efficient and sustainable commercial office developments in Dublin city, while sensitively respecting and enhancing the Georgian streetscape.

ESB INTERNATIONAL

ESB International, a global provider of engineering consultancy services, is currently working in the Middle East, Africa and Asia. It also continues to work across Europe including Ireland and the UK. During 2021, ESB International continued to deliver for its clients, providing a range of services that are based on ESB's core capabilities of engineering, management and project delivery across the electricity sector.

Enterprise Services

Geraldine Heavey

Executive Director, Enterprise Services

What are the key achievements in 2021 of Enterprise Services?

As the centre of excellence for a wide range of key business processes and services across ESB Group, Enterprise Services' achievements in 2021 included:

1. Ensuring the successful continuity of all key business processes, services and projects that Enterprise Services delivers for ESB during the COVID-19 pandemic.
2. Continuing to support the other businesses in managing their COVID-19 response, including ongoing support of wide-scale remote working across ESB.
3. Taking a lead role and being an exemplar in the delivery of digital transformation and championing a digital first approach across ESB through:
   - Successful go-live and adoption of ESB's Enterprise Resource Planning (ERP) system and SAP's next generation platform, SAP S/4Hana along with HR modules Concur and Success Factors. This project was recognised at the SAP Customer Success Awards UK & Ireland 2021 with the 'Best Value to the Business' award
   - ESB's Accelerate Digital Programme, enabling and supporting digital transformation across ESB through new technologies, platforms and digital ways of working
   - Project Edge, a key enabler of smart working, including the provision of remote working functionalities (e.g. hardware/software) giving full flexibility to ESB staff by leveraging technology
4. Playing a lead role in the delivery of business transformation across ESB whilst also delivering on our own Transformation Programme.

How did Enterprise Services help ESB fulfil its strategy?

Enterprise Services' purpose is to enable ESB's strategy by leading, advising and delivering in its core areas of expertise, significantly contributing to the delivery of ESB's strategic and financial objectives by:

- Providing key strategic advice in relation to legal, procurement, pension, insurance, operational excellence, and other professional services
- Providing a wide range of key IT business processes and services to ESB Group, including IT service and project delivery, analytics and digital transformation expertise which places customer and people experience at the centre
- Providing a wide range of financial accounting, reporting and transactional services to ESB Group
- Continuing to safely manage ESB's property portfolio during the COVID-19 pandemic, as well as the fit out of ESB premises to enable smart working
- Playing a lead role in the delivery of performance improvement and business transformation across ESB
- Continuing to build and enable a safe, high-performance team, working in collaboration and partnership with the rest of ESB Group

OVERVIEW

Enterprise Services' core areas of expertise:

- The strategic advisor to ESB Group in relation to core Enterprise Services' functions focused on strategy delivery and value creation
- Responsible for providing business critical processes and services to ESB Group, focused on operational efficiency and effectiveness
- Responsible for leading the digital transformation of ESB Group, leveraging data and technology, as well as leading operational excellence across ESB

An overview of Enterprise Services' functions is summarised below:

Function	Purpose
Legal	The role of Legal is to provide legal advice, expertise, and transactional services across a wide range of practice areas and to advise on legal risks across ESB Group.
Procurement	The role of Procurement is to manage all procurement activity across ESB Group while observing regulatory requirements. This includes development of procurement strategy, policies and procedures, strategic procurement planning, and tendering services.
Pensions & Insurance	The role of Pensions & Insurance is to manage all pensions and insurance activities across ESB Group. This includes development of strategies, provision of expert advice and risk management. It also manages staff insurance services and the Medical Provident Fund.
Operational Excellence	The role of Operational Excellence is to deliver process improvement projects and drive a culture of continuous improvement across ESB Group.
CIO	The role of CIO is to shape world-class technology solutions that enable business growth and efficiencies and to oversee cyber security. This includes leading the transformation of ESB Group from an IT, digital and analytics perspective.
IT Delivery	The role of IT Delivery is to implement, scale and support IT and digital projects, products and services, and manage cyber security.
Business Operations	The role of Business Operations is to provide core business support functions such as People Operations, Finance Operations, Treasury Operations, Financial Planning & Analysis, Requisition to Pay, Facilities, as well as Customer Support.
Transformation Office	The purpose of the Transformation Office is to enable and support the delivery of transformation priorities across the different Enterprise Services functions.

These functions are supported by central Finance, Human Resources and Safety, Health and Wellbeing teams, and operate in compliance with licence and other legal requirements.

Responsible Business Report

Overview

Pat Naughton

Executive Director, People and Organisational Development

Following the significant mobilisation of the business in the face of the COVID-19 pandemic through 2020, this past year saw ESB manage the continuing impact on our ways of working. This manifested as continued enforced remote working for our office-based employees, and in our asset-based and site-based employee population, sustaining the additional safety measures, resulting in these groups remaining largely remote from others to ensure continuity of electricity supplies.

The challenge of maintaining company culture and keeping people connected to ESB was the focus through 2021. The successful implementation of new digital tools and the deployment of laptops to employees, replacing older technology, was a significant step forward in ensuring a progressive people experience. This investment in the experience of our people will be a key enabler of our Smart Working programme to enable remote and flexible ways of working beyond COVID.

This programme accelerated at pace over the course of 2021 and saw investment in a number of existing offices to accommodate more collaboration spaces and more efficient use of space. This along with the investment in digital tools and technology and the development of leadership and culture, prepares ESB for a different future post pandemic.

Wellbeing has become an increasing area of focus in 2021 and is a key element of an overall people experience critical to enabling and sustaining high performance. The introduction of a new wellbeing app, Zevo Health, along with wellbeing initiatives, such as keeping Wednesday afternoons free of meetings and a wellbeing day in December, have all been crucial in helping to bring an increasing focus to employee wellbeing. Adopting the health and wellbeing question set and dashboard into our digital employee survey tool, Peakon, is helping us to better understand what we can do to ensure wellbeing at work. In 2021, ESB also brought an important focus to menopause and the challenge for individuals in managing this at work. Raising awareness of this topic is important in supporting gender diversity in the workplace and avoiding loss of female talent.

ESB continued to make progress in the implementation of our Inclusion and Diversity strategy. Enabling flexible and remote ways of working was one of the key goals of the strategy and the progress of the Smart Working programme will ensure this is in place when enforced remote working through COVID has diminished. We continued to focus on enabling gender diversity in the workplace by publishing ESB's Gender Pay Gap Report to show leadership in addressing the issue of women in STEM and enhancing support of working families by introducing paid Parents Leave.

Our LGBTQI+ employee network, BeMe@ESB, brought a focus to transgender in the workplace by hosting an informative webinar for employees. In the area of disability inclusion, we pivoted our traineeship programme for people with disabilities into a remote working programme, learning from the research into the positive impacts of remote work for people with disabilities.

External research suggests that COVID has eroded some of the gains in gender diversity worldwide. Through 2020 and 2021, we paid close attention to our data, in particular attrition, to stay ahead of this. The support of our managers in the context of a caring culture has been critical in supporting those with additional caring responsibilities through the difficulties caused by COVID.

Looking forward to 2022, I am hopeful that we will at last emerge from this era of pandemic allowing us to once again enjoy the social and physical interaction that is so important to our culture whilst leveraging the learnings of the past two years.

Pat Naughton

Pat Naughton
Executive Director, People and Organisational Development

People

Inclusion and Diversity Strategy

ESB's Inclusion and Diversity Strategy, developed in 2020, outlines a clearly defined statement, definition and objectives supported by a comprehensive implementation plan.

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

Statement

We embrace our diversity, uniqueness and individuality so that together we can lead the way towards an inclusive brighter future for all.

Definition

Diversity is about differences, seen and unseen.

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

Inclusion is also about leveraging our differences to deliver better business results.

Objective

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

Strategic Pillars

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

Over 1,000 ESB employees participated in the many Inclusion and Diversity related programmes throughout 2021. All Inclusion and Diversity activities and events continued to be delivered online, which has really enabled participation from right across the organisation. Geography as a barrier to participation has been eliminated in a virtual world.

During 2021 engagement with leadership teams across each business unit focused on what Inclusion and Diversity means from a leadership, business and people perspective. 2022 will see an increased focus

on shifting the dial on an inclusive culture and people experience at ESB. Central to the success of the strategy will be our ability to set the standards required, to understand and measure the progress being made as we move to a culture of active inclusion.

Investment in our people

ESB understands that our capability and success as an organisation rests with our people. From the moment people join ESB, we invest in their development and support them through their career journey. In 2021, to support capability development and learning ESB introduced Success Factors Learning. Using this platform and a new digital learning strategy, which comprises digital learning, online learning and in-person learning, we are increasing our capacity and range of development opportunities for our people, fit for a hybrid world of work. Through 2021, this has enabled ESB to provide development to first-time managers, leadership development for newly appointed senior level managers, and to provide all-employee learning on key policy and culture elements such as Our Code, ESB's code of business ethics.

Reward and Pay Equality

ESB offers a competitive reward package together with comprehensive employee benefits including health, wellbeing and diversity initiatives, family supports, flexible working arrangements, and commitment to career progression together with supports for ongoing development. At ESB, we care about the issues that our employees are interested in and we provide generous charitable contribution matching.

ESB complies with all employment equality legislation which provides for equal pay for work that is the same, similar or of equal value.

Union Membership and Industrial Relations

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

In April, members of the Independent Workers Union (IWU) engaged in industrial action, which took the form of a work-to-rule and a number of strike days. The IWU trade union is not affiliated to the ESB Group of Unions (GOU) and is not a member of the GOU. There was limited impact to electricity customers as a result of the industrial action.

ESB GENDER PAY GAP REPORT

Gender

Leveraging diversity to deliver better business results and sustaining a culture of inclusion and belonging where all our people can thrive, are priorities for ESB. The decision to be transparent and publish our gender pay gap data, enables us to bring a renewed focus to gender diversity and prioritise our actions for improvement in gender representation at ESB. ESB published its Gender Pay Gap Report in March 2021, ahead of the legislative requirement to do so and it is available on the ESB website, www.esb.ie.

In the absence of a confirmed calculation methodology, ESB has applied the high-level calculation principles in place for UK gender pay gap reporting and the mean (average) gender pay gap is 3.3%. The inclusion of overtime earnings increases this mean (average) to 10.0%. Analysis of this shows that the pay gap is largely driven by significantly lower female participation in craft and engineering roles, which often involve work schedules that attract role specific pay and allowances, and a higher number of men in senior leadership roles across all disciplines.

STEM Teacher Internship (STINT) Programme

STEM Teacher Internships offer immersive STEM learning experiences to shape shared futures and to further advance gender balance in STEM. Future primary and post-primary STEM teachers experience 12-week paid internships in STEM roles. Host organisations inspire innovative learning by deepening future teachers' STEM knowledge and competences. ESB were proud to be a host organisation for the 2021 STEM Teacher Internship Programme with placements supported by Engineering, and Major Projects and Enterprise Services. Participants on the programme had the opportunity to learn about various roles such as engineering, data analytics, project management and ESB Networks Apprenticeship Programme. It was also an opportunity to learn about ESB's Inclusion and Diversity, Corporate Social Responsibility Programme, Science Blast and more while also making mutually beneficial connections across the organisation for the future.

Following the success of this programme, ESB has committed to hosting 4 internships for 2022.

Family

Parents Leave Update

In October 2021, ESB approved payment of normal base pay, by topping up the State benefit for the first two weeks (of five weeks) Parent's Leave - where employees are entitled to Parents Leave Benefit. This payment has been backdated to 1 November 2019 for any employees who have already availed of Parent's Leave. This is another positive step in ESB's Positive Parenting Supports. ESB commits to reviewing the impact of further extending this support post COVID.

Parenting Transitions

ESB continued to support employees through parenting transitions, one of the key moments that matter in the life cycle of employees, with modules delivered across all key audiences. ESB's Managing Successful Parenting Transitions Programme is an award-winning, evidence based, coaching programme that enables sustained systemic change.

This programme continues to evolve to address the experiences and challenges of working parents:

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

LGBT+

BeMe@ESB Network hosted a number of virtual events throughout 2021, highlighting the reasons why individuals and organisations need to continue to create inclusive working environments and support the LGBT+ community, not just during Pride.

ESB has been a longstanding proud partner and supporter of BeLonGTo, who provide support and services for the young LGBT+ community in Ireland. BeLonGTo's Stand Up Programme, funded by the ESB Energy For Generation Fund, continues to make a positive impact across schools raising the awareness of the impact of bullying on the LGBT+ schools' community.

BeMe@ESB supported by Jim Dollard, Executive Sponsor for LGBT+ Inclusion at ESB, collaborated with BeLonGTo to deliver impactful webinars to further support BeMe@ESB's Ally Awareness Programme and virtual Pride Programme of Events.

ESB was awarded the 2021 Chartered Institute of Personnel and Development (CIPD) – Diversity and Inclusion Award for 'BeMe@ESB – Supporting LGBT+ in ESB'.

The CIPD judging panel commended BeMe@ESB: *"It is how it all aligned to the business strategy, was carried out to a high standard, was authentic through and through. With high levels of organisational sponsorship, the energy and authenticity reflected the bottom-up approach, as work started with an employee resource group. Embedding the LGBT+ Strategy helped to bring the organisation's values to life in everyone encouraged to Be Me."*

Disability and Access

ESB Traineeship Programme for People with Disabilities recommenced this year after a one year pause during the first year of COVID-19. The 2021 Traineeship Programme is significantly different from other years in that all trainees are onboarded, supported and working remotely. Trainees work from Cork and Dublin across various business units - ESB Networks, Electric Ireland, Enterprise Services and People and Organisational Development. Each trainee is supported by line managers, mentors, ESB's Traineeship Programme Manager and AHEAD, ESB's external recruitment partner. AHEAD also assisted with valuable and revised onboarding tips for a remote working environment and disability awareness training. ESB's Traineeship Programme is a six-month programme which provides training and experience of working in a modern business environment. It provides opportunities for personal and professional development and is of benefit to participants in applying for future employment opportunities.

Gender

SMART WORKING AT ESB

At ESB, we believe we have a once-in-a-generation opportunity to enhance the way we work. To achieve this, we have established a Smart Working Programme to help us try, learn and adapt to new ways of working.

Smart Working aims to empower our people with the autonomy, flexibility and digital tools to deliver on our purpose, leading the transition to a secure, affordable, low-carbon energy future for our customers and communities.

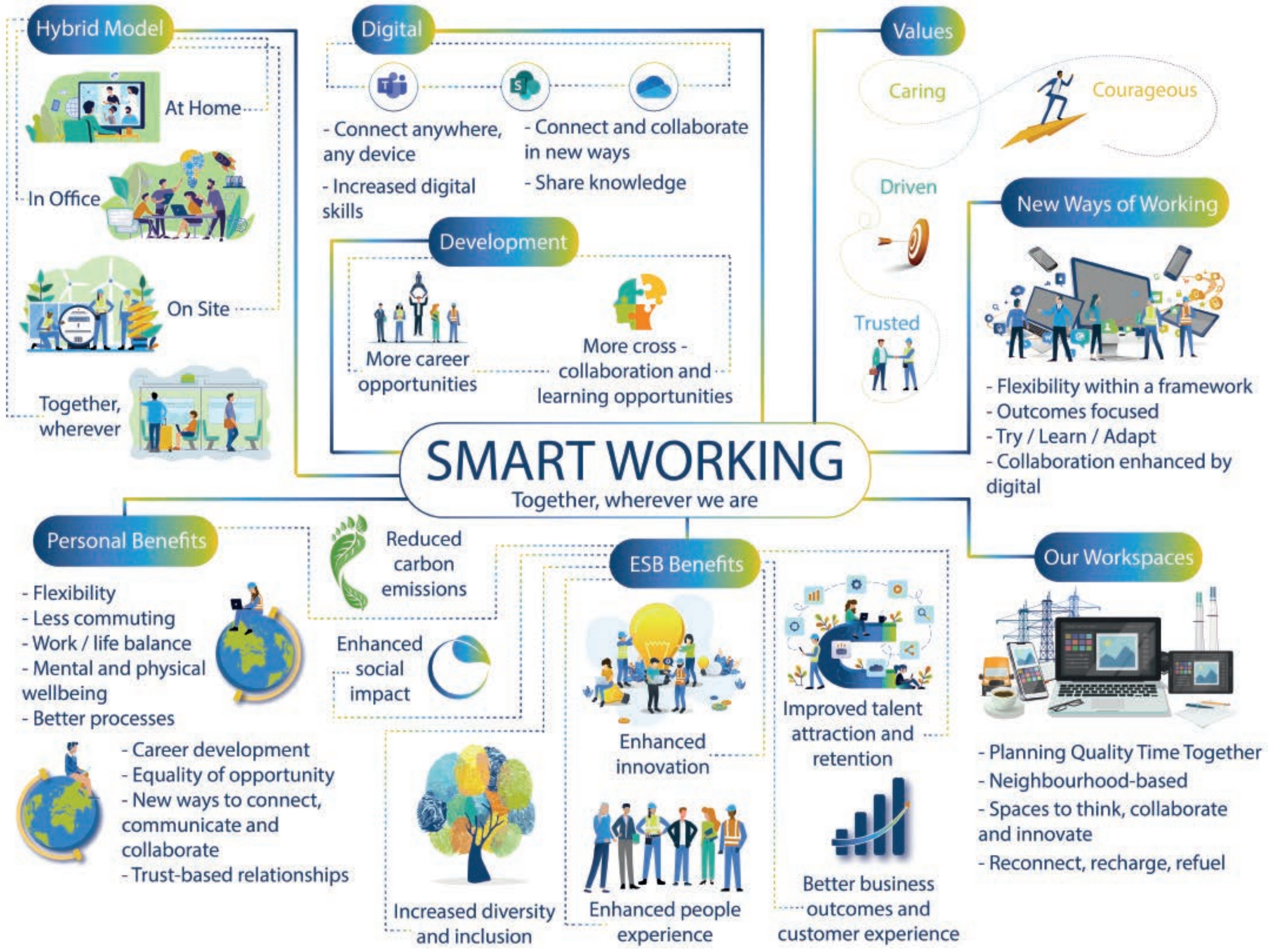
With People Experience at the centre, we are taking an employee led approach anchored in the three dimensions of Culture, Environment and Tools.

With input and support from across the organisation, together we have put the building blocks of Smart Working in place. Throughout 2021, we have seen much of it come to life, embracing digital tools and technology to support collaboration, developing new ways of working to empower our people and improving our buildings so they meet the needs of the future.

In September, ESB became a founding member of The Remote Alliance, a new initiative established by the social enterprise Grow Remote. Working with other like-minded members, we've committed to developing solutions that will ensure hybrid working can become a sustainable part of our business.

As we look forward to continuing our transition to Smart Working, we believe we've laid the foundations for a sustainable hybrid model – that will deliver better business results, support our sustainability goals and allow us to mind our wellbeing while enjoying the benefits of an inclusive, flexible working culture.

2022 is our year of learning for Smart Working, where we will try, learn and adapt to our best ways of working.



	2021	2020	2019
Average Number of Employees	7,870	7,938	7,974
Female	25%	26%	25%
Senior Management Female	31%	30%	30%
Employees with Disabilities*	3%	3%	3%

Average number of employees by business unit is included in note 10 of the financial statements.

* ESB continues to exceed the 3% employment target for people with disabilities, as set out in the Disability Act 2005.

Safety

Overview

ESB's Board, management and employees are committed to protecting the health and safety of employees, customers, contractors and the people ESB serves; their safety is always considered first in business actions and activities. ESB believes that all operational processes can be designed and operated in a safe manner. This belief guides the approach to safety across all business activities and is reinforced through strong and visible leadership throughout ESB.

The Chief Executive has overall responsibility for the management of health, safety and wellbeing in ESB. The ESB Group Safety Statement sets out the overall policy and general arrangements in ensuring the health, safety and wellbeing of all employees. Functional responsibility is shared with all senior management and, in turn, with each manager, supervisor, team leader and employee. The Safety, Environment and Culture Committee supports the Board's monitoring and governance of health, safety and wellbeing. Further details of the Safety, Environment and Culture Committee are outlined on page 117.

2021 was the second successive year living with COVID-19. From a health and safety perspective, controls continued to operate that have significantly reduced the opportunity for transmission of the virus in ESB controlled workplaces while maintaining the essential supply of electricity to all customers.

Sadly, there was one fatality associated with ESB activities during 2021. A member of the public was fatally injured when they came into contact or near contact with the overhead electricity network in Northern Ireland.

COVID-19 Pandemic – ESB Response

ESB continued to implement and revise its Pandemic Response Plan during 2021 as the COVID-19 virus behaviour changed. The Pandemic Response Support team (PRST) closely followed all emerging guidance from national and international public health bodies including HSE/NHS, Health Protection Surveillance Centre, ECDC, and WHO. The PRST updated ESB's response to the pandemic as soon as situations changed and relevant authorities advised on restrictions or lifting of restrictions. Towards the end of the year as national and international restrictions were lifted ESB took a cautious approach to removing any restrictions while ensuring that customers were not negatively impacted. This included office staff continuing to work largely from home.

Control measures included: remote working where possible; identification of critical roles; teams working in pods; hygiene and PPE measures; contact tracing; COVID-19 status decision guides; guidance on keeping safe and well; and a dedicated COVID-19 helpline with clinical staff and Employment Assistance Programme (EAP) officers available to answer employees' queries and concerns.

ESB continues to monitor this situation to protect the health and wellbeing of its employees, contractors, customers and the public as well as maintaining essential services.

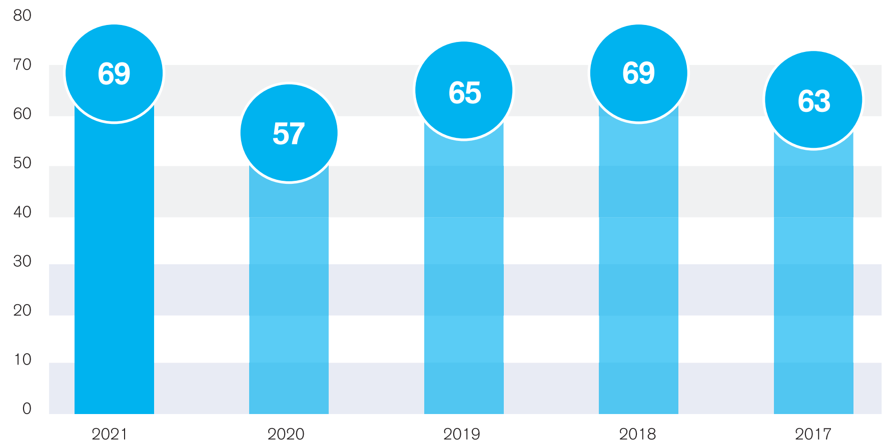
Safety Performance In 2021

Performance in 2021 has been similar to 2020.

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

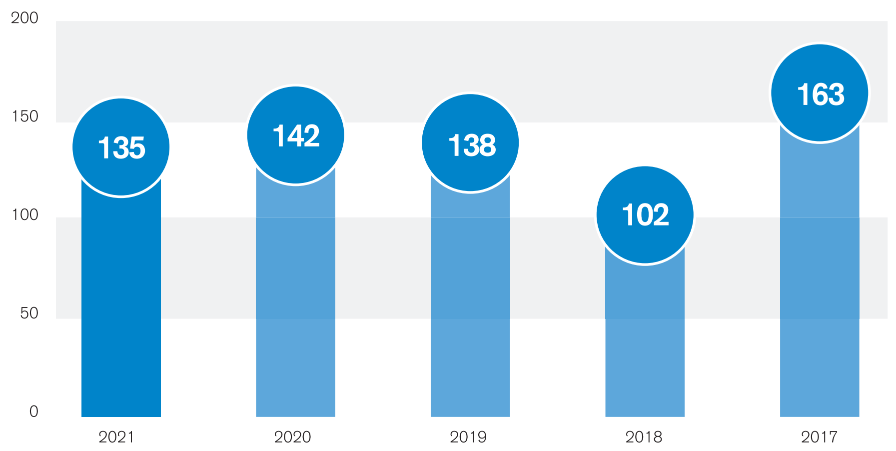
1. Good Catch reporting. A Good Catch is where an employee or contractor intervenes when they notice an unsafe act or unsafe condition. This helps to prevent a safety incident from occurring. The target for 2021 was 12,200 Good Catches. Due to the significant number of employees working from home throughout 2021, the number of Good Catches was below target at 9,687.
2. P1 Investigations closure. ESB categorises all incidents and near misses with a particular focus on high potential incidents that could lead to more serious outcomes. All P1 incidents are thoroughly investigated. The P1 investigation closure KPI reports on the timely completion of investigations. This KPI target was exceeded at the end of 2021 achieving an average of 84% closure rate per month.

Figure 1. Lost Time Injuries 2017–2021



High Potential Incidents (P1)

Figure 2. P1 Incidents 2017–2021



3. P1 Action closure. When a P1 incident is investigated the findings often result in corrective actions. This KPI tracks the timely completion of all actions associated with P1 Incidents. The P1 Action closure target was exceeded in 2021 achieving an average of 83% closure rate per month.
4. Senior Manager Safety Conversations. All Senior Managers in ESB are expected to demonstrate their safety leadership by conducting safety conversations each month. The KPI tracks completion of these conversations. During 2021 senior managers conversations were above target for the year at 82% completion rate.
5. Audit non-conformity closure. ESB subscribes to certification of its Safety Management Systems (SMS). Non-conformities associated with external audits of these SMS are tracked for on-time completion. The number of minor and major non-conformities is consistently very low. All actions have been closed on time.

Lost Time Injuries

The number of Lost Time Injuries (LTIs) in 2021 was 69 compared to 57 in 2020 and 65 in 2019. While there is a notable increase on previous years, the majority of these injuries were of low severity where the injured parties made a full recovery and quickly returned to work. The most common causes of LTIs were slips and trips, and general situational awareness.

Lost Time Injuries (LTI) are occupational injuries which result in at least one day's absence from work, not including the day that the injury occurred.

In 2021, 135 P1 incidents were recorded. 2021 has shown a decrease in P1 incidents compared to 2020. In 2021 ESB had less serious Lost Time Injuries (4) compared to previous 2 years (11 in both 2020 and 2019). Overall trend is decreasing slightly over the five-year period 2017–2021.

The most significant safety risks arising from P1 incidents for ESB are: electricity, falling objects, and working at height.

Public Safety

During 2021 the ESB Public Safety Strategy was reviewed and refreshed. This new strategy builds on the previous strategy, and sees the introduction of a management system approach to public safety and continues to focus on media messaging to key identified at-risk groups including the farming, construction and general public sectors.

The ESB Networks 24/7 - 365 emergency response service operated to the highest standards to ensure public safety.

During 2021, an independent audit of the Public Safety Programme (on behalf of the Commissioner for the Regulation of Utilities) confirmed that ESB Networks continues to comply with its regulatory requirements.

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

Safe And Sound

Safe and Sound is ESB's safety culture transformation programme. Since its launch in 2018, it has achieved considerable success in evolving the safety culture at ESB. The programme has helped make safety central to everything being undertaken. It is built on the ESB core values: caring for one's own safety and that of their colleagues; being courageous in speaking up when they see something unsafe; being trusted by employees, contracted partners, and customers to be safe every day; and being driven to be leaders in safety, health & wellbeing and environmental responsibility.

The focus in 2021 for Safe and Sound in ESB Networks, Generation and Trading and Engineering and Major Projects has been on positive safety leadership and on living the Safe and Sound principles. These are: Safety must be Why based, People are the Solution, Build on Peoples' Strengths and Treating People as Family. There has also been a strong focus on positive safety engagement with ESB's contractor partners, with the emphasis on growing a positive safety culture for all working in ESB. They have been focusing mainly on frontline safety but have also taken on challenges related to Health & Wellbeing and Environment and Sustainability.

Safe and Sound is now being expanded across the remaining business units. ESB plans to set up Safe and Sound Leadership teams across these business units. These teams will emulate and build on the successful methodology developed throughout the Safe and Sound journey to date.

Health And Wellbeing

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

Key Initiatives and Programmes Implemented or continued in 2021

- ESB business units maintained their safety management systems certification to ISO 45001 standard or equivalent.
- ESB continued to make progress in 2021 on improving its safety performance through delivery of key improvement projects in ESB Networks and in Generation and Trading.
- The Safe and Sound culture transformation programme continues to be embedded in the Engineering and Major Projects, Networks and Generation businesses and is now being expanded across ESB Group.
- A review of P1 incidents was undertaken and it found that the most likely causes of incidents are human factors, system of work and asset integrity. The review has enabled ESB to better understand and address the root causes and contributory factors at source, before they lead to serious incidents.
- Principal risks and their management are reviewed and reported quarterly to the Group Risk Manager and the Audit and Risk Committee.
- New strategies for road safety and public safety were published during the year as these are two significant safety risk areas.
- A stress management programme was developed and made available to all employees. Its focus for the individual, manager and team was on recognising and managing stress.
- A new health and wellbeing app with content on physical and mental health was introduced.
- Mental health first-aid training has been delivered to c.200 ESB employees.

Corporate Social Responsibility

Social Purpose

ESB has a long tradition of supporting communities and programmes that enhance Ireland's 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. Throughout 2021 ESB has invested over €2.5 million to worthy causes through its CSR programme.

Energy For Generations Fund

ESB's Energy for Generations Fund funds projects to end homelessness, prevent suicide and enable access to STEAM education. Over the past year the Fund supported 111 projects across the island of Ireland, totalling €1,242,390. ESB's funding includes partnerships with TU Dublin Foundation for the *Access to Apprenticeship* programme and Aware's *Life Skills for Schools* initiative to promote mental health awareness in secondary schools throughout Ireland.

Employee Volunteering

When ESB employees volunteer over 20 hours of their time or fundraise at least €250, they can apply to the ESB Energy for Generations Fund for a grant of €250 to that organisation. In 2021, €12,250 was donated through the Fund to a range of charities including the Irish Cancer Society, Debra Ireland and Irish Red Cross. In 2021, ESB employee volunteers participated in Time to Read and Time to Count delivered remotely in partnership with Business in the Community (BITC) to help improve literacy and numeracy initiatives in 8 primary schools throughout Ireland. ESB volunteers also introduced transition year pupils in 5 secondary schools to the world of work through BITC's World of Work programme.

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

International CSR

ESB is a corporate partner of ElectricAid, a charity established by the staff of ESB in 1987. Today, ElectricAid is supported by 2,400 serving and retired staff, with donations matched by ESB on a 2:3 ratio to a ceiling of €275,000 annually.

UNICEF Get A Vaccine

In October, ESB became a lead member of the UNICEF corporate vaccine alliance with a donation of €80,000 to procure, transport and distribute COVID-19 vaccines to healthcare workers in low and middle-income countries as part of the biggest vaccine roll out in history. ElectricAid also participated in UNICEF's "Get a Vaccine, Give a Vaccine" campaign and launched an emergency appeal where ESB pensioners and staff responded with donations totalling €26,417. Further matched with €25,000 from ESB, this brought total funding to UNICEF to €131,417.

Wind Farm Community Fund

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

Electric Aid
Power for Life

In 2021 ElectricAid funded 96 projects in 34 countries to a total of €1,008,058 million, with each project directly addressing one or more of the United Nations Sustainable Development Goals (UN SDGs). A copy of the ElectricAid Annual Report is available from the ElectricAid website – www.electricaid.ie.

Sponsorship

The Group manages an active sponsorship portfolio including the following:

- Proud supporter and sponsor to the Pieta House Darkness into Light annual event
- Promoting young people in sport through the Electric Ireland GAA All-Ireland Minor Championship and Higher Education Championship
- Supporting the arts through partnerships with organisations including National Gallery of Ireland, Abbey Theatre, Fishamble: The New Play Company and Business to Arts
- Supporting the development of key 21st century skills in young people through the ESB Generation Tomorrow STEAM education programme which aims to empower Ireland's young people to reach their potential and power their collective brighter future through strategic partnerships with a number of organisations, including the RDS and social enterprise Kinia

ESB Science Blast

ESB Science Blast, delivered by the RDS, empowers primary school children, from 3rd to 6th class, to work together as a class to investigate the science behind a simple question that interests them, before presenting their findings at one of the three showcase events in Dublin, Limerick or Belfast. The showcase events were unable to go ahead in 2021 due to the impact of COVID-19, however schools participated in an online programme, with judges, including over 40 from ESB, engaging in class project presentations virtually. ESB Science Blast TV, a four-episode series delivered through both Irish and English, investigated the science behind energy, flight, recycling and included in classroom experiments to support learning. The series was hosted online and on the www.rte.ie/learn platform.

Kinia (Formerly Camara Ireland And Techspace)

TechSpace is a creative technology education programme that is managed by social enterprise Camara Ireland and delivered in the informal and formal education sectors. It encourages young people to unlock their passions and potential through the creative use of technology. ESB has supported Camara Ireland programmes since 2014, also supporting Creative TechFest, the annual celebration of the creative work of young people throughout the TechSpace network. Camara Ireland merged with charity Suas to form Kinia in July 2021.

Tech2students

Technology is an integral part of today's society, even more so over the past year. The move to remote working and learning underlined just how important access to technology is, and will continue to be, particularly for those from disadvantaged socio-economic backgrounds. With the return to school closures in January 2021, the issue of the digital divide again came to the fore, raising concerns for students who did not have access to technology for home studies. ESB continued its support for the Camara Education Ireland and Trinity Access Tech2Student campaign, with a renewed media campaign seeking both funding and donations of disused laptops. Between the appeal launch in April 2020 and May 2021 over 4,500 laptops were donated, €750,000 was raised and over 100 schools and 350 youth organisations received repurposed technology to support those in need.

ESB Supporting The Arts

As a long-term patron of the arts in Ireland, ESB recognises the important role that artists play not only in recording and interpreting social and economic developments, but also in engaging communities and stimulating innovation and creativity. The arts sector has been hugely negatively impacted by COVID-19 and this year ESB launched two new partnerships specifically to support artists during this challenging time.

Tiny Plays For A Brighter Future

Fishamble: The New Play Company is an Irish theatre company that is passionate about championing the role of the playwright. We partnered with them to launch a challenge for anyone with an interest in writing to imagine what a brighter energy future will mean and to bring that to life in a 600-word Tiny Play. Over 300 submissions were received, with ten playwrights works shortlisted, paid a commissioning fee, and showcased online. Three playwrights had their work selected to be produced, staged, and filmed by Fishamble. Sustainability was at the heart of the production, with no single use props, the theatre was used as a prop, all lighting was LED, and costumes were the actors own or borrowed.

ESB Brighter Future Arts Fund

The ESB Brighter Future Arts fund, delivered in partnership with Business to Arts, is a €250,000 donor funded scheme open to artists from all art forms working with organisations in the area of sustainability, climate change and energy transition. The open call was launched in July 2021 and over 90 submissions were received by the September deadline. Five projects were then selected by an independent assessment panel for funding. The projects will be realised between January 2022 and December 2023.

Darkness into Light

Electric Ireland has supported Darkness into Light and Pieta since 2013, bringing hope to customers, staff and communities across Ireland that have been affected by suicide. This partnership helps drive brand affinity with our customers and with the broader public. It is also a true demonstration of "We're Brighter Together".

2021 was the second consecutive year when the annual Darkness into Light walk was affected by government restrictions due to COVID-19. Although the ban on mass gatherings posed a major challenge for the Pieta and Electric Ireland teams, together they worked hard to deliver a very successful event where, although physically apart, people could still get a sense of community sharing 'One Sunrise Together'; the very same sunrise that gives hope to those impacted by suicide every year.

'One Sunrise Together' for Darkness into Light 2021 raised over €7.5 million, with participation numbers exceeding 140,000 helped by a robust marketing and media campaign, The Late Late Show and broader RTE partnership across radio and online.

Young St Vincent De Paul

Electric Ireland have sponsored St Vincent De Paul's Youth Development programme since 2013 with over 200,000 student participants in the years since. The aim of the programme is to educate 4th and 5th year students about social justice and aid them in delivering social action projects in their local communities. In 2020/21, 9,473 students engaged with the programme in over 200 schools.

Electric Ireland Higher Education Leagues and Championships

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

GAA Minor Championships

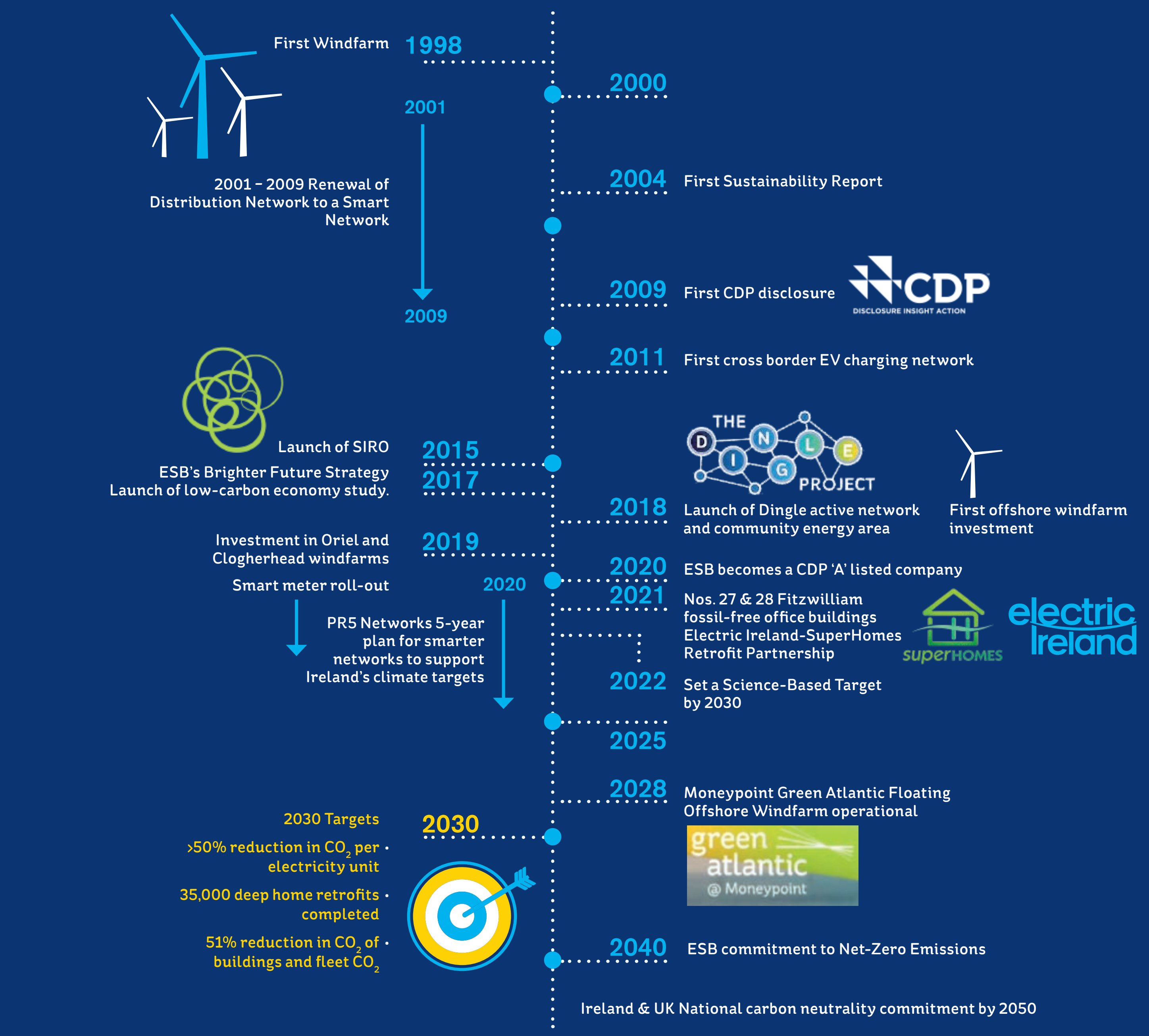
Electric Ireland has been proud sponsor of the GAA All-Ireland Minor Hurling and Football Championships since 2012. Having worked with minor teams over the years, Electric Ireland truly understands all that encompasses playing Minor. Over the course of the partnership Electric Ireland, under the campaign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





Environment and Sustainability

ESB's Environment & Sustainability Timeline



Leading the low-carbon transition

ESB recognises that climate change is the greatest priority facing Ireland and the world. It impacts us all and every layer of society has some role to play in how it is addressed. In response, ESB's strategy targets an accelerated transition to low-carbon electricity. ESB exited peat generation at the end of 2020 and will exit coal generation by mid-decade. ESB's target is to more than halve the carbon intensity of its electricity generation by 2030 and to bring renewable electricity output to 63% of ESB's total electricity production by the same date.

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

Climate Action

ESB's strategy puts sustainability at the heart of its strategic objectives and purpose as an organisation. ESB started life as a fully renewable company in 1927, when it was set up to manage the Shannon hydroelectric scheme at Ardnacrusha. Our purpose today is still to create a brighter future for our customers and society by empowering people to live low-carbon lives. That means providing sustainable electricity that is reliable and affordable and that can be used in all sectors of the economy.

In a year that saw COP26 deliver modest progress on global level climate actions, it is even more important for businesses to step up and lead the low-carbon transition. Climate action is everyone's responsibility and ESB is committed to playing a leading role.

Aligning ESB's activities and progress to the broader global efforts to deliver the Sustainable Development Goals (SDGs), allows ESB to both understand and demonstrate its contribution to the global purpose and climate action that underpins the SDGs.

The table below highlights progress and alignment between ESB's strategy and the SDGs.

Strategic Objective	Role in Decarbonisation	Indicators	Progress Update	SDG Contribution
	• Empowering Low-Carbon Living • Putting customers first and leaving no one behind	• ESB Renewable Generation >5,000 MW by 2030 • Connect >17 GW of Low-Carbon Energy to our Networks by 2030	• 983 MW • 6.5 GW connected	7 Affordable and clean energy; 9 Industry, innovation and infrastructure; 13 Climate action
	• Bringing clean reliable electricity to our customers • Innovating and investing for the future	• Carbon intensity of electricity ESB produces of <140g CO_2/kWh by 2030 • Share of ESB Generation Output from zero-carbon sources 63% by 2030	• 440gCO_2/kWh • 14% share of output from renewables in 2021	7 Affordable and clean energy; 9 Industry, innovation and infrastructure; 13 Climate action
	• Empowering low-carbon living • Innovating and investing for the future	• Electrification of Transport Network: Public EV Chargers • Rollout of 2.6m smart meters	• 1,700 EV chargers now installed on island of Ireland and GB • 620,000 smart meters installed	7 Affordable and clean energy; 9 Industry, innovation and infrastructure; 11 Sustainable cities and communities; 12 Responsible consumption and production; 13 Climate action
Foundational Capabilities				
	• Empowering low-carbon living • Innovating and investing for the future	• Active promotion of diversity and inclusion across our workforce • Employee engagement score	• Launch of Gender Pay Gap Report • Diversity and inclusion strategy and training in place • Employee engagement score 7.0	5 Gender equality; 8 Decent work and economic growth; 10 Reduced inequalities
	• Empowering low-carbon living • Innovating and investing for the future	• Percentage of Customer Engagements that are digital in top quartile by 2026	• Continued significant investment in digital • Digital customer engagement measure to be reported in 2022	8 Decent work and economic growth; 9 Industry, innovation and infrastructure; 10 Reduced inequalities
	• Empowering low-carbon living • Innovating and investing for the future	• Credit ratings of A- or equivalent and BBB+ on a standalone basis equivalent • Return on Capital where ROCE (%) > WACC (%)	• BBB+ on a stand-alone basis • ROCE: 5.6%	7 Affordable and clean energy; 8 Decent work and economic growth; 9 Industry, innovation and infrastructure
	• Innovating and investing for the future	• Net Zero emissions by 2040 • An externally accredited Science Based Carbon Target for 2030 • Reduction in absolute emissions from buildings and fleet energy by 51% by 2030 (2018 Baseline)	• ESB signed a Science Based Target iniative (SBTi) commitment letter in 2020 to set a science based emissions target and plans to make a submission in 2022	7 Affordable and clean energy; 8 Decent work and economic growth; 9 Industry, innovation and infrastructure; 13 Climate action

The theme of how ESB is progressing climate action and aligning our focus and efforts on relevant SDGs is further developed in ESB's Annual Sustainability report available on ESB's website, www.esb.ie. The 2021 report will be published online in 2022.

Emissions

Over the past number of years ESB has made significant progress in improving its emissions performance, through growing its renewable portfolio, retirement of peat stations and legacy thermal stations and reduced running of the coal station in Moneypoint. As a generator in the All-Island market in Ireland, ESB is subject to the market conditions in operation. During 2021, the island of Ireland experienced some of the lowest wind conditions in almost 60 years, resulting in a significant shortfall in wind generation. In 2019 and 2020, Ireland had the highest levels of onshore wind output globally. The lower than predicted wind conditions coincided with forced outages on two baseload plants nationally, which has resulted in a number of amber alert[1] events on the national electricity grid. These conditions have resulted in the market calling upon ESB's coal fired generation station at Moneypoint to increase its generation output and reduce the shortfall risk to the grid, resulting in an increase in emissions in 2021, against the long term downward trend.

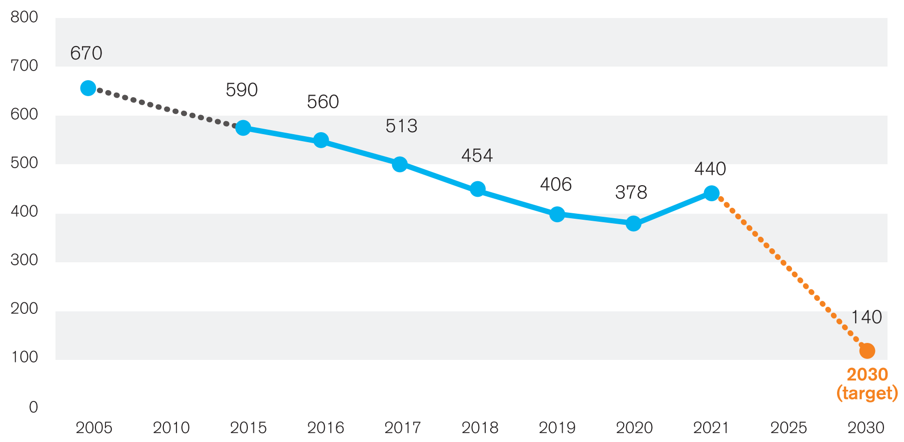
Despite this impact on emissions intensity in 2021, ESB remains fully committed to delivery of the 2030 emissions target and low carbon ambition. ESB is actively engaged with the grid operator and the market to ensure this shortfall risk is managed out of the Irish electricity market in the near term. In respect of Scope 1 emissions, while generation emissions have increased in 2021, operational efforts continue to deliver sustained improvements in fugitive emissions and vehicle fleet emissions. Scope 2 emissions for ESB include electricity used in buildings and all losses on the national electricity grid infrastructure. ESB discloses its full Scope 3 emissions and continues to focus on improving estimates and methodologies for the Scope 3 emissions categories that are not directly controlled by ESB. Scope 1, 2 and 3[2] emissions inventories are reported in their entirety via the CDP Climate Change Disclosure and ESB's annual Sustainability Report.

Emissions Verification and Assurance

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

ESB discloses environment and sustainability information annually in the Sustainability Report in accordance with GRI standards. Alignment with GRI standards is independently confirmed.

ESB's Carbon Intensity g/kWh



Note: 2021 based on provisionally verified data

Core Elements of Recommended Climate-Related Financial Disclosures

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

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

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

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

ESB's Task Force on Climate Related Financial Disclosure (TCFD)

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

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

Governance of Environment and Sustainability

Climate risk and opportunity is integrated into the strategic review process in ESB. It is also linked to the enterprise risk management process through a principal risk on climate and emerging risks. The Safety, Environment and Culture Committee of the Board monitors the management of safety, environment and climate risk and climate opportunities. The Audit and Risk Committee oversees the overall enterprise risk management in the company. The Environment and Sustainability Leadership Team, a group of senior managers from across the company receives regular updates on environmental, sustainability and climate issues. The Group Safety, Health and Environment Manager and the Environment and Sustainability Manager are members of this group. The Environment and Sustainability Managers group provide day to day updates on environment and sustainability and pool knowledge across the Group.

Strategy

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

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

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

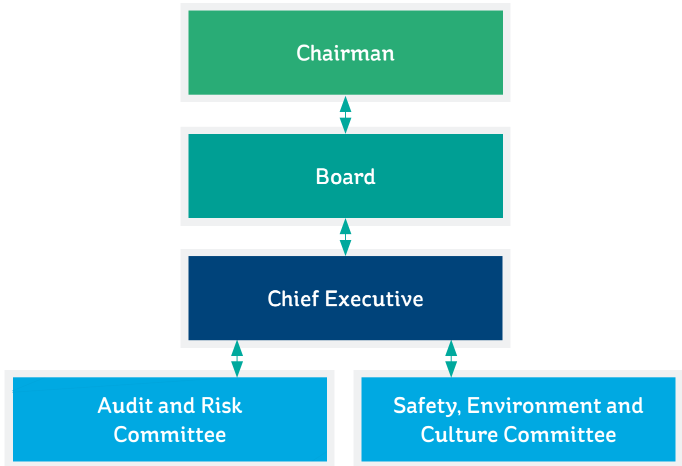
ESB's strategy is the subject of regular dedicated reviews by the Executive Director Team (EDT). Scenarios, including climate scenarios are used as part of this review. Progress on strategic goals is monitored and new developments in the environment and the status of climate risk and opportunities are considered in the review and actions are agreed, if appropriate.

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

Climate Risk

ESB has identified the main transition and physical climate risks and opportunities across the Group. Three climate risk scenarios were used in this assessment: one physical scenario, based on the Inter-Governmental Panel on Climate Change (IPCC) representative carbon pathway (RCP) 4.5 and two transition scenarios, one based on the Irish Government's 2019 Climate Action Plan and the second on the more ambitious climate commitments for 2030 in the 2021 Climate Action Plan and Climate Act, respectively. The IPCC RCP 4.5 scenario is based on global carbon emissions peaking in 2040 followed by a moderate decline thereafter. This is seen as a suitably severe possibility but more realistic than the no mitigation pathway. The transition scenarios broadly align with the EU's Clean Energy Package and the EU Green Deal, respectively.

ESB Board of Governance



Audit and Risk Committee

To assist the Board with its responsibilities in relation to:

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

Safety, Environment and Culture Committee

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

Governance of Climate Risk

Summary of Higher Scoring Climate Risks and Opportunities

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

[1] An Amber Alert may be issued by the system operator, EirGrid, when a single Event would give rise to a reasonable possibility of failure to meet the Power System Demand, or of Frequency or Voltage departing significantly from normal.
[2] Scope 1 covers direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company. Scope 3 includes all other indirect emissions that occur in a company's value chain.

Metrics & Targets

ESB Group successfully retained its leadership scoring performance CDP in 2021, scoring an A-. Contextually, this places ESB's performance in the top quartile for CDP response when compared with all responding global electricity utilities.

Environmental performance and programmes

ESB recognises that its activities, comprising of electricity generation, transmission, distribution and supply have the potential to cause environmental impacts and that it is the company's responsibility to manage its activities in a manner that provides a high level of protection for the natural environment and contributes to minimising the impacts of climate change (the reduction of carbon emissions), while supporting sustainable economic development. ESB strives for excellence in all its activities to comply with all applicable laws and regulatory requirements. ESB utilises externally certified environmental management systems conforming with the ISO14001:2015 standard throughout the company to achieve this.

Each year ESB Group collates annualised waste data from each business unit to build a consolidated waste report in line with the requirements of the Global Reporting Initiative Standard. Waste is reported a year in arrears.

Examples of business unit environmental actions can be found in the Business Unit sections of this report, with further details provided in the ESB Annual Sustainability Report.

Biodiversity

As part of ESB's commitment as a key partner to the All-Ireland Pollinator Plan (www.pollinators.ie), ESB has committed to take up opportunities for more pollinator-friendly management of landscapes within its property portfolio, where this fits with the needs of safety, business operations and property management. ESB is undertaking a review of its landholdings to identify parts of sites suitable for supporting pollinators, through various actions such as minor changes in mowing regimes, new habitat creation and other nature based solutions.

Fisheries

ESB operates several large-scale hydroelectric generations stations on the Shannon, Erne, Lee, Liffey and Clady Crolly river systems and carries out extensive fisheries development and conservation work as a primary fisheries owner. ESB operates three salmon conservation hatcheries on the Shannon, Erne, and Lee catchments to maintain and conserve stocks. The ESB Fisheries' annual report is available on ESB's website www.esb.ie.

	2020	2019	2018
Waste (tonnes)*	10,472	15,030	12,130
Recycling rate (%) (including energy recovery)	98%	96.6%	94.6%

*excludes construction spoil and ash from peat and coal generation.

Operational Energy Consumption			
Thermal Generation by Energy Source (GWh)*	**2021 (GWh)**	**2020 (GWh)**	**2019 (GWh)**
Coal	7,824	2,186	1,767
Natural Gas	22,628	17,427	18,999
Oil	2,167	468	413
Peat	-	1,720	3,971
Operational Energy (Primary Energy equivalent in kWh) **	**2020 (kWh PEE)**	**2019 (kWh PEE)**	**2018 (kWh PEE)**
Electricity	41,314,003	48,823,028	52,051,152
Thermal	2,502,817	4,321,560	3,790,805
Transport	53,710,105	54,318,204	53,653,578
Energy Performance Indicator (EnPI)	**2020**	**2019**	**2018**
kWh/FTE Employee	16,442	18,363	19,749
% improvement towards SI426/2014 2020 target (33%)	45.9%	39.6%	35%

*Thermal generation fuel inputs data is reported for the current year.
**Operational Energy Consumption is reported to Sustainable Energy Authority of Ireland (SEAI) under public sector energy efficiency regulations (SI426/2014). 2020 consumption data reflects 2021 SEAI Reporting cycle.

Energy Management and Performance

ESB operates a group-wide energy management system for its buildings and transport fleet, which is certified to ISO 50001:2018. ESB and other public bodies are subject to energy reduction targets under the transposition of the EU Energy Efficiency Directive S1426/2014. ESB achieved a 45.9% cumulative energy reduction against the national target of 33% on completion of the target cycle. The energy management system will be used to achieve further savings against the increased national targets for 2030 of 50% energy efficiency and 30% absolute carbon emissions reductions.

The table above reports the energy associated with fuel inputs to thermal generation (by source) and our operational energy usage as reported to SEAI under SI426/2014.

EU Taxonomy Regulation

The EU Taxonomy

The European Commission has established a classification system of environmentally sustainable economic activities known as the "EU Taxonomy". This list of activities, which can be considered sustainable, is an important enabler to supporting the scaling up of sustainable investment and the implementation of the European Green Deal.

The EU Taxonomy Regulation establishes six environmental objectives as follows:

1. Climate change mitigation
2. Climate change adaptation
3. The sustainable use and protection of water and marine resources
4. The transition to a circular economy
5. Pollution prevention and control
6. The protection and restoration of biodiversity and ecosystems

The Commission adopted the Climate Delegated Act in June 2021 (the Delegated Act), establishing the criteria that define which activities substantially contribute to the first two of the above objectives (which are in scope for 2021 reporting). The criteria relating to the remaining four environmental objectives will follow in 2022.

An activity shall qualify as a taxonomy-aligned economic activity if it:

1. Contributes substantially to one or more of the above environmental objectives
2. Does not significantly harm any of the above environmental objectives
3. Is carried out in compliance with minimum social safeguards
4. Complies with technical screening criteria (specific environmental performance requirements) that have been established by the Commission

Given the difficulties in assessing alignment with the EU Taxonomy, for financial year 2021, non-financial undertakings shall only disclose the share of Taxonomy-Eligible and Taxonomy Non-Eligible economic activities in their total activities. A Taxonomy-Eligible activity is one that is described in the Delegated Act, irrespective of whether the economic activity meets the technical screening criteria to become taxonomy aligned. The EU Taxonomy requires Key Performance Indicators (KPIs) to be disclosed relating to the share of Turnover, CapEx and OpEx associated with Taxonomy-Eligible and Non-Eligible economic activities.

ESB's EU Taxonomy work to date

ESB seeks to follow best practice in reporting ESG information and has elected to disclose the information required by the EU Taxonomy Regulation, although as a statutory body ESB is not subject to the provisions of the relevant regulations.

ESB has undertaken a comprehensive assessment of all significant economic activities and classified which of these, materially, can be categorised as 'Taxonomy-Eligible' and 'Taxonomy Non-Eligible'.

It should be noted that due to it being the first year of implementation, there is inherent uncertainty in interpreting the requirements set out in the EU Taxonomy. ESB has adopted a 'best-endeavours' approach and as such the KPIs presented are approximate.

ESB is committed to reporting in line with the EU Taxonomy, which includes performing an assessment of alignment in 2022.

ESB's Taxonomy-Eligible and Taxonomy Non-Eligible Activities

ESB's work to date has determined that the following are the economic activities (and related KPI's) described in the Delegated Act, which are most relevant to ESB:

- Transmission and distribution of electricity (Turnover, CapEx and OpEx)
- Electricity generation from wind power, hydropower and solar photovoltaic technology (Turnover, CapEx and OpEx)
- Storage of electricity (Turnover, CapEx and OpEx)
- Infrastructure enabling low-carbon road transport and public transport (Turnover, CapEx and OpEx)
- Construction of new buildings (CapEx and OpEx)
- Installation, maintenance and repair of energy efficiency equipment (Turnover, CapEx and OpEx)
- Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings) (Turnover, CapEx and OpEx)
- Installation, maintenance and repair of renewable energy technologies (Turnover, CapEx and OpEx)

Given that the Delegated Act focuses on specific activities only, ESB has identified a number of activities which are outside the scope of the Delegated Act but which would have a material impact on the KPIs ESB reports if they were to be included:

- Retail sales to electricity and gas customers
- Certain activities associated with portfolio-level wholesale market trading (e.g. contracts for difference, commodity trading etc.)
- Expenditure related to joint venture investments

Data used in the calculation of the KPI's has been extracted from ESB's financial systems which capture Turnover, CapEx and OpEx by general ledger line item or by project. Given that the KPI's are extracted from these financial systems, ESB is satisfied that it has avoided double counting in calculating the numerator used to determine each of the ratios. Turnover was only counted once in cases where it contributed to several objectives.

KPIs

Taxonomy-Eligible Turnover

ESB's Taxonomy-Eligible Turnover as a percentage of total Turnover is 28% reflecting revenue from the transmission and distribution of electricity and wholesale market income from renewable generation (notably wind and hydro power).

Turnover related to retail sales to electricity and gas customers is not covered by the Taxonomy and is a material component of ESB's revenue. If this activity was included in the Taxonomy, ESB's Taxonomy-Eligible Turnover KPI would rise to 83%.

Taxonomy-Eligible CapEx

In line with ESB's commitment to invest in a low-carbon energy future, ESB's Taxonomy-Eligible CapEx as a percentage of total CapEx is 88%. This reflects ESB's 2021 investment in developing the electricity network both in ROI and NI along with continued investment in onshore wind, battery and solar projects.

Expenditure related to joint venture investments (by way of equity investments and shareholder loans) is excluded from this KPI but is a key component of ESB's ambition to transition to a low-carbon future. If expenditure relating to joint venture investments (by way of equity investments) was included, ESB's Taxonomy-Eligible CapEx KPI would rise to 94%.

Taxonomy Non-Eligible CapEx primarily relates to overhauls of existing thermal plants.

Taxonomy-Eligible OpEx

ESB's Taxonomy-Eligible OpEx as a percentage of total OpEx is 62% primarily reflecting OpEx supporting the transmission and distribution systems.

Taxonomy Non-Eligible OpEx primarily relates to non-capitalised overhauls of ESB's existing thermal plants.

Other expenditure relating to day-to-day servicing of assets includes spend on the transmission and distribution system and spend on power generation plants, see accounting policy below for further details on Taxonomy-Eligible and Taxonomy Non-Eligible OpEx.

Additional KPI

ESB's Taxonomy-Eligible EBITDA as a percentage of total EBITDA is 89%. Although Taxonomy-Eligible EBITDA is not a KPI required to be disclosed, it is a useful metric in determining the financial performance of ESB relative to the EU Taxonomy.

Accounting Policy

The basis for the denominator and numerator for each of the KPI's is set out below.

Turnover

The turnover denominator includes the total revenue recognised pursuant to International Accounting Standard (IAS) 1, paragraph 82(a). The related financial statement line item is set out in note 4 to the financial statements. In determining the KPI for Turnover, the share that is Taxonomy-Eligible (numerator) is divided by the denominator.

The following is included within Taxonomy-Eligible Turnover (numerator):

- Revenue from Use of System charges to customers (including revenue from supply contributions and excluding intergroup Use of System revenue). Intergroup Use of System revenue equates to 31% of total Use of System revenue
- Proportion of revenue from power generation primarily relating to renewable assets such as hydro generation plants and wind farms
- Proportion of other revenue relating to other Taxonomy-Eligible activities

See further details on ESB's Revenue accounting policy in note 1 of the financial statements.

In addition to the Taxonomy-Eligible Turnover above, the following Taxonomy Non-Eligible Turnover contributes to the denominator:

- Revenue from sales to electricity and gas customers
- Proportion of revenue from power generation relating to thermal plants
- Proportion of other revenue relating to Taxonomy Non-Eligible activities

CapEx

The CapEx denominator includes additions to tangible and intangible assets during the financial year considered before depreciation, amortisation and any re-measurements, including those resulting from revaluations and impairments, for the relevant financial year and excluding fair value changes. The denominator includes additions to tangible and intangible assets resulting from business combinations. The related financial statement line items are set out in notes 12 and 13 to the financial statements.

In determining Taxonomy-Eligible CapEx (numerator), ESB includes all CapEx incurred in ESB Networks and NIE Networks, including CapEx which, while not directly on the network (e.g. IT/OT systems, vehicles etc.), is required for the successful operation of the electricity distribution and transmission networks.

In determining the KPI for CapEx, the share that is Taxonomy-Eligible (numerator) is divided by the denominator.

The following is included within Taxonomy-Eligible CapEx (numerator):

- CapEx incurred on the transmission and distribution system
- Proportion of CapEx incurred on power generation relating primarily to renewable assets such as hydro generation plants and wind farms
- CapEx incurred on construction of new buildings

In addition to the Taxonomy-Eligible CapEx above, the following Taxonomy Non-Eligible CapEx contributes to the denominator:

- Proportion of CapEx incurred on power generation relating to thermal plants
- IT CapEx incurred on Taxonomy Non-Eligible activities

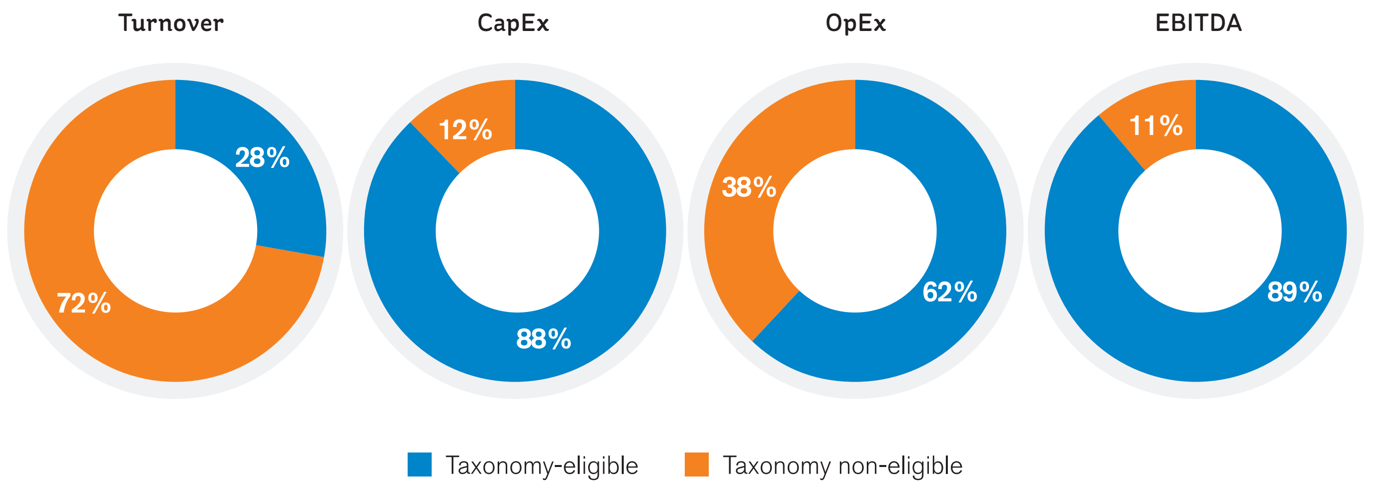
See further details on ESB's Property, Plant and Equipment and Intangible Assets accounting policies in note 1 of the financial statements.

OpEx

The OpEx denominator includes direct non-capitalised costs relating to research and development, building renovation measures, short-term leases, maintenance and repair, and other direct expenditures relating to the day-to-day servicing of assets of property, plant and equipment that are necessary to ensure the continued and effective functioning of such assets.

In determining the KPI for OpEx, the share that is Taxonomy-Eligible (numerator) is divided by the denominator.

The following is included within Taxonomy-Eligible OpEx (numerator):



- OpEx incurred on the transmission and distribution system
- OpEx incurred on power generation primarily relating to renewable assets such as hydro generation plants and wind farms

In addition to the Taxonomy-Eligible OpEx above, the following Taxonomy Non-Eligible OpEx contributes to the denominator:

- OpEx incurred on power generation relating to thermal plants

Additional KPI

EBITDA

The EBITDA denominator includes earnings before interest, taxation, depreciation, impairments, amortisation (including amortisation of supply contributions), impairments and non-trading net impairment losses on financial assets. EBITDA used in KPI calculations excludes exceptional items.

In determining the KPI for EBITDA, the share of EBITDA that is attributable to Taxonomy-Eligible Turnover (numerator) is divided by the denominator.

The following is included within the numerator:

- EBITDA from transmission and distribution of electricity
- Proportion of EBITDA from power generation relating primarily to renewable assets such as hydro generation plants and wind farms

In addition to the above, the following contributes to the denominator:

- EBITDA from sales to electricity and gas customers
- Proportion of EBITDA from power generation relating to thermal plants
- Proportion of EBITDA relating to other Taxonomy Non-Eligible activities

Using our profits in a sustainable way

Investment

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

OVER €1 billion

Taxes

Annual payments across various headings

OVER €560 million

Supporting Communities

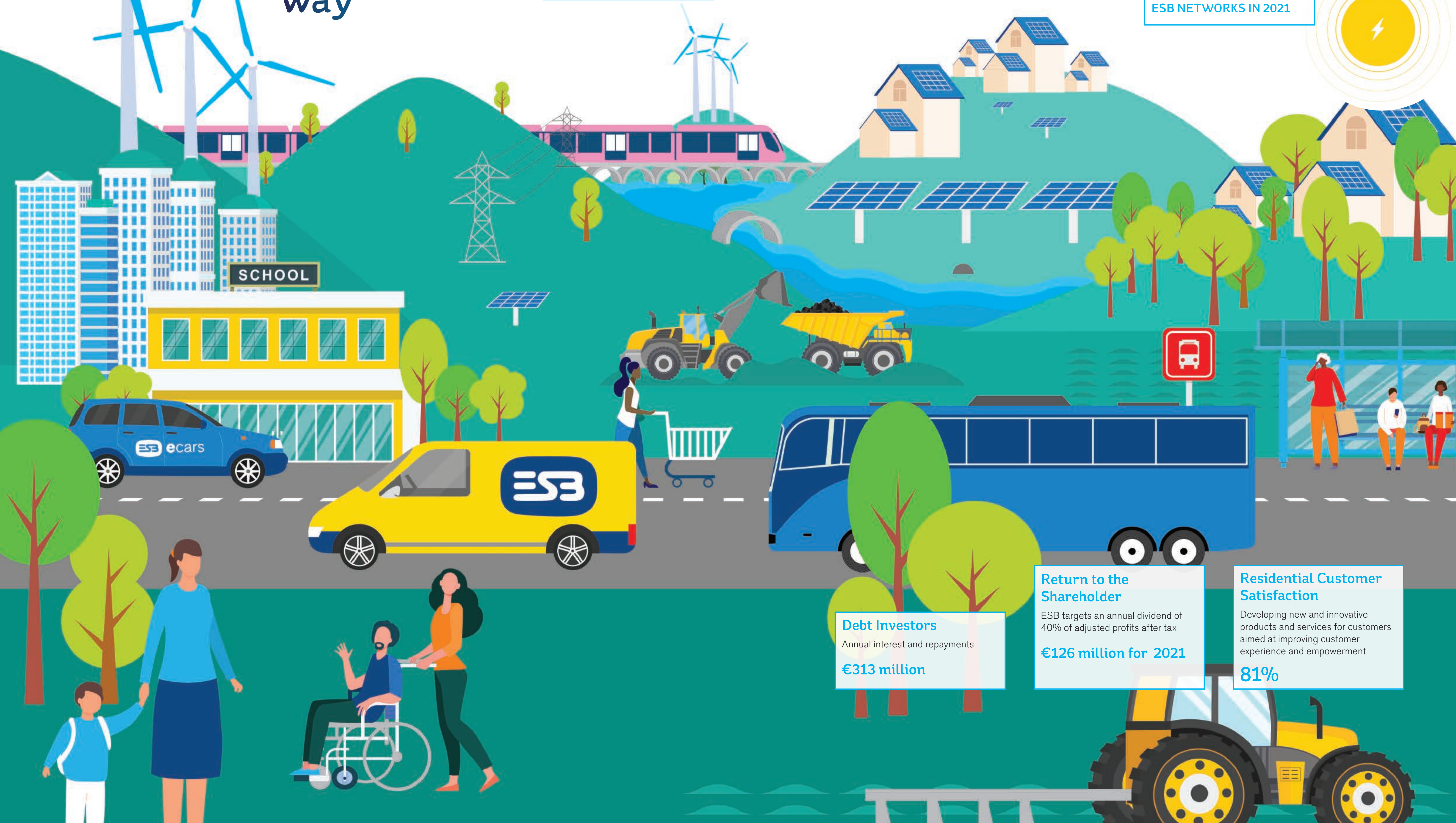
Seek to empower and enrich the lives of individuals and communities through the corporate social responsibility programme

OVER €2.5 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

96 1ST YEAR APPRENTICES BEGAN IN ESB NETWORKS IN 2021



Debt Investors

Annual interest and repayments

€313 million

Return to the Shareholder

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

€126 million for 2021

Residential Customer Satisfaction

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

81%

CHAPTER 2

CORPORATE GOVERNANCE

Rose Spillane, pictured inside her business Spillane's Bar and Restaurant, Castlegregory, Dingle, Co. Kerry

Rose Spillane

DINGLE PROJECT AMBASSADOR

Rose Spillane is the owner of Spillane's Bar and Restaurant in Castlegregory, Co. Kerry. Rose was selected to be an ambassador for ESB Networks' Dingle Project.

Each of the Dingle ambassadors had a range of low-carbon technologies installed in their homes and businesses, with each receiving:

- Solar PV Systems
- Battery Management Systems
- Air Source Heat Pumps (ASHP)
- Electric Vehicles and Smart EV Chargers
- Home Energy Monitoring Systems

Spillane's Bar and Restaurant underwent a deep retrofit. According to Rose, they were using a lot of non-renewable, high-carbon energy before the project took place. "We felt so lucky to be selected as a Dingle Ambassador for this project. We had new doors, windows, and a roof and attic put in. ESB Networks also installed technologies to help lower our carbon emissions. It now feels so warm and dry - it just feels like a new place. I've also been using an EV car as part of the project which is amazing – it's cheaper, more efficient and has less carbon emissions."

THE BOARD IN 2021

Terence O'Rourke

Chairman

Appointment to the Board: November 2020 as Board Member and Chairman.

Tenure: 1 year and 2 months.

Career experience: A Fellow of the Institute of Chartered Accountants in Ireland. Joined KPMG in 1975, became an audit partner in 1988 and was elected Managing Partner in 2006. A member of KPMG's Global Board, Global Executive Team and EMA Board from 2007 to 2013. Terence has a wide breadth of business skills with high-level experience in commercial, finance, decision-making and strategy development roles working with clients in Ireland and abroad.

External appointments: Chairman of Enterprise Ireland and Kinsale Capital Management Limited. Non-Executive Director and Audit Committee Chair of Hibernia REIT plc, Non-Executive Director of The Irish Times Limited and Chair of their Audit Committee. Chairman of the Irish Management Institute and a Board Member of the Institute of International and European Affairs (IIEA). Led the Arts Council 2014 Strategic Review Steering Group and has been involved in a number of charity boards. Terence recently agreed to become a Patron of Chapter Zero Ireland, a community of non-executive directors that lead Irish boardroom discussions on the impacts of climate change.

Anne Butler

Independent Board Member

Appointment to the Board: November 2012.

Tenure: 9 years and 2 months.

Career experience: Chartered engineer. Worked in engineering consultancy for Dublin local authorities and was a founding Director (Executive) of the Environmental Protection Agency (EPA). Former President of the Institution of Engineers and is a member of the Irish Academy of Engineering.

External appointments: Served on several boards including the National Roads Authority (NRA), Ordnance Survey Ireland (OSI) and Dublin Institute of Technology (DIT) and currently serves on the Board of REPAK Limited and the National Paediatric Hospital Development Board.

Dave Byrne

Worker Board Member

Appointment to the Board: January 2011 under the Worker Participation (State Enterprises) Act, 1977. Re-appointed to the Board in September 2018 for a term of four years commencing 1 January 2019.

Tenure: 11 years.

Career experience: Member of a team that is now part of ESB's Enterprise Services organisation and previously worked in Customer Supply (now Customer Solutions).

External appointments: President of ESB Officers Association (now the Energy Services Union) until April 2010 and then appointed as the Group of Unions' representative in Central Partnership.

Stephen Carrig

Worker Board Member

Appointment to the Board: January 2019 under the Worker Participation (State Enterprises) Act, 1977.

Tenure: 3 years.

Career experience: Joined ESB as an apprentice electrician in 1985. Holds primary and master's degrees in engineering from Trinity College Dublin and University College Dublin respectively. Stephen is the Asset Assurance Manager at Ireland's largest thermal generating station, Moneypoint.

External appointments: Member of Engineers Ireland and former Chair of Energy Sector Professionals Association (ESPA).

Andrew Hastings

Independent Board Member

Appointment to the Board: July 2015.

Tenure: 6 years and 6 months.

Career experience: Graduated with a B.Admin in 1985 from Dundee University. Independent Non-Executive Director and mentor following a 30-year career in banking and financial services. A chartered director, chartered banker and certified bank director, Andrew held the CEO position of Barclays Bank Ireland plc until March 2015, which included responsibility for Northern Ireland. Previously CEO of BNP Paribas Ireland from 2007 to 2011.

External appointments: Director of Elavon Financial Services DAC, the Dublin-based subsidiary of US Bancorp, Pepper Finance Corporation (Ireland) DAC, Scottish Building Society and a consultant to London-based Valuation Consulting LLP.

Seán Kelly

Worker Board Member

Appointment to the Board: January 2011 under the Worker Participation (State Enterprises) Act, 1977. Re-appointed to the Board in September 2018 for a term of four years commencing 1 January 2019.

Tenure: 11 years.

Career experience: A 20-year career in ESB Networks, currently in the delivery of large projects. Seán holds an honours degree in business from UCD and a higher diploma in mediation and conflict resolution from Maynooth University. Seán also holds a diploma in human resources completed through Chartered Institute of Personnel and Development (CIPD), certificates in health and safety from UCD and an in-company directorship from the Institute of Directors in Ireland.

External appointments: Former Chairperson and current member of the ESB Defined Benefit Superannuation Committee and Training Officer for the National Worker Directors' Group. He is a member of CIPD and the Institute of Directors.

Paul Lynam

Independent Board Member

Appointment to the Board: October 2016, re-appointed for a second term in December 2021.

Tenure: 5 years and 3 months.

Career experience: Currently Managing Director of Jungheinrich Lift Truck (Ireland) Limited, a subsidiary of the German based Jungheinrich AG, a leading material handling solutions provider. Paul has over 25 years' experience in business in Ireland and internationally. Previously served as Director of Operations of the International Industrial Business with Brand Energy and Infrastructure Services, was CEO of the Whitfield Clinic, CEO of Siemens Limited Ireland and CFO of Siemens Limited Ireland (2008-2010). Paul spent 14 years in Germany in various management roles with Smurfit Group and Kappa Packaging. Holds a BSc in Analytical Science from DCU, a postgraduate diploma in business studies from UCD and an MBA from City University Seattle.

External appointments: Director at Jungheinrich Lift Truck Limited, previously served as Director of Siemens Ireland and Director of Whitfield Clinic associated companies.

Tony Merriman

Worker Board Member

Appointment to the Board: January 2007 under the Worker Participation (State Enterprises) Act, 1977. Re-appointed to the Board in September 2018 for a term of four years commencing 1 January 2019.

Tenure: 15 years.

Career experience: Joined ESB as a network technician in 1979. Served as an officer with the ESB Group of Unions.

External appointments: Board Member of ESB Employee Share Ownership Plan (ESOP) Trustee Limited, Chairman of the National Worker Directors' Group and Trustee of ElectricAid.

Noreen O'Kelly

Independent Board Member

Appointment to the Board: April 2013.

Tenure: 8 years and 8 months.

Career experience: A chartered accountant who trained with KPMG. Held several senior positions in Independent News & Media Group including Head of Treasury and Group Secretary and was also Company Secretary of C&C Group plc. Currently works as a consultant on corporate governance.

External appointments: Previous external appointments include the vice chairmanship of the board and chairmanship of the audit committee of Rehab Group, and external membership of the audit committees of University College Dublin and IT Sligo.

Professor Alf Smiddy

Independent Board Member

Appointment to the Board: October 2016, re-appointed for a second term in December 2021.

Tenure: 5 years and 3 months.

Career experience: A chartered accountant, who trained with PwC. Chairman and Managing Director of Beamish & Crawford plc for over 12 years and served on the Board of its parent company, Scottish & Newcastle (UK) Limited. Member of the National Executive Council of IBEC, Director of Cork Chamber of Commerce, Chairman of the Cork Local Government Committee and served on the Board of Cork Airport Authority. A Fellow of the Irish Marketing Institute. A commerce graduate from UCC, with a master's degree in Executive Leadership from Boston College and the University of Ulster.

External appointments: Appointed in June 2021 as Adjunct Professor at the College of Business & Law, University College Cork, Director of the Government-backed Rethink Ireland (social innovation) and Director of Oxfam Ireland. Served as Senior Independent Non-Executive Director and Director with designated responsibility for workforce engagement at The Dalata Hotel Group plc. Chairman and/or Director of various independent companies including Aperee Limited (healthcare) and Granite Digital (digital marketing).

Sara Venning

Independent Board Member

Appointment to the Board: December 2021.

Tenure: 1 month.

Career experience: Currently CEO and Board Member of Northern Ireland Water (NI Water). Holds an MEng in Electrical and Electronic Engineering from Queen's University, Belfast. Joined Northern Ireland Electricity as a graduate engineer, holding a number of positions most latterly Customer Operations Manager prior to joining NI Water in 2010. Sara is a Fellow of the Institution of Civil Engineers.

External appointments: Board member of the Institute of Water and President of the NI WaterAid Committee.

Key to Committee Membership

Page 111	Audit and Risk Committee
Page 117	Safety, Environment and Culture Committee
Page 117	Remuneration and Management Development Committee
Page 118	Finance and Investment Committee
Page 118	Customer, Marketing and Innovation Committee

Chairman's Corporate Governance Statement

Terence O'Rourke

Chairman

Good corporate governance encourages informed and longer-term decision making as well as the efficient use of resources. It remains a core focus for the ESB Board and for me as Chairman. It strengthens accountability for the stewardship of resources and is characterised by robust scrutiny which places ongoing emphasis on improving performance.

The role of the Board is to provide effective leadership and oversight of ESB and to promote its long-term success. The Board ensures that ESB's strategy and culture is reflective of our purpose and values and that the interests of ESB's various stakeholders, including those of its shareholders, employees and the customers and communities we serve, are appropriately balanced when decisions are being made.

Management has the knowledge and expertise for the operational requirements of the business. It is not the role of the Board to duplicate that. In our view, the best decisions are made through the dynamic interaction between the Board and management.

2021 has been a very busy year for the Board. Significant decisions were made in respect of strategy direction, executive succession, investments in renewables and security of supply, acquisitions and disposals and a range of financial matters. The Board reviewed its major decision making at year end with a view to refining and improving the Board's approach. The Board was satisfied that the oversight being provided is effective and that decisions taken achieve the best long-term outcomes for ESB and its stakeholders.

Governance by Design

Good corporate governance does not happen by accident. ESB, in pursuit of its governance objectives, complies with the State Code. ESB also complies on a voluntary basis (insofar as is reasonably applicable, given that ESB is a statutory corporation) with the UK Code and with the Irish Corporate Governance Annex (Irish Annex). A report on compliance with the UK Code and the Irish Annex was presented to the Audit and Risk Committee in 2021 and exceptions to compliance with both are outlined on page 106. In this way, ESB adheres insofar as is reasonably applicable, to listed company governance standards.

ESB has put in place appropriate measures to comply with the State Code, which sets out the governance framework established by the Government in respect of oversight and reporting requirements of State Bodies, based on the principles of accountability, transparency, probity and a focus on the sustainable success of the organisation over the longer term. ESB has a robust process in place to ensure compliance with the State Code and a report on such compliance is made annually to the Audit and Risk Committee. The Board is satisfied that ESB has complied with the requirements of the State Code. A report is issued annually to the Minister for the Environment, Climate and Communications (the Minister), which confirms compliance with the requirements of the State Code.

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

As a statutory body, ESB is not subject to the disclosure requirements prescribed in the European Union (Disclosure of non-financial and diversity information by certain large undertakings and groups) Regulations 2017. However, on a voluntary basis ESB, in keeping with best practice, discloses certain non-financial information. See table on page 8.

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

- leading the Group effectively
- treating everyone with respect
- engaging openly and honestly with our customers, communities and stakeholders and
- using information carefully

Board Members are expected to lead by example and set the tone from the top. Our Code of Conduct is available on the ESB website. In 2021, the Board had specific training on managing conflicts of interest, mindful of our obligations under the Ethics in Public Office Act, 1995 and the Standards in Public Office Act, 2001.

Over the past year, the focus on sustainability and Environmental, Social and Governance (ESG) performance and reporting has accelerated, with much greater emphasis by investors and other stakeholders on non-financial metrics to judge corporate performance and sustainability. In addition, we are progressing preparations for new requirements under the EU Corporate Sustainability Reporting Directive that comes into effect in 2023.

We have also made good progress in the last twelve months on our ESG frameworks and we are reporting on a voluntary basis under the EU Taxonomy for the first time for the 2021 financial year. ESG reporting will continue to be a focus for the Board throughout 2022.

A detailed description of our governance compliance framework is set out on pages 100 to 110.

Board Effectiveness

The Board continually strives to improve its effectiveness. This is done through the conduct of post Board meeting reflections and informally by holding discussion amongst Board Members with feedback to the Chairman and Company Secretary. Board and Committee actions are formally tracked to ensure all are completed.

A formal internal evaluation is carried out annually, and every third year an independent external evaluation is carried out by an external evaluator. An external evaluation took place in 2021 led by Board Excellence. Board Excellence were highly impressed by the calibre and capabilities of the ESB Board Members and their deep commitment to ESB's sustainable success. Their overall assessment is that the ESB Board is currently positioned in the *Strong Category* range by reference to the benchmarks used. The key findings are set out on page 104. A number of recommendations were made to further enhance Board effectiveness and an implementation plan has been agreed with the Board to action the recommendations from the review.

Board and Committee Changes

There were a number of changes on the Board during 2021.

- Pat O'Doherty retired as Chief Executive and member of the Board during 2021 and Paddy Hayes was formally appointed as the next Chief Executive in August 2021. The Chairman has recommended to the Minister that Mr Hayes also be appointed as a member of the Board
- Noreen Wright completed her second term on the Board in June 2021
- Alf Smiddy and Paul Lynam were re-appointed to the Board in December 2021 for 3 year terms
- Sara Venning was appointed to the Board in December 2021 for a 5 year term

We are pleased that the Minister has appointed Board Members with the requisite knowledge, skills and experience to the Board. There were no other changes to the Board this year and the Group continues to benefit from the collective experience and diversity of current members.

During the year, Noreen Wright completed her term on the Board and on the Audit and Risk Committee and Sara Venning was appointed to the Safety, Environment and Innovation Committee. There were no other changes in Committee membership during the year. Details of the Committees and their activities during the year are set out on pages 111 to 118.

The Terms of Reference of Board Committees were reviewed during the year and revised and updated where appropriate. The Customer, Marketing and Innovation Committee revisions reflected the importance of customer centricity, the governance of sponsorships and an additional focus on low-carbon technologies (see page 118 for further details). The Audit and Risk Committee's responsibilities in respect of large subsidiary entities (as required by the Companies Act, 2014) were included in their Terms of Reference. The Remuneration and Management Development Committee Terms of Reference were substantially revised to align with the Chartered Governance Institute's guidelines for such committees including those relating to gender pay gap and diversity (see page 117 for further details).

The Board Committees play a central role in governance. All the Board Committees have an annual workplan which is used to support the Committee with their oversight responsibilities. Quarterly updates are provided on progress against the workplan and items are prioritised as appropriate. A separate Annual Report is provided to the Committees on performance against the workplan.

Board Diversity and Succession Planning

Inclusion and diversity are considered business imperatives by the Board, impacting the way we work and our future success. The external Board Evaluation (which took place in 2021) found that the current ESB Board team has a reasonable level of diversity. Board Member details are set out on pages 94 to 97.

During 2021, the Board adopted an Inclusion and Diversity Policy. The purpose of this Board policy is to support the achievement of an inclusive and diverse membership of the ESB Board and its Committees. In advising the Minister on the role specification for new Board Members and Board succession plans, inclusion and diversity in all its aspects is emphasised having regard to the Annex to the State Code "Gender Balance, Diversity and Inclusion". The new policy is available on ESB's website at www.esb.ie.

The Board is also conscious of the importance of addressing future skills requirements as part of ongoing succession planning. A succession plan based on an analysis of aggregate Board competencies and gaps has been developed and will be used to help with the recruitment of new Board Members in a timely manner.

The Board was pleased to see the Group publish its Gender Pay Gap Report in 2021, ahead of the legislative requirement to do so. ESB is committed to addressing the drivers of the gender pay gap through its inclusion and diversity policies as well as its recruitment, development and smart working practices.

Risk Management

Risk management and reporting continues to be a key area of focus for both the Board and the Audit and Risk Committee, with ESB's approach to managing risk being defined by the ESB Risk Policy and Governance Framework and a strong internal control framework as set out in the ESB Internal Control Policy. While the Board has overall responsibility for the Group's approach to risk, responsibility for supporting the Board's review of the effectiveness of internal controls and risk management has been assigned to the Audit and Risk Committee, which played a key role in 2021 in ensuring that appropriate governance and challenge around risk and assurance were embedded across the Group. The approach to risk is set out in the Risk Report on pages 26 to 41.

Culture and Board Engagement

The Board is appraised of the views of colleagues through reviews of regular employee surveys ("Our Voice"), and updates on investment in systems, talent and the capability of our people. In 2021, the Board also received updates on people strategy and initiatives which are helping to drive performance and improve the employee engagement required to deliver on ESB's strategy. ESB's Culture Dashboard reporting was further embedded in 2021 and allows the Board (via the Safety, Environment and Culture Committee) to monitor progress in areas such as ethics and compliance, safety, health and wellbeing, employee engagement, inclusion and diversity, and people and performance.

COVID-19 has accelerated the pace of culture change across ESB and we now have a once in a generation opportunity to reimagine our ways of working. ESB's Smart Working Programme has been designed to deliver better business results by embracing new digital technology and new ways of working, enjoy the benefits of an inclusive, flexible working culture and reduced carbon emissions. The Board is fully supportive of this initiative which seeks to enhance our people's experience through smarter working practices, technology and processes, while staying connected by a common purpose.

However, it is also important for us as Board Members to meet with people from across the business and to learn about the excellent work that is happening in ESB every day. The Board was keen that the year would not go by without meeting "face to face" with staff in the business. We continue to harness digital ways of working to meet with the Pandemic Support Team and the Crisis Co-ordination Group. This group of people has been working hard throughout the pandemic and continues to keep us all safe at this difficult time. Their endurance and caring approach was evidence of ESB's values in action. We also had the opportunity to hear about the valuable work ESB International staff are doing in Liberia where they are helping to run the Liberia Electricity Company under contract to the World Bank. It was really inspiring to hear what has been achieved.

The Board is also fortunate to have four elected Worker Board Members on the Board who share colleagues' views and perspectives in Board discussions.

Stakeholders

Stakeholder engagement has never been more important in the context of the transformational changes required to deliver net-zero carbon emissions. The Board, the Chief Executive and his executive team are committed to working with the shareholder and all our stakeholders to deliver the investments required for a clean energy future. We are listening to our stakeholders and seeking their views so that we make better informed decisions. The Board will continue to prioritise stakeholder engagement in its own workplans.

External Auditor

PwC has provided extremely high quality audit services throughout their term of appointment which concludes with the 2021 financial year. During 2021, ESB carried out a tender process with the approval and oversight of the Audit and Risk Committee to select ESB's next external auditor. This resulted in the appointment (subject to annual appointment at the Annual General Meeting) of Deloitte as external auditor of the Group's financial statements. We look forward to working with Deloitte in the future. Further details on the tender process are set out on page 116.

Conclusion

In the following pages we outline in detail how the Board and its Committees have fulfilled their responsibilities during the year to ensure that robust governance practices are embedded in ESB.

Terence O'Rourke, Chairman
01 March 2022

The Board's Governance Report

Principles Of Governance

ESB, in pursuit of its governance objectives, complies with the Code of Practice for the Governance of State Bodies 2016 (the State Code) and insofar as is reasonably applicable, with the UK Corporate Governance Code 2018 (the UK Code) and the Irish Corporate Governance Annex (the Irish Annex). A copy of the State Code can be obtained from the Department of Public Expenditure and Reform website www.per.gov.ie. A copy of the UK Code can be obtained from the FRC's website www.frc.org.uk and a copy of the Irish Annex is available at www.ise.ie.

The UK Code sets out five key principles of governance: (1) Board Leadership and Company Purpose, (2) Division of Responsibilities, (3) Composition, Succession and Evaluation, (4) Audit, Risk and Internal Control and (5) Remuneration. The Board's Governance Report is structured accordingly.

1 Board Leadership and Company Purpose

The Board

The Board provides the leadership of the Group and, either directly or through the operation of Committees, applies independent judgement on matters of values, strategy, performance, resources and governance. During 2021, the Board comprised of the Board Members detailed on pages 94 to 97, of whom the Chairman and the Independent Board Members were appointed by the Government and the four Worker Board Members were appointed pursuant to the Worker Participation (State Enterprises) Act, 1977. The Board size and structure is governed by the Electricity Supply Acts, 1927-2004 and by the Worker Participation (State Enterprises) Act, 1977. The roles of the Chairman and Chief Executive are not exercised by the same individual, with the responsibilities of each role formally defined in the Board's Terms of Reference.

The Board has led the development of ESB's Strategy: *Driven to make a difference: Net Zero by 2040*. The Brighter Future Strategy was approved by the Board in 2017 and was reviewed in detail again by the Board in 2021. This review confirmed that the strategy has proven to be directionally valid but a number of significant changes have been made which are set out on pages 17 to 23. The strategy continues to be a purpose driven strategy, that aims to meet customers' energy needs by connecting more renewables, providing a secure, sustainable and reliable electricity system and empowering customers and communities to achieve net-zero carbon emissions. The strategic objectives are aligned to the Government Climate Action Plan (as updated in 2021), reflecting the objective of making a significant contribution to wider society in terms of decarbonisation, underpinned by the requirement for strong financial performance, the capability of ESB's people, increased digitalisation and a commitment to sustainability and social responsibility.

Dialogue with shareholders and investors

ESB is 96.5% owned by the Irish Government and 3.5% by the trustees of the Employee Share Ownership Plan (ESOP). ESB engages in active and ongoing consultation with the Government on key policies and strategic issues as required by legislation and the State Code. This includes providing financial planning and performance information, including the annual budget, five-year business plan and quarterly financial performance updates. Notably in 2021, significant engagement took place between ESB and the Government in relation to security of supply matters. In addition, ESB regularly engages and consults with the Trustees of the ESB ESOP.

Communications with debt investors are also a priority for ESB. The Investor Relations team including the Group Treasurer and the Executive Director, Group Finance and Commercial, regularly engage with institutional debt investors in the form of formal announcements, investor roadshows and investors briefings (for example after the release of interim and annual financial results). More information is available on the investor relations section of ESB's website at www.esb.ie.

Conflicts of Interest

Board Members make annual disclosures of any potential or actual conflicts of interest under the Ethics in Public Office Act, 1995 and the Standards in Public Office Act, 2001. In addition, Board Members are responsible for notifying the Company Secretary on an ongoing basis should they become aware of any change in their circumstances regarding conflicts of interest, as detailed in the ESB Board Members' Code of Conduct. Training on conflicts of interest for Board Members takes place on an annual basis.

Biographical details for all the Board Members, including details of their external appointments are set out on pages 94 to 97.

2 Division of Responsibilities

The way we are structured

The organisation is structured to facilitate effective and efficient decision-making with clear accountability.

Role of the Board

The Board provides leadership and direction to the business as a whole and is responsible for the long-term success of ESB. Decisions are made only after all appropriate information has been made available to Board Members, following due consideration of the risks identified through the risk management process and in the context of the Group-level risk appetite statement. The Board constructively challenges and supports the development of proposals on strategy, which are then reviewed and approved by the Board.

In December, the Board carried out a review of Board decision making in 2021 including consideration of the key decisions made by the Board during the year. In keeping with the Board's commitment to continuous improvement, this was done to refine and improve future decision making.

The Board has reserved the following key decisions for its own consideration (some of which are also subject to shareholder approval):

- Approval of ESB Group Strategy, annual budgets and 5-year business plans, and interim financial statements and regulatory accounts
- Approval of dividends
- Approval of major investments, significant expenditure (including capital expenditure), certain derivative contracts, financing facilities and treasury policies
- Appointment of the Chief Executive, Company Secretary and Executive Team
- Severance or ill-health retirement arrangements for ESB's Chief Executive, Executive Directors and Company Secretary
- Appointment of Chairperson of the Dam Safety Committee
- Appointment of Directors to the Board of ESB Networks DAC (other than Alternate Directors) and the Directors and Secretary of the NIE Networks Board
- Major acquisitions, disposals or retirements of assets
- Appointment of external auditors
- Approval of annual risk plan and risk appetite
- Mass market residential tariffs
- Purchase of stock in ESB (other than pursuant to ESOP arrangements)
- Appointment and removal of ESB Nominated Trustee Directors to the Board of the ESOP
- Key matters related to the Novus Modus Partnership
- Key regulatory, legal, industrial relations, remuneration, pension, accounting and policy matters
- Review of operational and financial performance

Chairman
Terence O'Rourke

- Leading the Board
- Determining the Board agenda
- Ensuring its effectiveness and facilitating full participation by each Board Member
- Ensuring effective communication with the Group's owners and stakeholders

Board

- Chairman, six independent Board Members and four worker Board Members.
- Responsible for the long-term success of ESB and for its overall judgement on matters of strategy, performance, resources and governance

Company Secretary
Marie Sinnott

- Assists the Chairman in ensuring that all Board Members have access to all relevant information and in facilitating Board induction/professional development
- Is responsible for ensuring that correct Board procedures are followed and advises the Board on corporate governance matters
- Liaison between Board and Executive Team

Audit & Risk Committee

Chairman
Noreen O'Kelly

- To assist the Board with its responsibilities in relation to:
  - Financial reporting
  - Internal control and risk management
  - Compliance, whistle-blowing and fraud
  - External and internal auditors

Safety, Environment & Culture Committee

Chairman
Anne Butler

- Review strategies and polices relating to safety, health, the environment and sustainability
- Monitor performance on health, safety, the environment and sustainability matters along with risk management in these areas
- Ensure appropriate culture underpinned by values prevails across ESB
- Review diversity and inclusion and corporate social responsibility strategies and policies

Remuneration & Management Development Committee

Chairman
Terence O'Rourke

- Having regard to Government pay policy, legal obligations, the Code of Practice for the Governance of State Bodies and regulatory requirements approve the remuneration of:
  - Board and Main Subsidiary Board Members
  - Chief Executive
  - Executive Directors
- Monitor succession planning for leadership roles
- Consider the company's pay model and system of performance management
- Consider both diversity and gender pay balance

Finance & Investment Committee

Chairman
Andrew Hastings

- Review investment/divestment and capital expenditure proposals
- Review funding issues including financing requirements and treasury policies
- Review financial performance including business plans and annual financial plan
- Monitor shareholder matters including dividends
- Review trading strategies and policies

Customer, Marketing & Innovation Committee

Chairman
Alf Smiddy

- Alignment of marketing, sponsorship and brand strategies with strategic objectives
- Monitor embedding of customer centricity
- Review governance of sponsorship arrangements
- Monitor stakeholder relationships and engagement strategies
- Monitor reputation related matters
- Review IT and digital strategy
- Monitor innovation and research and development strategies

Executive Team

Leadership and Control of the Group

➔ Biographical details of the Chairman and Board Members can be found on pages 94 to 97.

➔ Biographical details of the Company Secretary can be found on page 47.

➔ Biographical details of the Executive Team can be found on pages 46 to 47.

Board Meetings

The Board met on 11 occasions during 2021 of which 8 were scheduled meetings. The Board is responsible for reviewing the operational and financial performance of the Group and for ensuring effective internal control and risk management. The Board has a formal schedule of matters specifically reserved to it for decision, which are described on page 100.

The Board has delegated authority to management for decisions in the normal course of business, subject to specified limits and thresholds. Oversight of decisions that are delegated by the Board is retained through a robust reporting framework, central to which are effective relationships with the Board Committees, the Chief Executive, the Executive Director, Group Finance and Commercial and the Executive Team.

There is ongoing financial and operational reporting to the Board, with papers made available electronically to each Board Member sufficiently in advance of each meeting to allow adequate time to review and consider matters for discussion/decision. The Board papers include the minutes of Board Committee meetings.

The aim of the Board meetings is to achieve the right balance of oversight of people, culture, strategy, operations, finance, governance and risk management matters. This is monitored through the annual Board Evaluation process, and informal feedback in order to ensure that adequate time is devoted to each matter. The Board is satisfied that the Chairman and each of the Board Members committed sufficient time during the year to enable them to fulfil their duties as Board Members of ESB.

The Board's focus for 2022 will be the execution of ESB's Strategy - *Driven to make a difference: Net Zero by 2040.* This will be achieved by focusing on 7 strategic objectives (see page 17 for further details on ESB's strategy).

To support the continued execution of ESB's strategy, the Board undertook the following activities during the year:

Strategic Objective	Example
Decarbonised Electricity	Approved the investment in Oweninny Windfarm Phase 2, monitored security of supply matters and approved investment in battery technology at existing power generation sites
Resilient Infrastructure	Monitored progress on PR5 delivery, including the continued roll out of smart meters and the delivery of network improvement, and approved the investment in aeroderivative engines to enhance security of supply
Empowered Customers	Approved the investment in So Energy (a retail brand offering 100% renewable energy) and monitored the investment in the ESB Superhomes joint venture
Our People	Reviewed the results of the "Our Voice" staff survey, the output from the People Capability Review and approved the selection of the new Chief Executive and appointments to the Executive Director Team
Digital & Data Driven	Monitored cyber security developments and approved significant IT investments
Financially Strong	Reviewed and approved the 5-year business plan, the refinancing of NIE Networks' inflation linked swaps, the sale of certain properties and the sale of the Tilbury project (GB)
Sustainable & Socially Responsible	Approval of ESB's statement on modern slavery and reviewed ESB's proposed ESG framework and ESG reporting (via the Audit and Risk Committee)

Independence

The Board has determined that those Board Members (details on pages 94 to 97) were independent during 2021. The determination of Board Members' independence takes account of the relevant provisions of the UK Code regarding Board Members' independence in character and judgement, and the absence of relationships or circumstances that could compromise Board Members' independence. Considering these factors, the Board is satisfied as to the independence of the Board Members.

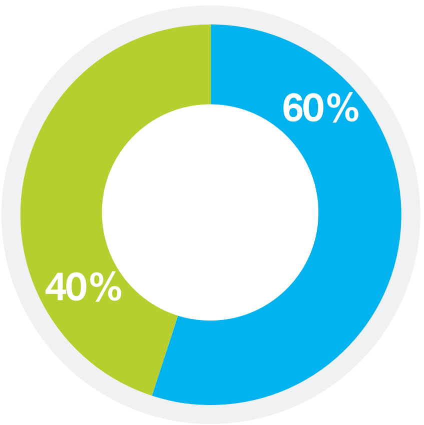
Attendance At Meetings In 2021

The attendance by each Board Member at scheduled and unscheduled meetings during the year is set out below. In addition to the Board Members and Company Secretary, several Executive Directors and Senior Managers attended relevant sections of Board Meetings, by invitation.

Board Members 2021	Meetings attended Scheduled (Unscheduled)
Terence O'Rourke	8 (3)
Anne Butler*	8 (2)
Dave Byrne^	8 (2)
Stephen Carrig^	8 (3)
Andrew Hastings*	8 (3)
Seán Kelly^	8 (3)
Paul Lynam*§	5 (2)
Tony Merriman^	8 (3)
Noreen O'Kelly*	8 (2)
Alf Smiddy* §	5 (2)
Noreen Wright*#	3
Sara Venning * ~	N/A
Pat O'Doherty **	4 (1)

* Independent board member
^ Worker board member
# Term ended in June 2021
~ Term commenced in December 2021
** Retired August 2021
§ Alf Smiddy and Paul Lynam's first term ended 3 October 2021 and both were re-appointed on 14 December 2021

Independence of Board*



Independant Board Members
Non-independant Board Members

* Independence of Board excluding Chairman

Experience and Board/Skills Mix

	Board Committee Participation					Directors Expertise							Director's Experience
	Audit & Risk	Finance & Investment	Customer Marketing & Innovation	Safety Environment & Culture	Remuneration & Management Development	Core Skills					Sector Specific Skills		Length of Tenure
						Operational Management/ Business Experience	Governance	Finance/ Accounting/ Audit/Legal	Science/ Technology/ Engineering	Customer/ Marketing/ Innovation	Energy/ Regulated Markets	Safety/ Social/ Environmental	
Terence O'Rourke					C	●	●	●		○	●	○	1 year & 2 months
Anne Butler			■	C		○	●		●			●	9 years & 2 months
Dave Byrne		■				●	●			○	●		11 years
Stephen Carrig				■		●	●		●		●	●	3 years
Andrew Hastings		C			■	●	●	●		○	●		6 years & 6 months
Sean Kelly		■				●	●			○	●	●	11 years
Paul Lynam	■	■		■		●	●	●	●		○	○	5 years & 3 months
Tony Merriman			■			○	●		●		●	●	15 years
Noreen O'Kelly	C	■				●	●	●		○	●		8 years & 8 months
Alf Smiddy	■		C			●	●	●	○	●		○	5 years & 3 months
Sara Venning				■		●	●	●	●	○	●	●	1 month

C Chairman of committee
■ Member of committee
● Has required skill/sectoral experience
○ Has some of the required skill/sectoral experience

3 Composition, Succession And Evaluation

Board Membership

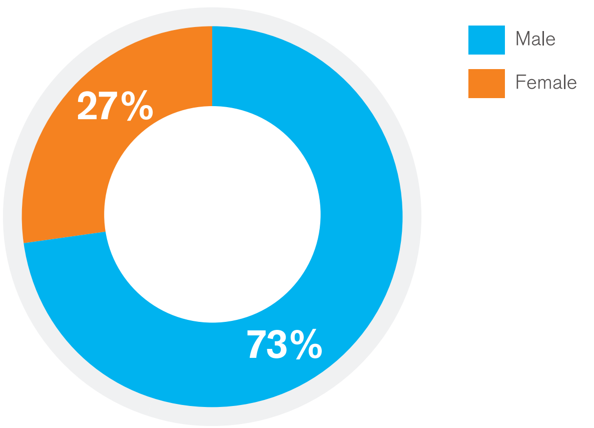
In 2021, the ESB Board Members brought diverse experience, independence and challenges to support effective decision making. The range of Board Members' experience is set out in the Board Members' biographies on pages 94 to 97 and their experience/skills on page 103. The Board is confident that all its members have the knowledge, ability and experience to perform the functions required of them.

The Board's primary role is to exercise objective and informed judgement in constructively challenging and helping to develop and approve ESB's Group Strategy, to ensure there is a strong management team in place to execute the strategy and drive business performance, and to maintain a framework of prudent and effective controls to mitigate risk. The State Code provides that the Chairman may engage with the Government on Board succession and this provides an opportunity for ensuring an appropriate mix of skills, diversity and experience on the Board.

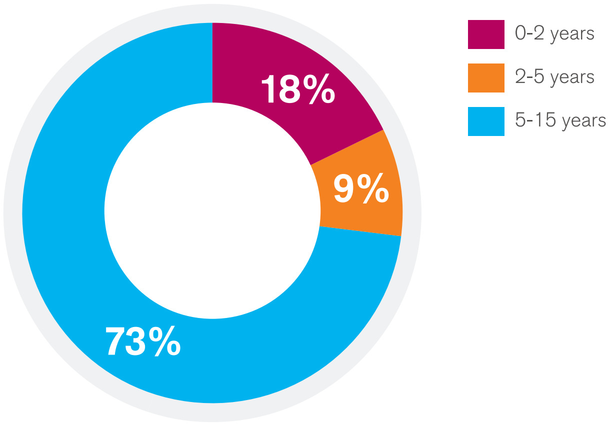
Two critical factors determine how the Board is equipped to fulfil those duties and obligations successfully:

- A diverse and deep range of skills and experience among Board Members and
- Processes to ensure that all Board Members develop and maintain a good understanding of the Group's operations and external environment and are therefore well placed to make informed decisions. See opposite for further detail on the induction and ongoing training and development processes.

Composition of Board (Gender)



Length of tenure



Board Appointments

As Board appointments are a matter for Government (including the appointment of Worker Board Members), ESB does not undertake an evaluation of individual Board Members. However, the Chairman does engage with the Government in advance of the Board appointment process about the specific skills and diversity that are required on the Board. In November 2014, the Department of Public Expenditure and Reform published *Guidelines on Appointments to State Boards* and these guidelines apply to appointments to the Board of ESB.

Board Members are normally appointed for an initial term of five years, renewable for a further period up to a maximum of eight years in total (updated in line with the 2020 Code of Practice Annex*), or for a term of four years in the case of Worker Board Members. Therefore Board Members are not subject to re-election at lesser intervals. The Chief Executive and Independent Board Members may be re-appointed to the Board by Government and any reappointment of Worker Board Members is pursuant to the Worker Participation (State Enterprises) Act, 1977.

*Note: Code of Practice Annex requirements do not apply to Worker Directors. For Non-Executive Directors (NEDs) in place at the date of publication of the Annex, it will be applied at the end of their contracts.

Induction

An induction programme is in place to familiarise new Board Members with the operations of the Group. The programme is tailored to the experience, background and requirements of the individual. Key elements are meeting the executives, visiting sites and receiving a briefing on the ESB Group Strategy, individual businesses and the Enterprise Risk Management Framework.

Ongoing Training and Development

A continuing development programme is in place for all Board Members. The Chairman and Company Secretary liaise with Board Members for their specific needs, such as attendance at conferences/courses/webinars relevant to the business or briefings by managers on specific topics (e.g. in 2021 in-depth training sessions were held on ESB Networks' business model, offshore wind development, financial regulation and ESG). The online resource materials available to the Board were maintained and updated during 2021. These resources provide content to the Board on a range of topics including corporate governance, strategy, enterprise risk, IT, environment and sustainability, people and culture, customers and Group policies.

Board Effectiveness

The Board conducts an annual evaluation of its own performance and that of its Committees (every third year this is done independently by an external evaluator). This evaluation is undertaken to comply with the State Code and, insofar as is reasonably applicable, with the UK Code. The evaluation relates to the Board's and Committees' collective performance and not to the individual performance of Board Members. The purpose of the evaluation is to review the Board's operation and to identify ways to improve its effectiveness. It also helps to identify specific skills required by Board Members, in relation to which the Chairman can make suggestions to the Government for consideration when appointments are being made.

The evaluation provides assurance that the Board is committed to the highest standards of governance. The evaluation is led by the Chairman and supported by the Company Secretary. The scheduled externally facilitated Board evaluation took place in 2021. While cognisant that the ESB Board must have regard to shareholder requirements and government policy when discharging its oversight obligations, the evaluation of the effectiveness of the Board was primarily undertaken with reference to large corporate and publicly listed entities. A questionnaire was used in the evaluation to provide a broad sense of issues or gaps, with a view to providing direction for the more detailed exploration of potential strengths/weaknesses in interviews. Board and Committee meetings were observed and feedback from stakeholders, including ESB's auditor and shareholder representatives was also received.

The high priority recommendations from the 2021 external evaluation are outlined below:

- Ensure increased presence of experienced electrical utility/energy sector independent Non-Executive Directors on the Board
- Review current approach to agenda design including frontloading of Board meetings with key strategic areas
- Incorporate Kaizen (continuous improvement) session at the end of each meeting
- Develop strategy review processes and reporting on strategic pillars
- Develop cybersecurity related reporting
- Review approach to monitoring and reporting on stakeholder engagement
- Enhance reporting on talent development
- Increase the focus on ESG matters

An action plan for the implementation of the above recommendations as well as the other recommendations identified in the external evaluation has been developed and will be tracked throughout 2022.

In addition to the recommendations from the external evaluation, Board effectiveness was further enhanced during the year with:

- An update of the Board's Terms of Reference and Code of Conduct
- A continuation of the Board induction and training programme and a roll-out of sector specific in-house training

The Chairman meets with Board Members for an open exchange concerning the efficiency and effectiveness of the Board.

Examples of matters considered and/or approved by the Board In 2021

People	Operations
• Senior executive appointments • Staff survey results • People Capability Review • Safety incidents • Policy on inclusion and diversity	• Group strategy update • Chief Executive operations reports • Health and safety reports • Security of supply update • Plant investment and overhauls programme • Property disposals • Investment in renewable/storage projects • Asset disposals • Smart metering programme update • ESB Networks' Regulatory Price Review 5 delivery update • Electricity price changes
Strategy	**Governance and Risk Management**
• Board strategy day considering economic, policy, competitor and technology trends in general and impact on ESB strategy • SIRO strategy • GB supply strategy and So Energy acquisition • Energy market update • Property disposal strategy	• Group Risk Plan • Internal audit plan for the year • Committees' Terms of Reference • Pension scheme appointments • Group authority levels • UK Modern Slavery Act • Board evaluation • Cybersecurity update • Board policies • NIE Board appointments
Finance	
• Annual and half-yearly published results • ESB regulatory accounts • Quarterly financial performance and forecasts • Monthly key performance indicators (KPIs) • Annual budget and five-year business plan • Dividend payments • Hurdle rates for new investments • Funding requirements • Refinancing of inflation linked swaps • Approval of appointment of external auditors • Pension scheme valuation	

4 Audit, Risk and Internal Control

Compliance with Corporate Governance Codes

ESB complies with the State Code, which sets out the principles of corporate governance that Boards of State Bodies are required to observe. 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 complies on a voluntary basis, insofar as is reasonably applicable with the UK Code and the Irish Annex. ESB is a statutory corporation established under the Electricity (Supply) Act, 1927 (as amended) and is not obliged to comply with the UK Code or the Irish Annex. The UK Code consists of principles (main and supporting) and provisions. Companies listed on the Irish Stock Exchange are required, as part of the Listing Rules, to describe how they apply the principles and comply with the provisions of the UK Code and the related Irish Annex, and to provide an explanation in the event of non-compliance.

A review was completed of compliance with the UK Code and the Irish Annex during 2021. ESB voluntarily complies with the principles and provisions of both subject to the exceptions set out in the table below.

UK Code

Principle / Clause	Explanation
J / 20 / 17 / 23	Appointments to the Board are a matter for the Government and accordingly ESB does not have a Nominations Committee.
18	Board Members are appointed for multi-year terms and therefore are not subject to re-election to the Board at lesser intervals.
34 / 36 / 39 / 41	ESB's policies and disclosures in relation to remuneration of the Chief Executive are in accordance with applicable Government guidelines. Notice periods in the Chief Executive's contract are in accordance with Government guidelines. The details of Board Members' remuneration on page 110 do not include amounts paid to the four Worker Board Members as employees of ESB (as such pay is neither increased nor decreased because of their membership of the Board). Obligations regarding share awards are not relevant to ESB, nor are post-employment shareholding requirements relevant as beneficial interests in the stock of ESB are held only through participation in ESB's Employee Share Ownership Plan (ESOP) and ESB is majority owned by the Government.
12 / L	The Board evaluation process has not to date evaluated the individual performance of Board Members as the Board does not have a formal role in determining its own composition.
32	The Board Chairman is also Chairman of the Remuneration and Management Development Committee, given the importance of compliance by ESB with Government policy in this area and the role of the Chairman as the primary interface with the Government.
12	The Independent Board Members do not meet without the Chairman present to appraise the Chairman's performance as the appointment of the Chairman is a matter for the Government.
41	The Government sets the pay of the Chief Executive and establishes pay policy relevant to senior management. This limits the discretion of the Remuneration and Management Development Committee in relation to these matters.
3	Committee Chairs do not engage with Ministerial Stockholders as there is a process in place whereby the Chair engages with Ministerial Stockholders and ensures that the Board and management are aware of the views of the Stockholders.
4	As ESB is 96.5% State owned, with governance arrangements in place with its Ministerial Stockholders, requirements in relation to consultation with shareholders in the event of 20% or more of votes being cast against a Board recommendation are considered not to be applicable.
5	Neither UK nor Irish company law is directly applicable to ESB (including Section 172 of the UK Companies Act, 2006).
15	Members of the Board of ESB are appointed in accordance with Section 2 of the Electricity (Supply) Act, 1927 and the Worker Participation (State Enterprises) Acts. Therefore, the requirement to take account of demands on directors' time and the undertaking of additional external appointments is a matter for the Government.

Irish Annex

Section	Explanation
1.1 / 1.7 / 4.1	Appointments to the Board are a matter for the Government. A reasoned explanation for Board appointments is not provided.
2.1	Appointments to the Board are a matter for the Government and accordingly ESB does not have a Nominations Committee.
3.1	The scope of the evaluation of the Board relates to the Board's and Committees' collective performance, and not to the individual performance of Board Members.

Financial and Business Reporting

The Board recognises its responsibility in preparing the Annual Report and Financial Statements and in presenting a fair, balanced and understandable assessment of the Group's position and prospects. The Board Members' responsibilities regarding financial statements and going concern are set out on pages 108 to 109.

Procurement

ESB carries out its procurement activities in compliance with applicable procurement laws and the State Code. A paper detailing obligations and providing assurance of compliance is provided annually to the Audit and Risk Committee.

Internal Control

The Board has overall responsibility for the Group's system of internal control and for monitoring its effectiveness. The system of internal control is designed to provide reasonable but not absolute assurance for the achievement of the following objectives:

- Effectiveness and efficiency of operations and safeguarding of the organisation's assets against loss
- Reliability of reporting for internal and external use
- Compliance with applicable laws and regulations

In order to discharge its responsibilities in a manner which ensures compliance with legislation and regulations, the Board has established an organisational structure with clear operating and reporting procedures, lines of responsibility, authorisation limits, segregation of duties and delegated authority.

The Group uses the integrated internal control framework as developed by the Committee of Sponsoring Organisations of the Treadway Commission (COSO) as guidance for designing, implementing and conducting internal control and assessing its effectiveness. The COSO framework was first released in 1992 and updated in 2013.

ESB has in place a strong internal control framework, which includes the following:

- A Code of Ethics ("Our Code") that sets the tone from the top and requires all employees to maintain the highest ethical standards in conducting business
- Comprehensive Anti-Bribery, Anti-Corruption and Fraud and Whistleblowing and Protected Disclosure Policies
- Insider trading policies and procedures for the prevention of market abuse
- A clearly defined organisational structure, with defined authority limits and reporting mechanisms to higher levels of management and to the Board, which support the maintenance of a strong control environment
- A corporate governance framework that includes risk analysis, financial control review and formal annual governance compliance statements by the management of business units and joint ventures (JVs)
- A comprehensive set of policies and procedures relating to operational and financial controls as well as compliance obligations including regulatory licence and ringfencing obligations
- Large capital projects requiring the approval of the Board are closely monitored on an ongoing basis by the Finance and Investment Committee
- Comprehensive budgeting systems with an annual budget and five-year plan approved by the Board
- A comprehensive system of financial reporting and non-financial reporting
- Cumulative actual results and KPIs are reported against budget and considered by the Board on a regular basis
- A telephone helpline and online webchat service that provides employees with a confidential and, if required, anonymous means of reporting any suspected wrongdoing or ethical concerns

These controls are reviewed systematically by Group Internal Audit. In these reviews, emphasis is placed on areas of greater risk as identified by risk analysis. Where weaknesses in the internal control system have been identified through the monitoring framework above, plans for addressing them are put in place and action plans are regularly monitored until completed.

Risk Management

Effective risk management is critical to the achievement of ESB's strategic objectives and the long-term sustainable growth of its business. The rapid changes taking place in ESB (and the markets and in the regulatory and operating environments in which ESB operates) make it all the more important to continuously reassess risks and have clear strategies and controls to manage them and, as appropriate, leverage any opportunities they present. The Board has overall responsibility for the Group's approach to risk, satisfying themselves that the systems of risk management are robust and defensible.

Specifically, the Board responsibilities in respect of risk include:

- Overall responsibility for Enterprise Risk Management and crisis management processes including effectiveness of management's mitigation measures and controls
- Ensuring risk management is embedded into all processes and activities
- Approval of the Group Risk Plan
- Overseeing that an appropriate risk culture is embedded throughout the Group
- Establishing a clearly articulated risk appetite position that clarifies the level of risk ESB is willing to accept, which also ensures that management and the Board align their views on risk and that investments and expenditures are considered in light of that appetite

During 2021, an external review of ESB's Enterprise Risk Management processes was completed and improvements were made to the risk assessment process during 2021. Work is ongoing to address the remaining findings of this review.

The Board has carried out a robust assessment of the principal risks facing the Group, including those that might threaten its business model, future performance, solvency and liquidity. A cyclical review process for identifying, assessing and managing significant risks has been in place for the year under review and up to the date of approval of this Annual Report. The principal risks and uncertainties facing the Group and the mitigating strategies are set out on pages 30 to 41.

The Board is aware that it must lead by example in shaping and supporting the updated Group values that underpin the approach to risk. It also seeks to ensure that sufficient risk management skills and capabilities are available in the business and that the knowledge and experience of all the employees in ESB who understand the risks associated with operations is utilised. Regular reporting has facilitated the Board to stay abreast of changes in identified principal risks, in addition to emerging risks and uncertainties.

The Board focuses primarily on those risks that could undermine ESB's strategy, or which could adversely affect the long-term viability or reputation of the Group. The Board delegates responsibility for oversight of specific risks to Board Committees in accordance with the Committees' Terms of Reference and respective area of expertise. The Board agrees how Committees will keep one another, and the Board itself, informed about risks and risk oversight practices. Efficiency and effectiveness call for clear boundaries, communication channels, and handoff points. The Board defines these elements clearly, adjusting as needed. The Committees' Chairs report to the full Board on key risks falling within their remit, developments and matters requiring further discussion and consideration. The Audit and Risk Committee retains overall responsibility for ensuring that enterprise risks are properly identified, assessed, reported and controlled on behalf of the Board.

Risk appetite may also vary over time and the Board has explicitly considered the level of this appetite and how specific risks are managed within it. The propensity to take risk is always balanced by a focus on exercising control.

Activities undertaken by the Audit and Risk Committee during 2021 in respect of its risk responsibilities included:

Activity	Detail
Group Risk Plan	The Committee reviewed the 2021 Group Risk Plan and recommended it to the Board for approval.
Business Continuity Planning (BCP) and Crisis Management Review	The Committee reviewed the effectiveness of business continuity plans, crisis management and resilience testing arrangements across the Group.
Mid-Year Risk Review	The Committee considered and reported to the Board any changes to the Group principal risks and emerging risks as approved at the start of the year, including a review of material changes to the risk profile.
Quarterly Risk Reports	The Committee reviewed changes to the status of the principal risks, including the effectiveness of operation of controls and the status of mitigating actions.
Supply Chain Risk Review	The Committee reviewed the assurance report on ESB supply chain risk management in the context of COVID-19 and Brexit.
Risk Deep Dive Meeting	The Committee was provided with an update on cybersecurity with a specific focus on ransomware attacks. Climate and environment risks were also considered at this meeting.
Data Protection	The Committee reviewed the bi-annual Data Protection Dashboard and half-year Data Protection report.
External Assessment of the GIA Function	The Committee reviewed the independent report on the internal audit function to assess whether it effectively delivers on its mandate of providing independent assurance on the adequacy and effectiveness of ESB's governance risk management internal controls and on the organisations performance in achieving its goals and objectives.
Independent External Review of the ESB Enterprise Risk Management (ERM) Framework	The Committee reviewed the Independent External Risk Review report on the assurance of the effectiveness of the ERM Framework.

The 2021 review of the effectiveness of Internal Control and Risk Management

The Board retains overall responsibility for internal control and risk management. During 2021, the Board has directly and through 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 2021 and will ensure a similar review is performed in 2022.

The process used by the Board and the Audit and Risk Committee to review the effectiveness of the system of internal control includes:

- A designated risk management function in ESB
- Review and consideration of the Annual Risk Plan, half-yearly risk review process, quarterly risk management updates and an annual risk deep dive review of a selection of principal risks
- Review of the operation of cybersecurity risks and controls
- Independent advice on the adequacy of the current Enterprise Risk Management process operating in ESB (finalised in 2021)
- Review and consideration of certification from management of satisfactory and effective operation of systems of internal control, both financial and operational
- A review of the programme of Group Internal Audit and consideration of its findings and reports. Group Internal Audit also report regularly on the status of implementation of recommendations raised previously from its own reports
- Independent assessment of the effectiveness of the internal audit function (this is carried out every five years and an assessment was carried out in 2021)
- A review of reports from the external auditors which contain details of work carried out on the key audit risks and recommendations regarding internal control improvements

Separately, the Safety, Environment & Culture Committee reviews the effectiveness of processes in place to identify, assess, report and control risks in relation to health, safety and environment matters.

Based on this review, the Board confirms the following for 2021:

- There is an ongoing process for identifying, evaluating and managing the principal and emerging risks of ESB
- Systems of internal control have been in place for the year under review and up to the date of approval of this Annual Report
- The systems comply with the Financial Reporting Council (FRC) Guidance on Risk Management, Internal Control and Related Financial and Business Reporting
- Several environmental and safety compliance and reporting issues were identified in ESB Networks in 2019. A programme of corrective actions was put in place with implementation well progressed in 2021
- No other significant failings or weaknesses in internal control were identified in the review and where areas of improvement were identified, processes are in place to ensure that the necessary action is taken, and progress is monitored until completed

Through its ongoing involvement and overview of internal control and risk management activities, the Board is satisfied that internal control and risk management processes are effective.

Going Concern

The COVID-19 pandemic has not had a significant impact on financial performance to date with electricity demand remaining resilient and capital expenditure programmes continuing. ESB has delivered operating profits (before exceptional items) of €679 million for the year. ESB's cash flow and liquidity position has remained strong throughout the pandemic and throughout a period of significant volatility in energy markets in 2021.

The Group has considerable financial resources (with net assets of €4.1 billion and liquidity of €1.9 billion) and the Board believes that the Group is well placed to manage its risks successfully. After making appropriate enquiries, the Board is satisfied that ESB has sufficient cash flows, available liquidity and access to capital markets to continue in operational existence for the foreseeable future. Accordingly, the Board continues to adopt the going concern basis in preparing ESB's financial statements.

ESB's performance, business model, strategy and principal risks and uncertainties and how these are managed are set out in the Strategy and Performance report on pages 17 to 41.

The financial position of ESB, its cash flows, liquidity position and borrowing facilities are described in the Financial Review on pages 54 to 59. Note 29 of the financial statements includes an overview of financial risk management, details of its financial instruments and hedging activities and its exposure to credit and liquidity risks.

Viability Statement

In accordance with the UK Code, the Board Members have assessed the prospects of ESB over a longer period than that required in adopting the going concern basis of accounting.

ESB's assessment has been made over a five-year period, which is consistent with the time frame of ESB's business planning process. The assessment is based on consideration of ESB's current position and prospects, maintenance of its financial strength (pages 54 to 59), progress against ESB's strategy (page 17), risk appetite (page 26), principal risks (pages 30 to 41) and how these are managed.

The Board believes that a five-year assessment is most appropriate as it aligns with the business planning process completed annually and is underpinned by regular Board briefings provided by business units along with strategic performance indicators (SPIs) to measure progress. The projections in the business plan consider ESB's cash flows, committed funding and liquidity positions and examine future funding requirements and financial covenants, and other key financial ratios including those relevant to maintaining investment grade credit ratings. The metrics in the business plan are subject to sensitivity analysis, which involves flexing a number of the main assumptions underlying the plan to assess key financial metrics, such as Net Debt and EBITDA (Earnings Before Interest, Tax, Depreciation and Amortisation) and, where appropriate, analysis is carried out to evaluate the potential financial impact of ESB's principal risks actually occurring. As part of the Enterprise Risk Management (ERM) processes, the major and material potential consequences of a principal risk materialising are identified and, where possible and appropriate, the financial impact estimated. In addition, the ERM processes considers the interdependency of principal risks, particularly in terms of impact.

The Board recognises the significance of maintaining a strong balance sheet. ESB's funding operations are of strategic importance and support capital expenditure, the refinancing of maturing debt and the maintenance of adequate liquidity. ESB's debt management strategy targets a debt portfolio profile with a diverse mix of counterparties, funding sources and maturities. In 2020, ESB entered into a new €1.4 billion sustainability linked revolving credit facility which provides ESB with a substantial level of standby liquidity. This facility currently extends to 2027 as during 2021 and early 2022, ESB exercised two 1-year extension options on this facility. ESB's funding position reflects its underlying financial strength and at least BBB+ (or equivalent) credit ratings from two major credit rating agencies. Further details on debt maturity are set out on page 59.

The Board has carried out a robust risk assessment of the principal and emerging risks facing ESB. As a reactive mitigation to minimise impact should any risks with a consequence for ESB's operations materialise, Business Continuity, Crisis Management and Disaster Recovery plans have been developed. These plans are traditionally exercised as part of an annual test plan, based on scenarios that could adversely impact ESB and assess the degree to which these risks can be mitigated. Results and lessons learned arising from the annual review and testing programme are reported to the Audit and Risk Committee. In 2021, ESB continued to manage its response to the COVID-19 pandemic, ensuring that the key lessons learned arising from the response to the pandemic in 2020 were incorporated in the Business Continuity Plans. Due to COVID-19, a restricted annual test plan for 2021 was exercised and its findings captured in the 2021 Business Continuity Report to the Audit and Risk Committee (which was presented in January 2022). ESB's principal risks and the way they are being managed and mitigated are outlined on pages 30 to 41.

Based on the results of the above analysis, the Board members have a reasonable expectation that ESB will be able to continue in operation and meet its liabilities as they fall due over the five-year period of their assessment.

5. Remuneration

The Terms of Reference of the Remuneration and Management Development Committee (April 2021) sets out the overall approach to executive remuneration. The Board adopts and implements a policy on executive remuneration which is clear, simple, predictable and proportionate. The objective of the policy is to attract, retain and motivate executive management of the calibre required to run the Group successfully and sustainably having regard to views of the Government as shareholder.

Chief Executive's Remuneration

Following a competitive selection process, Paddy Hayes took up his appointment as Chief Executive on 30 August 2021 in succession to Pat O'Doherty. His remuneration is set by reference to Government policy on the payment arrangements for Chief Executives of commercial State Bodies. In line with Government policy that the Chief Executive of State Companies should not receive performance related payments, he will not receive any such payments. In accordance with the Government's "One Person, One Salary" rule, the Chief Executive is not entitled to receive a fee as a member of the Board. Pat O'Doherty retired on 29 August 2021 having served as Chief Executive for the previous 10 years. At the date of exit he was paid €216,209 in retrospective salary and associated pension benefits in line with completion of his contract.

Worker Board Members' Remuneration

Worker Board Members are appointed under the Worker Participation (State Enterprises) Act, 1977 and are employees of ESB. They are members of the ESB Pension Scheme. Worker Board Members are entitled to receive a separate fee in respect of their position as Board Members.

Executive Director and Senior Managements' Remuneration

ESB operates performance related remuneration for Executive Directors and senior managers linked to achievement of financial and strategic objectives which fully reflect the Group's purpose and values. External market benchmarks are provided to the Remuneration and Management Development Committee.

For regulatory ringfencing reasons, the performance related remuneration for senior managers in the networks businesses is linked to the performance of the networks business only.

Independent Board Members' Remuneration

Independent Board Members (including the Chairman) serving on the Board of ESB are entitled to fees, at levels determined by the Minister for Public Expenditure and Reform. The current fee is set out in the warrants of appointment issued to each Board Member by the Minister for the Environment, Climate and Communications.

Board Members' Expenses

Board Members are entitled to reimbursement of reasonable expenses incurred for attending Board, Committee and other Board related meetings/events. Expenses are chargeable to income tax unless an exemption applies. A Board Members Fees and Expenses Policy has been approved by the Board setting out the governance arrangements which apply. In compliance with the State Code, disclosure is required of the expenses paid to Board Members. During 2021, €4,372 was reimbursed to, or paid on behalf of, Board Members for travel expenses, accommodation and other related expenses. The above expenses do not include those of the Chief Executive or the Worker Board Members in respect of their executive or employee duties.

Board Members' And Chief Executive Remuneration

Chairman	2021	2020
	€	€
Terence O'Rourke[1]	31,500	4,463
Elvena Graham OBE[2]	-	16,935

Chief Executive	Pat O'Doherty 2021 €	Paddy Hayes 2021* €	Total 2021 €	2020 €
Salary	372,781	82,454	455,235	318,083
Taxable benefits	3,320	6,667	9,987	8,360
Pension contributions	89,265	12,143	101,408	52,166
Payment in lieu of notice	79,520	-	79,520	-
Total	**544,886**	**101,264**	**646,150**	**378,609**

*remuneration since appointment in August 2021.

Independent/Worker Board Members	2021	2020
	€	€
Anne Butler	15,750	15,750
Dave Byrne	15,750	15,750
Stephen Carrig	15,750	15,750
Andrew Hastings	15,750	15,750
Seán Kelly	15,750	15,750
Paul Lynam[5]	11,813	15,750
Tony Merriman	15,750	15,750
Noreen O'Kelly	15,750	20,800^
Alf Smiddy[5]	11,813	15,750
Noreen Wright[3]	7,744	15,750
Sara Venning[4]	-	-
Total	**141,620**	**162,550**

1 Appointed in November 2020
2 Retired in 2020
3 Retired in 2021
4 Appointed in December 2021
5 Alf Smiddy and Paul Lynam's first term ended 3 October 2021 and both were reappointed on 14 December 2021
^ Inclusive of additional fees in respect of carrying out delegated authority duties as Chairman during the period before the appointment of the new Chairman

Audit and Risk Committee Report

Noreen O'Kelly,

Chairman,
Audit & Risk Committee

Chairman's Introduction

On behalf of the Audit and Risk Committee, I am pleased to introduce the Audit and Risk Committee Report for the year ended 31 December 2021. The purpose of the report is to provide an insight into the workings of the Audit and Risk Committee over the last 12 months. I confirm that the Audit and Risk Committee has satisfied its responsibilities as set out in its Terms of Reference and under the Code of Practice for the Governance of State Bodies (the State Code), the UK Corporate Governance Code 2018 (the UK Code) and the Irish Corporate Governance Annex (Irish Annex) as applied on a voluntary basis insofar as is reasonably applicable.

The responsibilities of the Audit and Risk Committee are summarised on page 112 and are set out in full in its Terms of Reference. The Audit and Risk Committee currently consists of three Independent Board Members whose biographical details are set out on pages 94 to 97. The Members bring a broad range of experience and expertise from a wide range of industries, which is vital to supporting effective governance. The Board has confirmed that each member of the Audit and Risk Committee is independent, and that the membership meets the requirements of the State Code and the UK Code in terms of recent and relevant financial experience and competence relevant to the sector in which the Group operates.

Financial Statements

The Audit and Risk Committee has reviewed the Annual Report and Financial Statements, in the context that taken as a whole, they should be fair, balanced and understandable and provide all the necessary information for shareholders/stakeholders to assess the Group's performance, business model and strategy. The Committee is satisfied that it meets these criteria and has recommended them to the Board for approval. The Audit and Risk Committee also considered the significant issues in relation to the financial statements and how these issues were addressed. This work is summarised on pages 113 to 114.

Fraud

In line with its Terms of Reference the Audit and Risk Committee also reviewed and assessed reports on incidents of fraud and attempted fraud during the year.

Looking Ahead

The key areas of focus in 2022 for the Audit and Risk Committee will include the following:

- Oversee the transition to new external auditors
- Continue to monitor and assess the Group's Environmental, Social and Governance (ESG) Reporting requirements
- Continue to focus on cybersecurity risk

The Audit and Risk Committee will also continue to keep its activities under review, taking into consideration external developments and Board priorities.

The Audit and Risk Committee held 7 meetings during 2021. The members of the Committee, length of service and the number of meetings attended are set out below:

Members	Designation	Length of Service	Meetings Attended
Noreen O'Kelly, Chairman[1]	Independent Board Member	8 years and 6 months	7
Paul Lynam[2]	Independent Board Member	1 year and 11 months	5*
Alf Smiddy[1]	Independent Board Member	5 years	5*
Noreen Wright[3^]	Independent Board Member	5 years and 9 months	3
Andrew Hastings**	Independent Board Member	N/A	2
Terence O'Rourke**	Chairman, ESB Board	N/A	2

1 Fellow of Chartered Accountants Ireland
2 Executive positions held in industry
3 Qualified Barrister and Energy sector experience through previous roles in Northern Ireland Electricity Networks plc
^ Retired in June 2021
* Alf Smiddy and Paul Lynam's first term ended 3 October 2021 and both were reappointed on 14 December 2021
** Andrew Hastings and Terence O'Rourke were co-opted to the Audit and Risk Committee for 2 meetings pending the filling of Board member vacancies

Key Objectives

The role of the Audit and Risk Committee is set out in its Terms of Reference, a copy of which can be found on the ESB website, www.esb.ie. The Terms of Reference sets out the duties of the Audit and Risk Committee under the following headings:

- Financial Reporting
- Internal Control and Risk Management
- Compliance, Whistleblowing and Fraud
- Internal Audit
- External Audit

Duty	Activities carried out in 2021
Financial Reporting Including a review of ESB's Annual and Interim Report and Financial Statements to ensure that when taken as a whole, they are fair, balanced and understandable and that appropriate accounting standards, estimates and judgements have been applied	• Reviewed the clarity and completeness of the disclosures in the Annual Report and Financial Statements and the material information presented within them • Reviewed ESB's Annual Report and Financial Statements to ensure that they were fair, balanced and understandable • Considered and challenged the methods used to account for significant or unusual transactions and how these were presented and disclosed in the financial statements • Reviewed whether the Group had applied appropriate accounting standards and made appropriate estimates and judgements, taking into account the views of the external auditors • Reviewed going concern assumptions/viability statement • Reviewed the interim results which consist of financial statements and explanatory notes • Reviewed and considered the key messages for the financial results publications • Reviewed and recommended to the Board for approval, the ESB Regulatory Financial Statements • Reviewed and recommended to the Board of ESB Finance DAC for approval, the ESB Finance DAC Financial Statements • Reviewed the status of large company subsidiary audits and financial statements (as defined by the Companies Act 2014)
Internal Control and Risk Management Review the effectiveness of internal control and risk management	• Reviewed and monitored the effectiveness of the Group's system of internal control • Reviewed the arrangements for business continuity planning and crisis management • Reviewed ESB's Risk Management Policy and Governance Framework, Risk Plan, Risk Appetite Statement and regular risk reports (recommending them to the Board for approval) as well as considered the recommendations of the external Enterprise Risk Management review • Reviewed biannual Data Protection dashboard • Committee received update on supply chain risk (COVID-19 and Brexit impact) • Committee received update on the cybersecurity strategy and reviewed the latest Independent Cybersecurity Maturity Assessment • Considered Environmental, Social and Governance (ESG) developments
Compliance, Whistleblowing 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	• Reviewed the procedures and policies for preventing and detecting fraud and were informed of any instances of fraud or potential fraud, and other irregularities • Reviewed and considered updates on status of protected disclosures • Reviewed compliance with UK Code and Irish Annex • Reviewed procurement compliance • Reviewed processes to comply with the State Code
Internal audit Monitor and assess the role and effectiveness of the internal audit function	• Reviewed the internal audit plan (including NIE Networks) and monitored progress against this plan to assess the effectiveness of the function • Reviewed reports detailing the results of key audits, management's response and the timeliness of resolution of actions • Met with the Head of Internal Audit without management being present • Reviewed internal audit key performance indicators • Reviewed and considered the external assessment of the Group Internal Audit function
External Audit Monitor and review the objectivity, independence and quality of the external auditors and review the findings of the audit with the external auditors	• Assessed the effectiveness of the external audit process including auditor independence and objectivity • Reviewed and challenged the proposed external audit plan to ensure that PwC had identified all key risks and developed robust audit procedures • Reviewed the report from PwC on its audit of the financial statements and their comments on accounting, financial control and other audit issues • Considered and reviewed non-audit services provided by PwC and adherence to ESB policy • Met with the external auditors without management being present, giving PwC the opportunity to raise any matters in confidence • Reviewed PwC 's internal control recommendations and management's response to these recommendations • Oversight of the external audit tender process

Financial Reporting

The Audit and Risk Committee receives and considers the interim and year-end financial statements from management, in addition to receiving reports from the internal audit team and discussing the audit strategy and focus of the external auditors.

Considering the information from these activities, the Audit and Risk Committee determined the key areas of judgement in the Group's financial statements related to the following:

- Carrying value of long-lived assets and goodwill
- Carrying value of investments in and loans to equity accounted investees (joint ventures)
- Completeness of Asset Retirement Obligations
- Pension obligations
- Matters relating to So Energy

These issues were discussed with management during the year. The Audit and Risk Committee reviewed and agreed the auditors' Group Audit Plan, and at the conclusion of the audit of the year-end financial statements.

Significant issues considered	How issues were addressed by the Audit and Risk Committee
CARRYING VALUE OF LONG-LIVED ASSETS AND GOODWILL **Republic of Ireland (ROI) and United Kingdom (UK) generation portfolio** Where indications of potential impairment on the ROI and UK generation assets were identified, impairment reviews were performed to ensure the carrying values are supported by forecast future discounted cash flows. An impairment charge of €15 million was necessary following these reviews. **Networks Transmission and Distribution long-lived assets** As at 31 December 2021, there were no indicators of impairment of the carrying value of the asset base of ESB Networks (€8.8 billion). **Northern Ireland Electricity Networks (NIE Networks) long-lived assets and goodwill** As at 31 December 2021, there were no indicators of impairment of the carrying value of the asset base of NIE Networks (£1.8 billion). Goodwill recognised in the NIE Networks business as at 31 December 2021 amounted to €181 million. An annual impairment test of the carrying value of this goodwill was carried out in accordance with IAS 36 and no impairment was required. The significant judgements used to carry out this test are explained fully in note 15 of the financial statements.	The Audit and Risk Committee recognises that the impairment reviews for the carrying value of assets involve a range of judgemental decisions largely related to the assumptions used to assess the value-in-use of the assets being tested. To assist with their decision on the level of impairment charge the Audit and Risk Committee carried out the following: • Considered detailed papers prepared by management, including details of the methodologies and assumptions applied in determining the recoverable values including the discount rates and market and tariff assumptions used • Constructively challenged the assumptions and projections presented in the papers • Considered the sensitivity analysis provided, including scenarios with different discount rates and market assumptions • Considered the detailed reporting from, and findings of the external auditors Following the review above, the Audit and Risk Committee is satisfied with the impairment review approach and key assumptions used.
CARRYING VALUE OF INVESTMENTS IN, AND LOANS TO, EQUITY ACCOUNTED INVESTEES (JOINT VENTURES) An impairment assessment of the carrying value of the investment (and related shareholder loan) in Neart na Gaoithe (NNG) was carried out in accordance with IAS 36 and an impairment charge of €154 million was necessary following this review. Further details (including details of the assumptions used) are in note 6 of the financial statements.	The Audit and Risk Committee recognises that the impairment reviews for the carrying value of investments in equity accounted investees, notably Neart na Gaoithe, involve several significant judgements. To assist with their decision on the level of impairment charge the Audit and Risk Committee carried out the following: • Considered detailed management papers, including details of the methodologies and assumptions applied in determining the recoverable value including the capital expenditure forecasts, discount rates and market assumptions used • Considered the external expert report prepared outlining their view of a fair market valuation of ESB's stake in the NNG project • Constructively challenged the assumptions and projections presented in the papers • Considered the sensitivity analysis provided • Considered the detailed reporting from, and findings of, the external auditors

Significant issues considered	How issues were addressed by the Audit and Risk Committee
ASSET RETIREMENT OBLIGATIONS ESB has provided for the expected decommissioning costs associated with the closure of certain power stations, wind farms and asset retirement obligations for the ESB Networks creosote treated wood poles in ROI. The costs are capitalised in property, plant and equipment and are depreciated over the useful economic lives of the assets to which they relate unless the related asset has reached the end of its useful life. ESB Networks has over 2 million creosote treated poles on the network. Following a review of key inputs to the provision, including disposal cost and discount rate, the asset retirement provision remained largely unchanged, increasing marginally from €248 million to €252 million. In Generation and Trading the provision decreased by €12 million in 2021. The closing provision as at 31 December 2021 is €201 million. See note 2 (c), 6 and 28 of the financial statements for further details.	The accounting for asset retirement obligations reflected in the financial statements requires the exercise of judgement. The Committee have considered papers prepared and presented by management detailing the basis and assumptions for the provisions and have considered the detailed reporting from and findings of the external auditors. Following the review above, the Audit and Risk Committee is satisfied with the review of asset retirement obligations and the underlying basis for assumptions used.
PENSION OBLIGATIONS – ESB DEFINED BENEFIT PENSION SCHEME (THE SCHEME) In accordance with IAS 19 Employee Benefits, ESB continues to reflect its existing committed obligations on the balance sheet as set out in note 24 of the financial statements. This treatment is based on the following key factors, none of which changed for the year ended 31 December 2021. ▪ 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 they also stipulate contributions to be paid by both ESB and the contributing members. ▪ The Scheme is not a typical balance of costs Defined Benefit Scheme (where the employer is liable to pay the balance of contributions required to fund benefits). ESB does not intend that any further contributions, other than the normal ongoing contributions will be made. ▪ Should a deficit arise in the future, ESB is obliged under the Scheme regulations 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 its rate of contribution cannot be altered without the agreement of ESB and the approval of the Minister for Environment, Climate and Communications.	The accounting for the obligations to be reflected in the financial statements requires the exercise of judgement. The Audit and Risk Committee is satisfied that the appropriate accounting treatment, determined in accordance with IAS 19 Employee Benefits, is to reflect its existing committed obligations, as set out in the notes to the financial statements.
SO ENERGY - CARRYING VALUE OF ASSETS AND GOODWILL AND ONEROUS CONTRACT PROVISION **Goodwill** An impairment assessment of the goodwill recognised on the acquisition of So Energy was carried out in accordance with IAS 36 and an impairment charge of €45 million was necessary following this review. The significant judgements used to carry out this test are explained fully in note 6 of the financial statements.	The Audit and Risk Committee recognises that the impairment review for the carrying value of goodwill associated with the acquisition of So Energy, involves several significant judgements. To assist with their decision on the level of impairment charge the Audit and Risk Committee carried out the following: ▪ Considered detailed papers prepared by management, including details of the methodologies and assumptions applied in determining the recoverable value of the goodwill ▪ Considered recent regulatory and UK Government announcements, particularly in relation to the Standard Variable Tariff Price Cap ▪ Constructively challenged the assumptions and projections presented in the papers ▪ Considered the sensitivity analysis provided ▪ Considered the detailed reporting from, and findings of the external auditors Following the review above, the Audit and Risk Committee is satisfied with the impairment charge and the underlying basis for assumptions used.
Onerous Contracts An onerous contract provision has been recognised in respect of certain GB retail customer contracts for gas and electricity. This provision recognises that the costs of meeting the obligations to provide electricity and gas to customers on Standard Variable Tariff (SVT) contracts, which have a regulated price cap, exceeds the benefits expected to be received up to the next price cap change on 1 April 2022. In 2021 an amount of €16 million has been recognised in the Income Statement relating to an additional onerous contract provision recognised since the acquisition of So Energy. This amount has been disclosed as an exceptional item. At 31 December the onerous contract provision and related intangible asset amount to €50 million and €24 million respectively. See note 6 and 28 of the financial statements for further details.	The accounting for onerous contracts reflected in the financial statements requires the exercise of judgement related to the customer revenue expected to be received and the costs of fulfilling those contracts. The Committee have considered management papers detailing the basis and assumptions for the provision and the findings of the external auditors. Following the review above, the Audit and Risk Committee is satisfied with the provision for onerous contracts and the underlying basis for assumptions used.

The above description of significant issues considered should be read in conjunction with the Independent Auditors' Report on pages 126 to 131 and the statement of accounting policies disclosed in note 1 of the financial statements on page 140.

Fair, Balanced and Understandable

At the request of the Board, the Audit and Risk Committee has considered whether, in its opinion, the Annual Report and Financial Statements taken as a whole, are fair, balanced and understandable and provide all the necessary information for shareholders/stakeholders to assess ESB's performance, business model and strategy. Consideration is also given to whether the information is presented in a clear and concise format, avoids the use of jargon and is easily understood by the reader.

To assist in the process of supporting the fair, balanced and understandable assessment statement, management prepared a report to the Audit and Risk Committee setting out the key considerations in arriving at the statement and to assist in its challenge and testing of a fair, balanced and understandable assessment.

In reaching their conclusion, the Audit and Risk Committee considered the following:

- All Board Members received copies of the Annual Report and Financial Statements to review early in the reporting cycle to ensure the key messages in the Annual Report were aligned with the Group's position, performance and strategy, and the narrative sections of the Annual Report were consistent with the financial statements
- That a robust process was put in place by management for the preparation of the Annual Report and Financial Statements for the year ended 31 December 2021, including early planning, taking into consideration regulatory changes and best practice
- Clear linkages to the strategic objectives are provided throughout the report
- That the key performance indicators (KPIs) used and reported in the Annual Report are consistent with those provided by management to the Board throughout the year
- Review of data and information included in the Annual Report by internal audit
- Review of the external auditors' report
- That all key events and issues reported to the Board during the year, both positive and negative, have been adequately referenced or reflected in the Annual Report

Following its review, the Audit and Risk Committee is of the opinion that the Annual Report and Financial Statements taken as a whole, are fair, balanced and understandable and provide all the necessary information for shareholders/stakeholders to assess ESB's performance, business model and strategy.

Audit and Risk Committee Effectiveness

As part of the external Board evaluation process conducted in 2021, the operation of the Audit and Risk Committee was also evaluated. The review noted a committed, capable, hard working committee with a strong depth of skills. While some of the recommendations applying to the Board equally apply to the Audit and Risk Committee, the review noted in particular that there are opportunities to shorten the length and detail of papers presented to the Committee. Further detail on the Board effectiveness evaluation is included on page 98.

Additionally, on an annual basis, an end of year report is prepared for the Committee, which reviews materials that were presented to the Committee by reference to their Terms of Reference and the annual workplan to provide assurance that the Committee had adequate coverage of its oversight responsibilities and is delivering against its Terms of Reference.

External Audit

Audit Quality

To maintain audit quality and provide assurance on the integrity of financial reporting, the Audit and Risk Committee reviews and challenges the proposed external audit plan, including its scope and materiality prior to approval, to ensure that the external auditors have identified the key audit risks and developed a robust approach. The Audit and Risk Committee considers the external auditors' response to accounting, financial control and audit issues as they arise and meets with them at least once annually without management present, providing the external auditors with the opportunity to raise any matters in confidence. The Audit and Risk Committee met with PwC privately in February 2021 and February 2022.

Discussions with External Auditors

The Audit and Risk Committee has received and discussed a report from the external auditors on the findings from the audit, including those relating to the judgemental areas noted on pages 126 to 131.

After reviewing the presentations and reports from management and internal audit and considering views expressed by the external auditors, the Audit and Risk Committee is satisfied that the financial statements appropriately address critical judgements and key estimates. The Audit and Risk Committee is also satisfied that the significant assumptions used for determining the value of assets and liabilities have been appropriately scrutinised, challenged and are sufficiently robust.

Throughout the year, ESB and PwC were engaged in ongoing, open communication on current matters as and when they arose.

Independence

The Audit and Risk Committee assesses the auditors' independence on an ongoing basis.

Auditor independence and objectivity is safeguarded by several control measures, including:

- A limit on the nature and value of non-audit services performed by the external auditors as covered under the policy for non-audit services
- Monitoring the changes in legislation related to auditor objectivity and independence
- Confirmation from PwC that they have appropriate internal safeguards in place that are consistent with applicable standards
- Audit partner rotation every five years
- Providing opportunities to meet with the Audit and Risk Committee privately
- Annual review of the effectiveness of the external auditors
- Annual confirmation of independence by the external auditors

The Audit and Risk Committee is satisfied that the auditors, PwC, are both independent and objective.

The Committee considers the appointment of the external auditors and this process is subject to public tender. The last tender process was completed in 2016 and a new tender process was undertaken in 2021.

Auditor Effectiveness

The effectiveness of the current external auditors is reviewed annually, taking into account feedback from a questionnaire on the evaluation of the external auditors by the Audit and Risk Committee. The evaluation focuses on such areas as the robustness of the audit process, audit team, communications and governance. A review was carried out in 2021 and overall, the Audit and Risk Committee is satisfied with the effectiveness of the external audit.

Non-Audit Services

The Audit and Risk Committee has approved a policy on the engagement of ESB's external auditors for non-audit services to take account of the implementation of the EU Audit Regulation and Directive on non-audit services in compliance with Statutory Instrument No 312/2016 - European Union (Statutory Audits) (Directive 2006/43/EC, as amended by Directive 2014/56/EU, and Regulation (EU) No. 537/2014) Regulations 2016 in Ireland and with the Ethical Standard for Auditors issued in April 2017 by the Irish Auditing and Accounting Supervisory Authority (IAASA) which was updated in November 2020. The Ethical Standard for Auditors 2020 became effective on 15 July 2021.

The policy outlines the governance arrangements that apply to the provision of non-audit services. This policy includes a list of prohibited services and outlines the governance arrangements that apply to the provision of such permitted non-audit services. The policy includes a defined approval process and follows ESB procurement procedures and Group authority levels. The policy is in line with The EU Audit Regulation regarding non-audit services.

An update on the nature of non-audit services provided by PwC and the value of such services is presented to the Audit and Risk Committee bi-annually to demonstrate that the services are in compliance with the policy and the value is within the cap.

A summary of the audit and non-audit fees paid to the external auditors is set out in note 11 of the financial statements. The primary non-audit related services provided by the external auditors during the year were in respect of permitted work on regulatory accounts and the provision of comfort letters in connection with bond issuance. In addition, PwC also provided administrative assistance directly to the ESOP in relation to the ESOP auction process.

The Audit and Risk Committee is satisfied that the fees paid in 2021 did not compromise the independence or integrity of the external auditors. The Committee will continue to monitor the type and level of services provided to prevent any perceived or actual impact on auditors' independence.

Auditor Tender and Appointment

The Audit and Risk Committee oversees the external auditor selection process. With PwC's current 5-year term as auditors coming to an end, a tender process was undertaken to appoint ESB's next external auditor.

The tender was carried out in compliance with EU, Government and ESB procurement procedures. In December 2020, an Official Journal of the European Communities (OJEC) notice was issued requesting expressions of interest. Based on the expressions of interest received to the OJEC notice, the Audit and Risk Committee reviewed and approved the shortlisted firms who expressed an interest in tendering. The Audit and Risk Committee approved the request for tender (RFT) document and this was issued to the shortlisted firms.

Following a comprehensive evaluation of the tender responses, the Audit and Risk Committee made a recommendation to the Board that Deloitte be appointed as external auditor for up to three years (i.e. 2022, 2023 and 2024 financial years) with an option to extend for subsequent years. The Board resolved to recommend the appointment of Deloitte to the Minister for the Environment, Climate and Communications (with the consent of the Minister for Public Expenditure and Reform). In December 2021, the Minister confirmed the appointment of Deloitte as external auditor for the 2022 financial year, it being noted that reappointment for successive years would be dealt with at the Annual General Meeting.

Meetings

The internal and external auditors have full and unrestricted access to the Audit and Risk Committee. The Audit and Risk Committee Chairman reports the outcome of its meetings to the Board. Meetings, or part thereof, are routinely attended by the Board Chairman, Chief Executive and/or Deputy Chief Executive, Executive Director, Group Finance and Commercial, Head of Group Internal Audit, Group Compliance Manager and representatives of the external auditors. Committee-only sessions are arranged at the beginning/end of meetings, as determined by the Audit and Risk Committee Chairman.

On behalf of the Audit and Risk Committee

Noreen O'Kelly, Chairman

Audit and Risk Committee
01 March 2022

Board Committees in 2021

Safety, Environment and Culture Committee

Anne Butler, Chairman

Committee Meetings: The Committee held 5 meetings during 2021. The Members of the Committee, length of service and the number of meetings attended are set out below:

Members	Designation	Length of Service	Meetings Attended
Anne Butler, (Chairman)	Independent Board Member	6 years and 3 months	5
Paul Lynam	Independent Board Member	5 years	4
Pat O'Doherty*	Chief Executive	9 years and 9 months	3
Stephen Carrig	Worker Board Member	3 years	5

* Pat O'Doherty retired in August 2021

Note: Sara Venning was appointed to the Committee following her appointment to the Board in December 2021 but did not attend any meetings during 2021.

Role: The Safety, Environment and Culture Committee's responsibilities are set out in its Terms of Reference. The Committee Chairman meets as required with the Chairman of the Audit and Risk Committee to agree and update as appropriate the specific risk responsibilities of the Safety, Environment and Culture Committee.

See pages 76 to 86 for further information on Safety, Environment and Culture in 2021 as set out in the Responsible Business Report section.

Key Activities of the Safety, Environment and Culture Committee in 2021

Duty	Activity
Safety, Health and Environment	Reviewed and considered: • Key safety risk and KPI updates including lost time injuries, high potential incidents, near-misses and good catches • Health and wellbeing update on mental health support for staff • COVID-19 update and activities initiated to protect staff • Safe and Sound safety driving update • Environment and sustainability update • Environmental incidents updates • Update on ESB environmental risk register • ESB Networks Annual Environment Report to Commission for Regulation of Utilities (CRU) • Group environmental policy • People capability review • Group Corporate Social Responsibility strategy • Modern Slavery statement and update on ESB's Human Rights Policy • Sustainability annual report • Fisheries update • Annual dam safety review • ESB biodiversity plan • NIE Networks Safety Improvement Plan
Culture and Diversity	Reviewed and considered: • Inclusion and diversity - gender pay gap update • Culture Dashboard update

Remuneration and Management Development Committee

Terence O'Rourke, Chairman

Committee Meetings: The Committee held 6 meetings during 2021. The members of the Committee, length of service and the number of meetings attended are set out below:

Members	Designation	Length of Service	Meetings Attended
Terence O'Rourke, (Chairman)	Chairman	1 year and 2 months	6
Andrew Hastings	Independent Board Member	6 years and 3 months	6
Noreen Wright*	Independent Board Member	9 years and 6 months	1

* Noreen Wright retired June 2021

Role: The Remuneration and Management Development Committee's responsibilities are set out in its Terms of Reference, which were reviewed and approved by the Board in 2021.

Key Activities of the Remuneration and Management Development Committee in 2021

Duty	Activity
Succession planning and leadership development	• Oversight of the Chief Executive selection process • Review of succession planning and leadership competencies for Executive Director roles • Review process to select two new Executive Directors • Review of Chief Executive and Executive Director career and personal development plans
Board and main subsidiary Board Members remuneration	• Approval of remuneration arrangements for Worker Board Members
Chief Executive remuneration (including objectives/key results)	• Reviewed Chief Executive's performance against 2020 targets • Agreed 2021 performance targets for the Chief Executive • Reviewed draft Terms & Conditions for new Chief Executive in accordance with the Code of Practice for the Governance of State Bodies
Executive remuneration	• Reviewed executive remuneration benchmarks • Reviewed performance against 2020 targets • Review 2021 performance targets agreed with the Chief Executive • Reviewed and approved remuneration for the Executive Team
Termination payments	• Reviewed and approved arrangements for conclusion of previous Chief Executive's contract • Reviewed and approved exit arrangements for Executive Director on resignation

Finance and Investment Committee

Andrew Hastings, Chairman

Committee Meetings: The Committee held 9 meetings during 2021. The members of the Committee, length of service and the number of meetings attended are set out below:

Members	Designation	Length of Service	Meetings Attended
Andrew Hastings, (Chairman)	Independent Board Member	6 years and 3 months	9
Dave Byrne	Worker Board Member	8 years and 9 months	9
Seán Kelly	Worker Board Member	6 years and 3 months	9
Paul Lynam	Independent Board Member	5 years	6
Pat O'Doherty*	Chief Executive	8 years and 5 months	5
Noreen O'Kelly	Independent Board Member	6 years and 3 months	9

* Pat O'Doherty retired in August 2021

Role: The Finance and Investment Committee's responsibilities are set out in its Terms of Reference which were reviewed and approved by the Board in 2021.

Key Activities of the Finance and Investment Committee in 2021

Duty	Activity
Investments and Capital Expenditure	Reviewed and recommended to the Board (where applicable): ▪ Renewable investments (offshore wind, battery and solar) ▪ Major property disposals ▪ Generation plant overhaul and investments programmes ▪ SIRO Phase 2 business plan and funding ▪ So Energy (GB) acquisition ▪ Quarterly capital expenditure reports ▪ PR5 delivery update ▪ Investment hurdle rates
Financial Performance/ Shareholder matters	Reviewed and recommended to the Board (where applicable): ▪ Integrated Business Planning 2022-2026 update ▪ GB Supply business update ▪ Quarterly financial updates ▪ ESB Treasury policies update
Funding	Reviewed and recommended to the Board (where applicable): ▪ Update on RPI swaps ▪ Credit rating update ▪ ESB funding requirements ▪ Loans, swaps and bonds reports
Energy Markets and Trading	Reviewed and considered: ▪ Energy trading and risk management ▪ Capacity auction updates

Customer, Marketing and Innovation Committee

Alf Smiddy, Chairman

Committee Meetings: The Committee held 4 meetings during 2021. The members of the Committee, length of service and the number of meetings attended are set out below:

Members	Designation	Length of Service	Meetings Attended
Alf Smiddy, (Chairman)	Independent Board Member	5 years	2
Anne Butler^	Independent Board Member	5 years	3
Tony Merriman	Worker Board Member	5 years	3
Pat O'Doherty*	Chief Executive	4 years and 8 months	2
Dave Byrne~	Worker Board Member	N/A	1

^Acting Chairman for the December meeting
* Pat O'Doherty retired in August 2021
~Dave Byrne was co-opted to the Customer, Market and Innovation Committee for the meeting in December

Role: The Customer, Marketing and Innovation Committee's responsibilities are set out in its Terms of Reference which were reviewed and approved by the Board in 2021.

Key Activities of the Customer, Marketing and Innovation Committee in 2021

Duty	Activity
Customer	Reviewed and considered: ▪ ESB Networks customer update ▪ Customer Solutions customer and market update ▪ Electric Ireland B2B strategy update ▪ ESB Networks customer dashboard update ▪ ESB Energy brand update ▪ Supporting ESB's vulnerable customers ▪ ESB Networks brand update
Reputational and Stakeholder Management	Received an update on: ▪ ESB reputation survey update ▪ ESB Ecars customer survey feedback and action plan
Innovation and Technology	Reviewed and considered: ▪ ESB Networks' Smart Metering Programme and marketing update ▪ ESB research and development strategy ▪ ESB digital strategy including digital programme and robotic Process Automation update ▪ ESB Hydrogen Roadmap

Each Board Committee has its Terms of Reference reviewed and approved by the Board annually. Terms of Reference of all Committees are available on the Governance section of the ESB website, www.esb.ie or upon request from the Company Secretary.

Board Members' Report

The Board Members present their report together with the audited financial statements of ESB and of the Group for the year ended 31 December 2021.

Principal Activities

The principal activities of the Group are the generation, transmission, distribution and supply of electricity, gas and energy services in the Republic of Ireland (ROI) and Northern Ireland (NI). The Group also operates internationally, in the generation and supply of electricity in Great Britain (GB) and is involved in several international engineering consultancy projects in Asia and Africa.

ESB Annual General Meeting (AGM)

ESB holds an AGM each year, no later than 15 months after the last AGM. With the restrictions imposed by the COVID-19 pandemic, the 2021 AGM was held virtually on 21 April 2021. The Chairman gave an overview of the year and invited representatives of the Ministerial stockholders and of the Trustee of the ESB ESOP to make any comments they may have. The external auditors attended the AGM.

Business Review

Commentaries on performance in the year ended 31 December 2021, including information on recent events and potential future developments, are contained in the Chairman's Statement and the Chief Executive's Review. The performance of the business, its financial position and the principal risks faced by the Group are reflected in the reviews for each major business unit on pages 60 to 69, the Financial Review on pages 54 to 59 and the Risk Report on pages 26 to 41.

Results and Dividend for the year

The financial results of the Group show a profit after tax before exceptional items of €266 million for the financial year 2021, compared with a profit of €357 million for 2020. Profit after tax and exceptional items is €191 million (2020: profit of €126 million). The dividend policy was updated in 2021 and provides for targeted dividends at a rate of 40% of adjusted profit after tax (unchanged from previous policy). In line with the revised dividend policy, the Board did not declare an interim dividend during 2021 and is now recommending a final dividend for 2021 of 6.47 cent per unit of stock, or €126.1 million. This would bring the total dividends paid over the past decade to €1.2 billion.

Share Capital

An Employee Share Ownership Plan (ESOP) market liquidity proposal was approved by ESB's Board in 2015. ESB approved the expenditure of up to €25 million to acquire capital stock in internal ESOP markets, commencing in 2017, with the objective of improving liquidity in the market. This expenditure commitment by ESB matched the expenditure committed by the ESOP Trustee under the proposal. In 2021, ESB (or a subsidiary) committed up to €35 million of additional funds to purchase shares in future markets from 2021 onwards on the same basis as the funds committed in 2015. ESB purchased and cancelled capital stock worth €9.6 million in 2021 (2020: €8.4 million). Further details are outlined in notes 20 and 32 of the financial statements. Details of the Group's share capital are outlined in note 20 of the financial statements.

Future Developments

ESB is a strong diversified, vertically integrated utility operating right across the electricity/gas and energy services markets from generation, through transmission and distribution to supply of customers, with an expanding presence in the GB market. The strategy, which was revised during 2021, is designed to ensure that ESB continues to grow as a successful business while maintaining the financial strength to invest in a low-carbon future at the necessary scale and pace to deliver on its commitment to Net Zero by 2040 (see pages 17 to 23 for more information).

Principal Risks and Uncertainties

A description of the principal risks and uncertainties facing the Group is set out in the Risk Report on pages 26 to 41.

Financial Instruments

The financial risk management objectives and policies of the group along with a description of the use of financial instruments is set out in note 29 of the financial statements.

Accounting Records

The Board members believe that they have employed accounting personnel with appropriate expertise and provided adequate resources to the financial function to ensure compliance with ESB's obligation to keep proper books of account. The books of account of ESB are held at Two Gateway, East Wall Road, Dublin 3.

Report under Section 22 of the Protected Disclosures Act, 2014

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 5 protected disclosures were made to ESB in 2021. The matters reported have been or are in the course of being investigated in accordance with applicable ESB Group policies.

Regulation of Lobbying Act 2015

In accordance with the requirements of the Regulation of Lobbying Act, ESB is registered on the Lobbying Register at www.lobbying.ie and has made the required return for the period 1 January to 31 December 2021.

Human Rights (Including Protection Against Modern Slavery)

ESB is committed to respecting all internationally recognised human rights including those expressed in the International Bill of Human Rights and the principles concerning fundamental rights set out in the International Labour Organization's Declaration on Fundamental Principles and Rights at Work. This commitment is supported by a range of policies covering focus areas within human rights including employee rights, non-discrimination, inclusion and diversity as well as modern slavery. The ESB's employee Code of Ethics ("Our Code") requires all employees to operate fairly and to respect all human rights.

Modern slavery is a criminal offence under the UK Modern Slavery Act, 2015. The Act imposes obligations on organisations of a certain size, which carry on a business in the United Kingdom. Modern slavery can occur in various forms, including servitude, forced and compulsory labour and human trafficking, all of which have in common the deprivation of a person's liberty by another in order to exploit them for personal or commercial gain. As the parent of a number of subsidiary companies with significant operations in the UK, ESB has adopted a policy on modern slavery with the aim of preventing opportunities for modern slavery occurring within its business and supply chains. In accordance with the Act, ESB publishes an Annual Statement setting out the steps that ESB has taken during the previous financial year to ensure that slavery and human trafficking is not operating within either its own business or its supply chains. ESB carried out audits of contractors during the year and risk screening of its suppliers. Based on this a number of site-based supplier audits were commissioned and completed. No incidents of modern slavery have been found to date. The most recent Annual Statement was published in May 2021 and is available on the ESB website, www.esb.ie.

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

Anti-Bribery, Corruption and Fraud

ESB has a detailed Anti-Bribery, Corruption and Fraud Policy in place, which outlines the standards of behaviour expected of staff in how they work and to promote controls to prevent, deter and detect bribery, corruption and fraud. ESB has a zero-tolerance approach to bribery, corruption and fraud. During 2021 there were no instances of bribery or corruption. Incidents or attempted incidents of fraud are reported to the Audit and Risk Committee on a quarterly basis. The policy is available on the ESB website, www.esb.ie.

Environment and Sustainability

Climate change and biodiversity loss are the two biggest issues facing humanity. A commitment to leadership in reducing carbon emissions and supporting the electrification of heat and transport is central to ESB's strategy. ESB is committed to setting a science-based carbon target, is a CDP A-rated entity and joined the All-Ireland Pollinator Plan in 2021. Sustainability in its fullest sense includes carrying out business operations responsibly and with care for the impact on the environment. ESB's policies, including the Environment and Sustainability policy and Human Rights policies set out the high-level principles to progress towards these goals throughout the organisation. Environmental Management Systems are operated throughout the Group. ESB reports on its ESG performance annually, including full disclosure of direct and indirect carbon emissions. In 2021 ESB made its first climate risk disclosure under the Task Force on Climate Related Financial Disclosures (TCFD) framework and has also voluntarily included disclosures in its Annual Report under the EU Taxonomy Regulation. An ESG project to support enhanced reporting and governance to meet the increased requirements of EU regulation, investors, and stakeholders was established during the year. ESB's revised strategy committed to the development of science based targets and net zero by 2040. Information on the Group's approach to Environment and Sustainability (including Corporate Social Responsibility (CSR) activities) is set out on pages 78 to 86.

Electoral Act 1997

The Board made no political donations during the year.

Principal Subsidiary, Joint Venture and Associated Undertakings

Details of the principal subsidiary, joint venture and associated undertakings are outlined in note 35 of the financial statements.

Prompt Payments Regulation

The Board acknowledges its responsibility for ensuring compliance, in all material respects, with the provisions of the Prompt Payment of Accounts Act, 1997 and European Communities (Late Payments in Commercial Transactions) Regulations, 2012 (S.I. No. 580 of 2012) as amended by European Communities (Late Payment in Commercial Transactions) (Amendment) Regulations 2016 (S.I. No. 281 of 2016) 2002. The Board is satisfied that ESB has complied with the requirements of the Regulations.

Related Party Transactions

Related party transactions are set out in note 31 of the financial statements.

Research and Development

ESB's business is involved in innovative projects and programmes to develop the energy sector. A number of these projects and programmes are referred to in the Strategy and Performance Section on pages 6 to 69.

Statement under Section 330 of the Companies Act 2014

The ESB Regulations require ESB to observe the provisions of the Companies Act 2014 applying to a Companies Act entity in regard to audit and/or auditors. This requires the Board Members to make a statement in the form required by Section 330 of the 2014 Act. In compliance with this requirement, the Board confirms that it applies the standards in Section 330 of the Companies Act 2014 and, in this regard, each of the Board Members confirms that:

- so far as the Board member is aware, there is no relevant audit information of which ESB's statutory auditors are unaware
- each Board member has taken all the steps that he or she ought to have taken as a Board Member in order to make himself or herself aware of any relevant audit information and to establish that ESB's auditors are aware of that information (within the meaning of Section 330).

Audit and Risk Committee

ESB has an Audit and Risk Committee, the members of which are set out on page 111.

Auditors

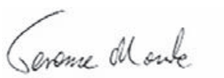
PwC were appointed as ESB's auditors for the 2021 financial year at the AGM held in 2020, in accordance with Section 7(2) of the Electricity (Supply) Act, 1927 (as amended).

During the year, the Board approved the appointment of Deloitte as ESB's auditors for the 2022 financial year. The Minister for the Environment, Climate and Communications (with the consent of the Minister for Public Expenditure and Reform) confirmed the appointment, it being noted that reappointment for successive years will be dealt with at the Annual General Meeting.

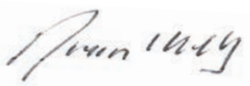
At the 2022 AGM, the shareholders will be asked to authorise the directors to fix the remuneration of the auditors in respect of the year ended 31 December 2022.

Approval of the 2021 Annual Report and Financial Statements

The Board is satisfied, after taking into account the recommendation of the Audit and Risk Committee, that the Annual Report and Financial Statements taken as a whole, are fair, balanced and understandable.



Terence O'Rourke, Chairman



Noreen O'Kelly, Board Member

01 March 2022

Tesco Ireland

ESB SMART ENERGY SERVICES

To help achieve its ambitious net zero emissions target Tesco partnered with ESB Smart Energy Services to identify and deliver a variety of energy efficiency upgrades for its stores and distribution network in Ireland, and to provide ongoing energy monitoring and carbon accounting.

With over 150 stores across Ireland, Tesco took significant action to reduce its energy consumption, while maintaining service and comfort for colleagues and customers. The retailer also needed a way to track carbon savings, monitor return on investment and identify areas for further improvement on an ongoing basis.

The solution: Continuous monitoring and analysis of energy usage and carbon by the ESB Energy Management Hub ensures ongoing energy savings. In addition, ESB Smart Energy Services Delivery Team are tasked with developing and delivering Tesco's annual energy efficiency programme, including the retrofitting of fridge doors across 33 stores. This results in the reduction of electricity demand for the refrigeration systems and reduces the requirement for store heating. Working together, energy use at Tesco has reduced by 25% to date.

The technology: The Energy Management Hub uses a cloud-based, state of the art remote monitoring system to capture energy usage by type, equipment performance, environmental data and carbon output across all metered properties.

Geoff Byrne, Chief Operating Officer, Tesco Ireland outside Tesco Extra Naas, Co Kildare

CHAPTER 3

FINANCIAL STATEMENTS

Contents

Statement of Board Members' Responsibilities

The Board members are responsible for preparing the annual report, incorporating financial statements for ESB and for the ESB Group, comprising ESB and its subsidiaries "the Group".

Under ESB's governing regulations, adopted pursuant to Section 6 (1) of the Electricity (Supply) Acts 1927 (as amended) "the ESB Regulations", the Board is required to prepare financial statements as are required by companies established under the Companies Act 2014.

ESB is also required, to furnish its annual report, which incorporates the financial statements, to the Minister for Communications, Climate Action and Environment in accordance with corporate governance guidelines and to meet its obligations under Section 32 of the Electricity (Supply) Act 1927 (as amended).

The Board has elected to prepare ESB's financial statements in accordance with IFRS as adopted by the European Union and as applied in accordance with the applicable provisions of the Companies Act, 2014 and the ESB Regulations.

The Board members must not approve the financial statements unless they are satisfied that they give a true and fair view of the assets, liabilities and financial position of the Group and of ESB and of the Group's profit or loss for that year.

In preparing the financial statements the Board members are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- state that the financial statements comply with IFRS as adopted by the European Union, and as regards ESB, as applied in accordance with the Companies Act, 2014; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group and ESB will continue in business.

The Board members are responsible for keeping adequate accounting records which disclose with reasonable accuracy at any time the assets, liabilities, financial position and profit or loss of ESB, and which enable them to ensure that the financial statements of ESB and the Group are prepared in accordance with applicable IFRS as adopted by the European Union and as applied in accordance with applicable provisions of the Companies Act, 2014 and the ESB Regulations.

The Board members are also responsible for safeguarding the assets of ESB and the Group, and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Board members are responsible for the maintenance and integrity of the corporate and financial information included on ESB's website www.esb.ie. Legislation in the Republic of Ireland governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Each of the Board members, confirms that, to the best of his or her knowledge and belief:

- the Group financial statements, prepared in accordance with IFRS as adopted by the European Union and ESB's financial statements prepared in accordance with IFRS as adopted by the European Union as applied in accordance with the provisions of Companies Act 2014 and as applied by the ESB Regulations, give a true and fair view of the assets, liabilities, financial position of the Group and of ESB at 31 December 2021 and of the profit of the Group for the year then ended 31 December 2021;
- the Board members' report contained in the annual report includes a fair review of the development and performance of the business and the position of the Group and ESB, together with a description of the principal risks and uncertainties that they face; and
- the annual report and financial statements, taken as a whole, provides the information necessary to assess the Group's performance, business model and strategy and is fair, balanced and understandable and provides the information necessary for shareholders to assess ESB's position and performance, business model and strategy.

On behalf of the Board

Terence O'Rourke, Chairman

Noreen O'Kelly, Board Member

Independent Auditors' Report to Stockholders of Electricity Supply Board (ESB)

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS

OPINION

In our opinion, ESB's Group financial statements and Parent financial statements (the "financial statements"):

- give a true and fair view of the Group's and the Parent's assets, liabilities and financial position as at 31 December 2021 and of the Group's profit and the Group's and the Parent's cash flows for the year then ended;
- have been properly prepared in accordance with International Financial Reporting Standards ("IFRSs") as adopted by the European Union and, as regards the Parent's financial statements, as applied in accordance with the provisions of the Companies Act 2014; and
- have been properly prepared in accordance with the requirements of the Companies Act 2014, as applied by the ESB Acts 1927 to 2014.

We have audited the financial statements, included within the Annual Report and Financial Statements (the "Annual Report"), which comprise:

- the Group and Parent Balance Sheets as at 31 December 2021;
- the Group Income Statement and Group Statement of Comprehensive Income for the year then ended;
- the Group and Parent Cash Flow Statements for the year then ended;
- the Group and Parent Statements of Changes in Equity for the year then ended; and
- the Notes to the financial statements, which include a description of the significant accounting policies.

BASIS FOR OPINION

We conducted our audit in accordance with International Standards on Auditing (Ireland) ("ISAs (Ireland)") and applicable law. Our responsibilities under ISAs (Ireland) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remained independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in Ireland, which includes IAASA's Ethical Standard and we have fulfilled our other ethical responsibilities in accordance with these requirements.

OUR AUDIT APPROACH

Overview

Materiality

- €23 million (2020: €21 million) - Group financial statements

  Based on c. 5% of profit before tax and exceptional items. We consider this to be an appropriate benchmark as the Group is profit orientated and the exceptional items are significant non-recurring items which are not reflective of the Group's ongoing trading activity. For the 2021 audit we also excluded c.€113 million losses recognised in respect of the inflation linked swaps in determining our materiality.
- €23 million (2020: €21 million) - Parent financial statements

  We considered it appropriate to restrict materiality for the Parent financial statements to €23 million, being that applied to the Group financial statements.

Audit scope

We conducted our work across the four reportable segments and the head office function. Our audit work covered in excess of 90% of Group revenues, profit before taxation and exceptional items, total assets and total liabilities.

Key audit matters

- Neart na Gaoithe - Recoverability of carrying value of equity accounted investment and loans
- Carrying value of Long-Lived Assets
- Asset Retirement Obligations
- So Energy Limited Acquisition
- Revenue Recognition – Unbilled Electric Ireland Revenue
- Completeness of Pension Obligations

Independent Auditors' Report to Stockholders of Electricity Supply Board (ESB) (continued)

The scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we looked at where the Board members made subjective judgements, for example in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits we also addressed the risk of management override of internal controls, including evaluating whether there was evidence of bias by the Board members that represented a risk of material misstatement due to fraud.

Key audit matters

Key audit matters are those matters that, in the auditors' professional judgement, were of most significance in the audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by the auditors, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. These matters, and any comments we make on the results of our procedures thereon, were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. This is not a complete list of all risks identified by our audit.

Key audit matter	How our audit addressed the key audit matter
Neart na Gaoithe - Recoverability of carrying value of equity accounted investment and loans **Refer to page 113 (Report of the Audit & Risk Committee), notes 1(ii), (xii) and (xxii) (Statement of Accounting Policies) and notes 6 and 16 to the financial statements** Neart na Gaoithe (NnaG) is a 50% equity investment to develop a 448 MW wind farm off the east coast of Scotland which is still in the construction phase. An impairment review of the carrying value of ESB's equity investment in NnaG was carried out at 31 December 2021 as a result of delays to the project and an expectation of significant additional construction costs. Management engaged an external expert to perform a fair value less cost to sell valuation of ESB's 50% equity investment in NnaG. An impairment charge of €153.5 million has been recognised as at 31 December 2021, after which the value of ESB's equity accounted interest in NnaG is €35.3 million (2020: €216.1 million). ESB also has shareholder loans due from NnaG of €83.8 million (2020:€nil) at 31 December 2021. Construction issues and delays, higher costs and the overall scale and complexity of the project has resulted in significant judgement and estimation in determining the fair value at year end including estimates in respect of construction costs, the project timeline and commercial operation date. We determined this to be a key audit matter as there is significant judgement in estimating the inputs into the discounted cash flow model used to perform the fair value less cost to sell valuation which was the basis for the impairment test in respect of the equity investment and loans outstanding at year end.	We obtained an understanding from management of the latest available information on the current challenges and delays on the construction project and the plans to address these. We evaluated the competence, capabilities and objectivity of the experts engaged by management to determine the fair value less cost to sell of ESB's investment in NnaG. We critically assessed and challenged the key assumptions and probability weightings applied to each scenario, including the estimate of capital expenditure costs to complete, the project timeline and assumed Commercial Operational dates. We considered the appropriateness of the discount rates used by management's external expert by assessing the assumptions used in the weighted average cost of capital against external benchmarks. We performed sensitivity analysis, assessing the impact of potential changes in key assumptions in the valuation model and considered the likelihood of such changes arising. We considered the appropriateness of disclosures included in the financial statements and considered the disclosures to be reasonable. We concluded that the impairment charge recognised in the financial statements is reasonable and that the related disclosures included in the financial statements were appropriate.

Key audit matter	How our audit addressed the key audit matter
Carrying value of Long-Lived Assets **Refer to page 113 (Report of the Audit & Risk Committee), notes 1(vi), (vii) and (viii) (Statement of Accounting Policies) and notes 6,12 and 13 to the financial statements** The carrying value of ESB's property, plant and equipment and intangible assets is €11.8 billion, most of which are long-lived assets designed to deliver a return over 20+ years. The Group is required to assess at the end of each reporting period whether there is any indication that an asset may be impaired. If any such indication exists, the Group is required to perform impairment testing. We consider the carrying value of the Carrington Combined Cycle Gas Turbine ('CCGT') plant, which at 31 December 2021 was €376 million, to be a key audit matter on the basis of its value relative to overall Generation and Trading assets and because an impairment charge was recorded in the prior year. The impairment assessment of CCGT plant involves significant judgement in estimating the inputs to discounted cash flow models used to assess the recoverable amount of the asset, including assumptions in respect of future electricity prices, capacity income, future fuel costs, expected plant running (load factors), discount rates, inflation and the plant closure date.	We obtained an understanding of management's approach to determining the key assumptions in the Carrington CCGT impairment model, including comparing them to the latest Board approved business plan. Where there was independent source data, we compared this to the inputs to the model and understood management's basis for the judgements made in the model. For inputs with no observable data we considered these and challenged management's assumption in the context of available internal data, including historical data and budget information. We considered the appropriateness of the discount rates used in the impairment model by assessing the assumptions used in the weighted average cost of capital against external benchmarks. We performed sensitivity analysis, assessing the impact of potential changes in key assumptions in the year end model and considered the likelihood of such changes arising. Based on our procedures we were satisfied that no impairment charge was required in the current year in respect of the Carrington CCGT. We also considered the disclosures in the financial statements in relation to these matters and consider the disclosures to be reasonable.

Independent Auditors' Report to Stockholders of Electricity Supply Board (ESB) (continued)

Key audit matter	How our audit addressed the key audit matter
Asset Retirement Obligations **Refer to page 114 (Report of the Audit & Risk Committee), note 1 (xv) (Statement of Accounting Policies) and note 28 to the financial statements** ESB holds provisions for asset retirement obligations in respect of generation station closures, creosote treated wood poles and other assets. Given the level of change and focus on environmental obligations, including operational decisions as to how and when assets are disposed of, the identification and quantification of all asset retirement obligations requires judgement. We determined the provision in respect of creosote treated wood poles and station closures to be a key audit matter due to the level of judgement and estimation in determining the amount of provision required, the limited historical data on disposal costs and the significant length of time over which the poles are disposed of and replaced.	We assessed the estimates of asset retirement obligations including considering the quantum, nature and timing of costs. Our evaluation included discussions with management to understand the basis for the assumptions made. We assessed and challenged the assumptions made in respect of the timing of the pole disposals by reference to the profile of poles in the network, the cost of disposal, operational plans in respect of the timing and management of future disposals, the ageing and useful economic lives. We evaluated the appropriateness of provisions held in respect of estimated closure costs for generation stations by reference to the external and internal expert reports commissioned by management. We assessed the competence, capabilities and objectivity of management's experts. We challenged the assumptions made in respect of the timing of station closures by reference to the underlying asset lives, budgets and forecasts. We considered the appropriateness of the inflation and discount rates used by comparing them to external benchmarks. We concluded that the assumptions and methodologies adopted by management to calculate the Group's asset retirement obligations were reasonable. We also considered the disclosures in the financial statements in relation to these matters and consider the disclosures to be reasonable.
So Energy Limited Acquisition **Refer to page 115 (Report of the Audit & Risk Committee), notes 1(ii), (vii) and (xxii) (Statement of Accounting Policies) and notes 6, 15 and 16(c) to the financial statements** In August 2021 ESB purchased 76% of So Energy Limited, a company operating in the UK energy supply market for total consideration of €26 million. Based on the provisional fair value of assets and liabilities acquired, goodwill of €64.5 million arose on the acquisition. Since the acquisition date there has been significant volatility in the UK retail energy market and trading losses have been incurred in the period since acquisition. Management carried out a goodwill impairment test as at 31 December 2021 and recorded an impairment charge of €45.3 million. We determined this to be a key audit matter as there is significant judgement in estimating the inputs into the determination of the fair values of assets and liabilities acquired and the discounted cash flow model used to assess the recoverability of goodwill.	We obtained and reviewed the legal agreements underlying the acquisition and considered whether they have been accounted for appropriately. We critically assessed the methods, assumptions and data used in the identification and valuation of the provisional fair values of assets and liabilities acquired. We obtained an understanding of management's approach to determining the key assumptions in the goodwill impairment model. We considered management's model in the context of available external and internal data, including historical data and budget information. We considered the impairment charge recorded in the context of the trading performance since acquisition, recent developments in the UK energy supply market and the remaining carrying value of goodwill at the year end. We considered the appropriateness of disclosures included in the financial statements in relation to these matters and consider the disclosures to be reasonable. We concluded that the impairment charge recognised in the financial statements is reasonable and that the related disclosures included in the financial statements were appropriate.
Revenue Recognition - Unbilled Electric Ireland Revenue **Refer to note 1 (xviii) (Statement of Accounting Policies) and note 18 to the financial statements** Unbilled revenue is the revenue from energy supplied to the customer between the date of their last bill and the year end date and requires estimation. In determining the unbilled revenue at the year end, volumes are estimated by reference to electricity volume purchases and other assumptions. In Electric Ireland, given the size of the residential and small and medium sized enterprise (SME) customer base, estimates are also used in determining the values attributable to these volumes in the Republic of Ireland (ROI) and are material to the financial statements. There is also significant complexity in the model used to estimate unbilled revenue in respect of residential and SME customers at year end. We determined this to be a key audit matter given the level of complexity and estimates involved in determining the unbilled revenue at year end.	We assessed the IT general controls system application configuration and the business process controls in relation to billing systems. We evaluated the integrity of the model used by the Group in calculating unbilled revenue for residential and SME customers in ROI. We challenged the appropriateness of the estimates used in the model by reference to historical and current data and current pricing. Our work included reconciling certain relevant inputs to the model to the underlying source data. We also considered the outturn from retrospective reviews of previous estimates made in comparison to actual billing data and assessed other information as part of our consideration of the Group's estimation techniques including the reasonableness of management's sensitivity analysis on key assumptions. We concluded that the assumptions and methodologies adopted by management to calculate the unbilled revenue at the year end were reasonable.

Independent Auditors' Report to Stockholders of Electricity Supply Board (ESB) (continued)

Key audit matter	How our audit addressed the key audit matter
Completeness of Pension Obligations **Refer to page 114 (Report of the Audit & Risk Committee), note 1 (xvii) (Statement of Accounting Policies) and note 24 to the financial statements** As set out in Note 24 to the financial statements, the regulations governing the "ESB Defined Benefit Scheme" stipulate the benefits that are to be provided and the contributions to be paid by both ESB and the contributing members. ESB has determined that its legal and/or constructive obligations in respect of contributions payable by it to the ESB Defined Benefit Scheme Fund are limited to the amounts provided for in the Scheme Rules, namely, the normal ongoing contributions and the contribution which was committed and already paid by ESB under the 2010 Pensions agreement. As set out in Note 24, the Defined Benefit Pension Scheme is not a typical "balance of costs" scheme where the employer is liable to pay the balance of contributions required to fund benefits. We determined this to be a key audit matter as there has been a high level of complexity and judgement involved in the interpretation of the Scheme rules and the determination of the related accounting and adequacy of disclosures in the financial statements.	We updated our understanding of ESB's assessment of their obligations in respect of the ESB Defined Benefit Scheme and considered the continued appropriateness of the accounting treatment in the context of IAS 19 "Employee Benefits". We made enquiries of senior management and internal legal counsel and read the board minutes, internal documentation and correspondence for the year to confirm that there had been no changes to the Group's position or commitments made to employees since 31 December 2020. We received a representation from the Board that ESB does not intend to make any further payments to the Scheme, including to the extent that there are any deficits or future deficits under the minimum funding standard, other than ESB's regular fixed rate contributions, which are specified within the Scheme Rules. We considered the changes to the Scheme Rules implemented during the year by the ESB Board as part of the plan to address the Minimum Funding deficit. ESB has informed us that the Defined Benefit Pension Scheme is not a typical "balance of costs" scheme where the employer is liable to pay the balance of contributions required to fund benefits. The accounting treatment and disclosures in the financial statements reflects this position.

How we tailored the audit scope

The Group is structured across four key reportable segments and the head office function. We determined that there are five reporting components, four in the Republic of Ireland and one in Northern Ireland.

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the structure of the Group, the accounting processes and controls, and the industry in which the Group operates.

Our audit work covered in excess of 90% of Group revenues, profit before taxation and exceptional items, total assets and total liabilities.

All of the required audit work in respect of the four reporting components in the Republic of Ireland was performed by the Group team.

Under instruction from the Group team, our network firm in Northern Ireland performed an audit of the NIE Networks reporting component. We determined the level of involvement we needed to have in their audit work to be able to conclude whether sufficient appropriate audit evidence had been obtained as a basis for our opinion on the Group financial statements as a whole. We had regular communications and discussions with our Northern Ireland team throughout the audit process. We received a detailed memorandum of examination on work performed and relevant findings in addition to an audit report which supplemented our understanding of the reporting component.

Materiality

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

	Group financial statements	Parent financial statements
Overall materiality	€23 million (2020: €21 million)	€23 million (2020: €21 million)
How we determined it	c. 5% of profit before tax and exceptional items.	Based on Group materiality.
Rationale for benchmark applied	We consider that profit before tax and exceptional items is an appropriate benchmark as the Group is profit orientated and the exceptional items are significant non-recurring items which are not reflective of the Group's ongoing trading activity. For the 2021 audit we also excluded c. €113 million losses recognised in respect of the inflation linked swaps in determining our materiality as the level of these charges distorts the underlying performance of the Group.	We considered it appropriate to restrict materiality for the Parent financial statements to €23 million, being that applied to the Group financial statements.

We agreed with the Audit Committee that we would report to them misstatements identified during our audit above €500,000 in respect of the Group and Parent audit as well as misstatements below that amount that, in our view, warranted reporting for qualitative reasons.

Independent Auditors' Report to Stockholders of Electricity Supply Board (ESB) (continued)

Conclusions relating to going concern

Our evaluation of the Board members' assessment of the Group and Parent's ability to continue to adopt the going concern basis of accounting included:

- Obtaining an understanding, evaluating and comparison to approved budgets of the assumptions underpinning the Board members' going concern assessment;
- Consideration of available liquidity as set out in Notes 19 and 22 of the financial statements;
- Reading and considering the key terms of revolving credit facility agreements to confirm their availability;
- Consideration of the overall headroom in the going concern assessment; and
- Evaluation of the disclosures in the financial statements and their consistency with the underlying assessment made by the Board members.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Group's or the Parent's ability to continue as a going concern for a period of at least twelve months from the date on which the financial statements are authorised for issue.

In auditing the financial statements, we have concluded that the Board members' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

However, because not all future events or conditions can be predicted, this conclusion is not a guarantee as to the Group's or Parent's ability to continue as a going concern.

In relation to the Group's reporting on how they have applied the UK Corporate Governance Code, we have nothing material to add or draw attention to in relation to the Board members' statement in the financial statements about whether the Board members considered it appropriate to adopt the going concern basis of accounting.

Our responsibilities and the responsibilities of the Board members with respect to going concern are described in the relevant sections of this report.

REPORTING ON OTHER INFORMATION

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The Board members are responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

With respect to the Board Members' Report, we also considered whether the disclosures required by the Regulations of ESB have been included.

Based on the responsibilities described above and our work undertaken in the course of the audit, ISAs (Ireland) and the Companies Act 2014 (CA14), which is made applicable to the audit of the financial statements of ESB by the Regulations of ESB adopted pursuant to the ESB Acts 1927 to 2014, require us to also report certain opinions and matters as described below (required by ISAs (Ireland) unless otherwise stated).

Board Members' Report

- In our opinion, based on the work undertaken in the course of the audit, the information given in the Board Members' Report for the year ended 31 December 2021 is consistent with the financial statements and has been prepared in accordance with the applicable legal requirements. (CA14)
- Based on our knowledge and understanding of the Group and Parent and their environment obtained in the course of the audit, we did not identify any material misstatements in the Board Members' Report. (CA14)

Code of Practice for the Governance of State Bodies (the "Code")

Under the Code of Practice for the Governance of State Bodies (the "Code") we are required to report to you if the statement regarding the system of internal control included in the Board Governance Report on pages 100 to 110 does not reflect the Group's compliance with paragraph 1.9(iv) of the Code or if it is not consistent with the information of which we are aware from our audit work on the financial statements. We have nothing to report in respect of this responsibility.

The Board members' assessment of the prospects of the Group and of the principal risks that would threaten the solvency or liquidity of the Group

As a result of the Board members' voluntary reporting on how they have applied the UK Corporate Governance Code (the "UK Code"), under ISAs (Ireland) we are required to report to you if we have anything material to add or to draw attention to regarding:

- The Board members' confirmation on page 109 of the Annual Report that they have carried out a robust assessment of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity.
- The disclosures in the Annual Report that describe those risks and explain how they are being managed or mitigated.
- The Board members' explanation on page 109 of the Annual Report as to how they have assessed the prospects of the Group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

We have nothing to report in respect of this responsibility.

Other UK Code provisions

As a result of the Board members' voluntary reporting on how they have applied the UK Code, we are required to report to you if, in our opinion:

- The statement given by the Board members' on page 125 that they consider the Annual Report taken as a whole to be fair, balanced and understandable and provides the information necessary for the members to assess the Group's and Parent's position and performance, business model and strategy is materially inconsistent with our knowledge of the Group and Parent obtained in the course of performing our audit.
- The section of the Annual Report on page 112 describing the work of the Audit and Risk Committee does not appropriately address matters communicated by us to the Audit and Risk Committee.

We have nothing to report in respect of this responsibility.

Independent Auditors' Report to Stockholders of Electricity Supply Board (ESB) (continued)

RESPONSIBILITIES FOR THE FINANCIAL STATEMENTS AND THE AUDIT

Responsibilities of the Board members for the financial statements

As explained more fully in the Statement of Board Members' Responsibilities set out on page 125 , the Board members are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view.

The Board members are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board members are responsible for assessing the Group's and the Parent's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the Board members either intend to liquidate the Group or the Parent or to cease operations, or have no realistic alternative but to do so.

Auditors' responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (Ireland) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Our audit testing might include testing complete populations of certain transactions and balances, possibly using data auditing techniques. However, it typically involves selecting a limited number of items for testing, rather than testing complete populations. We will often seek to target particular items for testing based on their size or risk characteristics. In other cases, we will use audit sampling to enable us to draw a conclusion about the population from which the sample is selected.

A further description of our responsibilities for the audit of the financial statements is located on the IAASA website at:

https://www.iaasa.ie/getmedia/b2389013-1cf6-458b-9b8f-a98202dc9c3a/Description_of_auditors_responsibilities_for_audit.pdf

This description forms part of our auditors' report.

Use of this report

This report, including the opinions, has been prepared for and only for the Stockholders of ESB as a body in accordance with section 391 of the Companies Act 2014, made applicable to ESB by the Regulations adopted pursuant to the ESB Acts 1927 to 2014, and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

OTHER REQUIRED REPORTING

Companies Act 2014 opinions on other matters

- We have obtained all the information and explanations which we consider necessary for the purposes of our audit.
- In our opinion the accounting records of the Parent were sufficient to permit the Parent financial statements to be readily and properly audited.
- The Parent Balance Sheet is in agreement with the accounting records.

Companies Act 2014 exception reporting

Board Members' remuneration and transactions

Under the Companies Act 2014 we are required to report to you if, in our opinion, the disclosures of board members' remuneration and transactions specified by sections 305 to 312 of that Act have not been made. We have no exceptions to report arising from this responsibility.

Mary Cleary

Mary Cleary

For and on behalf of PricewaterhouseCoopers

Chartered Accountants and Statutory Audit Firm

Dublin

1 March 2022

Group Income Statement

For the year ended 31 December 2021

	Notes	2021 Excluding exceptional items	2021 Exceptional items note 6	2021 Total	2020 Excluding exceptional items	2020 Exceptional items note 6	2020 Total
		€m	€m	€m	€m	€m	€m
Revenue	4	5,248.0	152.0	5,400.0	3,731.4	-	3,731.4
Other operating income (net)	7	19.2	3.2	22.4	18.6	-	18.6
Net impairment losses on financial assets	8/18	(21.8)	-	(21.8)	(24.8)	-	(24.8)
Operating costs (net)	8	(4,566.8)	(64.3)	(4,631.1)	(3,109.2)	(247.3)	(3,356.5)
Operating profit		678.6	90.9	769.5	616.0	(247.3)	368.7
Net interest on borrowings	9	(118.6)	-	(118.6)	(125.5)	-	(125.5)
Financing charges	9	(12.9)	-	(12.9)	(18.6)	-	(18.6)
Fair value movement on financial instruments	9	(126.9)	-	(126.9)	(50.4)	-	(50.4)
Finance income	9	6.7	-	6.7	2.1	-	2.1
Net finance cost		(251.7)	-	(251.7)	(192.4)	-	(192.4)
Impairment of equity accounted investees		-	(153.5)	(153.5)	-	-	-
Share of equity accounted investees (loss) / profit, net of tax	16	(75.9)	-	(75.9)	9.3	-	9.3
Profit before taxation		351.0	(62.6)	288.4	432.9	(247.3)	185.6
Income tax expense	21	(85.1)	(12.6)	(97.7)	(76.1)	16.3	(59.8)
Profit after taxation		265.9	(75.2)	190.7	356.8	(231.0)	125.8
Attributable to:							
Equity holders of the Parent		290.3	(75.2)	215.1	360.8	(231.0)	129.8
Non-controlling interest		(24.4)	-	(24.4)	(4.0)	-	(4.0)
Profit for the financial year		265.9	(75.2)	190.7	356.8	(231.0)	125.8

Group Statement of Comprehensive Income

For the year ended 31 December 2021

	2021	2020
	€m	€m
Profit for the financial year	190.7	125.8
Items that will not be reclassified subsequently to profit or loss:		
NIE Networks pension scheme actuarial gains / (losses)	98.4	(26.4)
Tax on items that will not be reclassified to profit or loss	(11.2)	8.7
	87.2	(17.7)
Items that are or may be reclassified subsequently to profit or loss:		
Translation differences on consolidation of foreign subsidiaries	4.0	(10.2)
Effective hedge of a net investment in foreign subsidiary	-	0.1
Fair value losses on cash flow hedges	(12.0)	(20.9)
Fair value gains / (losses) on cash flow hedges in equity accounted investees	59.1	(36.4)
Transferred to income statement on cash flow hedges	24.2	15.9
Tax on items that are or may be reclassified subsequently to profit or loss	1.5	2.6
Tax on items that are or may be reclassified subsequently to profit or loss for equity accounted investees	(11.3)	6.9
Tax on items transferred to income statement	(3.0)	(2.0)
	62.5	(44.0)
Other comprehensive income for the financial year, net of tax	149.7	(61.7)
Total comprehensive income for the financial year	340.4	64.1
Attributable to:		
Equity holders of the Parent	364.8	68.1
Non-controlling interest	(24.4)	(4.0)
Total comprehensive income for the financial year	340.4	64.1

Group Balance Sheet

As at 31 December 2021

	Notes	2021 €m	2020 €m
ASSETS			
Non-current assets			
Property, plant and equipment	12	**11,353.3**	10,930.1
Intangible assets	13	**466.9**	426.8
Right-of-use assets	14	**113.3**	123.6
Goodwill	15	**201.3**	169.0
Investments in equity accounted investees	16	**282.5**	378.1
Financial asset investments at fair value through profit or loss	16	**5.3**	8.6
Trade and other receivables	18	**216.0**	149.3
Derivative financial instruments	23	**86.3**	8.3
Deferred tax assets	21	**1.8**	1.7
Total non-current assets		**12,726.7**	12,195.5
Current assets			
Inventories	17	**131.4**	160.1
Intangible assets	13	**329.0**	120.1
Derivative financial instruments	23	**595.7**	169.6
Current tax asset		**32.2**	5.7
Trade and other receivables	18	**1,638.9**	942.6
Cash and cash equivalents	19	**537.0**	248.7
Total current assets		**3,264.2**	1,646.8
Total assets		**15,990.9**	13,842.3
EQUITY			
Capital stock	20	**1,949.4**	1,957.7
Capital redemption reserve		**30.5**	22.2
Translation reserve		**(2.4)**	(6.4)
Other reserves		**(192.5)**	(243.4)
Cash flow hedging reserve		**7.6**	(50.9)
Retained earnings		**2,367.8**	2,243.1
Equity attributable to equity holders of the Parent		**4,160.4**	3,922.3
Non-controlling interest		**(49.1)**	(14.2)
Total equity		**4,111.3**	3,908.1
LIABILITIES			
Non-current liabilities			
Borrowings and other debt	22	**5,292.5**	5,114.0
Lease liabilities	14	**106.7**	107.3
Liability – ESB pension scheme	25	**84.2**	95.3
Liability – NIE Networks pension scheme	24	**6.7**	116.9
Employee related liabilities	25	**39.4**	47.0
Trade and other payables	26	**9.3**	-
Deferred income	27	**1,355.1**	1,269.1
Provisions	28	**560.7**	597.7
Deferred tax liabilities	21	**498.6**	462.3
Derivative financial instruments	23	**805.1**	604.9
Total non-current liabilities		**8,758.3**	8,414.5
Current liabilities			
Borrowings and other debt	22	**70.7**	129.6
Lease liabilities	14	**12.8**	17.5
Liability – ESB pension scheme	25	**10.5**	11.0
Employee related liabilities	25	**80.4**	90.1
Trade and other payables	26	**1,763.5**	821.4
Deferred income	27	**93.3**	91.0
Provisions	28	**443.7**	166.4
Derivative financial instruments	23	**646.4**	192.7
Total current liabilities		**3,121.3**	1,519.7
Total liabilities		**11,879.6**	9,934.2
Total equity and liabilities		**15,990.9**	13,842.3

Terence O'Rourke, Chairman

Noreen O'Kelly, Board Member

Pat Fenlon, Executive Director, Group Finance and Commercial

Group Statement of Changes in Equity

As at 31 December 2021

Reconciliation of changes in equity	Capital stock €m	Translation reserve €m	Capital redemption reserve €m	Cash flow hedging reserve €m	Other reserves[1] €m	Retained earnings €m	Total €m	Non-controlling interest €m	**Total equity €m**
Balance at 1 January 2020	1,966.4	3.7	13.5	(17.0)	(233.2)	2,171.8	3,905.2	(10.0)	3,895.2
Total comprehensive income / (expense) for the year									
Profit for the financial year	-	-	-	-	-	129.8	129.8	(4.0)	125.8
NIE Networks pension scheme actuarial losses	-	-	-	-	(26.4)	-	(26.4)	-	(26.4)
Foreign currency translation adjustments	-	(10.1)	-	-	-	-	(10.1)	-	(10.1)
Cash flow hedges:									
- Net fair value gains / (losses)	-	-	-	(20.9)	-	-	(20.9)	-	(20.9)
- Transfers to income statement									
- Finance cost (interest)	-	-	-	5.2	-	-	5.2	-	5.2
- Finance cost (foreign translation movements)	-	-	-	20.5	-	-	20.5	-	20.5
- Other operating expenses	-	-	-	(9.8)	-	-	(9.8)	-	(9.8)
Fair value loss for hedges in equity accounted investees	-	-	-	(36.4)	-	-	(36.4)	-	(36.4)
Tax on items taken directly to OCI	-	-	-	2.6	8.7	-	11.3	-	11.3
Tax on items transferred to income statement	-	-	-	(2.0)	-	-	(2.0)	-	(2.0)
Tax on items taken directly to OCI for equity accounted investees	-	-	-	6.9	-	-	6.9	-	6.9
Total comprehensive income / (expense) for the year	-	(10.1)	-	(33.9)	(17.7)	129.8	68.1	(4.0)	64.1
Transactions with owners recognised directly in equity									
Dividends	-	-	-	-	-	(50.1)	(50.1)	(0.2)	(50.3)
Repurchase of own shares[1]	(8.7)	-	8.7	-	-	(8.4)	(8.4)	-	(8.4)
ESOP repurchase provision[2]	-	-	-	-	7.5	-	7.5	-	7.5
Balance at 31 December 2020	1,957.7	(6.4)	22.2	(50.9)	(243.4)	2,243.1	3,922.3	(14.2)	3,908.1
Balance at 1 January 2021	**1,957.7**	**(6.4)**	**22.2**	**(50.9)**	**(243.4)**	**2,243.1**	**3,922.3**	**(14.2)**	**3,908.1**
Total comprehensive income / (expense) for the year									
Profit for the financial year	-	-	-	-	-	215.1	215.1	(24.4)	**190.7**
NIE Networks pension scheme actuarial gain	-	-	-	-	98.4	-	98.4	-	**98.4**
Foreign currency translation adjustments	-	4.0	-	-	-	-	4.0	-	**4.0**
Cash flow hedges:									
- Net fair value losses	-	-	-	(12.0)	-	-	(12.0)	-	**(12.0)**
- Transfers to income statement									
- Finance cost (interest)	-	-	-	4.7	-	-	4.7	-	**4.7**
- Finance cost (foreign translation movements)	-	-	-	(18.2)	-	-	(18.2)	-	**(18.2)**
- Other operating expenses	-	-	-	37.7	-	-	37.7	-	**37.7**
Fair value gains for hedges in equity accounted investees	-	-	-	59.1	-	-	59.1	-	**59.1**
Tax on items taken directly to OCI	-	-	-	1.5	(11.2)	-	(9.7)	-	**(9.7)**
Tax on items transferred to income statement	-	-	-	(3.0)	-	-	(3.0)	-	**(3.0)**
Tax on items taken directly to OCI for equity accounted investees	-	-	-	(11.3)	-	-	(11.3)	-	**(11.3)**
Total comprehensive income / (expense) for the year	-	**4.0**	-	**58.5**	**87.2**	**215.1**	**364.8**	**(24.4)**	**340.4**
Transactions with owners recognised directly in equity									
Dividends	-	-	-	-	-	(80.8)	(80.8)	-	**(80.8)**
Repurchase of own shares[1]	(8.3)	-	8.3	-	-	(9.6)	(9.6)	-	**(9.6)**
ESOP repurchase provision[2]	-	-	-	-	(27.0)	-	(27.0)	-	**(27.0)**
Redemption reserve	-	-	-	-	(9.3)	-	(9.3)	-	**(9.3)**
Non controlling interest on acquisition of So Energy	-	-	-	-	-	-	-	(10.5)	**(10.5)**
Balance at 31 December 2021	**1,949.4**	**(2.4)**	**30.5**	**7.6**	**(192.5)**	**2,367.8**	**4,160.4**	**(49.1)**	**4,111.3**

[1]Other reserves include (i) other reserves relating to the Northern Ireland Electricity Networks Limited (NIE Networks) pension scheme of (€150.0) million (2020: (€237.2) million), (ii) a non-distributable reserve of (€5.0) million which was created on the sale of the Group's share in Ocean Communications Limited in 2001; (iii) an ESOP repurchase provision which relates to the amount that ESB has committed to date to purchase from the ESOP internal market (€27.0) million (2020: (€nil) million), and (iv) (€9.3) million redemption reserve relating to put option in So Energy (2020: (€nil) million). See note 20 for further details on other reserves and note 32 for information on the ESOP repurchase.

[2]Refer to note 32 for information on the ESOP repurchase.

Parent Balance Sheet

As at 31 December 2021

	Notes	2021 €m	2020 €m
ASSETS			
Non-current assets			
Property, plant and equipment	12	7,721.0	7,498.7
Intangible assets	13	411.8	370.3
Right-of-use assets	14	59.9	66.9
Investments in equity accounted investees	16	24.1	33.9
Investments in subsidiary undertakings	16	61.8	61.8
Trade and other receivables	18	2,067.4	1,817.8
Derivative financial instruments	23	90.9	10.1
Total non-current assets		10,436.9	9,859.5
Current assets			
Inventories	17	91.8	42.8
Intangible assets	13	284.1	119.5
Derivative financial instruments	23	553.5	129.8
Current tax asset		5.9	0.8
Trade and other receivables	18	2,198.2	1,319.5
Cash and cash equivalents	19	463.3	164.1
Total current assets		3,596.8	1,776.5
Total assets		14,033.7	11,636.0
EQUITY			
Capital stock	20	1,949.4	1,957.7
Capital redemption reserve		30.5	22.2
Cash flow hedging and other reserves		(5.2)	(11.4)
Other Reserves		(26.6)	-
Retained earnings		2,037.9	1,707.9
Equity attributable to equity holders of the Parent		3,986.0	3,676.4
LIABILITIES			
Non-current liabilities			
Borrowings and other debt	22	833.5	729.1
Lease liabilities	14	56.8	55.5
Liability – ESB pension scheme	25	84.2	95.3
Employee related liabilities	25	39.4	46.9
Deferred income	27	887.5	862.1
Provisions	28	475.0	485.9
Deferred tax liabilities	21	382.3	373.6
Derivative financial instruments	23	110.2	31.1
Total non-current liabilities		2,868.9	2,679.5
Current liabilities			
Borrowings and other debt	22	70.7	127.7
Lease liabilities	14	6.1	11.2
Liability – ESB pension scheme	25	10.5	11.0
Employee related liabilities	25	72.0	81.9
Trade and other payables	26	6,128.0	4,732.0
Deferred income	27	65.2	59.1
Provisions	28	233.5	106.2
Derivative financial instruments	23	592.8	151.0
Total current liabilities		7,178.8	5,280.1
Total liabilities		10,047.7	7,959.6
Total equity and liabilities		14,033.7	11,636.0

Terence O' Rourke, Chairman

Noreen O'Kelly, Board Member

Pat Fenlon, Executive Director, Group Finance and Commercial

Parent Statement of Changes in Equity

As at 31 December 2021

Reconciliation of changes in equity	Capital Stock €m	Capital Redemption Reserve €m	Cash flow hedging and other reserves €m	Retained earnings €m	Total €m
Balance at 1 January 2020	1,966.4	13.5	(19.5)	1,711.7	3,672.1
Total comprehensive income / (expense) for the year					
Profit for the financial year	-	-	-	46.3	46.3
Cash flow hedges:					
- Net fair value losses	-	-	(4.3)	-	(4.3)
- Transfers to income statement					
- Finance cost (interest)	-	-	5.2	-	5.2
- Finance cost (foreign translation movements)	-	-	20.5	-	20.5
- Other operating expenses	-	-	(20.7)	-	(20.7)
Tax on items taken directly to OCI	-	-	0.5	-	0.5
Tax on items transferred to income statement	-	-	(0.6)	-	(0.6)
Total comprehensive income / (expense) for the year	-	-	0.6	46.3	46.9
Transactions with owners recognised directly in equity					
Dividends	-	-	-	(50.1)	(50.1)
Repurchase of own shares[1]	(8.7)	8.7	-	-	-
ESOP repurchase provision[1]	-	-	7.5	-	7.5
Balance at 31 December 2020	1,957.7	22.2	(11.4)	1,707.9	3,676.4
Balance at 1 January 2021	**1,957.7**	**22.2**	**(11.4)**	**1,707.9**	**3,676.4**
Total comprehensive income / (expense) for the year					
Profit for the financial year	-	-	-	410.8	410.8
Cash flow hedges:					
- Net fair value losses	-	-	(1.4)	-	(1.4)
- Transfers to income statement					
- Finance cost (interest)	-	-	4.7	-	4.7
- Finance cost (foreign translation movements)	-	-	(18.2)	-	(18.2)
- Other operating expenses	-	-	22.4	-	22.4
Tax on items taken directly to OCI	-	-	0.2	-	0.2
Tax on items transferred to income statement	-	-	(1.1)	-	(1.1)
Total comprehensive income / (expense) for the year	-	-	**6.6**	**410.8**	**417.4**
Transactions with owners recognised directly in equity					
Dividends	-	-	-	(80.8)	(80.8)
Repurchase of own shares [1]	(8.3)	8.3	-	-	-
ESOP provision [1]	-	-	(27.0)	-	(27.0)
Balance at 31 December 2021	**1,949.4**	**30.5**	**(31.8)**	**2,037.9**	**3,986.0**

[1] Refer to note 32 for information on the ESOP repurchase.

Group Cash Flow Statement

For the year ended 31 December 2021

	Notes	2021 €m	2020 €m
Cash flows from operating activities			
Profit after taxation		190.7	125.8
Adjustments for:			
Depreciation and amortisation	8	877.2	806.7
Transfer to income statement from intangibles	13	27.4	-
Revenue from supply contributions and amortisation of other deferred income	4/27	(109.9)	(111.7)
Net emissions movements		(12.4)	0.6
Profit on disposal of non-current assets	7	(14.0)	(11.5)
Profit on disposal of equity accounted investees	7	(3.2)	-
Inventory (write back) / impairment	17	(3.2)	2.8
Net finance cost	9	251.7	192.4
Impact of fair value adjustments in operating costs		19.5	(3.5)
Losses / (profit) from equity accounted investees	16	75.9	(9.3)
Impairment of equity accounted investees	16	153.5	-
Income tax expense	21	97.7	59.8
Dividend received	7	-	(0.7)
Net Impairment losses on financial assets	8/18	21.8	24.8
Impairment charge	8	63.7	200.7
Impairment gain	8	(79.0)	-
Operating cash flows before changes in working capital and provisions		1,557.4	1,276.9
(Credit) / charge in relation to provisions		(10.0)	100.3
Charge in relation to employee related liabilities		96.9	94.0
Utilisation of provisions		(14.4)	(12.6)
Payments in respect of employee related liabilities		(151.1)	(427.0)
Deferred income received		22.1	36.3
Networks supply contributions received		156.2	86.9
Net exchanged traded collateral received		205.6	25.8
(Increase) / decrease in trade and other receivables		585.7	138.5
Decrease / (increase) in inventories		31.9	(11.6)
Increase / (decrease) in trade and other payables		471.4	(6.0)
Cash generated from operations		1,780.3	1,301.5
Current tax paid (net)		(82.5)	(59.6)
Financing costs paid		(139.9)	(163.6)
Net cash inflow from operating activities		1,557.9	1,078.3
Cash flows from investing activities			
Payment for acquisition of subsidiary, net of cash acquired		(18.7)	-
Purchase of property, plant and equipment		(971.5)	(828.6)
Purchase of intangible assets		(119.6)	(136.5)
Proceeds from sale of non-current assets		21.4	14.0
Proceeds from sale of investments		3.2	12.8
Amounts advanced to equity accounted investees as shareholder loans		(113.1)	(48.7)
Amounts repaid from equity accounted investees		89.7	11.6
Dividends received from joint venture undertakings	16	8.6	11.7
Dividends received from investments measured at fair value through profit and loss		-	0.7
Purchase of financial asset investments		(61.0)	(5.7)
Interest received		0.8	2.1
Net cash outflow from investing activities		(1,160.2)	(966.6)
Cash flows from financing activities			
Dividends paid	20	(80.8)	(50.3)
Principal elements of lease payments		(14.8)	(16.4)
Repurchase of ESOP shares		(9.6)	(8.4)
(Repayments) of bonds, revolving credit and term debt facilities		(144.9)	(446.5)
Proceeds from the issue of bonds		-	572.2
Revolving credit facility arrangement fee		-	(3.6)
Proceeds from revolving credit facility and other borrowings		150.1	-
Payments on inflation linked interest rate swaps		(28.1)	(17.1)
Net cash (outflow) / inflow from financing activities		(128.1)	9.9
Net increase in cash and cash equivalents		269.6	121.6
Cash and cash equivalents at 1 January	19	248.7	125.1
Effect of exchange rate fluctuations on cash held		18.7	2.0
Cash and cash equivalents at 31 December	19	537.0	248.7

Parent Cash Flow Statement

For the year ended 31 December 2021

	Notes	2021 €m	2020 €m
Cash flows from operating activities			
Profit after taxation		410.8	46.3
Adjustments for:			
Depreciation and amortisation		590.3	541.9
Revenue from supply contributions and other deferred income	27	(63.1)	(61.4)
Net emissions movements		(55.1)	1.0
Profit on disposal of non-current assets		(0.3)	(11.8)
Net finance cost		46.0	39.4
Impact of fair value movement on financial instruments in operating costs		22.3	23.3
Loss from equity accounted investees		9.8	9.7
Dividend received from subsidiary undertakings		(8.9)	(8.9)
Income tax expense		61.6	70.1
Inventory (write back) / impairment		(3.7)	2.1
Provision for amounts due from related undertakings		53.0	199.5
Net impairment losses on financial assets		14.3	18.6
Impairment charge	13	0.4	-
Operating cash flows before changes in working capital and provisions		1,077.4	869.8
Charge in relation to provisions		1.6	96.7
Charge in relation to employee related liabilities	25	82.5	79.6
Utilisation of provisions		(9.2)	(10.8)
Payments in respect of employee related liabilities	25	(116.1)	(393.4)
Networks supply contributions received		109.2	58.8
Net exchanged traded collateral received		209.1	25.8
(Increase) / decrease in trade and other receivables		(1,001.1)	228.0
(Increase) / decrease in inventories		(45.4)	9.2
Increase / (decrease) in trade and other payables		1,000.4	(269.6)
Cash generated from operations		1,308.4	694.1
Current tax paid		(54.8)	(34.1)
Interest paid		(94.7)	(104.0)
Net cash inflow from operating activities		1,158.9	556.0
Cash flows from investing activities			
Purchase of property, plant and equipment		(691.7)	(572.9)
Purchase of intangible assets		(108.9)	(120.4)
Proceeds from the sale of non-current assets		2.0	14.0
Amounts (advanced) to / repayments from subsidiary undertakings (net)		(61.2)	181.6
Interest received		45.1	58.5
Dividends received from subsidiary undertakings		8.9	8.9
Net cash outflow from investing activities		(805.8)	(430.3)
Cash flows from financing activities			
Dividends paid	20	(80.8)	(50.1)
Principal elements of lease payments		(7.9)	(10.6)
Repayments of term debt facilities		(131.8)	(85.5)
Proceeds from borrowings		-	(3.6)
Proceeds from / (Repayment) of revolving credit facility and other borrowings		150.0	(70.0)
Proceeds from loans from subsidiaries		-	200.0
Net cash outflow from financing activities		(70.5)	(19.8)
Net increase in cash and cash equivalents		282.6	105.9
Effect of exchange rate fluctuations on cash held		16.6	-
Cash and cash equivalents at 1 January	19	164.1	58.2
Cash and cash equivalents at 31 December	19	463.3	164.1

Notes to the Financial Statements

1. STATEMENT OF ACCOUNTING POLICIES

(I) GENERAL INFORMATION AND BASIS OF PREPARATION

Electricity Supply Board (ESB) is a statutory corporation established under the Electricity (Supply) Act, 1927 and is domiciled in Ireland. The consolidated financial statements of ESB as at and for the year ended 31 December 2021 comprise the Parent and its subsidiaries (together referred to as "ESB" or "the Group") and the Group's interests in associates and jointly controlled entities.

The Parent and consolidated financial statements are prepared under IFRS (International Financial Reporting Standards) as adopted by the EU (EU IFRS) as applied in accordance with the Companies Act 2014. The Companies Act 2014 provide a Parent entity that presents its individual financial statements together with its consolidated financial statements with an exemption from publishing the Parent income statement and statement of comprehensive income which forms part of the Parent financial statements prepared and approved in accordance with the Act. The financial statements of the Parent and Group have been prepared in accordance with the EU IFRS standards and IFRIC (International Financial Reporting Interpretations Committee) interpretations issued and effective for accounting periods ending on or before 31 December 2021. The Parent and consolidated financial statements have been prepared on the historical cost basis except for derivative financial instruments and certain financial asset investments which are measured at fair value.

The policies set out below have been consistently applied to all years presented in these consolidated financial statements and have been applied consistently by all Group entities – with the exception of adoption of amended standards as set out at note 1 (iii) below. Parent accounting policies are consistent with the consolidated financial statements policies outlined below except where otherwise stated.

Certain corresponding amounts have been adjusted so that they are directly comparable with the amounts shown in respect of the current financial year.

Going concern

The COVID-19 pandemic has not had a significant impact on financial performance to date with electricity demand remaining resilient and capital expenditure programmes continuing.

The funding and liquidity management of the Group are described in note 22. The amount of cash and cash equivalents that the Group had on hand on 31 December 2021 was €537 million. The Group also has a revolving credit facility (undrawn) of €1.4 billion providing standby liquidity to February 2027. Including cash and other facilities, the Group has overall liquidity of €1.9 billion at 31 December 2021. ESB successfully raised a €500.0 million green bond after the balance sheet date. The unprecedented price volatility in wholesale energy markets has impacted the cash collateral positions of the Group in relation to exchange traded gas, carbon and power hedging contracts. ESB continues to effectively manage this position. Note 22 and note 29 includes an overview of financial risk management, details of the Group's financial instruments and hedging activities and its exposure to credit risk and liquidity risk.

The Group has considerable financial resources and the Board believes that the Group is well placed to manage its risks successfully. After making appropriate enquiries, the Board is satisfied that ESB has sufficient cash flows, available strong liquidity and access to capital markets to continue in operational existence for at least twelve months from the date of approval of the financial statements. Accordingly, the consolidated and Parent financial statements are prepared on the going concern basis of accounting.

(II) BASIS OF CONSOLIDATION

The Group's financial statements consolidate the financial statements of the Parent and of all subsidiary undertakings together with the Group's share of the results and net assets of associates and joint ventures made up to 31 December 2021. The results of subsidiary undertakings acquired or disposed of in the year are included in the Group income statement from the date of acquisition or up to the date of disposal. ESB Parent has availed of the exemption in section 304(2) of the Companies Act 2014 not to present its individual income statement, statement of comprehensive income and related notes that form part of the approved Parent financial statements.

Accounting for business combinations

Business combinations are accounted for using the acquisition method as at the acquisition date, which is the date on which control is transferred to the Group.

Acquisitions on or after 1 January 2010

The Group account for business combinations under IFRS 3 Business Combinations, the Group measures goodwill at the acquisition date as:
- the fair value of the consideration transferred; plus
- the recognised amount of any non-controlling interests in the acquiree; plus if the business combination is achieved in stages, the fair value of the existing equity interest in the acquiree; less
- the net recognised amount (fair value) of the identifiable assets acquired and liabilities assumed.

When the excess is negative, a bargain purchase gain is recognised immediately in profit or loss.

Where settlement of any part of cash consideration is deferred, the amounts payable in the future are discounted to their present value as at the date of exchange. The discount rate used is the entity's incremental borrowing rate, being the rate at which a similar borrowing could be obtained from an independent financier under comparable terms and conditions.

Contingent consideration is classified either as equity or a financial liability. Amounts classified as a financial liability are subsequently remeasured to fair value, with changes in fair value recognised in profit or loss.

Where a put and/or call option exists on non-controlling interests in subsidiary, a redemption liability is recognised through equity for the unavoidable obligation to transfer cash under this option, discounted to present value.

Costs relating to the acquisition (other than those associated with the issue of debt or equity securities) that the Group incur in connection with a business combination are expensed as incurred.

Acquisitions between 1 January 2004 and 1 January 2010

For acquisitions between 1 January 2004 and 1 January 2010, goodwill represents the excess of the cost of the acquisition over the Group's interest in the recognised amount (fair value) of the identifiable assets, liabilities and contingent liabilities of the acquiree. When the goodwill excess was negative, a bargain purchase gain was recognised immediately in profit or loss. Transaction costs, other than those associated with the issue of debt or equity securities that the Group incurred in connection with business combinations were capitalised as part of the cost of the acquisition.

Notes to the Financial Statements

1. STATEMENT OF ACCOUNTING POLICIES (CONTINUED)

(II) BASIS OF CONSOLIDATION (CONTINUED)

Acquisitions prior to 1 January 2004 (date of transition to IFRS)

As part of its transition to IFRS, the Group elected to restate only those business combinations that occurred on or after 1 January 2003 in accordance with policy elections made by the Group at the time. In respect of acquisitions prior to 1 January 2003, goodwill represents the amount recognised under the Group's previous accounting framework, Irish / UK GAAP.

IFRS 10 - Consolidated financial statements

The IFRS 10 control model focuses on whether the Group has power over an investee, exposure or rights to variable returns from its involvement with the investee and ability to use its power to affect those returns. In particular, IFRS 10 requires the Group to consolidate investees that it controls on the basis of de facto control.

In accordance with IFRS 10, the Group's assessment of control is performed on a continuous basis and the Group reassesses whether it controls an investee if facts and circumstances indicate that there are changes to one or more of the elements of the control model.

Subsidiaries

Subsidiaries are entities controlled by ESB (control exists when ESB is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity). The financial statements of the subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

IFRS 11 - Joint arrangements

Under IFRS 11, the Group classifies its interests in joint arrangements as either joint operations or joint ventures depending on the Group's rights to the assets and obligations for the liabilities of the arrangements. When making this assessment, the Group considers the structure and legal form of the arrangements, the contractual terms of the arrangement agreed by the parties and when relevant, other facts and circumstances.

Joint operations

Joint operations are those undertakings in which ESB is deemed to have joint control of the arrangement and has rights to the assets and obligations for the liabilities of the arrangement. Accordingly, the Company's share of assets, liabilities, revenues, expenses and other comprehensive income are recognised in the respective categories within the consolidated financial statements.

Joint ventures

Joint venture undertakings (joint ventures) are those undertakings over which ESB exercises contractual control jointly with another party, whereby the Group has rights to net assets of the arrangement rather than rights to its assets and obligations for its liabilities.

Joint ventures are accounted for using the equity method of accounting. Under the equity method, the Group's share of the profits or losses after tax of joint ventures is included in the consolidated income statement after interest and financing charges. The Group's share of items of other comprehensive income is shown in the statement of comprehensive income.

The Group's interests in the net assets are included as investments in joint ventures on the face of the consolidated balance sheet at an amount representing the Group's share of the fair values of the net assets at acquisition plus goodwill, acquisition costs, the Group's share of post acquisition retained income and expenses less any impairment charge. Net liabilities are only recognised to the extent that ESB has incurred legal or constructive obligations or made payments on behalf of joint ventures.

Where contingent consideration has been recognised on acquisition, the Group recognises a liability. Any subsequent change in the measurement of the contingent consideration is accounted for using the cost-based approach and applied prospectively in accordance with IAS 8. The change in contingent consideration liability is adjusted to the cost of the investment.

The amounts included in the consolidated financial statements in respect of post acquisition results of joint ventures are taken from their latest financial information made up to the Group's balance sheet date.

The Group assesses if a change in the facts and circumstances requires reassessment of whether joint control still exists. The Group has evaluated its involvement in joint arrangements and has confirmed that these investments meet the criteria of joint ventures which continue to be accounted for using the equity method.

Associates

Entities other than joint arrangements and subsidiaries and over whose operating and financial policies the Group is in a position to exercise significant influence but not control or joint control, are accounted for as associates using the equity method and are included in the consolidated financial statements from the date on which significant influence is deemed to arise until the date on which such influence ceases to exist.

In the Parent financial statements, investments in associates are carried at cost less any impairment charges.

Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealised income and expenses arising from intra-group transactions, are eliminated in preparing the consolidated financial statements. Unrealised gains arising from transactions with equity accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

Notes to the Financial Statements

1. STATEMENT OF ACCOUNTING POLICIES (CONTINUED)

(III) NEW STANDARDS AND INTERPRETATIONS

The following standards and Interpretations are effective for the Group in 2021 but have no material effect on the results or financial positions of the Group:

New standards or amendments	Details	Effective date	Material effect on the results and financial position of the group
IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 (Amendments)	Interest Rate Benchmark Reform	01 January 2021	No material effect

IRFS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 (Amendments)

For the year ended 31 December 2021, the Group has adopted the following hedge accounting reliefs provided by 'Phase 2' of the amendments:

- Hedge designation: When the phase 1 amendments cease to apply, the Group will amend its hedge designation to reflect changes which are required by IBOR reform, but only to make one or more of these changes:
  a) designating an alternative benchmark rate (contractually or non-contractually specified) as a hedged risk;
  b) amending the description of the hedged item, including the description of the designated portion of the cash flows or fair value being hedged; or
  c) amending the description of the hedging instrument.
- The Group will update its hedge documentation to reflect this change in designation by the end of the reporting period in which the changes are made. These amendments to the hedge documentation do not require the Group to discontinue its hedge relationships.
- Risk components: The Group is permitted to designate an alternative benchmark rate as a non-contractually specified risk component, even if it is not separately identifiable at the date when it is designated, provided that the Group reasonably expects that it will meet the requirements within 24 months of the first designation and the risk component is reliably measurable. The 24-month period applies separately to each alternative benchmark rate which the Group might designate.

(IV) STANDARDS, INTERPRETATIONS AND AMENDMENTS TO PUBLISHED STANDARDS THAT ARE NOT YET EFFECTIVE

A number of new standards, amendments to standards and interpretations are not yet effective for the year ended 31 December 2021 and have not been applied in preparing these financial statements. The items that may have relevance to the Group are as follows:

New standards or amendments	Details	Effective date	Material effect on the results and financial position of the group
IAS 16 (Amendments)	Property, Plant and Equipment	01 January 2022	No material effect
IAS 37 (Amendments)	Provisions, Contingent Liabilities and Contingent Assets	01 January 2022	No material effect
IFRS 3 (Amendments)	Reference to the Conceptual Framework	01 January 2022	No material effect
IAS 1 (Amendments)	Presentation of Financial Statements	01 January 2023	No material effect
IFRS 17	Insurance Contracts	01 January 2023	No material effect
IAS 8 (Amendments)	Accounting Estimates	01 January 2023	No material effect
IAS 12 (Amendments)	Deferred Tax	01 January 2023	No material effect

(V) FOREIGN CURRENCIES

These financial statements are presented in euro, which is the Parent's functional currency.

(a) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The consolidated financial statements are presented in euro.

(b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year end exchange rates are generally recognised in profit or loss. They are deferred in equity if they relate to qualifying cash flow hedges and qualifying net investment hedges or are attributable to part of the net investment in a foreign operation.

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss. For example, translation differences on non-monetary assets and liabilities such as equities held at fair value through profit or loss are recognised in profit or loss as part of the fair value gain or loss.

(c) Group companies

The results and financial position of foreign operations (none of which has the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet
- income and expenses for each statement of profit or loss and statement of comprehensive income are translated at average exchange rates (unless this is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the exchange rates at the dates of the transactions); and
- all resulting exchange differences are recognised in other comprehensive income.

On consolidation, exchange differences arising from the translation of any net investment in foreign entities, and of borrowings and other financial instruments designated as hedges of such investments, are recognised in other comprehensive income. When a foreign operation is sold or any borrowings forming part of the net investment are repaid, the associated exchange differences are reclassified to profit or loss, as part of the gain or loss on sale.

Goodwill arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate.

Notes to the Financial Statements

1. STATEMENT OF ACCOUNTING POLICIES (CONTINUED)

(VI) PROPERTY, PLANT AND EQUIPMENT AND DEPRECIATION

Recognition and measurement

Property, plant and equipment is stated at cost less accumulated depreciation and provisions for impairment in value, except for land which is shown at cost less impairment. Property, plant and equipment includes capitalised employee, interest and other costs that are directly attributable to the asset and an appropriate portion of relevant overheads.

Depreciation

The charge for depreciation is calculated to write down the cost of property, plant and equipment to its estimated residual value over its expected useful life using methods appropriate to the nature of the Group's business and to the character and extent of its property, plant and equipment. No depreciation is provided on freehold land or on assets in the course of construction. Depreciation on other items of property, plant and equipment is calculated using the straight-line method to allocate their depreciable amounts over their estimated useful lives as follows:

Generation plant and thermal station structures	20 years
Wind farm generating assets	20 / 25 years
Distribution plant and structures	25 / 30 years
Transmission plant and structures	30 years
General buildings and hydro stations	50 years

Subsequent expenditure

Subsequent expenditure on property, plant and equipment is included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. All other repairs and maintenance costs are charged in the income statement during the financial period in which they are incurred.

Included in property, plant and equipment are strategic spares in relation to the electricity generation business. Capital stock in the Networks business is carried within assets under construction pending commissioning.

(VII) INTANGIBLE ASSETS AND GOODWILL

(a) Goodwill

Goodwill that arises on the acquisition of subsidiaries is presented separately on the balance sheet. Where the Group acquires less than 100% of a business, goodwill is measured using the proportionate share method.

Subsequent measurement

Goodwill is measured at cost less accumulated impairment losses. Goodwill is tested annually for impairment. An impairment loss is recognised if the carrying amount of the asset or cash-generating unit (CGU) exceeds its recoverable amount.

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU.

Impairment losses in respect of goodwill are recognised in profit or loss, and are not reversed. For impairment losses where goodwill is recognised using the proportionate method, only the impairment loss relating to the goodwill that is allocated to the parent is recognised as a goodwill impairment loss.

(b) Emission allowances and renewable obligation certificates (ROCs)

Emission allowances purchased by ESB are recorded as intangible assets at cost.

As emissions arise, a charge is recorded in the income statement to reflect the amount required to settle the liability to the relevant authority. This provision includes the carrying value of the emission allowances held, as well as the current market value of any additional allowances required to settle the obligation. These allowances are returned to the relevant Authority in charge of the scheme within four months of the end of that calendar year for the European CO_2 emissions trading scheme and three months for the UK emissions trading scheme, in order to cover the liability for actual emissions of CO_2 during that year.

ROCs are certificates issued to operators of accredited renewable generating stations in the UK for the eligible renewable electricity they generate. The Group purchases ROCs from certain of its joint ventures. Purchased ROCs are recognised initially at cost (purchase price) within intangible assets. The liability for actual emissions of CO_2 is measured at the cost of purchased allowances up to the level of purchased allowances held, and then at the market price of allowances ruling at the balance sheet date, with movements in the liability recognised in operating profit.

Emission allowances and ROCs held at cost as intangible assets are therefore not amortised as they are held for settlement of the related liabilities in the following year.

(c) Software costs and other intangible assets

Acquired computer software licenses and other intangible assets including grid connections and other acquired rights, are capitalised on the basis of the costs incurred to acquire and bring the specific asset into use. These assets are measured at cost less accumulated amortisation, which is estimated over their useful lives on a straight line basis, and accumulated impairment losses. Major asset classifications and their allotted life spans are:

Software	3 / 5 years
Other intangibles	up to 20 years

Notes to the Financial Statements

1. STATEMENT OF ACCOUNTING POLICIES (CONTINUED)

(VII) INTANGIBLE ASSETS AND GOODWILL (CONTINUED)

Development costs that are directly associated with the production of identifiable and unique software products controlled by the Group and that will probably generate economic benefits exceeding costs beyond one year, are recognised as intangible assets when the following criteria are met:

- management intends to complete the software and use or sell it
- there is an ability to use or sell the software
- it can be demonstrated how the software will generate probable future economic benefits
- there are adequate technical, financial and other resources to complete the development and to use or sell
- the expenditure attributable to the software during its development can be reliably measured.

Direct costs include the costs of software development, employees and an appropriate portion of relevant overheads. These assets are measured at cost less accumulated amortisation, which is estimated over their estimated useful lives (three to five years) on a straight line basis, and accumulated impairment losses.

Incremental costs of obtaining a contract are capitalised in line with IFRS 15 Revenue from Contracts with Customers where those costs would not have been incurred if the contract had not been obtained, and ESB expects to recover those costs. These assets are measured at cost less accumulated amortisation, which is estimated over their useful lives (2 years) on a straight line basis, and accumulated impairment losses.

(d) Research and development

Research expenditure and development expenditure that does not meet the criteria above is recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period.

(VIII) IMPAIRMENT OF NON-CURRENT ASSETS OTHER THAN GOODWILL

Assets that have an indefinite useful life are not subject to amortisation and are tested annually for impairment. Assets that are subject to depreciation and amortisation are tested for impairment whenever events or changes in circumstance indicate that the carrying amount may not be recoverable. Assets not yet in use are tested annually for impairment. An impairment loss is recognised for the amount by which an asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and its value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units).

For power generation assets, value in use is based on the estimated cash flows expected to be generated by the asset and is based on estimates of forecast power generation and forecast power, gas, carbon and capacity prices (where applicable) and the timing and extent of operating costs and capital expenditure. These cash flows are discounted to their present value using a pre-tax discount rate that reflects the current markets assessment of the time value of money and the risks specific to the asset.

(IX) RIGHT-OF-USE OF ASSETS AND LEASE LIABILTIES

Leases are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the group. At the inception of a lease contract the Group assess whether a contract is, or contains, a lease. If the contract conveys the right to control the use of an asset for a period of time in exchange of consideration, it is recognised as a lease.

To assess the right to control an asset, the Group considers the following:

- does the contract contain an identifiable asset
- does the Group have the right to obtain substantially all of the economic benefits of the asset
- does the Group have the right to operate the asset throughout the period of the contract

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the lease payments. Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability. The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, which is generally the case for leases in the Group, the lessee's incremental borrowing rate is used, being the rate that the individual lessee would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions.

Lease payments are allocated between principal and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability
- any lease payments made at or before the commencement date less any lease incentives received
- any initial direct costs, and
- restoration costs.

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Group is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life.

Payments associated with short-term leases of equipment and vehicles and all leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets are considered low value if the value of the asset when new is less than €5,000. Low value assets within ESB comprise predominantly of IT equipment and small items of office furniture.

The Group leases various land and buildings, wind farm land and motor vehicles. Rental contracts are typically made for fixed periods but may have extension options. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes.

Notes to the Financial Statements

1. STATEMENT OF ACCOUNTING POLICIES (CONTINUED)

(X) BORROWING COSTS

Borrowing costs attributable to the construction of major assets, which necessarily take substantial time to get ready for intended use, are added to the cost of those assets at the weighted average cost of borrowings, until such time as the assets are substantially ready for their intended use. The capitalisation rate applied equates to the average cost of ESB's outstanding debt and where applicable, a project specific rate is applied. All other borrowing costs are recognised in the income statement in the period in which they are incurred.

(XI) INVENTORIES

Inventories are carried at the lower of average cost and net realisable value. Cost comprises all purchase price and direct costs that have been incurred in bringing the inventories to their present location and condition. Net realisable value is based on normal selling price less further costs expected to be incurred prior to disposal.

Specific provision is made for damaged, deteriorated, obsolete and unusable items where appropriate.

(XII) FINANCIAL ASSETS AND LIABILITIES

Classification and measurement

The following accounting policies apply to the measurement of financial assets in the ESB's consolidated financial statements:

Financial assets at fair value through profit or loss (FVTPL)

These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognised in profit or loss.

Financial assets at fair value through other comprehensive income (FVOCI)

These assets are subsequently measured at fair value. Net gains and losses are recognised in other comprehensive income.

Financial assets at amortised cost

These assets are subsequently measured at amortised cost using the effective interest method. The amortised cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment is recognised in profit or loss. Any gain or loss on derecognition is recognised in profit or loss.

Trade and other receivables

Trade and other receivables are initially recognised at fair value, which is usually the original invoiced amount and subsequently carried at amortised cost using the effective interest method less allowance made for impairment.

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade and other receivables except on the shareholder loans advanced to equity accounted investees which are measured using the general approach. The loss allowances for financial assets are based on assumptions about risk of default and expected loss rates. The Group uses judgement in making these assumptions and selecting the inputs to the expected credit loss calculations, based on the Group's past history, existing market conditions and forward looking estimates at the end of each reporting period.

Loans and balances with equity accounted investees

Loans and balances with equity accounted investees are non-derivative financial assets or liabilities which are not quoted in an active market. They are included in current assets or current liabilities on the balance sheet, except for those with maturities greater than twelve months after the balance sheet date, which are included in non-current assets or non-current liabilities and are initially recorded at fair value and thereafter at amortised cost using the effective interest method less loss allowance made for impairment.

Loans and balances with Group companies (Parent)

Loans and balances with Group companies are non-derivative financial assets or liabilities which are not quoted in an active market. They are included in current assets or current liabilities on the balance sheet, except for those with maturities greater than twelve months after the balance sheet date, which are included in non-current assets or non-current liabilities. Loans and balances are included within trade and other receivables or trade and other payables in the Parent balance sheet and are initially recorded at fair value and thereafter at amortised cost.

Trade and other payables

Trade and other payables are initially recorded at fair value, which is usually the original invoiced amount, and subsequently carried at amortised cost using the effective interest rate method.

Impairment

The Group assesses on a forward looking basis the expected credit losses associated with its debt instruments carried at amortised cost. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For loans and balances with Group companies, the Parent applies the general approach permitted by IFRS 9, which requires 12 month expected credit losses to be recognised on initial recognition of these receivables. If a significant increase in credit risk occurs, this requires expected lifetime credit losses to be recognised on these receivables.

Cash and cash equivalents

Cash and cash equivalents include cash in hand, deposits repayable on demand and other short-term highly liquid investments with original maturities of three months or less. Cash and cash equivalents for the purpose of cash flow include bank overdrafts payable on demand. Bank overdrafts are shown within borrowings in current liabilities in the balance sheet.

Notes to the Financial Statements

1. STATEMENT OF ACCOUNTING POLICIES (CONTINUED)

(XII) FINANCIAL ASSETS AND LIABILITIES (CONTINUED)

(a) Borrowings

Interest bearing borrowings

Interest bearing borrowings are recognised initially at fair value less attributable transaction costs. Subsequent to initial recognition these borrowings are stated at amortised cost using the effective interest rate method. If a financial liability measured at amortised cost is modified without this resulting in derecognition, a gain or loss is recognised in profit or loss. The gain or loss is calculated as the difference between the original contractual cash flows and the modified cash flows discounted at the original effective interest rate.

(b) Derivative financial instruments and other hedging instruments

The Group uses derivative financial instruments to hedge its exposure to commodity price, foreign exchange and interest rate risk arising from operational, financing and investing activities. The principal derivatives used include interest rate swaps, inflation-linked interest rate swaps, currency swaps and forward foreign currency contracts. Commodity contracts are also used to hedge the Group's exposures to the purchase of fuel and sale of electricity. The Group applies the general hedge accounting model in IFRS 9. This requires the Group to ensure that hedge accounting relationships are aligned with its risk management objectives and strategy and to apply a more qualitative and forward looking approach to assessing hedge effectiveness.

Within its regular course of business, the Group routinely enters into sale and purchase contracts for commodities, including gas and electricity. Where the contract was entered into and continues to be held for the purposes of receipt or delivery of the commodities in accordance with the Group's expected sale, purchase or usage requirements, the contracts are designated as own use contracts and are accounted for as executory contracts. These contracts are therefore not within the scope of IFRS 9 Financial Instruments.

Commodity contracts which are not designated as own use contracts are accounted for as trading derivatives and are recognised in the balance sheet at fair value. The changes in fair value when a hedge accounting relationship exists and the contract has been designated as held for hedging purposes' will be recognised in accordance with IFRS 9 as cash flow hedges or fair value hedges.

Financial derivative instruments are used by the Group to hedge interest rate and currency exposures. All such derivatives are recognised at fair value and are re-measured to fair value at the balance sheet date. With the exception of the inflation linked interest rate swaps the majority of other derivative financial instruments are designated as being held for hedging purposes.

The designation of the hedge relationship is established at the inception of the contract. The treatment of gains and losses on subsequent re-measurement is dependent on the classification of the hedge and whether the hedge relationship is designated as either a fair value or cash flow hedge.

All fair value movements on derivatives that are not designated as hedging relationships are recorded through the income statement within finance income and expense or other operating costs, as appropriate.

Cash flow hedges

Where a derivative financial instrument is designated as a hedge of the variability in cash flows of a recognised liability, a firm commitment or a highly probable forecast transaction, the effective part of any gain or loss on the derivative financial instrument is recognised directly in other comprehensive income. When the firm commitment or forecasted transaction results in the recognition of a non-financial asset or liability, the cumulative gain or loss is removed from other comprehensive income and included in the initial measurement of that asset or liability. Otherwise the cumulative gain or loss is removed from other comprehensive income and recognised in the income statement at the same time as the hedged transaction. The gain or loss relating to the ineffective portion is recognised in the income statement immediately.

When a hedging instrument or hedge relationship is terminated but the hedged transaction is still expected to occur, the cumulative gain or loss at that point remains in other comprehensive income and is recognised in accordance with the above policy when the transaction occurs. If the hedged transaction is no longer probable, the cumulative unrealised gain or loss recognised in other comprehensive income is recognised in the income statement immediately.

Hedge of net investment in foreign entity

Where a foreign currency liability hedges a net investment in a foreign operation, foreign exchange differences arising on translation of the liability are recognised directly in other comprehensive income, and taken to the translation reserve, with any ineffective portion recognised in the income statement immediately.

(c) Guarantees

During the normal course of business, the Group provides guarantees and bonds to third parties, subsidiary companies of the Parent and equity accounted investees. Where claims are probable, the expected credit loss model is applied.

(XIII) CAPITAL STOCK

The units of capital stock are measured at the price at which they were initially issued to the Department of Public Expense and Reform, the Department of Environment, Climate and Communications and ESB ESOP Trustee Limited.

(XIV) INCOME TAX

Income tax on the profit or loss for the year comprises current and deferred tax. Income tax is recognised in the income statement, except to the extent that it relates to items recognised directly in other comprehensive income or equity.

(a) Current tax

Current tax is provided at current rates and is calculated on the basis of results for the year. The income tax expense in the income statement does not include taxation on the Group's share of profits of joint venture undertakings, as this is included within the separate line on the face of the income statement for share of equity accounted investee profit / (loss), net of tax.

Notes to the Financial Statements

1. STATEMENT OF ACCOUNTING POLICIES (CONTINUED)

(XIV) INCOME TAX (CONTINUED)

(b) Deferred tax

Deferred tax is provided using the balance sheet liability method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes.

Deferred tax assets are recognised only to the extent that the Board consider that it is more likely than not that there will be suitable taxable profits from which the future reversal of the underlying temporary differences can be deducted.

Deferred tax is measured at the tax rates that are expected to apply in the periods in which temporary differences reverse, based on tax rates and laws enacted or substantively enacted at the balance sheet date.

(XV) PROVISIONS

A provision is recognised if, as a result of a past event, the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognised as a finance cost.

Provision for asset retirement obligations

The provision for retirement and decommissioning of generating stations, wind farms and ESB Networks creosote treated wood poles represents the present value of the current estimate of the costs of closure of the stations and the disposal of the poles at the end of their useful lives.

The estimated costs of closing stations and other asset retirement obligations are recognised in full at the outset of the asset life, but discounted to present values using an appropriate pre-tax discount rate. The costs are capitalised in property, plant and equipment and are depreciated over the useful economic lives of the stations or other assets to which they relate unless the related asset has reached the end of its useful life. Subsequent changes in the liability in respect of assets that have reached the end of their useful life are recognised in the income statement as they occur. The costs are reviewed each year and amended as appropriate. Amendments to the discounted estimated costs are capitalised into the relevant assets and depreciated over the remaining life of those assets to the extent that the assets are still in use.

As the costs are capitalised and initially provided on a discounted basis, the provision is increased by a financing charge in each period, which is calculated based on the provision balance and discount rate applied at the last measurement date (updated annually) and is included in the income statement as a financing charge. In this way, the provision will equal the estimated closure costs at the end of the useful economic lives of stations or other assets. The actual expenditure is set against the provision as stations are closed or other obligations are met.

The provision for generating station closure costs and other asset retirement obligations is included within current or non-current provisions as appropriate on the balance sheet.

(XVI) EMPLOYEE RELATED LIABILITIES

(a) Restructuring liabilities

Voluntary termination benefits are payable under various collective agreements between the Board of ESB and ESB Group of Unions when an employee accepts voluntary redundancy in exchange for these benefits. The Group recognises termination benefits when it is demonstrably committed, without realistic possibility of withdrawal, to a formal detailed plan to either terminate employment before the normal retirement age, or to provide termination benefits as a result of an offer made to employees to encourage voluntary redundancy. Ordinary termination benefits not covered by the aforementioned agreement are recognised at the earlier of when the Group can no longer withdraw the offer of those benefits and when the Group begins to implement the restructuring plan. Benefits expected to be settled more than twelve months after the balance sheet date are discounted to present value. Future operating losses are not provided for.

(b) Other short-term employee related liabilities

The costs of holiday leave and bonuses accrued are recognised when employees render the service or performance that increases their entitlement to future compensated absences or payments.

(XVII) PENSION OBLIGATIONS

The 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 approximately half of the employees in the electricity business are funded through a contributory pension scheme called the ESB Defined Benefit (DB) 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 Environment, Climate and Communications. Should an actuarial deficit arise in the future, ESB is obliged under the Scheme regulations to consult with the Superannuation Committee, the Trustees and the Scheme Actuary to consider the necessity of submitting an amending Scheme for Ministerial approval.

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.

Notes to the Financial Statements

1. STATEMENT OF ACCOUNTING POLICIES (CONTINUED)

(XVII) PENSION OBLIGATIONS (CONTINUED)

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" Defined Benefit 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 will be made (note: the €591.0 million additional contribution agreed as part of the 2010 Pensions Agreement has now been fully paid). Therefore, ESB has concluded that the financial statements should reflect its obligations to the Scheme, which consist of:

(a) Pre-existing commitments relating to past service (the present value of the agreed contributions that relates to service prior to October 2010); and

(b) Past Voluntary Severance (VS) Programmes – in 2010 the Company recognised a future commitment in respect of staff who have 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.

FM United Kingdom Stakeholder Scheme

ESB operates a stakeholder pension scheme in the UK for all its GB employees. The 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.

Pension scheme in Northern Ireland

The Group's wholly owned subsidiary undertaking, Northern Ireland Electricity Networks Limited (NIE Networks), operates a pension scheme which has two sections: Defined contribution Options, defined benefit Focus. Focus has been closed to new members since 1998. The defined benefit obligation of NIE Networks is calculated annually by independent actuaries using the projected unit credit method, and discounted at a rate selected with reference to the current rate of return of high quality corporate bonds of equivalent currency and term to the liabilities. Pension scheme assets are measured at fair value. Full actuarial valuations are obtained at least triennially and are updated annually thereafter. Actuarial gains and losses are recognised in full in the period in which they occur and are recognised in other comprehensive income.

The cost of providing benefits under the defined benefit scheme is charged to the income statement over the periods benefiting from employees' service. Past service costs including curtailment losses are recognised in the income statement in the period they occur. The interest income from pension scheme assets and the interest expense on pension scheme liabilities are included within net finance cost.

(XVIII) REVENUE FROM CONTRACTS WITH CUSTOMERS

Revenue principally comprises the sales values derived from the following:
- Customer Solutions revenues consist primarily of sales to electricity and gas customers.
- ESB Networks and NIE Networks earn Use of System income in the Republic of Ireland and Northern Ireland respectively.
- Generation and Trading revenue derives mainly from electricity generation.
- Revenue derived from the provision of engineering, telecommunication and other services.

Customer Solutions

Revenue from sales to electricity and gas customers

This revenue is earned from both residential and business customers in the Republic of Ireland (ROI), Northern Ireland (NI) and Great Britain (GB). Revenue is recognised over time on consumption of gas and electricity. Electricity and gas revenue includes the value of units supplied to customers between the date of the last meter reading and the period end. This estimate is initially included in trade and other receivables in the balance sheet as retail electricity - unbilled, customers are billed monthly or bi-monthly depending on the type of account, and are subsequently recognised as retail electricity receivables - billed. Residential credit terms and debtor days in respect of retail electricity receivables are 14 days. Credit terms for business customers vary by contract.

Unbilled revenue is arrived at by using estimated revenue which is calculated by applying the tariffs applicable to specific customer types to estimated volume of electricity or gas consumed across those customer types, less the total amounts already billed for the relevant period. This process includes the analysis of calculated unbilled volumes and rates (in GWh and millions of therms) taking into consideration, movements in pricing tariffs, seasonality and data on total consumption by supplier obtained by I-SEM. There are a number of offerings such as sign-up bonuses, discounts and rewards available to customers which are all accounted for as variable consideration under IFRS 15. Discounts and rewards that are enduring are applied over time to our relevant customer bills. On joining the sign-up bonuses are applied to customer accounts which are recognised over time in line with customer usage.

Other revenue

Other revenue comprises of income derived from the provision of energy and telecommunications services and represents the fair value of services and works delivered to customers. Services are deemed to have been delivered to customers when, and to the extent that, the entity has met its performance obligations under its contracts. Revenue is recognised over time in accordance with the input method in the income statement in line with the contract terms in proportion to the stage of completion, based on total costs of the contract. Billed revenue is recognised as a trade receivable-non electricity and is normally settled in 30 business days. Unbilled revenue is recognised in other receivables.

Notes to the Financial Statements

1. STATEMENT OF ACCOUNTING POLICIES (CONTINUED)

(XVIII) REVENUE FROM CONTRACTS WITH CUSTOMERS (CONTINUED)

ESB Networks - Revenue from Use of System charges to customers

ESB Networks mainly recognises revenue from Use of System that comprises of Distribution Use of System (DUoS) revenue and Transmission Use of System (TUoS) revenue. ESB Networks operates in the Republic of Ireland and is a regulated business, earning its revenue primarily from an allowed return on its Regulated Asset Base (RAB).

DUoS revenue is earned through charges to suppliers for the use of the ESB Networks distribution system. DUoS revenue is recognised in line with the use of the system by suppliers and any outstanding billed and unbilled usage for DUoS is included as a Use of System receivable on the balance sheet. DUoS revenue is invoiced on a bi-monthly basis. Revenue is also earned from operations & maintenance annual charges for generators connected to the Distribution system. These are based on a standard amount per km line or cable and are recognised over time as the performance obligation is satisfied.

TUoS revenue is earned by maintaining the transmission assets to facilitate the effective operation by EirGrid. For this fixed price contract TUoS revenue is recognised over time on a straight-line basis and a Use of System receivable is recognised on the balance sheet.

ESB Networks receives non-repayable supply contributions income as a result of providing new connections to its existing network in respect of property, plant and equipment. These contributions are held in trade payables as progress payments until their performance obligation is satisfied, when the work on the connection has met the performance obligation they are transferred to deferred income and released to revenue in the income statement over the estimated useful economic lives of the related assets. The useful life of these assets is estimated at 25 and 30 years for distribution and transmission networks respectively.

ESB Networks also recognises revenue from a number of unregulated sources. Revenue is recognised from providing ancillary network services and other miscellaneous income. All unregulated income is recognised at a point in time with a corresponding receivable carried on the balance sheet for each item.

NIE Networks - Revenue from Use of System charges to customers

NIE Networks derives its revenue principally through charges for use of the distribution system (DUoS) levelled on electricity suppliers and transmission service charges (TSC) mainly for use of the transmission system levied on System Operator for Northern Ireland (SONI).

DUoS revenue is recognised in line with the use of the system by suppliers and any outstanding billed and unbilled usage for DUoS is included within Use of System receivable at the balance sheet date.

TSC revenue is earned by maintaining the transmission assets to facilitate the effective operation by SONI. For this fixed price contract TSC revenue is recognised over time on a straight-line basis and a Use of System receivable is recognised on the balance sheet.

NIE Networks receives non-repayable supply contributions income as a result of providing new connections to its existing network in respect of property, plant and equipment. These contributions are held in trade payables as progress payments until their performance obligation is satisfied, when the work on the connection has met the performance obligation they are transferred to deferred income and released to revenue in the income statement over the estimated useful economic lives of the related assets.

Generation and Trading revenue derives mainly from electricity generation

Republic of Ireland

Integrated-Single Electricity Market (I-SEM)

The I-SEM is the wholesale electricity market arrangement for Ireland and Northern Ireland that went live on 1 October 2018. Within I-SEM there are multiple markets or auctions, each spanning different trading time frames, with separate (although related) clearing and settlement mechanisms.

There are two ex-ante markets for physical energy: the Day-Ahead Market and the Intraday Market. In addition, Energy balancing services are offered into the Balancing Market by generators (energy producers) and suppliers (energy consumers). Capacity is a commitment by a generator or interconnector owner to be available to deliver energy into the grid, if called on to do so. Capacity providers who are successful in the Capacity Market receive a regular capacity payment, which assists with funding generation capacity. Revenue from the sale of electricity in the I-SEM markets are recognised over time on consumption of electricity and an I-SEM receivable is recognised on the balance sheet and settled daily for the ex-ante market and weekly for the ex-post market.

Capacity income is received through the 'Capacity Remuneration Mechanism' (CRM) where a capacity payment is made to a participant in respect of a Generator Unit in each Capacity Period on the basis of the Unit's Eligible Availability, which is based on the Unit's Availability Profile. Revenue is recognised over time and recognised as an I-SEM receivable on the balance sheet and settled within one month.

Ancillary income is received through 'Delivering a Secure Sustainable Electricity System' (DS3) programme for provision of frequency response services to the grid. Ancillary income is recognised over time. Ancillary income is recognised as a SEM/I-SEM receivable on the balance sheet and settled within one month.

Great Britain

British Electricity Trading and Transmission Arrangements is the wholesale electricity market operating in Great Britain (GB). Unlike the I-SEM, trading can take place between generators and suppliers either bilaterally or through exchanges. Both physical and financial contracts can be struck to manage price volatility, for timescales ranging from several years ahead to on-the-day trading markets. The British Government operates a capacity remuneration scheme and under the scheme, generators are awarded capacity contracts (based on the outcome of an auction) that enable them to receive payments for the provision of generation capacity while also receiving penalties for non-delivery during scarcity events. Revenue in respect of capacity payments is recognised over time.

Revenue derived from GB is through the sale of power to individual GB counterparties and is recognised over time when performance obligations are satisfied. Revenue relating to the GB market is recognised as other electricity receivables on the balance sheet and settled daily or monthly depending on the terms of the individual contract.

Notes to the Financial Statements

1. STATEMENT OF ACCOUNTING POLICIES (CONTINUED)

(XVIII) REVENUE FROM CONTRACTS WITH CUSTOMERS (CONTINUED)

Other Segments - Other revenue

Other revenue comprises of income derived from the provision of electrical, mechanical, civil, environmental, engineering, property sales and consultancy services and represents the fair value of services and works delivered to customers.

Services are deemed to have been delivered to customers when, and to the extent that, the entity has met its performance obligations under its contracts. Revenue is recognised over time in accordance with the input method in the income statement in line with the contract terms in proportion to the stage of completion, based on total costs of the contract. Billed revenue is recognised as a trade receivable non electricity and settled in 30 business days. Unbilled revenue is recognised in other receivables.

(XIX) OTHER OPERATING INCOME

Other operating income comprises of income which accrues to the Group outside of the Group's normal trading activities.

(XX) OPERATING SEGMENTS – IFRS 8

ESB have voluntarily applied the disclosure requirements of IFRS 8 Operating Segments to the Group. IFRS 8 specifies how an entity should disclose information about its segments using a "management approach" under which segment information is presented on the same basis as that used for internal reporting. Financial information for segments whose operating activities are regularly reviewed by the Executive Team and the Board, collectively the Chief Operating Decision Maker (CODM), in order to make decisions about allocating resources and assessing performance has been presented in note 3 to the financial statements.

(XXI) COSTS

(a) Employee costs

Salaries, overtime, expenses, bonuses, social welfare contributions (PRSI), national insurance, paid annual leave and sick leave are accrued in the period in which the associated services are rendered by the employees of the Group.

(b) Energy costs

Energy costs comprise direct fuel (primarily coal and gas), purchased electricity, Use of System charges (other electricity costs) and net emissions costs. Fuel and purchased electricity costs are recognised as they are utilised. The Group has entered into certain long term power purchase agreements for fixed amounts. Amounts payable under the contracts that are in excess of or below market rates are recoverable by the Group or repayable to counterparties.

(c) Operating and other maintenance costs

Operating and other maintenance costs relate primarily to overhaul and project costs, contractor costs and establishment costs. These costs are recognised in the income statement as they are incurred.

(d) Finance income and finance costs

Finance income comprises interest income on bank deposits, which attract interest at prevailing deposit interest rates in addition to interest income on loans.

Finance costs comprise interest expense on borrowings, unwinding of the discount on provisions, pension financing charges, fair value gains and losses on financial instruments not qualifying for hedge accounting or where hedge accounting is not used, losses on hedging instruments that are not recognised in operating costs and reclassifications of amounts previously recognised in other comprehensive income.

(XXII) EXCEPTIONAL ITEMS

The Group has used the term "exceptional" to describe certain items which, in management's view, warrant separate disclosure by virtue of their size or incidence, or due to the fact that certain gains or losses are determined to be non-recurring in nature. Exceptional items may include restructuring, significant impairments, profit or loss on asset disposals, material changes in estimates or once off costs where separate identification is important to gain an understanding of the financial statements. Further details of the Group's exceptional items are provided in note 6 of the financial statements.

Notes to the Financial Statements

2. USE OF ESTIMATES AND JUDGEMENTS

The preparation of Parent and consolidated financial statements requires a significant number of judgemental assumptions and estimates to be made. These impact on the income and expenses contained within the income statement and the valuation of the assets and liabilities in the balance sheet. Such estimates and judgements are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances and are subject to continual re-evaluation.

Specifically given the nature of the Group's operations, the Board have considered how the below climate related risks have impacted accounting estimates and the application of management judgement:

(i) Physical climate events have the potential to cause damage to the Group's assets, however to date this has not arisen to a material extent. Such events are considered as part of the Group's impairment assessments as required.

(ii) An increasing amount of renewable generation being connected to the grid, as well as increased costs related to commodity costs, including carbon taxes, may result in changes to future cash flows derived from thermal assets and impact on expected useful lives. These changes are considered through the Group's annual impairment assessments and review of asset lives. See part (c) below for further detail.

(iii) Given the nature of assets and equipment used by the Group, there are specific asset retirement obligations that are required to be met arising from environmental and other legislative obligations. See part (e) below for further detail.

It should be noted that the impact of variation in some assumptions and estimates can have a particularly material impact on the reported results. These include but are not limited to:

(a) The accounting for the ESB pension liability requires the exercise of judgement. The Board is satisfied that the appropriate accounting treatment, determined in accordance with IAS 19 - Employee Benefits, is to reflect its existing committed obligations, as set out in the notes to the financial statements (see note 25).

(b) The employees in NIE Networks are entitled to membership of the Northern Ireland Electricity Pension Scheme (the NIE Networks Scheme) which has both defined benefit and defined contribution arrangements. The estimation of and accounting for retirement benefits obligation involves judgements made in conjunction with independent actuaries. This involves estimates about uncertain future events including the life expectancy of scheme members, future salary and pension increases and inflation as well as discount rates. The assumptions used by the Group and a sensitivity analysis of a change in these assumptions are described in note 24.

(c) Assessment of the recoverable amount, being the higher of value in use and the fair value less cost to sell, of property, plant and equipment, intangible assets, right-of-use assets, goodwill (described in note 15) and equity accounted investees, in accordance with IAS 36 Impairment of Assets, as described below:

- For power generation assets, value in use is based on the estimated cash flows expected to be generated by the asset which are based on an external review of forecast power generation and forecast power, gas, carbon and capacity prices (where applicable) and the timing and extent of operating costs and capital expenditure.
- For goodwill on the acquisition of Northern Ireland Electricity Networks, the value in use is based on expected cashflows and a terminal value based on the Regulated Asset Base (RAB). Expected cashflows are based on assumptions in respect of regulatory returns and inflation. See note 15 for further details.
- For goodwill on the acquisition of So Energy Ltd (So Energy), the value in use is based on expected cashflows and a terminal value. Expected cashflows are based on assumptions in respect of customer numbers, margin per customer and operating costs. See note 15 for further details.
- For other tangible and intangible assets, where assets are required to be tested for impairment, value in use is determined based on estimated cashflows or other benefits expected to be derived from use of the assets.
- For Fair value less cost to sell, the approach is consistent across all assets where fair values are based on independent third party assessments less costs of disposal.
- Cash flows used in value in use models are discounted to their present value using a pre-tax discount rate that reflects the current market assessments of the time value of money and the risks specific to the asset. The estimation of forecasted revenues and the timing of expenditure requires judgement and is dependent on the economic factors associated with these assets.
- The equity investment in Neart na Gaoithe has been assessed based on a fair value less cost to sell approach determined by an independent third party. The valuer has determined the fair value less cost to sell based on market assumptions using the income approach under IFRS 13. Please refer to note 6 for details of the main estimates and judgements.

(d) As described in note 29 section (i), the valuation of certain financial instruments is based on a number of judgemental factors and assumptions which of necessity are not based on observable inputs. These have been classified as level 3 financial instruments, under the meaning of IFRS 13 Fair Value Measurement.

(e) Future costs required to settle current provisions such as the power station closure costs, creosote treated wood pole retirement provision and employee liabilities including severance obligations. These liabilities are disclosed in notes 24, 25 and 28.

There is significant estimation and judgement required in the calculation of the provision for generation assets, including the impact of regulation, the accuracy of the site surveys, unexpected contaminants, the impact of alternative technologies and the use of appropriate discount rates.

There is significant estimation required in determining the level of provision required for the disposal of creosote treated wood poles. This includes estimating the disposal cost per pole, which will be determined via competitive tender processes, the period over which poles will be disposed of which is dependent on pole condition and the use of an appropriate discount rate. The period over which poles are disposed of is estimated based on current operational plans which could change significantly in the future as a result of environmental legislation or pole condition.

(f) The measurement of a number of assets, liabilities, income and costs at year end which require a high degree of estimation and judgement, including the calculation of unbilled electricity income and trade and other receivables, amounts due from equity accounted investees, the valuation of fuel stocks, the cost of fuel consumed, the useful lives of property, plant and equipment and also accruals for goods received or work carried out for which supplier invoices have not yet been received. These items are estimated in accordance with the accounting policies of the Group and current EU IFRS.

Notes to the Financial Statements

2. USE OF ESTIMATES AND JUDGEMENTS (CONTINUED)

(g) ESB provide services to around 1.9 million individuals and businesses, mainly on credit terms. It is known that certain debts due to ESB will not be paid through the default of a small number of customers. Estimates, based on historical experience are used in determining the level of debts that is believed will not be collected. These estimates include such factors as the current state of the Irish economy and particular industry issues (see note 18).

(h) Other legal claims, please refer to note 28 for further details of estimates and judgements regarding ongoing legal claims.

(i) Application of IFRS 16 requires the Group to make judgements that affect the valuation of lease liabilities, the valuation of right-of-use assets, the discount rate used to discount the lease payments and the lease terms.

(j) Recoverability of amounts due from subsidiaries by ESB Parent requires judgement in respect of the ability of subsidiary companies to generate sufficient cash flows to repay the amounts as they fall due.

(k) Calculation of onerous contract provision requires judgement relating to the contract term, (including for customers not in a fixed term contract) unavoidable costs of fulfilling that contract and economic benefits expected to accrue from those customers.

(l) There is estimation and judgement required in the identification of assets acquired and liabilites assumed and the calculation of their acquisition-date fair values in line with IFRS 3 Business Combinations including estimating the fair value of commodity contracts and calculation of onerous contracts (see (k) above).

(m) The accounting for network supply contributions area remains under consideration within the industry and the accounting profession more broadly, and the accounting treatment ultimately adopted by the Group in this area could therefore be impacted by the outcome of these ongoing discussions.

Management have considered the impact of the COVID-19 pandemic with respect to judgements and estimates it makes in the application of accounting policies. The COVID-19 pandemic has not had a significant impact on financial performance to date with electricity demand remaining resilient and capital expenditure programmes continuing.

Notes to the Financial Statements

3. SEGMENT REPORTING

The Group has applied IFRS 8 Operating Segments, and has made the appropriate disclosures in these financial statements.

For management purposes, the Group is organised into four key reportable segments, being the Group's strategic divisions which are managed separately and in respect of which internal management information is supplied to Executive Management and to the Board being collectively the Chief Operating Decision Maker (CODM) of the Group. Three further corporate divisions provide support and other services to the principal operating divisions of the Group and are combined as Other Segments in the information below.

A description of the Group's key reportable segments is as follows:

(a) Customer Solutions develops, markets, sells and services innovative energy supply and service offerings through all of ESB's customer-facing brands (Electric Ireland, Smart Energy Services, ESB e-Cars, ESB Telecoms, ESB Energy and So Energy) in Ireland (Republic of Ireland (ROI) and Northern Ireland (NI)) and Great Britain (GB). Electric Ireland is the leading supplier of electricity and gas to domestic customers on the island of Ireland. Customer Solutions operates in the GB domestic market through ESB Energy and So Energy. Electric Ireland also has a substantial market share in the non-domestic sector in both the ROI and NI. Revenues are primarily derived from sales to electricity and gas customers.

(b) ESB Networks is principally concerned with the ownership and operation of the electricity distribution network and the ownership of the electricity transmission network in ROI. ESB Networks is a regulated business earning an allowed return on its Regulated Asset Base (RAB) and derives its revenue principally from charges for the use of the distribution system levied on electricity suppliers and from charges for transmission services collected from Eirgrid Plc. It is ring-fenced by regulation from the Group's generation and supply business.

(c) Generation and Trading operates, develops, constructs and trades the output of power stations and wind farms in ROI, NI and GB. This includes wholly owned subsidiaries and investments in joint ventures.

(d) NIE Networks is principally concerned with the ownership and operation of the electricity distribution network and the ownership of the electricity transmission network in NI. NIE Networks is a regulated business earning an allowed return on its Regulated Asset Base (RAB) and derives its revenue principally from charges for the use of the distribution system levied on electricity suppliers and from charges for transmission services collected from the System Operator for Northern Ireland (SONI).

(e) Other Segments include the results of internal service providers, which supply the main business units of the Group with support services. These segments are governed by regulation, and service level agreements are designed to ensure that transactions between operating segments are on an arm's length basis similar to transactions with third parties. This segment also includes most finance costs in the Group, as the majority of Treasury activity is conducted centrally. Finance costs incurred centrally are not recharged to other operating segments.

The CODM monitors the operating results of the segments separately in order to allocate resources between segments and to assess performance. Segment performance is predominantly evaluated based on operating profit. Assets and liabilities are not reported by segment to the CODM.

Revenue by product

Reportable segments are split by type of product revenue earned. Customer Solutions revenues consist of sales to electricity and gas customers and other related services as set out at (a) above. Generation and Trading revenue derives mainly from electricity generation. ESB Networks and NIE Networks earn Use of System income in the ROI and NI respectively. Revenue included within Other Segments relates primarily to engineering services.

Notes to the Financial Statements

3. SEGMENT REPORTING (CONTINUED)

(a) Income statement

	Customer Solutions	ESB Networks	Generation and Trading	NIE Networks	Other Segments	Consolidation and eliminations	**Total**
	€m	€m	€m	€m	€m	€m	**€m**
(i) Segment revenue - 2021							
External revenues	3,014.0	906.9	1,024.0	277.6	25.5	-	**5,248.0**
Exceptional revenues	-	-	-	-	152.0	-	**152.0**
Inter-segment revenue	40.6	404.7	1,110,1	52.5	310.0	(1,917.9)	**-**
Revenue	3,054.6	1,311.6	2,134.1	330.1	487.5	(1,917.9)	**5,400.0**
(ii) Segment operating costs - 2021							
Depreciation and amortisation	(28.3)	(511.1)	(136.6)	(170.3)	(30.9)	-	**(877.2)**
Net other operating costs	(3,020.6)	(391.5)	(1,797.3)	(86.0)	(274.5)	(1,917.5)	**(3,652.0)**
Impairment charge	(1.5)	-	(16.5)	-	(0.4)	-	**(18.4)**
Net impairment (losses) / gains on financial assets	(23.0)	-	-	(0.3)	1.5	-	**(21.8)**
Exceptional Impairment gain	-	-	79.0	-	-	-	**79.0**
Exceptional net operating costs including impairment charges	(61.3)	-	3.2	-	(82.0)	-	**(140.1)**
Costs	(3,134.7)	(902.6)	(1,868.2)	(256.6)	(386.3)	(1,917.9)	**(4,630.5)**
(iii) Operating result - 2021							
Operating profit / (loss) - excluding exceptional items	(18.8)	409.0	183.7	73.5	31.2	-	**678.6**
Operating profit / (loss) - including exceptional items	(80.1)	409.0	265.9	73.5	101.2	-	**769.5**
Net finance cost	(1.1)	(6.0)	(26.6)	(42.3)	(175.7)	-	**(251.7)**
Exceptional impairment of equity accounted investee	-	-	(153.5)	-	-	-	**(153.5)**
Share of equity accounted investees' profit / (loss)	-	-	(65.9)	-	(10.0)	-	**(75.9)**
Profit / (loss) before taxation	(81.2)	403.0	19.9	31.2	(84.5)	-	**288.4**
(i) Segment revenue - 2020							
External revenues	2,170.0	847.5	399.7	293.1	21.1	-	3,731.4
Inter-segment revenue	1.8	384.4	946.7	43.5	307.9	(1,684.3)	-
Revenue	2,171.8	1,231.9	1,346.4	336.6	329.0	(1,684.3)	3,731.4
(ii) Segment operating costs - 2020							
Depreciation and amortisation	(20.2)	(469.5)	(130.9)	(161.3)	(24.8)	-	(806.7)
Net other operating costs	(2,069.8)	(394.0)	(1,094.3)	(89.9)	(307.1)	1,684.3	(2,270.8)
Impairment charge	-	-	(13.1)	-	-	-	(13.1)
Net impairment losses on financial assets	(24.0)	(0.3)	-	(0.3)	(0.2)	-	(24.8)
Exceptional net operating costs including impairment charges	-	(59.7)	(187.6)	-	-	-	(247.3)
Costs	(2,114.0)	(923.5)	(1,425.9)	(251.5)	(332.1)	1,684.3	(3,362.7)
(iii) Operating result - 2020							
Operating profit / (loss) - excluding exceptional items	57.8	368.1	108.1	85.1	(3.1)	-	616.0
Operating profit / (loss) - including exceptional items	57.8	308.4	(79.5)	85.1	(3.1)	-	368.7
Net finance cost	(0.4)	(2.1)	(36.5)	(42.3)	(111.1)	-	(192.4)
Share of equity accounted investees' profit / (loss)	-	-	19.0	-	(9.7)	-	9.3
Profit / (loss) before taxation	57.4	306.3	(97.0)	42.8	(123.9)	-	185.6

All inter-segment revenues are eliminated upon consolidation and are reflected in the eliminations column above.

Notes to the Financial Statements

3. SEGMENT REPORTING (CONTINUED)

(b) Other disclosures

	2021	2020
	€m	€m
Additions to non-current assets		
Customer Solutions	**26.1**	27.0
ESB Networks	**734.0**	748.5
Generation and Trading	**209.3**	121.3
NIE Networks	**192.5**	140.4
Other Segments	**61.0**	77.7
Total	**1,222.9**	1,114.9

Additions to non-current assets (excluding acquisitions) includes investments in property, plant and equipment, intangible assets (excluding emission allowances), financial assets and equity accounted investees.

4. REVENUE FROM CONTRACTS WITH CUSTOMERS

IFRS 15 requires disclosure to reflect the nature, timing, amount and uncertainty of its revenue within its disclosure requirements. ESB has determined that the disaggregation using existing segments and the nature of revenues is appropriate for its circumstances.

2021	Customer Solutions	ESB Networks	Generation and Trading	NIE Networks	Other Segments	Consolidation and eliminations	**Total**
	€m	€m	€m	€m	€m	€m	**€m**
External revenues							
Revenue from power generation	-	-	1,024.0	-	-	-	**1,024.0**
Revenue from Use of System charges to customers	-	843.8	-	259.9	-	-	**1,103.7**
Revenue from supply contributions	-	63.1	-	17.7	-	-	**80.8**
Revenue from sales to electricity and gas customers	2,964.7	-	-	-	-	-	**2,964.7**
Revenue from sale of property	-	-	-	-	152.0	-	**152.0**
Other revenue	49.3	-	-	-	25.5	-	**74.8**
Revenue from contracts with customers	**3,014.0**	**906.9**	**1,024.0**	**277.6**	**177.5**	**-**	**5,400.0**
Inter-segment revenue	40.6	404.7	1,110.1	52.5	310.0	(1,917.5)	**-**
Total ESB Group revenue	**3,054.6**	**1,311.6**	**2,134.1**	**330.1**	**487.5**	**(1,917.5)**	**5,400.0**

2020	Customer Solutions	ESB Networks	Generation and Trading	NIE Networks	Other Segments	Consolidation and eliminations	Total
	€m	€m	€m	€m	€m	€m	€m
External revenues							
Revenue from power generation	-	-	399.7	-	-	-	399.7
Revenue from Use of System charges to customers	-	786.9	-	275.4	-	-	1,062.3
Revenue from supply contributions	-	60.6	-	17.7	-	-	78.3
Revenue from sales to electricity and gas customers	2,105.6	-	-	-	-	-	2,105.6
Other revenue	64.4	-	-	-	21.1	-	85.5
Revenue from contracts with customers	2,170.0	847.5	399.7	293.1	21.1	-	3,731.4
Inter-segment revenue	1.8	384.4	946.7	43.5	307.9	(1,684.3)	-
Total ESB Group revenue	2,171.8	1,231.9	1,346.4	336.6	329.0	(1,684.3)	3,731.4

Notes to the Financial Statements

5. GEOGRAPHIC INFORMATION

(a) Non-current assets by geographic location

	2021	2020
	€m	€m
Ireland	8,726.0	8,474.4
UK including Northern Ireland	3,408.8	3,175.1
Total	12,134.8	11,649.5

Non-current assets for this purpose consist of property, plant and equipment, intangible assets, right-of-use assets, and goodwill. Investments in equity accounted investees, financial asset investments, trade and other receivables, derivative financial instruments and deferred tax assets are excluded.

(b) External revenue by geographic market

	2021	2020
	€m	€m
Ireland	4,363.5	2,809.3
UK including Northern Ireland	1,016.1	897.8
Rest of world	20.4	24.3
Total	5,400.0	3,731.4

6. EXCEPTIONAL ITEMS

	2021	2020
	€m	€m
Profit on disposal of equity accounted investee and impairment gain	82.2	-
Profit on disposal of property	70.0	-
Impairment of equity accounted investee	(153.5)	-
So Energy impairment of goodwill and onerous contract provision	(61.3)	-
Impairment charges	-	(187.6)
Operating costs	-	(59.7)
	(62.6)	(247.3)

2021 Profit on disposal of equity accounted investee and impairment gain

In June 2021 ESB completed the disposal of its shareholding in Tilbury Green Power Holdings Limited (Tilbury) to Lakeside BidCo Limited (a consortium of Altri / Greenvolt and Equitix). The Group was a 47% partner in Tilbury, a joint arrangement formed with Green Investment Bank (47%) and Scandinavian equipment suppliers BWSC and AET (6%). Tilbury operates a waste wood to energy plant in Great Britain.

The gain arising on the disposal of ESB's shareholding in Tilbury comprises of two components:
- €3.2 million, being the difference between the proceeds received for the equity shareholding held less its carrying value of €nil at the date of disposal. The carrying value reflects share of joint venture losses recognised in previous periods; and
- €79.0 million impairment gain in respect of shareholder loans to Tilbury. The impairment gain includes the reversal of expected credit losses previously recognised in the income statement and interest income not previously recognised as the loans were accounted for under IFRS 9 as a stage 3 credit impaired asset.

2021 Profit on disposal of property

In 2017 ESB commenced the redevelopment of its Fitzwilliam Street Head Office complex. The former head office complex was demolished in 2018, and construction commenced on two modern commercial office blocks, namely Fitzwilliam 27 and Fitzwilliam 28. Fitzwilliam 27 will serve as ESB's new head office with Fitzwilliam 28 sold to a third party.

In November 2020, agreement was reached with Amundi Real Estate for the sale of Fitzwilliam 28 and a deposit was received upon signing of the contract for sale with the balance of the consideration to be received on completion. Contract completion occurred on 10 December 2021.

ESB has recognised revenue of €152.0 million on the sale of Fitzwilliam 28. Operating costs include €79.8 million of construction costs and €2.2 million of other costs associated with the sale.

Notes to the Financial Statements

6. EXCEPTIONAL ITEMS (CONTINUED)

2021 Impairment of equity accounted investee

The Neart na Gaoithe (UK) project is being constructed through NNG Windfarm Holdings Limited, a joint arrangement between ESB II UK Limited and EDF Renewables UK Limited. The purpose of this joint arrangement is to develop a 448 MW wind farm off the east coast of Scotland.

Significant challenges have been experienced in the delivery of the foundations package. As a result, commercial operations will be delayed and additional construction costs are expected to be incurred. An impairment test of the carrying value of the Neart Na Gaoithe project, included within investments in equity accounted investees, was performed as at 31 December 2021.

The valuation methodology used to value the Group's equity accounted investment in Neart Na Gaoithe was based on a probability weighted discounted cash flow model (i.e. income approach) to determine a fair value less cost to sell in line with IFRS 13.

The main assumptions used in performing the impairment test are outlined below:
- Estimated construction costs to complete
- Scenarios of project timeline, including the estimated Commercial Operation Dates which impact on the overall construction costs and overall revenues
- The level of financial commitments
- Impact of inflation hedges
- Estimate of long term inflation rate for unhedged revenues
- Forecast market prices
- Forecast wind load factors
- A post-tax discount rate for operational cash flows

The recoverable amount has been assessed as €35.3 million as at 31 December 2021. This has resulted in an impairment charge of €153.5 million (31 December 2020: €nil) being recorded as an exceptional item in 2021. The group also has further commitments of €253.0 million at 31 December 2021 (see note 29 (e))

Any material adverse change in the construction costs or timing of the Commercial Operation Date would result in a reduction in the recoverable amount and an increase in the impairment charge.

2021 So Energy impairment of goodwill and onerous contract provision

As a result of the significant challenges experienced in the Group's UK energy supply market business due to soaring wholesale prices and the Government imposed price cap (a regulatory imposed limit on the both the standing charge and unit price of electricity and gas for domestic customers who are on a standard variable tariff), an impairment of the goodwill arising on the acquisition of So Energy of €45.3 million has been recognised (see note 15 for further details). An onerous contract provision of €16.0 million has also been recognised in the income statement as an exceptional item reflecting customer contracts where the costs of meeting obligations to provide electricity and gas exceed the benefits expected to be received (see note 28 for further details).

2020 Impairment charges

IAS 36 - Impairment of Assets stipulates that an impairment loss is the amount by which the carrying value of an asset exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and its value in use. Value in use is calculated by taking the Net Present Value (NPV) of expected future cash flows from the asset discounted at an appropriate discount rate.

The impact of COVID-19 on electricity demand in the short term, in addition to lower forecast wholesale electricity margins in both the GB market and the Integrated Single Electricity Market (I-SEM) were the indicators that prompted an impairment review as at 31 December 2020. The main assumptions used in preparing impairment reviews are outlined below:

- Specific discount rates are applied to each class of asset and applied to their cash inflows and outflows in determining the NPV.
- Forecast cash inflows for each asset and generation plant are based on the expected energy margin produced by the plant which is calculated based on forecasted running profiles for the plants, regulatory support, forward market and AFRY prices for electricity, gas and carbon.
- Forecast cash outflows reflect the forecast operating and capital expenditure plans based on the Board approved five-year business plans and 10-year long term asset plans updated for management's latest view. Thereafter, forecast cash outflows are extrapolated based on forecast inflation rates, forecast running profile and management's view of required operating and capital expenditure.
- Sensitivity analysis is performed in respect of significant assumptions.

Carrington is an 885MW Combined Cycle Gas Turbines plant in the Generation and Trading segment located in Great Britain (GB). It was commissioned in September 2016.

A value in use calculation was used to determine the recoverable amount as €383.0 million as at 31 December 2020. This resulted in an impairment charge of €187.6 million. The impairment reflected somewhat lower forecasted demand in addition to lower day ahead power prices and lower peak prices, both resulting in lower forecasted revenue and margins. The real discount rate applied to the projected cash flows to determine the NPV was a pre-tax rate of 6.1%. The carrying value in respect of Carrington as at 31 December 2021 was €376.0 million and no further impairment was identified at that date.

2020 Operating Costs

The Group provides for the estimated future costs arising from certain obligations in relation to the retirement and decommissioning of ESB Networks creosote treated wood poles at the end of their useful economic life (see note 28) in line with IAS 37, Provisions, Contingent Liabilities and Contingent Assets. This asset retirement provision is re-examined annually, and the liability re-calculated in accordance with the most recent expected estimates.

The asset retirement provision for the disposal of creosote treated wood poles was increased by €129 million. In accordance with IFRIC 1 Changes in Existing Decommissioning, Restoration and Similar Liabilities, a charge of €59.7 million was included in the income statement in respect of the portion of the increase in the provision that relates to assets that have been fully depreciated as at 31 December 2020.

The increase in the provision arises from the Group's estimate of the increased cost of disposal per pole, partially offset by changes in the Group's assumptions of the timeframe for the disposal of poles.

Notes to the Financial Statements

7. OTHER OPERATING INCOME

	2021	2020
	€m	€m
Profit on disposal of property, plant and equipment and intangible assets	14.0	11.5
Profit on disposal of equity accounted investee (note 6)	3.2	-
Other operarting income	5.2	-
Dividends received	-	0.7
Fair value movements on assets through profit and loss	-	6.4
Total	**22.4**	18.6

8. OPERATING COSTS (INCLUDING NET IMPAIRMENT LOSSES ON FINANCIAL ASSETS)

	2021	2020
	€m	€m
Employee costs (note 10)	476.2	494.3
Energy costs[1/2]	2,761.8	1,270.1
Operations and maintenance[3]	531.2	584.7
Net impairment losses on financial assets (note 18)	21.8	24.8
Depreciation and amortisation (note 12/13/14)	877.2	806.7
Impairment charges[4]	63.7	200.7
Impairment gain[5]	(79.0)	-
Total	**4,652.9**	3,381.3

[1] Included in energy costs is a charge of €23.6 million (2020: €2.6 million) relating to the fair valuing of fuel commodity contracts which have not been designated as accounting hedges.

[2] Included in energy costs is a net charge of €16.0 million relating to an onerous contract provision in So Energy at 31 December 2021.

[3] Included in operations and maintenance is a foreign exchange retranslation gain of €35.9 million (2020: loss of €13.0 million) predominantly related to sterling denominated intercompany positions, short term deposits and long term debt and a charge of €4.1 million (2020: €nil) relating to fair valuing of foreign exchange contracts which have not been designated as accounting hedges.

[4] Impairment charges of €63.7 million (2020: €200.7 million) in respect of Property, plant and equipment (note 12), Intangible assets (note 13), Right-of-use assets (note 14) and Goodwill (note 15) have been recognised in 2021, €45.3 million (2020: €187.6 million) of which have been disclosed as exceptional items in the income statement, see note 6 for further details.

[5] Impairment gain of €79.0 million (2020: €nil) in respect of shareholder loans have been recognised in 2021, €79.0 million (2020: €nil) of which has been disclosed as an exceptional item in the income statement. See note 6 for further details.

Notes to the Financial Statements

9. NET FINANCE COST AND OTHER FINANCING CHARGES

	2021	2020
	€m	€m
Interest payable on borrowings	142.5	149.7
Less capitalised interest	(23.9)	(24.2)
Net interest on borrowings	**118.6**	125.5
Financing charges:		
- on NIE Networks pension scheme (note 24)	1.4	2.1
- on ESB pension scheme (note 25)	4.6	12.4
- on provisions (note 28)	5.0	2.0
- on lease obligations (note 14)	1.9	2.1
Total financing charges	**12.9**	18.6
Fair value (gains) / losses on financial instruments:		
- interest rate swaps and inflation linked swaps not qualifying for hedge accounting	124.5	45.2
- currency / interest rate swaps: cash flow hedges, transfer from OCI	4.7	5.2
- foreign exchange contracts not qualifying for hedge accounting	(2.3)	-
Total fair value (gains) / losses on financial instruments	**126.9**	50.4
Finance cost	**258.4**	194.5
Finance income	**(6.7)**	(2.1)
Net finance cost	**251.7**	192.4

The financing charges on provisions are calculated in accordance with the policy for discounting of future payment obligations as disclosed in the accounting polices - see note 1.

Included in interest rate swaps and inflation linked swaps not qualifying for hedge accounting are fair value losses relating to interest rate swaps, fair value; losses on inflation linked interest rate swaps and fair value gains on currency swaps. See note 23a for futher details of these movements.

Included in finance income is interest on borrowings receivable from Oweninny Power DAC €0.5 million (2020: €0.3 million) Inch Cape €3.2 million (2020: €nil), Neart na Gaoithe €1.9 million (2020 €nil). See note 16 for further details.

Notes to the Financial Statements

10. EMPLOYEES

GROUP

(a) Average number of employees in year by business activity, including temporary employees:

	2021 Number	2020 Number
Generation and Trading	692	796
Customer Solutions	726	614
ESB Networks	3,339	3,436
NIE Networks	1,209	1,209
Other Segments	1,904	1,883
Total	7,870	7,938

(b) Employee costs in year

	2021	2020
	€m	€m
Current staff costs (excluding pension)		
Salaries	544.3	541.0
Overtime	37.6	38.3
Social welfare costs (PRSI and national insurance)	47.2	45.0
Other payroll benefits[1]	23.1	26.2
Payroll cost for employees	652.2	650.5
(c) Pension and other employee benefit costs		
Exit costs - severence programmes[3]	-	1.7
Pensions charge - other schemes[2]	47.9	50.4
NIE Networks pension scheme charge[3]	8.7	7.5
	708.8	710.1
Capitalised payroll	(232.6)	(215.8)
Total employee related costs charged to the income statement	476.2	494.3

[1] These benefits primarily include travel and subsistence allowances.

[2] The pension charge for other schemes include contributions of €25.6 million (2020: €25.6 million) to the ESB Defined Benefit Pension Scheme, €17.0 million (2020: €15.8 million) to the ESB Defined Contribution Scheme, €9.8 million (2020: €8.2 million) to the Options section of the NIE Networks Pension Scheme (NIE Networks Scheme) and €0.7 million (2020: €0.8 million) to the stakeholder pension scheme for Great Britain (GB) employees (FMUK Pension Scheme). See note 24 for further details. This charge also includes a credit to the income statement in relation to ESB pension liability of €5.2 million (2020: €nil). See note 25.

[3] The NIE Networks pension scheme charge relates solely to the Focus section of the Northern Ireland Electricity Scheme (the NIE Networks Scheme). This charge also includes past service costs of €nil million (2020: €0.9 million). See note 24 for further details.

Notes to the Financial Statements

10. EMPLOYEES (CONTINUED)

PARENT

(a) Average number of employees in year by business activity, including temporary employees:

	2021 Number	2020 Number
Generation and Trading	440	534
Customer Solutions	359	354
ESB Networks	3,321	3,418
Other Segments	1,756	1,729
Total	5,876	6,035

(b) Employee costs in year

	2021	2020
	€m	€m
Current staff costs (excluding pension)		
Salaries	424.6	429.9
Overtime	30.0	31.8
Social welfare costs (PRSI)	36.4	35.2
Other payroll benefits[1]	19.0	20.6
Payroll cost for employees	510.0	517.5
(c) Pension and other employee benefit costs		
Exit costs - severence programmes	-	1.7
Pension charge[2]	33.0	37.9
	543.0	557.1
Capitalised payroll	(173.5)	(164.6)
Total employee related costs charged to the income statement	369.5	392.5

[1] These benefits primarily include travel and subsistence allowances.

[2] The pension charge includes contributions to the ESB Defined Contribution Scheme and the ESB Defined Benefit Pension Scheme. See note 24 for further details.

11. PROFIT FOR THE FINANCIAL YEAR

	2021	2020
	€m	€m
Auditor's remuneration:		
- Audit of individual and Group financial statements[1]	1.4	1.0
- Other assurance services	0.1	0.2
ESB (Parent) Board members' remuneration:		
- Emoluments	0.6	0.5
- Pension contributions	0.1	0.1

The details of Board members remuneration do not include amounts paid to four Worker Board members as employees of ESB (as such pay is neither increased nor decreased because of their membership of the Board), but do include amounts paid to them by way of Board fees.

[1] €0.4 million (2020: €0.4 million) related to the audit of Parent company. Additionally, €0.1 million is payable to PwC Belfast in respect of the 2021 audit of NIE Networks (2020: €0.1 million). The audit of individual and Group financial statements includes the audit of subsidiary companies.

Notes to the Financial Statements

12. PROPERTY, PLANT & EQUIPMENT

GROUP	Land and buildings	Plant and machinery	Total assets in commission	Assets under construction	Total
	€m	€m	€m	€m	€m
Cost					
Balance at 1 January 2020	1,220.1	20,213.1	21,433.2	1,366.8	**22,800.0**
Additions	-	443.2	443.2	510.5	**953.7**
Retirements / disposals	(1.0)	(31.9)	(32.9)	-	**(32.9)**
Transfers out of assets under construction	22.7	550.1	572.8	(572.8)	**-**
Transfers from / (to) intangible assets	-	0.7	0.7	0.5	**1.2**
Translation differences	(1.0)	(284.6)	(285.6)	(1.7)	**(287.3)**
Balance at 31 December 2020	1,240.8	20,890.6	22,131.4	1,303.3	**23,434.7**
Balance at 1 January 2021	1,240.8	20,890.6	22,131.4	1,303.3	**23,434.7**
Additions	-	465.4	465.4	560.3	**1,025.7**
Retirements / disposals	(3.7)	(508.3)	(512.0)	(5.6)	**(517.6)**
Transfers out of assets under construction	12.6	336.5	349.1	(349.1)	**-**
Reduction in asset retirement provison	-	(11.3)	(11.3)	-	**(11.3)**
Transfers from / (to) intangible assets	-	(0.3)	(0.3)	(0.4)	**(0.1)**
Other transfers	-	(0.3)	(0.3)	-	**(0.3)**
Translation differences	1.3	355.2	356.5	0.2	**356.7**
Balance at 31 December 2021	1,251.0	21,528.1	22,779.1	1,508.7	**24,287.8**
Depreciation					
Balance at 1 January 2020	699.1	11,023.5	11,722.6	-	**11,722.6**
Charge for the year	21.4	711.7	733.1	-	**733.1**
Retirements / disposals	(0.9)	(29.9)	(30.8)	-	**(30.8)**
Other transfers	(0.8)	0.8	-	-	**-**
Impairment	-	197.8	197.8	1.6	**199.4**
Translation differences	-	(119.7)	(119.7)	-	**(119.7)**
Balance at 31 December 2020	718.8	11,784.2	12,503.0	1.6	**12,504.6**
Balance at 1 January 2021	718.8	11,784.2	12,503.0	1.6	**12,504.6**
Charge for the year	22.8	749.6	772.4	-	**772.4**
Retirements / disposals	(2.5)	(507.6)	(510.1)	-	**(510.1)**
Transfers from / (to) intangible assets	(0.3)	(5.2)	(5.5)	-	**(5.5)**
Impairment	-	15.2	15.2	-	**15.2**
Translation differences	0.2	157.7	157.9	-	**157.9**
Balance at 31 December 2021	739.0	12,193.9	12,932.9	1.6	**12,934.5**
Net book value at 31 December 2021	**512.0**	**9,334.2**	**9,846.2**	**1,507.1**	**11,353.3**
Net book value at 31 December 2020	522.0	9,106.4	9,628.4	1,301.7	**10,930.1**
Net book value at 1 January 2020	521.0	9,189.6	9,710.6	1,366.8	**11,077.4**

During the year the Group capitalised interest of €20.6 million (2020: €22.0 million) in assets under construction, using an effective interest rate of 2.4% (2020: 2.5%).

The carrying value of non-depreciable assets (land) at 31 December 2021 is €96.5 million (2020: €93.7 million).

Property, plant and equipment with a net book value of €nil at 31 December 2021 is included above at a cost of €4,835.1 million (2020: €5,195.2 million).

Included within additions in 2021 is the capitalisation of an increase in the asset retirement provision for Generation and Trading and ESB Networks of €1.1 million (2020: increase of €83.9 million). See note 28 for further details.

Retirements / disposals in both 2021 and 2020 primarily relate to the retirement of assets that have been fully depreciated.

Included in additions is €0.3 million regarding assets acquired in relation to the acquisition of So Energy. See note 16 (c) for further details.

Notes to the Financial Statements

12. PROPERTY, PLANT & EQUIPMENT (CONTINUED)

Impairment charge

IAS 36 - Impairment of Assets stipulates that an impairment loss is the amount by which the carrying value of an asset exceeds its recoverable amount. Recoverable amount is the higher of its fair value less costs of disposal and its value in use. Value in use is calculated by taking the Net Present Value (NPV) of expected future cash flows from the asset discounted at an appropriate discount rate. Entities are required to conduct impairment tests where there is an indication of impairment of an asset.

Impairment reviews have been carried out on certain generation assets displaying indicators of impairments and no impairments were identified (2020: €199.4 million). See note 6 for further details of exceptional impairment in 2020.

The impairment charge of €15.2 million in 2021 largely relates to individual assets which are no longer operational.

PARENT	Land and buildings	Plant and machinery	Total assets in commission	Assets under construction	Total
	€m	€m	€m	€m	€m
Cost					
Balance at 1 January 2020	1,183.4	14,398.7	15,582.1	1,083.4	**16,665.5**
Additions	-	306.6	306.6	366.3	**672.9**
Retirements / disposals	(1.0)	(31.4)	(32.4)	-	**(32.4)**
Transfers out of assets under construction	19.1	315.0	334.1	(334.1)	**-**
Transfers from / (to) intangible assets	-	0.7	0.7	-	**0.7**
Other transfers	-	-	-	11.5	**11.5**
Balance at 31 December 2020	1,201.5	14,989.6	16,191.1	1,127.1	**17,318.2**
Balance at 1 January 2021	1,201.5	14,989.6	16,191.1	1,127.1	**17,318.2**
Additions	-	279.7	279.7	446.7	**726.4**
Retirements / disposals	(1.5)	(507.4)	(508.9)	-	**(508.9)**
Transfers out of assets under construction	12.6	280.0	292.6	(292.6)	**-**
Reduction in asset retirement provision	-	(0.8)	(0.8)	-	**(0.8)**
Transfers from / (to) intangible assets	-	0.1	0.1	-	**0.1**
Other transfers	-	-	-	6.6	**6.6**
Balance at 31 December 2021	1,212.6	15,041.2	16,253.8	1,287.8	**17,541.6**
Depreciation					
Balance at 1 January 2020	682.0	8,683.4	9,365.4	-	**9,365.4**
Charge for the year	20.9	463.4	484.3	-	**484.3**
Retirements / disposals	(0.9)	(29.3)	(30.2)	-	**(30.2)**
Balance at 31 December 2020	702.0	9,117.5	9,819.5	-	**9,819.5**
Balance at 1 January 2021	702.0	9,117.5	9,819.5	-	**9,819.5**
Charge for the year	22.6	486.5	509.1	-	**509.1**
Retirements / disposals	(1.5)	(506.5)	(508.0)	-	**(508.0)**
Balance at 31 December 2021	723.1	9,097.5	9,820.6	-	**9,820.6**
Net book value at 31 December 2021	**489.5**	**5,943.7**	**6,433.2**	**1,287.8**	**7,721.0**
Net book value at 31 December 2020	499.5	5,872.1	6,371.6	1,127.1	**7,498.7**
Net book value at 1 January 2020	501.4	5,715.3	6,216.7	1,083.4	**7,300.1**

During the year the Parent capitalised interest of €18.6 million (2020: €17.7 million) in assets under construction, using an effective interest rate of 2.4% (2020: 2.5%).

The carrying value of non-depreciable assets (land) at 31 December 2021 is €77.8 million (2020 €77.8 million).

Included within additions in 2021 is the capitalisation of an increase in the asset retirement provision for Generation and Trading and ESB Networks of €nil (2020: increase of €71.6 million). See note 28 for further details.

Property, plant and equipment with a net book value of €nil at 31 December 2021 are included above at a cost of €3,864.2 million (2020: €4,184.1 million).

Retirements / disposals in both 2021 and 2020 primarily relate to the retirement of assets that have been fully depreciated.

Notes to the Financial Statements

13. INTANGIBLE ASSETS

GROUP	Software and other intangible assets	Emission allowances & ROCs	Software under development	Total
	€m	€m	€m	€m
Cost				
Balance at 1 January 2020	775.1	110.4	169.5	**1,055.0**
Software additions	4.3	-	134.4	**138.7**
Purchase of emission allowances	-	125.4	-	**125.4**
Settlement of allowances	-	(115.5)	-	**(115.5)**
Software retirements	(3.5)	-	-	**(3.5)**
Transfers out of software under development	40.0	-	(40.0)	**-**
Transfers to property, plant and equipment	(0.7)	-	(0.5)	**(1.2)**
Translation differences	(11.1)	(0.2)	-	**(11.3)**
Balance at 31 December 2020	804.1	120.1	263.4	**1,187.6**
Balance at 1 January 2021	804.1	120.1	263.4	**1,187.6**
Software additions	9.2	-	113.7	**122.9**
Purchase of emission allowances	-	346.5	-	**346.5**
Acquisitions	59.2	-	-	**59.2**
Settlement of emission allowances	-	(162.0)	-	**(162.0)**
Software retirements	(19.6)	-	-	**(19.6)**
Transfers out of software under development	286.5	-	(286.5)	**-**
Transfers from / (to) property, plant and equipment	(0.3)	-	0.4	**0.1**
Transfer to income statement	(27.4)	-	-	**(27.4)**
Translation differences	15.6	-	0.7	**16.3**
Balance at 31 December 2021	1,127.3	304.6	91.7	**1,523.6**
Amortisation				
Balance at 1 January 2020	596.9	-	-	**596.9**
Charge for the year	55.0	-	-	**55.0**
Retirements	(3.5)	-	-	**(3.5)**
Impairment	1.0	-	-	**1.0**
Translation differences	(8.7)	-	-	**(8.7)**
Balance at 31 December 2020	640.7	-	-	**640.7**
Balance at 1 January 2021	640.7	-	-	**640.7**
Charge for the year	87.0	-	-	**87.0**
Transfers from / (to) property, plant and equipment	5.5	-	-	**5.5**
Retirements	(19.6)	-	-	**(19.6)**
Impairment	1.9	-	-	**1.9**
Translation differences	12.2	-	-	**12.2**
Balance at 31 December 2021	727.7	-	-	**727.7**
Net book value at 31 December 2021	**399.6**	**304.6**	**91.7**	**795.9**
Net book value at 31 December 2020	163.4	120.1	263.4	**546.9**
Net book value at 1 January 2020	178.2	110.4	169.5	**458.1**
Analysed as follows:				
Non-current intangible assets	375.2	-	91.7	**466.9**
Current intangible assets	24.4	304.6	-	**329.0**
Total intangible assets	399.6	304.6	91.7	**795.9**

Software assets include both internally developed and externally purchased assets with the majority being represented by internally developed assets.

Other intangibles assets include grid connections with a net book value of €4.6 million (2020: €4.8 million).

During the year the Group capitalised interest of €3.3 million (2020: €2.2 million) in software under development, using an effective interest rate of 2.4% (2020: 2.5%).

In line with IFRS 3 Business Combinations, an intangible asset of €51.3 million was recognised on the acquisition of So Energy in respect of favourable commodity contracts held by So Energy at the acquisition date. €27.4 million has been recognised in energy costs in respect of the utilisation of these contracts during the period.

Notes to the Financial Statements

13. INTANGIBLE ASSETS (CONTINUED)

PARENT	Software and other intangible assets	Emission allowances & ROCs	Software under development	Total
	€m	€m	€m	€m
Cost				
Balance at 1 January 2020	580.5	107.4	166.1	**854.0**
Software additions	-	-	122.6	**122.6**
Purchase of emission allowances	-	69.0	-	**69.0**
Settlement of emission allowances	-	(56.9)	-	**(56.9)**
Software retirements	(3.5)	-	-	**(3.5)**
Transfers out of software under development	33.9	-	(33.9)	**-**
Transfers to property, plant and equipment	(0.7)	-	-	**(0.7)**
Other transfers	-	-	(0.5)	**(0.5)**
Balance at 31 December 2020	610.2	119.5	254.3	**984.0**
Balance at 1 January 2021	610.2	119.5	254.3	**984.0**
Software additions	-	-	112.2	**112.2**
Purchase of emission allowances	-	243.9	-	**243.9**
Settlement of emission allowances	-	(79.3)	-	**(79.3)**
Software retirements	(14.9)	-	-	**(14.9)**
Transfers out of software under development	285.0	-	(285.0)	**-**
Transfers from / (to) property, plant and equipment	(0.1)	-	-	**(0.1)**
Other transfers	-	-	0.4	**0.4**
Balance at 31 December 2021	880.2	284.1	81.9	**1,246.2**
Amortisation				
Balance at 1 January 2020	452.0	-	-	**452.0**
Charge for the year	45.7	-	-	**45.7**
Retirements / disposals	(3.5)	-	-	**(3.5)**
Balance at 31 December 2020	494.2	-	-	**494.2**
Balance at 1 January 2021	494.2	-	-	**494.2**
Charge for the year	70.6	-	-	**70.6**
Retirements / disposals	(14.9)	-	-	**(14.9)**
Impairment	0.4	-	-	**0.4**
Balance at 31 December 2021	550.3	-	-	**550.3**
Net book value at 31 December 2021	**329.9**	**284.1**	**81.9**	**695.9**
Net book value at 31 December 2020	116.0	119.5	254.3	**489.8**
Net book value at 1 January 2020	128.5	107.4	166.1	**402.0**
Analysed as follows:				
Non-current intangible assets	329.9	-	81.9	**411.8**
Current intangible assets	-	284.1	-	**284.1**
Total intangible assets	329.9	284.1	81.9	**695.9**

Software assets include both internally developed and externally purchased assets with the majority being represented by internally developed assets.

Other intangible assets include grid connections with a net book value of €1.5 million (2020: €1.7 million).

During the year the Parent capitalised interest of €3.3 million (2020: €2.2 million) in software under development, using an effective interest rate of 2.4% (2020: 2.5%).

Notes to the Financial Statements

14. RIGHT-OF-USE ASSETS AND LEASE LIABILITIES

GROUP

(a) Amounts recognised in the balance sheet

Right-of-use assets	Land and buildings	Motor vehicles	Total
	€m	€m	€m
Balance at 1 January 2020	127.4	5.9	133.3
Additions	8.9	2.2	11.1
Depreciation	(16.0)	(2.6)	(18.6)
Impairment	(0.3)	-	(0.3)
Translation differences	(1.6)	(0.3)	(1.9)
Balance at 31 December 2020	118.4	5.2	123.6
Balance at 1 January 2021	118.4	5.2	123.6
Additions	5.4	1.9	7.3
Depreciation	(15.2)	(2.6)	(17.8)
Impairment	(1.3)	-	(1.3)
Remeasurement of right-of-use assets	(0.6)	-	(0.6)
Translation differences	1.8	0.3	2.1
Balance at 31 December 2021	108.5	4.8	113.3

Lease liabilities	Total
	€m
Balance at 1 January 2020	(132.0)
Additions	(11.1)
Interest expense	(2.1)
Lease payments[1]	18.5
Translation differences	1.9
Balance at 31 December 2020	(124.8)
Balance at 1 January 2021	(124.8)
Additions	(7.3)
Interest expense	(1.9)
Lease payments[1]	16.7
Translation differences	(2.2)
Balance at 31 December 2021	(119.5)

Analysed as follows:	2021	2020
	€m	€m
Non-current liabilities	(106.7)	(107.3)
Current liabilities	(12.8)	(17.5)
Total	(119.5)	(124.8)

[1]Lease payments include principal elements shown as financing activities of €14.8 million (2020: €16.4 million).
The impairment charge of €1.3 million in 2021 relates to curtailment of operations at one of the windfarms in the portfolio.

(b) Other amounts recognised in the statement of profit or loss

	2021	2020
	€m	€m
Expenses relating to short-term leases	2.6	1.6
Expenses relating to variable lease payments not included in lease liabilities	3.1	1.9
Total	5.7	3.5

Payments associated with short-term leases and leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less.

Notes to the Financial Statements

14. RIGHT-OF-USE ASSETS AND LEASE LIABILITIES (CONTINUED)

PARENT

(a) Amounts recognised in the balance sheet

Right-of-use assets	Land and buildings
	€m
Balance at 1 January 2020	73.2
Additions	5.6
Depreciation	(11.9)
Balance at 31 December 2020	66.9
Balance at 1 January 2021	66.9
Additions	4.1
Depreciation	(10.5)
Remeasurement of right-of-use assets	(0.6)
Balance at 31 December 2021	59.9

Lease liabilities	Total
	€m
Balance at 1 January 2020	(71.7)
Additions	(5.6)
Interest expense	(0.8)
Lease payments[1]	11.4
Balance at 31 December 2020	(66.7)
Balance at 1 January 2021	(66.7)
Additions	(4.1)
Interest expense	(0.7)
Lease payments[1]	8.6
Balance at 31 December 2021	(62.9)

Analysed as follows:	2021	2020
	€m	€m
Non-current liabilities	(56.8)	(55.5)
Current liabilities	(6.1)	(11.2)
Total	(62.9)	(66.7)

[1]Lease payments include principal elements shown as financing activities of €7.9 million (2020: €10.6 million).

(b) Other amounts recognised in the statement of profit or loss

	2021	2020
	€m	€m
Expenses relating to short-term leases	2.5	1.1
Expenses relating to variable lease payments not included in lease liabilities	0.6	0.4
Total	3.1	1.5

Payments associated with short-term leases and leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less.

Notes to the Financial Statements

15. GOODWILL

	€m
Balance at 1 January 2020	178.3
Translation differences	(9.3)
Balance at 31 December 2020	169.0
Balance at 1 January 2021	169.0
Acquisitions	64.5
Impairment	(45.3)
Translation differences	13.1
Balance at 31 December 2021	201.3

NIE Networks

Goodwill was recognised on the acquisition of Northern Ireland Electricity Networks (NIE Networks) in December 2010.

Goodwill is reviewed annually in December for impairment, by assessing the recoverable amount of the investment, based on its value in use. The annual impairment test of goodwill was carried out in December 2021 in accordance with IAS 36. No reduction in the value of goodwill was deemed to be required.

The Group calculates the value in use using a 20-year discounted cash flow model and a terminal value based on the Regulated Asset Base (RAB), corresponding to the expected useful life of the underlying asset base. The future cash flows are adjusted for risks specific to the investment and are discounted using a post-tax discount rate of 5.18% (2020: 5.5%).

Key drivers of the discounted cash flow include inflation and regulatory assumptions. Inflation rates used were sourced from the UK Office of Budget Responsibility and Bloomberg and a long-term rate of 2.96% (2020: 3.08%) was applied. Assumptions in relation to regulatory return and capital expenditure are made by reference to previous regulatory decisions for NIE Networks. The discount rate used is also a key driver for the valuation and the rate was determined by building up an appropriate Weighted Average Cost of Capital (WACC) for the NIE Networks business.

Key drivers also include expectations of future levels of capital spend and the allowed return on the RAB. Both are agreed with the Utility Regulator in Northern Ireland (NIAUR) as part of the Regulatory Price Reviews, the most recent of which, RP6, was published on 30 June 2017. Estimates beyond the period covered by the latest Regulatory Price Review are based on the average annual capital spend and the allowed return under RP6.

So Energy Ltd (So Energy)

Goodwill was recognised on the acquisition of So Energy in August 2021, see note 16(c) for further details.

Goodwill is reviewed annually in December for impairment, by assessing the recoverable amount of the investment, based on its value in use. The impairment test of goodwill was carried out in December 2021 in accordance with IAS 36 and an impairment of €45.3 million was recognised as a result of significant challenges experienced in the business due to soaring wholesale prices and the Government imposed price cap (a regulatory imposed limit on both the standing charge and unit price of electricity and gas for domestic customers who are on a standard variable tariff).

The Group calculates the value in use using a 5-year discounted cash flow model and a terminal value based on an implied value per meter point.

Key drivers of the discounted cash flow include customer numbers, margin per customer, operating costs, valuation per meter point and discount rate. The discount rate was determined by building up an appropriate Weighted Average Cost of Capital for the So Energy business.

Notes to the Financial Statements

16. FINANCIAL ASSET INVESTMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS AND EQUITY ACCOUNTED INVESTEES

(a) GROUP

	Equity accounted investees	Financial assets at fair value through profit or loss	Total
	€m	€m	€m
Balance at 1 January 2020	413.5	13.4	426.9
Additions	21.1	1.4	22.5
Disposals	-	(12.8)	(12.8)
Share of profit (net)	9.3	-	9.3
Fair value movement on cash flow hedges (net of tax)	(29.5)	-	(29.5)
Fair value movement through profit or loss (note 6)	-	6.4	6.4
Dividends received	(11.7)	-	(11.7)
Repayments	(5.5)	-	(5.5)
Translation differences	(19.1)	0.2	(18.9)
Balance at 31 December 2020	**378.1**	**8.6**	386.7
Balance at 1 January 2021	378.1	8.6	386.7
Additions	74.6	-	74.6
Transfer to other receivables	-	(3.3)	(3.3)
Share of loss (net)	(75.9)	-	(75.9)
Fair value movement on cash flow hedges (net of tax)	47.9	-	47.9
Dividends received	(8.6)	-	(8.6)
Impairments	(153.5)	-	(153.5)
Translation differences	19.9	-	19.9
Balance at 31 December 2021	**282.5**	**5.3**	287.8

Equity accounted investees

The entities listed below are legally separated from the parties and the legal form and the contractual arrangement do not give the parties direct rights to the assets and liabilities of the vehicle. Having assessed each investment ESB have concluded that they have joint control under IFRS 10 and IFRS 11, with the exception of Five Estuaries Offshore Wind Farm Limited which is considered an associate. Accordingly, ESB's investment in these entities is equity accounted in line with IAS 28 Investment in Associates and Joint Ventures.

The fair value movement on cash flow hedges for equity accounted investees relates to derivatives held in Aldeburgh Offshore Wind Holdings Limited, NNG Windfarm Holdings Limited, Oweninny Power Holdings DAC and Raheenleagh Power DAC which have been designated as cash flow hedging relationships in these entities.

Translation differences for equity accounted investees relate to Aldeburgh Offshore Wind Holdings Limited, Inch Cape Offshore Holdings Limited, Five Estuaries Offshore Wind Farm Limited and NNG Windfarm Holdings Limited as these companies' functional currency is sterling.

Notes to the Financial Statements

16. FINANCIAL ASSET INVESTMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS AND EQUITY ACCOUNTED INVESTEES (CONTINUED)

Interests in equity accounted investees

The following companies have been included in the ESB Group accounts as joint ventures using equity accounting:

Name of the company	Country	**Holding 2021 % of share capital owned**	Holding 2020 % of share capital owned
Inch Cape Offshore Holdings Limited	Great Britain	**50**	50
NNG Windfarm Holdings Limited	Great Britain	**50**	50
Aldeburgh Offshore Wind Holdings Limited	Great Britain	**50**	50
SIRO Limited	Republic of Ireland	**50**	50
Raheenleagh Power DAC	Republic of Ireland	**50**	50
Oweninny Power Holdings DAC	Republic of Ireland	**50**	50
FuturEnergy Ireland Development Holdings DAC	Republic of Ireland	**50**	0
Oweninny Power Holdings 2 DAC	Republic of Ireland	**50**	50
Five Estuaries Offshore Wind Farm Limited	Great Britain	**12.5**	12.5
Superhomes Ireland DAC	Republic of Ireland	**50**	0
Emerald Bridge Fibres DAC	Republic of Ireland	**50**	50
Kingspan ESB Limited	Great Britain	**50**	50
Tilbury Green Power Holdings Limited	Great Britain	**0**	47

Inch Cape Offshore Holdings Limited

In November 2020 the Group acquired a 50% stake in Inch Cape Offshore Holdings Limited (ICOHL), a joint arrangement with Red Rock Power Limited. The amount included in financial assets is €33.5 million (2020: €19.2 million) which includes €28.9 million of contingent consideration which is contingent upon achieving project milestones and specified returns included in the financial investment decision. In addition a shareholder loan of €8.3 million was advanced during the year. Total shareholder loan to date is €57.2 million. Interest on borrowings receivable to date from ICOHL amounts to €3.2 million.

ICOHL owns 100% of Inch Cape Offshore Limited (IC). The project, located off the east coast of Scotland, has a grid connection agreement for 1,080MW. The 50% investment in ICOHL indirectly provides ESB with a 50% stake in IC.

NNG Windfarm Holdings Limited (Neart na Gaoithe)

In December 2019 the Group acquired a 50% stake in NNG Windfarm Holdings Limited (NNGWH), a joint arrangement with EDF Renewables UK Limited. The amount invested to date is €328.2 million (2020: €231.1 million) this includes a shareholder loan of €81.9 million which was advanced during the year. Interest on borrowings receivable to date from Neart na Gaoithe amounts to €1.9 million.

NNGWH owns 100% of Neart na Gaoithe Offshore Wind Limited (NNGOW). The purpose of this joint arrangement is to develop a 448 MW wind farm off the east coast of Scotland. The 50% investment in NNGWH indirectly provides ESB with a 50% stake in NNGOW.

An impairment review of the carrying value of ESB's equity investment in NNGWH was carried out and an impairment charge of €153.5 million was recognised during the year (2020: €nil). See note 6 for further details. The carrying value of the Group's investment at 31 December 2021 is €35.3 million.

The Group has a legal obligation under guarantees provided in respect of financing agreements in place for NNGWH to provide further funding of up to €253.0 million at the balance sheet date.

The Group's share of capital commitments at 31 December 2021 amounts to €269.0 million (2020: €334.0 million).

Aldeburgh Offshore Wind Holdings Limited (AOWHL)

In March 2018 the Group acquired 50% of the issued share capital of AOWHL. The Group also acquired 50% of the loan notes issued by Aldeburgh Offshore Wind Investments Limited (AOWIL) a 100% owned subsidiary of AOWHL to become a 50% Joint Venture Partner with Sumitomo Corporation Europe Limited. The amount invested by ESB to date amounts to €122.9 million (2020: €115.3 million), all of which was advanced as equity.

AOWHL has a 25% stake in the Galloper Wind Farm project. The Galloper project is a 353 MW development located in the Outer Thames estuary, 30km off the coast of Suffolk, England. The 50% investment in AOWHL indirectly provides ESB with a 12.5% stake in the Galloper project.

SIRO Limited (SIRO)

SIRO is an unlisted joint arrangement in which the Group has joint control and a 50% ownership interest. SIRO was founded by the Group with Vodafone Ireland Limited acquiring a 50% stake in November 2014.

ESB has committed to provide capital funding to SIRO of €93.0 million, of which €93.0 million has been advanced as a short-term shareholder loan to date. The Group's share of capital commitments at 31 December 2021 amounts to €17.6 million (2020: €21.4 million).

Raheenleagh Power DAC (Raheenleagh)

The Group is a 50% partner in Raheenleagh, a joint arrangement with GR Wind Farms 1 Limited. This joint arrangement operates a 35 MW wind farm in Co. Wicklow. The amount invested in Raheenleagh to date amounts to €3.1 million (2020: €3.1 million).

The Group entered into a 15-year arrangement with Raheenleagh in 2015 to purchase physical power from the wind farm. Payments made under this contract are based upon actual production. Raheenleagh reached commercial operation in 2016.

Notes to the Financial Statements

16. FINANCIAL ASSET INVESTMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS AND EQUITY ACCOUNTED INVESTEES (CONTINUED)

Oweninny Power Holdings DAC (Oweninny)

The Group is a 50% partner in Oweninny, a joint arrangement formed with Bord na Móna. This joint arrangement operates a 172 MW wind farm located in Bellacorrick, Co. Mayo. As at 31 December 2021 the amount invested in Oweninny as a shareholder loan amounts to €3.5 million. Interest on borrowings receivable to date from Oweninny amounts to €0.1 million (2020: €1.7 million). The Group's share of capital commitments at 31 December 2021 amounts to €nil (2020: €nil).

Investment in Oweninny was held at €2.3 million at 31 December 2021 (2020: €nil).

Oweninny reached commercial operation in November 2019.

FuturEnergy Ireland Development Holdings DAC

During the year ended 2021 the Group acquired a 50% stake in FuturEnergy Ireland Development Holdings DAC (FEIDH), a joint arrangement with Coillte Limited. The amount invested in FEIDH to date amounts to €62.1 million of which €59.1 million was advanced as equity and €3.0 million as shareholder loans.

FEIDH owns 100% of FuturEnergy Ireland Development DAC (FEID). The purpose of this joint arrangement is to develop relevant renewable energy projects. The 50% investment in FEIDH indirectly provides ESB with a 50% stake in FEID.

Oweninny Power Holdings 2 DAC

The Group is a 50% partner in Oweninny Power Holdings 2 DAC (OPH2), a joint arrangement formed with Bord na Móna. Investment in Oweninny Power Holdings 2 DAC was held at €nil at 31 December 2021 (2020: €nil). Shareholder loan of €16.5 million was advanced during the year. Interest on borrowings receivable to date from OPH2 amounts to €0.2 million.

OPH2 owns 100% of Oweninny Power 2 DAC (OP2). The 50% investment in OPH2 indirectly provides ESB with a 50% stake in OP2. The purpose of OP2 is to develop a 83 MW windfarm in Bellacorrick, Co. Mayo.

The Group's share of capital commitments at 31 December 2021 amounts to €nil (2020: €nil).

Five Estuaries Offshore Wind Farm Limited

During the year ended 31 December 2021, the Group invested €1.2 million in Five Estuaries Offshore Wind Farm Limited for a 12.5% equity shareholding in the company. The purpose of Five Estuaries Offshore Wind Farm Limited is the development of the Five Estuaries offshore wind farm adjacent to the Galloper Offshore Wind Farm off the Suffolk coast. This investment is classified as an associate and is accounted for using the equity method.

Superhomes Ireland DAC

During the year ended 31 Decemeber 2021 the Group acquired a 50% stake in Superhomes Ireland DAC (SIDAC), a joint arrangement with Tipperary Energy Agency. The amount invested to date is €3.6 million all as equity accounted investee additions. The purpose of this joint arrangement is to develop a national deep-retrofit business of scale focusing exclusively on the Irish domestic market.

Emerald Bridge Fibres DAC (EBFD)

The Group is a 50% partner in EBFD, a joint arrangement with ZAYO Group. The purpose of this joint arrangement is the development and provision of telecommunication infrastructure between Ireland and the United Kingdom in the form of a subsea fibre optic cable network. The amount invested in EBFD to date amounts to €6.2 million of which €2.5 million was advanced as equity and €3.7 million as shareholder loans. Loans and interest on borrowings receivable from EBFD were fully impaired at 31 December 2021 (2020: €5.7 million, also fully impaired).

Investment in EBFD was held at €nil at 31 December 2021 (2020: €nil).

Tilbury Green Power Holdings Limited (Tilbury)

In June 2021 ESB completed the disposal of its shareholding in Tilbury Green Power Holdings Limited (Tilbury). See note 6 for further details.

Please refer to note 31 for further information regarding transactions with equity accounted investees for the years ended 31 December 2021 and 2020.

Notes to the Financial Statements

16. FINANCIAL ASSET INVESTMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS AND EQUITY ACCOUNTED INVESTEES (CONTINUED)

The Group's aggregate share of the non-current assets, current assets, non-current liabilities, current liabilities, income and expenses related to its interests in these joint ventures are as follows:

Summarised income statement[1]	NNG Windfarm Holdings Limited		Aldeburgh Offshore Wind Holdings Limited		SIRO Limited		Other equity accounted investees[4]	
	2021	2020	2021	2020	2021	2020	2021	2020
	€m	€m	€m	€m	€m	€m	€m	€m
Revenue	-	-	-	6.9	34.3	22.9	45.2	69.5
Depreciation	-	-	-	-	(27.0)	(28.1)	(11.1)	(9.8)
Interest income / (interest paid)	-	-	-	-	(8.5)	(6.6)	(5.7)	(26.1)
Income tax	-	-	(0.8)	(0.2)	3.2	13.1	(1.1)	(0.5)
Total gain / (loss)	(185.8)	21.9	20.3	14.6	(19.6)	(19.4)	12.1	(10.6)
Group share of (loss) / gain	(92.9)	10.9	10.2	7.3	(9.8)	(9.7)	6.0	(4.6)
Other adjustments[1]	4.2	-	-	-	-	-	6.4	5.4
Impairment of investment	(153.5)	-	-	-	-	-	-	-
Group share of fair value movements on cash flow hedges (net of tax)	50.3	(25.8)	4.5	(3.5)	-	-	(6.9)	(0.2)
Total comprehensive (loss) / gain	(191.9)	(14.9)	14.7	3.8	(9.8)	(9.7)	5.5	0.6

Summarised balance sheet	2021	2020	2021	2020	2021	2020	2021	2020
	€m	€m	€m	€m	€m	€m	€m	€m
Cash	19.3	20.3	0.1	0.7	14.5	3.0	44.5	15.0
Current assets	124.1	59.2	-	-	11.9	6.2	17.0	37.6
Non-current assets	2,030.4	1,611.8	35.2	20.0	475.7	445.4	452.6	465.1
Current liabilities	(2,091.3)	(97.1)	(4.3)	(3.5)	(206.8)	(214.5)	(185.5)	(223.3)
Non-current liabilities	(168.0)	(1,594.7)	-	-	(258.1)	(184.4)	(301.9)	(403.8)
Net assets / (liabilities)	(85.5)	(0.5)	31.0	17.2	37.2	55.7	26.7	(109.4)

Reconciliation of the above amounts to the investment recognised in the consolidated balance sheet.

Group equity interest	50%	50%	50%	50%	50%	50%		
Net assets / (liabilities)	(85.5)	(0.5)	31.0	17.2	37.2	55.7	26.7	(109.4)
Group Share	(42.8)	(0.3)	15.5	8.6	18.6	27.9	13.3	(50.7)
Other adjustments[3]	78.1	216.4	103.0	96.1	5.5	6.0	91.2	74.1
Carrying value of Group's equity interest	35.3	216.1	118.5	104.7	24.1	33.9	104.6	23.4

[1] The numbers included in the above table are based on unaudited management accounts. When audited financial statements become available, any adjustments are reflected in the following year.

[2] Where the Group's share of losses of an associate or joint venture equals or exceeds its interest in the associate or joint venture, the Group discontinues recognising its share of further losses unless there is legal or constructive obligation to recognise further losses. Unrecognised losses in 2021 include Kingspan ESB Limited of €nil (cumulative unrecognised losses to date of €0.3 million).

[3] Other adjustments represent the difference between the carrying value of the Group's share of the net assets acquired and the investment amount.

[4] Other equity accounted investees' includes ESB's 50% share in Emerald Bridge Fibres DAC, Kingspan ESB DAC, Raheenleagh Power DAC, Oweninny Power Holdings DAC, FuturEnergy Ireland Development Holdings DAC, Oweninny Power Holdings 2 DAC, Five Estuaries Offshore Wind Farm Limited, Superhomes Ireland DAC and Inch Cape Offshore Holdings Limited. The 2020 comparative amount includes Tilbury Green Power Holdings Limited which was disposed of during the year (see note 6).

Interest in financial assets held at fair value through profit and loss

The Group owns a venture capital fund, ESB Novusmodus Limited Partnership, in which seed capital is invested into emerging technology entities. These investments are managed purely for an investment return and are consequently carried at fair value through the income statement. No financial assets held at fair value through profit or loss are controlled by ESB. The investments comprise of a number of clean energy and new technology companies. These investments have been fair valued at the year end and the movement is reflected in the income statement.

The Group has a 5% share in Oriel Offshore Wind Farm Limited and this investment is accounted for under fair value as a financial asset investment in line with IFRS 9.

Notes to the Financial Statements

16. FINANCIAL ASSET INVESTMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS AND EQUITY ACCOUNTED INVESTEES (CONTINUED)

(b) PARENT

	Equity accounted investees investments	Subsidiary undertakings
	€m	€m
Balance at 1 January 2020	43.6	61.8
Share of loss	(9.7)	-
Balance at 31 December 2020	33.9	61.8
Balance at 1 January 2021	33.9	61.8
Share of loss	(9.8)	-
Balance at 31 December 2021	24.1	61.8

Notes to the Financial Statements

16. FINANCIAL ASSET INVESTMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS AND EQUITY ACCOUNTED INVESTEES (CONTINUED)

(c) GROUP ACQUISITIONS

Acquisition of So Energy

On 26 August the Group entered into an agreement to purchase 76% of So Energy Limited (UK), a holding company owning 100% of So Energy Trading Limited (UK), an energy supply business operating in the UK market, in exchange for cash consideration and 24% of the share capital of ESB Energy Limited, a supply business operating in the UK market which is subsidiary of the Group.

ESB paid a cash consideration of €23.7 million as well as fair value of other consideration exchanged €2.3 million.

A redemption reserve of €9.3 million was created on the acquisition of So Energy being present value of the estimated redemption amount of the put option. The put option gives the minority interest shareholder the option to sell their shareholding to the Group at certain points in the future and the Group the option to purchase the minority shareholding at certain points in the future.

Costs of €1.3m related to the acquisition are included within operating costs in accordance with IFRS 3 Business Combinations.

The principal factors contributing to the recognition of goodwill on the business combination is the expected profitability of the acquired business. The goodwill is not tax deductible.

The assets acquired and liabilities assumed are recognised at fair value at the date of acquisition.

	€m
Recognised values on acquisition	
Property, Plant & Equipement	0.3
Intangible assets (Note 13)	59.2
Trade and other receivables*	51.0
Cash and cash equivalents	5.0
Trade and other payables	(104.7)
Provisions (Note 28)	(61.4)
Net identifiable assets and liabilities	**(50.6)**
Non controlling interest (24% of net identifiable assets and liabilities)	12.1
Cash consideration	23.7
Fair value of other consideration exchanged	2.3
Net Consideration paid	26.0
Goodwill arising on acquisition	**64.5**

* The fair value of receivables includes an expected credit loss provision of €3.6 million.

The Group has estimated that if the acquisition set out above had occurred on 1 January 2021, the revenue and loss that would have been recognised in the Group results:

	€m
Total revenue for the year (unaudited)	342.5
Total loss after tax for the year (unaudited)*	103.7

The estimated amounts are based on unaudited management accounts.

So Energy has had the following operating performance since acquisition date:

	€m
Total revenue included in the consolidated income statement	126.8
Total loss after tax included in the consolidated income statement*	83.6

* Total loss after tax includes the exceptional onerous contract provision of €16.0 million (see note 28) but excludes exceptional impairment of goodwill of €45.3 million (see note 15).

Notes to the Financial Statements

17. INVENTORIES

	GROUP		PARENT	
	2021	2020	**2021**	2020
	€m	€m	**€m**	€m
Materials	**36.0**	36.6	**12.8**	12.6
Fuel	**85.9**	37.1	**79.0**	30.2
Construction work in progress	**9.5**	86.4	**-**	-
Total	**131.4**	160.1	**91.8**	42.8

Construction work in progress includes property assets which are being constructed for resale and stated at the lower of cost and net realisable value.

	GROUP		PARENT	
	2021	2020	**2021**	2020
	€m	€m	**€m**	€m
Inventories consumed	**203.1**	52.4	**200.2**	50.3
Inventory (writeback) / provision for impairment recognised during the year	**(3.2)**	2.8	**(3.7)**	2.1

Notes to the Financial Statements

18. TRADE AND OTHER RECEIVABLES

	GROUP 2021	GROUP 2020	PARENT 2021	PARENT 2020
	€m	€m	€m	€m
Current receivables:				
Retail electricity receivables - billed	144.9	56.1	80.7	37.6
Retail electricity receivables - unbilled	413.9	236.1	147.3	133.2
Total retail electricity receivables	558.8	292.2	228.0	170.8
I-SEM / SEM pool related receivables	33.3	22.5	24.9	18.1
Use of System receivables (including unbilled)	241.2	242.7	56.9	55.2
Other electricity receivables	19.6	40.2	-	-
Total electricity receivables	852.9	597.6	309.8	244.1
Trade receivables - non-electricity	264.5	102.6	226.4	57.7
Amounts due from equity accounted investees	97.6	104.4	92.9	96.8
Amounts due from insurers	30.9	-	30.9	-
Other receivables	336.3	58.1	37.8	10.3
Amounts due from subsidiary undertakings	-	-	1,458.0	895.6
Prepayments	56.7	79.9	42.4	15.0
Total current recievables	1,638.9	942.6	2,198.2	1,319.5

	GROUP 2021	GROUP 2020	PARENT 2021	PARENT 2020
	€m	€m	€m	€m
Non-current receivables:				
Amounts due from equity accounted investees	167.6	55.1	3.0	-
Amounts due from subsidiary undertakings	-	-	2,016.0	1,723.6
Amounts due from insurers	48.4	94.2	48.4	94.2
Total non-current receivables	216.0	149.3	2,067.4	1,817.8
Total receivables	1,854.9	1,091.9	4,265.6	3,137.3

Included in the above are amounts due from equity accounted investees at 31 December 2021 of €5.0 million (2020: €12.2 million) in respect of normal trading activities.

Wholesale and retail credit risk

Trade and other receivables can be divided into electricity receivables, other (non-electricity) receivables, insurance receivables, equity accounted investees and amounts due from subsidiary undertakings.

Expected credit loss allowance

Under IFRS 9 an expected credit loss (ECL) impairment model is in place for the calculation of impairment loss allowances. Under this impairment model, it is assumed that all receivables carry a risk of default. This impairment model is used to calculate the probability of default at a range of possible outcomes, weighted by the probability of their occurrence. These ECLs are measured under the general approach or simplified approach.

The simplified approach is applied to ESB's trade and other receivables within the scope of IFRS 15. Under the simplified approach, an entity will recognise a loss based on the lifetime ECLs. It allows an entity to use a provision matrix for calculating the ECLs. This matrix considers the historical default rates over the expected life of the trade receivable and is adjusted for forward-looking estimates.

The general approach is applied to the Group's shareholder loans advanced to equity accounted investees. Under the general approach, an entity must determine whether the financial asset is in one of three stages in order to determine the amount of ECL to recognise;

Stage 1 is where credit risk has not increased significantly since initial recognition. For financial assets in stage 1, entities are required to recognise 12 month ECL and recognise interest income on a gross basis – this means that interest will be calculated on the gross carrying amount of the financial asset before adjusting for ECL.

Stage 2 is where credit risk has increased significantly since initial recognition. When a financial asset transfers to stage 2, entities are required to recognise lifetime ECL but interest income will continue to be recognised on a gross basis.

Stage 3 is where the financial asset is credit impaired. This is effectively the point at which there has been an incurred loss event. For financial assets in stage 3, entities will continue to recognise lifetime ECL but they will now recognise interest income on a net basis. This means that interest income will be calculated based on the gross carrying amount of the financial asset less ECL.

The general approach applies to all loans and receivables not eligible for application of the simplified approach, which for the Group are primarily loans to equity accounted investees and for Parent also includes amounts due from subsidiary undertakings. Assessment of the probability of default for loans to equity accounted investees is included below. For further details of these loans see note 16.

The maximum credit exposure of the Group at 31 December 2021 and 31 December 2020 is set out on the following tables. In the case of the Parent company balances stated in the following tables exclude amounts due from subsidiary undertakings of €3,474.0 million (2020: €2,619.2 million).

Notes to the Financial Statements

18. TRADE AND OTHER RECEIVABLES (CONTINUED)

Impact of COVID-19

The economic impacts arising from the COVID-19 pandemic and associated government responses in the geographies in which the Group operates have increased the level of uncertainty around the estimates the Group makes in measuring provisions for the impairment of financial assets. Where customers experience difficulties in settling balances, the increased aging of these amounts results in an increase in provisions held in respect of them under the simplified approach employed. In measuring the provision for expected losses, the Group has also considered macroeconomic forecasts and the potential economic impacts of COVID-19 on the sectors in which they operate.

The assumptions made in estimating the impairment charge for the period and provisions held at the reporting date are felt to be appropriate, however the current high level of economic uncertainty means that impairment charges and provisions in respect of financial assets are a matter of significant judgement. The impact of any worsening of the economic outlook and any future recession could impact receivables from residential and business customers to differing extents.

Simplified approach - Expected Credit Losses

2021	GROUP Gross amount receivable	GROUP Loss allowance	GROUP Net amount receivable	PARENT Gross amount receivable	PARENT Loss allowance	PARENT Net amount receivable
	€m	€m	€m	€m	€m	€m
Not past due receivables	1,208.5	(4.5)	1,204.0	531.7	(3.4)	528.3
Past due < 30 days	130.7	(3.4)	127.3	21.1	(3.0)	18.1
Past due 30 - 120 days	64.1	(7.3)	56.8	18.1	(5.0)	13.1
Past due > 120 days	70.2	(25.4)	44.8	26.1	(16.7)	9.4
Past due by more than one year	54.5	(33.7)	20.8	26.1	(21.0)	5.1
Total	1,528.0	(74.3)	1,453.7	623.1	(49.1)	574.0

2020	GROUP Gross amount receivable	GROUP Loss allowance	GROUP Net amount receivable	PARENT Gross amount receivable	PARENT Loss allowance	PARENT Net amount receivable
	€m	€m	€m	€m	€m	€m
Not past due receivables	563.9	(3.7)	560.2	225.0	(2.6)	222.4
Past due < 30 days	152.6	(2.8)	149.8	79.9	(2.4)	77.5
Past due 30 - 120 days	26.6	(5.8)	20.8	5.2	(4.1)	1.1
Past due > 120 days	42.2	(21.6)	20.6	24.5	(16.6)	7.9
Past due by more than one year	30.9	(24.0)	6.9	20.0	(16.8)	3.2
Total	816.2	(57.9)	758.3	354.6	(42.5)	312.1

Notes to the Financial Statements

18. TRADE AND OTHER RECEIVABLES (CONTINUED)

General approach - Expected Credit Losses

2021

	GROUP			PARENT		
	Gross amount receivable	Loss allowance	Net amount receivable	Gross amount receivable	Loss allowance	Net amount receivable
	€m	€m	€m	€m	€m	€m
Stage 1 - 12 Month ECL (not credit impaired)	88.9	-	88.9	3.4	-	3.4
Stage 2 - Lifetime ECL (not credit impaired)	176.8	(0.5)	176.3	93.0	(0.5)	92.5
Stage 3 - Lifetime ECL (credit impaired)	-	-	-	-	-	-
Total	265.7	(0.5)	265.2	96.4	(0.5)	95.9

2020

	GROUP			PARENT		
	Gross amount receivable	Loss allowance	Net amount receivable	Gross amount receivable	Loss allowance	Net amount receivable
	€m	€m	€m	€m	€m	€m
Stage 1 - 12 Month ECL (not credit impaired)	68.5	(1.2)	67.3	4.6	-	4.6
Stage 2 - Lifetime ECL (not credit impaired)	93.0	(0.8)	92.2	93.0	(0.8)	92.2
Stage 3 - Lifetime ECL (credit impaired)	51.9	(51.9)	-	-	-	-
Total	213.4	(53.9)	159.5	97.6	(0.8)	96.8

Expected Credit Losses Reconciliation

	GROUP		PARENT	
	2021	2020	2021	2020
	€m	€m	€m	€m
Simplified approach	1,453.7	758.3	574.0	312.1
General approach	265.2	159.5	95.9	96.8
Prepayments [1]	56.7	79.9	42.4	15.0
Amounts due from subsidiary undertakings	-	-	3,474.0	2,619.2
Amounts due from insurers	79.3	94.2	79.3	94.2
Total	1,854.9	1,091.9	4,265.6	3,137.3

[1] Prepayments are excluded from the analysis as no credit exposure is perceived in relation to this balance.

PARENT

Amounts due from subsidiary undertakings

At 31 December 2021, the Parent company had balances receivable of €3,474.0 million (2020: €2,619.2 million) from its subsidiaries. These receivables mainly relate to management services and loans to subsidiaries as well as electricity charges including Use of System charges. Total provision in respect of amounts due from subsidiary undertakings at 31 December 2021 is €115.5 million (2020: €59.5 million).

The impairment loss recognised in the Parent company in respect of amounts due from subsidiary undertakings has been calculated using expected credit loss model as required by IFRS 9. In determining the impairment loss, amounts due from subsidiaries were classified as either amounts repayable on demand, low credit risk receivables or amounts for which there has been a substantial increase in credit risk since initial recognition. In determining the expected credit loss (including probability of default and loss given default), regard was given to the historic performance of the relevant loan as well as forward looking information for the relevant subsidiary including detailed discounted cash flow forecasts. For repayable on demand loans where the loan could not be repaid at the reporting date, expected credit losses were calculated by considering the likely recovery strategies of the Parent company, including consideration of 'repay over time' strategies. For loans with a substantial increase in credit risk, consideration was given to the future activities and cash flows of the subsidiary and lifetime expected credit losses were recognised accordingly where appropriate.

Notes to the Financial Statements

18. TRADE AND OTHER RECEIVABLES (CONTINUED)

Movement in the expected credit loss of trade and other receivables

The loss allowances for financial assets are based on assumptions about credit risk of default and expected credit loss rates. The Group uses judgement in making these assumptions and selecting the inputs to the expected credit loss calculations, based on the Group's past history, existing market conditions as well as forward looking estimates at the end of each reporting period. The movement in the expected credit loss in respect of trade receivables during the year was as follows:

	GROUP		PARENT	
	2021	2020	2021	2020
	€m	€m	€m	€m
Balance at 1 January	57.9	41.0	42.5	31.0
Expected credit loss provision in So Energy at acquisition date (note 16(c))	3.6	-	-	-
Impairment loss recognised (net)	21.8	24.8	14.3	18.6
Bad debts recovered	-	(0.4)	-	-
Provision utilised	(9.0)	(7.5)	(7.7)	(7.1)
Balance at 31 December	74.3	57.9	49.1	42.5

Amounts due from equity accounted investees

Amounts due from equity accounted investees include shareholder loans, interest on these loans and trade receivable balances. Trade receivable balances from equity accounted investees are assessed for probability of default using the simplified approach under IFRS 9. All other balances due from equity accounted investees are assessed for probability of default using the general approach. In applying the general approach, the Group has used judgement in making assumptions and selecting the inputs to the expected credit loss calculation based on market conditions as well as forward looking estimates at the end of the reporting period. The Group has no purchased credit impaired loans.

Following an assessment of all ESB's shareholder loans advanced to equity accounted investees it was determined that there was an increase in the credit risk of loans to two of ESB's equity accounted investees since initial recognition, NNG Windfarm Holdings Limited and SIRO Ltd, as a result the loans are accounted for as a stage 2 lifetime ECL (not credit impaired) loans. Expected credit losses of €nil (31 December 2020 €0.8m in relation to SIRO Ltd) were recognised in the income statement during the year.

In June 2021 ESB completed the disposal of its shareholding in Tilbury Green Power Holdings Limited (Tilbury). This sale resulted in the repayment of the shareholder loan, which was accounted for as a stage 3 credit (credit impaired) asset with a loss allowance of €51.9 million at 31 December 2020, and the recognition of an impairment gain on the reversal of the loss allowance previously recognised (see note 6).

The remaining shareholder loans to equity accounted investees are assessed as stage 1 (not credit impaired) financial assets. The 12-month expected credit loss approach has been applied to the stage 1 loans consisting of analysis on both historical and forward looking qualitative and quantitative information to determine the credit risk. These loans are deemed to be of low credit risk given no indications of an increase in credit risk since initial recognition. As a result, no expected credit loss has been recognised in relation to these loans. The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially purchased or originated credit-impaired during the year ended 31 December 2021 is €nil (2020: €nil).

Retail electricity receivables

Retail electricity receivables which includes electricity and gas customers relate to both residential and business customers. The credit risk on electricity accounts is managed through the ongoing monitoring of debtor days, putting in place appropriate collateral and a collection policy based on the credit worthiness, size and duration of debt. The concentration of risk in Customer Solutions is in relation to retail electricity accounts that have closed in arrears. In addition, given the continuing increase in competition, certain customers may switch suppliers before they have settled their outstanding balances. These accounts are managed within the Group's debt collection policy by a combination of internal debt follow-up, the use of debt collection agencies and legal action where necessary including the obtaining of publication of judgements.

Providing for future expected losses in relation to retail electricity receivables, including both billed and unbilled, is based on analysis of recent debt performance and an evaluation of the impact of economic conditions and industry issues. Current economic conditions have been significantly impacted by the COVID-19 pandemic. Whilst the full extent of the financial impact on receivables as a result of COVID-19 remains unknown, an additional provision has been made on a portfolio basis to cover anticipated losses resulting from the pandemic. Collateral is held in the form of security deposits on new customer accounts not on direct debit arrangements.

Controls around electricity receivables are focused on the full recovery of amounts invoiced. Electricity receivables to the value of €68.9 million (2020: €57.9 million) were provided for at year end. The single largest customer amount written off during the year was €81,000 (2020: €26,000) relating to Company dissolution/liquidation. Retail electricity receivables arise largely in the Republic of Ireland (ROI), with 14% (2020: 14%) relating to Northern Ireland (NI) revenue and 13% (2020: 3%) relating to Great Britain (GB) revenue.

Unbilled electricity receivables represent estimates of consumption not yet invoiced. Credit risk in relation to unbilled electricity is managed in line with billed electricity receivables as discussed above.

Notes to the Financial Statements

18. TRADE AND OTHER RECEIVABLES (CONTINUED)

Integrated Single Electricity Market (I-SEM) receivables

Credit risk in relation to the I-SEM related receivables is managed by the Energy Trading and Risk functions (ET&R) within those business units engaged in electricity trading through the I-SEM. Each of these functions is ring-fenced from each other and segregation of responsibilities between the back office, middle office and front office functions is maintained in each case. The Trading back office function is responsible for invoicing customers and maintaining all accounts receivable. Payment terms for all trading balances relating to each of the I-SEM revenue streams are governed by the I-SEM settlement calendar.

Use of System receivables

Use of System income in ROI comprises of Distribution Use of System (DUoS) income, Transmission Use of System (TUoS) income and Operation and Maintenance (O&M) charges for generators connected to the Distribution System. The credit terms for DUoS are 10 business days and there are currently 52 suppliers. TUoS is collected by EirGrid, and the Transmission Asset Owner (TAO) allowed revenue is invoiced to EirGrid over 12 monthly instalments with each invoice due 36 days after month end. Invoices were issued in respect of 246 generators during 2021 for O&M charges, credit terms for O&M charges are 30 days. Generators are invoiced for connection charges on a staged basis, as approved by CRU, with 65% of the capital contribution recouped in advance of construction, 90% in advance of energisation and the balance post energisation. Included in amounts due from subsidiary undertakings in Parent are amounts billed and collected through ESB Networks DAC, a subsidiary of the Parent in respect of Use of System receivables €101.9 million (2020: €79.7 million).

The credit risk in relation to DUoS is managed by the invocation of section 7 of the DUoS Framework Agreement approved by CRU on 1 August 2002. This section provides for the provision of security by each supplier. Before a supplier can register as a customer they must sign up to the DUoS agreement. All suppliers must provide security in accordance with section 7.2. The DUoS credit risk is also managed through the timely collection procedures in place which are in line with what is outlined in section 6 of the DUoS Framework Agreement and the monitoring of debtor days to keep these to a minimum. In the event of a supplier defaulting in line with section 7 of the DUoS Framework Agreement there is security cover in place for all suppliers.

TUoS credit risk is managed through the timely collection procedures in place and the monitoring of debtor days to keep these to a minimum. Procedures for the payment by EirGrid of TUoS income due to ESB Networks DAC as TAO are governed by the Infrastructure Agreement between EirGrid and ESB. This is not a normal bilateral contract freely entered into by the will of the parties, but an arrangement required by legislation and many of whose terms are specified in that legislation. Accordingly, the credit risk in relation to TUoS receivables is considered to be low. The amount due in respect of TUoS income at 31 December 2021 was €56.8 million (2020: €55.2 million), which is the largest Use of System receivable balance in ROI.

In respect of the Networks business in NI, revenue is derived principally from charges for use of the distribution system, PSO charges levied on electricity suppliers and charges for transmission services levied on SONI (System Operator for Northern Ireland). Credit risk in respect of Use of System receivables from electricity suppliers is mitigated by security received in the form of cash deposits, letters of credit or Parent company guarantees. With the exception of public bodies, payments in relation to new connections or alterations are paid for in advance of the work being carried out. Normal credit terms and debtor days in respect of trade receivables from electricity suppliers are less than 30 days. The largest Use of System electricity receivable in NI at 31 December 2021 is €9.9 million (2020: €10.1 million).

Other electricity receivables

Other electricity receivables include amounts in relation to ancillary services and amounts in relation to electricity trading in the UK market which is not included in the I-SEM.

Trade and other receivables - non-electricity

Trade receivables (non-electricity) relate to balances due in respect of the Group's non-electricity trading and other operations. It includes amounts due in respect of the Group's telecommunications, consultancy, facility management and other ancillary operations. Credit risk with regard to these balances is not considered to be significant. The largest unsecured single balance included within this category at 31 December 2021 is an amount of €6.6 million (2020: €4.4 million) due from an external company.

Included within these categories are collateral amounts pledged by the Group to bilateral parties and clearing banks for exchange trading of gas, carbon and power of €101.4 million (2020: €10.4 million). The amounts pledged cover initial margin and daily mark to market movements.

Notes to the Financial Statements

19. CASH AND CASH EQUIVALENTS

	GROUP		PARENT	
	2021	2020	**2021**	2020
	€m	€m	**€m**	€m
Cash at bank and in hand	**537.0**	248.7	**463.3**	164.1
	537.0	248.7	**463.3**	164.1

Included in the cash on hand is €260.6 million (2020 €55.0 million) relating to the net cash collateral amounts received in relation to exchange traded gas, carbon and power contracts. Corresponding amounts are included in trade and other receivables or trade and other payables.

20. CHANGES IN EQUITY

(i) Capital stock

There are 1,949,381,855 units of capital stock in issue at a par value of €1.00 each (2020: 1,957,681,855 units).

	2021	2020
	€m	€m
Comprised as:		
Stock issued from converted reserves	**1,880.9**	1,880.9
Stock issued for subscription by ESOT	**68.5**	76.8
	1,949.4	1,957.7

In accordance with the Electricity (Supply) (Amendment) Act 2001, on 30 December 2001, the equity of ESB was converted to capital stock which was issued to the Department of Finance. At the same time, ESB ESOP Trustee Limited, established to act as Trustee for an ESB employee shareholding scheme, subscribed for 5% of the stock. The principal rights attaching to each unit of capital stock include the rights to exercise a vote at annual meetings, entitlements to dividends from profits when declared and the rights to proportionate participation in a surplus on winding up.

The Energy (Miscellaneous Provisions) Act 2006 amended Section 2 of the 2001 Act and as a result 10.2% of issued capital stock in ESB now stands vested in the Minister for Environment Climate and Communications, with the Minister for Public Expenditure and Reform retaining 86.3% of ESB's capital stock and the ESOP retaining 3.5% of the stock at that date.

The Ministers and Secretaries Amendment Act 2011, which came into force on 6 July 2011, establishes the office of the Minister for Public Expenditure and Reform. The 2011 Act has the effect of transferring ownership of the stock previously held by the Minister for Finance in ESB to the Minister for Public Expenditure and Reform as and from 6 July 2011.

(ii) Capital Redemption Reserve

During 2021, ESB recognised an ESOP provision of €36.5 million (31 December 2020: €0.9 million) and continued the repurchase of the ESOP capital stock. A capital redemption reserve of €8.3 million (2020: €8.7 million) arose from the purchase and cancellation of 8.3 million ESOP share capital (2020: 8.7 million) for a consideration of €9.6 million (2020: €8.4 million) and represents the nominal amount of the share capital cancelled. The repurchase reduced the ESOP repurchase provision by €9.6 million and at 31 December 2021, the ESOP repurchase provision (note 28) recognised in other provisions amounts to €27.0 million (2020: €nil). See note 32 for further details.

(iii) Cash flow hedging and other reserves – Group and Parent

The hedging reserve primarily represents the fair value of derivatives which are part of effective cash flow hedging relationships at year end. As the derivatives are held for hedging purposes as defined by IFRS 9 and designated as hedges, their fair value movements are retained in OCI instead of being charged to the income statement during the year and will be charged to income in the same period as the corresponding transaction.

(iv) Other reserves

Group other reserves include the following:

- Non-distributable reserves of (€5.0 million) which was created on the sale of the Group's share in Ocean Communications Limited in 2001; and
- Actuarial movements on the NIE Networks defined benefit scheme, net of the related deferred tax adjustments, totalling (€150.0 million) (2020: (€237.2 million); and
- ESOP repurchase provision of (€27.0 million) (2020: €nil) which relates to the amount that ESB has committed to date to repurchase from the ESOP internal market.
- Redemption reserve of (€9.3 million) which was created on the acquisition of So Energy being present value of the estimated redemption amount of the put option.

Parent other reserves include the following:

ESOP repurchase provision of (€27.0 million) (2020: €nil) which relates to the amount that ESB has committed to date to repurchase from the ESOP internal market.

Notes to the Financial Statements

20. CHANGES IN EQUITY (CONTINUED)

(v) Non-controlling interest - Group

Non-controlling interests at 31 December 2021 relate to the minority shareholdings in So Energy, Crockahenny Wind Farm DAC, Mountain Lodge Power DAC and other companies associated with wind and solar projects.

Dividends on capital stock:

GROUP	2021	2020
	€m	€m
Total dividend paid 4.13 (2020: 2.53) cent per capital stock unit	80.8	50.1
Dividend to non-controlling interest	-	0.2
Total	80.8	50.3

PARENT	2021	2020
	€m	€m
Dividends on capital stock:		
Total dividend paid 4.13 (2020: 2.53) cent per capital stock unit	80.8	50.1
Total	80.8	50.1

Total dividends paid during 2021 amounted to €80.8 million and include a final dividend of €80.8 million (4.13 cents per unit of stock) in respect of 2020.

The Board is now recommending that a final dividend of 6.47 cent per unit of capital stock, or €126.1 million in aggregate, in accordance with the dividend policy of 40% of adjusted profit after tax.

Notes to the Financial Statements

21. TAXATION

(a)

Income tax expense	2021	2020
	€m	€m
Current tax expense		
Current tax	75.5	52.7
Prior year (over) / under provision	(0.8)	(4.7)
Value of tax losses surrendered to equity accounted investees	3.8	3.0
	78.5	51.0
Deferred tax expense		
Origination and reversal of temporary differences	(3.0)	(6.0)
Increase in tax rate [1]	26.4	9.6
Prior year (over) / under provision	(4.2)	5.2
	19.2	8.8
Total	97.7	59.8

Reconciliation of effective tax rate	2021	2020
	€m	€m
Profit before tax	288.4	185.6
(Loss) / profit before tax		
Plus: impairment of equity accounted investees	153.5	-
Plus: after tax share of equity accounted investees	75.9	(9.3)
(Loss) / profit before tax (excluding equity accounted investees loss)	517.8	176.3
Taxed at 12.5%	64.7	22.0
Expenses not deductible	6.4	25.1
Tax effect of losses not recognised	4.2	-
Income not taxable	(4.0)	-
Higher tax on chargeable gains	2.4	-
Deferred tax impact of increase in UK tax rate[1]	26.4	9.6
Higher tax rates on overseas profits	2.6	2.6
Prior year (over) / under provisions	(5.0)	0.5
Income tax expense	97.7	59.8

[1] The 2021 Budget for the UK included a provision that the UK corporation tax rate will increase to 25%(effective 1 April 2023). This increase to 25% was substantively enacted on 24 May 2021 (2020: the substantively enacted UK corporation tax rate increased from 17% to 19%). The increase in the substantively enacted UK corporation tax rate will increase the Group's future current tax charge accordingly. The deferred tax liability at 31 December 2021 has been calculated based on the rate of 25% (2020: 19%), the substantively enacted rate at the balance sheet date.

ESB will be impacted by the Minimum Effective Tax Rate of 15% as a result of Ireland's decision to enter the OECD Tax Agreements on Pillar Two. The effective tax rate is to come into force on 1st January 2023 in Ireland and ESB's effective Irish tax rate will increase to at least 15% as a result.

Notes to the Financial Statements

21. TAXATION (CONTINUED)

(b) Deferred tax assets and liabilities

GROUP	2021	2020
	€m	€m
Deferred tax assets		
Property, plant and equipment and intangible assets	5.3	6.3
Liability – NIE Networks pension scheme	1.3	22.2
Liability – ESB pension scheme	33.6	42.0
Borrowings	1.8	3.6
Provisions	3.8	1.7
Tax losses forward	9.3	5.9
Derivative financial instruments	87.1	81.3
Total deferred tax assets	142.2	163.0
Less deferred tax asset recognised separately on the Balance Sheet	(1.8)	(1.7)
Net deferred tax asset being netted against deferred tax liability	140.4	161.3
Deferred tax liabilities		
Property, plant and equipment and intangible assets	615.2	604.9
Provisions	12.4	7.3
Derivative financial instruments	8.4	8.4
Capital gains tax	3.0	3.0
Total deferred tax liabilities	639.0	623.6
Netted deferred tax liabilities	(498.6)	(462.3)
Net deferred tax liability	(496.8)	(460.6)

The movement in temporary differences for the Group were as follows:

2021	Balance at 1 January	Recognised in income	Recognised in OCI	Translation differences	Balance at 31 December
	€m	€m	€m	€m	€m
ASSETS					
Property, plant and equipment and intangible assets	6.3	(1.0)	-	-	5.3
Liability – NIE Networks pension scheme	22.2	(10.8)	(11.3)	1.2	1.3
Liability – ESB pension scheme	42.0	(8.5)	-	0.1	33.6
Borrowings	3.6	(1.8)	-	-	1.8
Provisions	1.7	2.1	-	-	3.8
Tax losses forward	5.9	3.1	-	0.3	9.3
Derivative financial instruments	81.3	-	0.5	5.3	87.1
Total deferred tax assets	**163.0**	**(16.9)**	**(10.8)**	**6.9**	**142.2**
LIABILITIES					
Property, plant and equipment and intangible assets	604.9	(2.2)	(0.1)	12.6	615.2
Provisions	7.3	4.5	-	0.6	12.4
Derivative financial instruments	8.4	-	-	-	8.4
Capital gains tax	3.0	-	-	-	3.0
Total deferred tax liabilities	**623.6**	**2.3**	**(0.1)**	**13.2**	**639.0**
Net deferred tax (liability) / asset	**(460.6)**	**(19.2)**	**(10.7)**	**(6.3)**	**(496.8)**

Notes to the Financial Statements

21. TAXATION (CONTINUED)

(b) Deferred tax assets and liabilities (continued)

2020	Balance at 1 January	Recognised in income	Recognised in OCI	Translation differences	Balance at 31 December
	€m	€m	€m	€m	€m
ASSETS					
Property, plant and equipment and intangible assets	6.7	(0.4)	-	-	6.3
Liability – NIE Networks pension scheme	19.8	(6.3)	8.7	-	22.2
Liability – ESB pension scheme	49.1	(7.1)	-	-	42.0
Borrowings	5.4	(1.8)	-	-	3.6
Provisions	1.0	0.7	-	-	1.7
Tax losses forward	7.9	(2.0)	-	-	5.9
Derivative financial instruments	90.8	(1.1)	(9.5)	1.1	81.3
Total deferred tax assets	180.7	(18.0)	(0.8)	1.1	163.0
LIABILITIES					
Property, plant and equipment and intangible assets	611.3	(5.2)	-	(1.2)	604.9
Provisions	7.2	0.1	-	-	7.3
Derivative financial instruments	26.0	(5.8)	(10.1)	(1.7)	8.4
Capital gains tax	1.3	1.7	-	-	3.0
Total deferred tax liabilities	645.8	(9.2)	(10.1)	(2.9)	623.6
Net deferred tax (liability) / asset	(465.1)	(8.8)	9.3	4.0	(460.6)

There is no expiry date to when tax losses in the Group can be utilised.

Deferred tax asset on tax losses not provided for in the accounts:

Deferred tax assets not recognised amounted to €19.6 million in 2021 (2020: €nil). This amount relates to deferred tax assets not recognised against pre-acquisition tax losses arising in So Energy Trading Ltd in the amount of €5.9 million and €13.7 million of deferred tax assets not recognised against tax losses arising post acquisition.

Deferred tax in relation to unremitted reserves of overseas subsidiaries:

Deferred tax has not been provided for in relation to unremitted reserves of the Group's overseas subsidiaries for two reasons: either there is no commitment for these reserves to be distributed in the foreseeable future or it has been established that no tax would arise on the remittance. Deferred tax has not been provided for in relation to unremitted reserves of the Group's overseas joint ventures as the Group has the ability to control the repatriation of these reserves to the Republic of Ireland. Cumulative unremitted reserves of overseas subsidiaries and joint ventures totalled €818.9 million (2020: €744.5 million) as at 31 December 2021.

PARENT	2021	2020
	€m	€m
Deferred tax assets		
Liability – ESB pension scheme	33.6	42.0
Borrowings	1.8	3.6
Provisions	1.7	1.8
Derivative financial instruments	4.6	5.5
Total deferred tax assets	41.7	52.9
Deferred tax liabilities		
Property, plant and equipment	418.9	421.5
Derivative financial instruments	3.9	3.8
Capital gains tax	1.2	1.2
Total deferred tax liabilities	424.0	426.5
Net deferred tax liability	(382.3)	(373.6)

Notes to the Financial Statements

21. TAXATION (CONTINUED)

(b) Deferred tax assets and liabilities (continued)

PARENT (continued)

The movement in temporary differences for the Parent were as follows:

2021	Balance at 1 January	Recognised in income	Recognised in OCI	Balance at 31 December
	€m	€m	€m	€m
ASSETS				
Liability – ESB pension scheme	42.0	(8.4)	-	33.6
Provisions	1.8	(0.1)	-	1.7
Borrowings	3.6	(1.8)	-	1.8
Derivative financial instruments	5.5	-	(0.9)	4.6
Total deferred tax assets	52.9	(10.3)	(0.9)	41.7
LIABILITIES				
Property, plant and equipment	421.5	(2.6)	-	418.9
Derivative financial instruments	3.8	-	0.1	3.9
Capital gains tax	1.2	-	-	1.2
Total deferred tax liabilities	426.5	(2.6)	0.1	424.0
Net deferred tax (liability) / asset	**(373.6)**	**(7.7)**	**(1.0)**	**(382.3)**

2020	Balance at 1 January	Recognised in income	Recognised in OCI	Balance at 31 December
	€m	€m	€m	€m
ASSETS				
Liability – ESB pension scheme	49.1	(7.1)	-	42.0
Borrowings	5.4	(1.8)	-	3.6
Provisions	17.9	(16.1)	-	1.8
Derivative financial instruments	5.6	-	(0.1)	5.5
Total deferred tax assets	78.0	(25.0)	(0.1)	52.9
LIABILITIES				
Property, plant and equipment	423.9	(2.4)	-	421.5
Derivative financial instruments	3.9	-	(0.1)	3.8
Capital gains tax	1.2	-	-	1.2
Total deferred tax liabilities	429.0	(2.4)	(0.1)	426.5
Net deferred tax (liability) / asset	(351.0)	(22.6)	-	(373.6)

Notes to the Financial Statements

22. BORROWINGS AND OTHER DEBT

GROUP	Recourse borrowings	Non-recourse borrowings	2021 Total	2020 Total
	€m	€m	€m	€m
Current borrowings				
- Repayable by instalments	70.7	-	70.7	74.5
- Repayable other than by instalments	-	-	-	55.1
Total current borrowings	70.7	-	70.7	129.6
Non-current borrowings				
- Repayable by instalments				
Between one and two years	75.3	-	75.3	71.4
Between two and five years	173.1	-	173.1	200.3
After five years	334.3	-	334.3	235.9
	582.7	-	582.7	507.6
- Repayable other than by instalments				
Between one and two years	253.1	-	253.1	-
Between two and five years	297.4	890.9	1,188.3	919.8
After five years	3,268.4	-	3,268.4	3,686.6
	3,818.9	890.9	4,709.8	4,606.4
Total non-current borrowings	4,401.6	890.9	5,292.5	5,114.0
Total borrowings outstanding	4,472.3	890.9	5,363.2	5,243.6

See section (b) for details of applicable interest rates.

Current borrowings by facility	Ref	2021	2020
		€m	€m
Non-recourse long-term project finance debt	2	-	1.9
Long-term bank borrowings	4	70.7	72.1
Private placement borrowings	5	-	55.6
		70.7	129.6

Non-current borrowings by facility	Ref	2021	2020
		€m	€m
ESB Eurobonds	1	3,568.2	3,542.1
Non-recourse long-term project finance debt	2	-	10.1
Non-recourse NIE Networks Sterling bonds	3	890.9	832.7
Long-term bank borrowings	4	580.3	494.8
Private placement borrowings	5	253.1	234.3
		5,292.5	5,114.0

None of the borrowings are secured against the Group assets.

ESB was rated A- from Standard & Poor's (outlook stable) and A3 (equivalent to A-) from Moody's (outlook stable).

1. ESB Eurobonds

The table below provides details of ESB Eurobonds included in borrowings at 31 December 2021:

Issuer	Value	Issue Date	Tenor	Coupon
ESB Finance DAC	Euro €300.0 million	November 2013	10 years	3.494%
ESB Finance DAC	Euro €500.0 million	June 2015	12 years	2.125%
ESB Finance DAC	Euro €600.0 million	June 2016	15 years	1.875%
ESB Finance DAC	Euro €500.0 million	January 2017	12 years	1.750%
ESB Finance DAC	Euro €500.0 million	November 2018	15 years	2.125%
ESB Finance DAC	Euro €100.0 million	April 2019	25 years	2.000%
ESB Finance DAC	Euro €700.0 million (Green Bond)[1]	June 2019 / July 2020	11 years	1.125%
ESB Finance DAC	Stg £325.0 million	January 2020	15 years	1.875%

[1]€500.0 million was issued in June 2019 and €200.0 million was issued in July 2020.

Notes to the Financial Statements

22. BORROWINGS AND OTHER DEBT (CONTINUED)

2. Non-recourse long-term project finance debt

This debt relates to a wind farm in Great Britain (GB).

3. Non-recourse NIE Networks Sterling Bonds

Issuer	Value	Issue Date	Tenor	Coupon
NIE Networks Limited	Stg £400.0 million	June 2011	15 years	6.375%
NIE Networks Limited	Stg £350.0 million	September 2018	7 years	2.500%

4. Long-term bank borrowings

Issuer	Balance at 31 December 2021	Balance at 31 December 2020
€200 million European Investment Bank (EIB) to support renewable connections to the electricity network in the southwest of Ireland	Euro €178.8 million	Euro €200.0 million
Other Long term bank borrowings of floating rate debt borrowed on a bilateral basis (apart from above €200million)	Euro €29.2 million	Euro €43.7 million
€150.0 million European Investment Bank (EIB) to support the roll out of Smart Meters in Ireland	Euro €150 million	0
€1.4 billion revolving credit facility (with a syndicate of 14 banks)	0	0
Other EIB fixed rate debt	Euro €296.7 million	Euro €327.0 million

A €200.0 million facility with the European Investment Bank (EIB) to support renewable connections to the electricity network in the southwest of Ireland. €178.8 million of this facility was drawn down at 31 December 2021 (2020: €200.0 million).

A €150.0 million facility with the European Investment Bank (EIB) to support the roll out of Smart Meters in Ireland was signed in August 2020 and was drawn down in full at 31 December 2021 (2020 €nil).

In February 2020 ESB entered into a new €1.4 billion Sustainability linked Revolving Credit Facility up to February 2025 with a group of fourteen international banks. This replaced the previous €1.44 billion facility signed in 2015. In December 2021 this facility was extended to February 2027. €nil of this facility was drawdown at 31 December 2021 (2020: €nil).

5. Private placement borrowings

	Balance at 31 December 2021	Balance at 31 December 2020	Issue Date	Maturity Date	Coupon
First Private Placement Senior unsecured notes	USD $273.5 million	USD $273.5 million	December 2003	December 2023	6.050%
	Stg £10million	Stg £10million	December 2003	December 2023	6.000%
Second Private Placement Senior unsecured notes	Stg £nil	Stg £50million	June 2009	June 2021	7.310%

The private placement debt and certain other facilities have conditions which require ESB to maintain certain interest cover and asset covenants. At 31 December 2021 ESB is fully in compliance with all the covenant requirements associated with the private placement debt and other facilities.

Hedge of net investment in foreign operations

Included in 2020 borrowings above were Sterling denominated bank loans, which have been designated as a hedge of the Group's investment in a sterling denominated subsidiary in the United Kingdom. These loans were repaid in full during the year ended 31 December 2020, as outlined below:

Sterling denominated loans designated as a hedge of Group's investment in subsidiary	2021 €m	2020 €m
Value at 1 January	-	22.4
Repayments in year	-	(21.6)
Gain / (loss) on translation to euro	-	(0.8)
Value at 31 December	-	-
Loss on translation of intragroup Euro loan to subsidiary (taken to OCI)	-	(0.7)

Notes to the Financial Statements

22. BORROWINGS AND OTHER DEBT (CONTINUED)

PARENT	RECOURSE BORROWINGS 2021 Total €m	2020 Total €m
Current borrowings		
- Repayable by instalments	70.7	72.6
- Repayable other than by instalments	-	55.1
Total current borrowings	70.7	127.7
Non-current borrowings		
- Repayable by instalments		
Between one and two years	75.3	69.4
Between two and five years	173.1	194.5
After five years	334.3	233.6
	582.7	497.5
- Repayable other than by instalments		
Between one and two years	250.8	(0.6)
Between two and five years	-	232.2
	250.8	231.6
Total non-current borrowings	833.5	729.1
Total borrowings outstanding	904.2	856.8

(a) Funding and liquidity management

The principal liquidity risks faced by the Group relate to cash flow requirements arising from day-to-day operations, maturing debt obligations and the funding of capital investment programmes. The Group's treasury function manages this risk through a combination of liquid investments, cash and cash equivalents and undrawn committed bank facilities. The Group negotiates facilities with relationship banks and debt capital markets to pre-fund, or pre-hedge, any funding requirements arising from maturing debt, capital expenditure and general business requirements.

At 31 December 2021 the Group had over €1.9 billion available in cash or cash equivalents and committed bank facilities, ensuring liquidity demands can be met as required. The committed bank facilities include a syndicated loan facility with a large number of well-rated financial institutions. The Group successfully raised a €500.0 million green bond after the balance sheet date (see note 33).

The Group's debt management strategy targets a debt portfolio profile with a diverse mix of counterparties, funding sources and maturities. Structured non-recourse and limited recourse financing is used where appropriate, taking into account both funding costs and risk mitigation.

The maturity profile of the carrying amount of the Group's borrowings, and the expiry of material undrawn committed bank borrowing facilities are as follows:

	Drawn Debt - Group		Drawn Debt - Parent		Undrawn Facility - Group and Parent	
Maturing	2021 €m	2020 €m	2021 €m	2020 €m	2021 €m	2020 €m
In one year or less	70.7	129.6	70.7	127.7	-	-
Between one and two years	328.4	71.4	326.1	68.8	-	-
Between two and five years	1,361.4	1,120.1	173.1	426.7	1,400.0	1,400.0
In more than five years	3,602.7	3,922.5	334.3	233.6	-	-
	5,363.2	5,243.6	904.2	856.8	1,400.0	1,400.0

Notes to the Financial Statements

22. BORROWINGS AND OTHER DEBT (CONTINUED)

(a) Funding and liquidity management (continued)

The following table sets out the contractual maturities of Group borrowings, including the associated interest payments. Borrowings with a carrying value of €4,459.1 million (31 December 2020: €4,386.9 million) relate to borrowings of subsidiaries in the Group.

	Carrying amount	Contractual cash outflows / (inflows) - net	Within 1 year	1 - 2 years	2 - 5 years	More than 5 years
	€m	€m	€m	€m	€m	€m
31 December 2021						
Recourse borrowings	4,472.3	5,229.1	168.9	419.6	695.9	3,944.7
Non-recourse borrowings	890.9	1,086.8	40.8	40.8	1,005.2	-
Total borrowings	**5,363.2**	**6,315.9**	**209.7**	**460.4**	**1,701.1**	**3,944.7**
31 December 2020						
Recourse borrowings	4,398.9	5,227.4	227.7	162.8	968.4	3,868.5
Non-recourse borrowings	844.7	1,067.4	40.4	40.4	510.4	476.2
Total borrowings	5,243.6	6,294.8	268.1	203.2	1,478.8	4,344.7

(b) Interest rate risk management

The Group's interest rate policy was updated in 2021 and the target is to have a significant majority of its debt at fixed (or inflation linked) interest rate to maturity, with a minimum of 60% fixed (or inflation linked) at all times. This is achieved either by borrowing directly at fixed interest rates or via interest rate swaps. At 31 December 2021, 99.6% of the Group's debt was fixed to maturity or inflation linked (31 December 2020: 96.3%). The fair value of interest rate swaps is disclosed in note 23.

In respect of interest bearing financial liabilities, the following table indicates their effective interest rates at the balance sheet date taking into account the effect of interest rate swaps and cross currency swaps:

	Effective interest rate	Total	Within 1 year	1-2 years	2-5 years	More than 5 years
	%	€m	€m	€m	€m	€m
Private placement borrowings (fixed interest rate)	**6.15%**	**253.1**	-	253.1	-	-
Non-recourse borrowings (fixed interest rate)	**4.57%**	**890.9**	-	-	890.9	-
Other long-term borrowings (fixed and variable interest rate)	**2.02%**	**4,219.1**	70.6	75.4	470.6	3,602.5

Included within other long-term borrowings in this analysis are floating rate liabilities of €208 million (31 December 2020: €244 million).

The effective interest rate on the private placement borrowings has been fixed through the use of cross currency swaps and interest rate swaps. Inflation linked swaps are included at equivalent nominal interest rate levels.

Notes to the Financial Statements

22. BORROWINGS AND OTHER DEBT (CONTINUED)

(b) Interest rate risk management (continued)

In managing interest rate risk, the Group aims to reduce the impact of short-term fluctuations on the Group's earnings. Over the longer term, however, permanent changes in interest rates will have an impact on consolidated earnings. It is estimated that a general increase of 50 basis points in interest rates (and corresponding real interest rates) for the year would have increased profit before taxation and reduced equity by the amounts shown below. This analysis assumes that all other variables, in particular foreign currency rates, remain constant, including the assumption that there is no change in inflation rates.

	31 December 2021		31 December 2020	
	50 bp increase gain / (loss)	**50 bp decrease gain / (loss)**	50 bp increase gain / (loss)	50 bp decrease gain / (loss)
	€m	**€m**	€m	€m
Profit before taxation				
Interest payable	**(0.6)**	**0.0**	(0.7)	0.2
Fair value movements on financial instruments	**51.6**	**(54.5)**	53.3	(56.7)
Other comprehensive income				
Fair value gains / (losses)	**10.2**	**(10.7)**	3.2	(3.4)

The following assumptions were made in respect of the sensitivity analysis above:

- the balance sheet sensitivity to interest rates analysis, conducted on behalf of ESB and its wholly owned subsidiaries inclusive of NIE Networks, relates only to derivative financial instruments, as debt and other deposits are carried at amortised cost and so their carrying value does not change as interest rates move;
- the sensitivity of accrued interest to movements in interest rates is calculated on net floating rate exposures on debt, deposits and derivative instruments;
- derivatives designated as cash flow hedges against movements in interest rates are assumed to be fully effective, recorded fully within equity with no impact on the income statement;
- changes in the carrying value of derivative financial instruments not in hedging relationships affect the income statement only; and
- the floating leg of any swap or any floating rate debt is treated as not having any interest rate already set, therefore a change in interest rates affects a full 12-month period for the accrued interest portion of the sensitivity calculations.

(c) Reconciliation of external borrowings

GROUP

2021 Debt Facilities	Balance at 1 January	Proceeds	Repayments	Effects of foreign exchange	Other	Balance at 31 December
	€m	€m	€m	€m	€m	**€m**
ESB Eurobonds	3,542.1	-	-	24.5	1.6	**3,568.2**
Non-recourse long-term project finance debt	12.0	-	(13.0)	0.5	0.5	**-**
Non-recourse NIE Networks Sterling Bonds	832.7	-	-	57.7	0.5	**890.9**
Long-term bank borrowings	566.9	150.1	(73.7)	6.9	0.8	**651.0**
Private placement borrowings	289.9	-	(58.2)	21.4	-	**253.1**
Total	**5,243.6**	**150.1**	**(144.9)**	**111.0**	**3.4**	**5,363.2**

2020 Debt Facilities	Balance at 1 January	Proceeds	Repayments	Effects of foreign exchange	Other	Balance at 31 December
	€m	€m	€m	€m	€m	€m
ESB Eurobonds	3,296.3	572.2	(309.1)	(18.9)	1.6	3,542.1
Non-recourse long-term project finance debt	14.6	-	(1.9)	(0.8)	0.1	12.0
Non-recourse NIE Networks Sterling bonds	878.5	-	-	(46.2)	0.4	832.7
Long-term bank borrowings	729.0	-	(155.5)	(7.0)	0.4	566.9
Private placement borrowings	314.0	-	-	(24.0)	(0.1)	289.9
Total	5,232.4	572.2	(466.5)	(96.9)	2.4	5,243.6

Notes to the Financial Statements

22. BORROWINGS AND OTHER DEBT (CONTINUED)

PARENT

2021 Debt Facilities	Balance at 1 January	Proceeds	Repayments	Effects of foreign exchange	Other	Balance at 31 December
	€m	€m	€m	€m	€m	€m
Long-term bank borrowings	566.9	150.0	(73.6)	7.0	0.8	651.1
Private placement borrowings	289.9	-	(58.2)	21.4	-	253.1
Total	**856.8**	**150.0**	**(131.8)**	**28.4**	**0.8**	**904.2**

2020 Debt Facilities	Balance at 1 January	Proceeds	Repayments	Effects of foreign exchange	Other	Balance at 31December
	€m	€m	€m	€m	€m	€m
Long-term bank borrowings	729.0	-	(155.5)	(7.0)	0.4	566.9
Private placement borrowings	314.0	-	-	(24.0)	(0.1)	289.9
Total	1,043.0	-	(155.5)	(31.0)	0.3	856.8

Notes to the Financial Statements

23. DERIVATIVE FINANCIAL INSTRUMENTS

(a) Fair value by class of derivative financial instrument

Derivative financial instruments are carried at fair value. The fair value of a financial instrument is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The method used to calculate the fair value of the Group's financial instruments is discounted cash flow analysis, using a zero-coupon discount rate and reflecting counterparty credit risk. This method enables the Group to discount the cash flows at a rate equal to the prevailing market rate of interest taking into account maturity and credit margin.

The fair values of financial instruments, grouped by class of instrument, are as follows:

	2021				
GROUP	Non-current assets	Current assets	Non-current liabilities	Current liabilities	Total
	€m	€m	€m	€m	€m
Interest rate swaps	0.1	-	(2.6)	(6.1)	(8.6)
Inflation linked interest rate swaps	-	-	(694.9)	(25.7)	(720.6)
Currency swaps	6.2	-	(20.8)	-	(14.6)
Foreign exchange contracts	4.7	11.5	(7.5)	(6.5)	2.2
Forward fuel price contracts	75.3	584.2	(79.3)	(608.1)	(27.9)
	86.3	**595.7**	**(805.1)**	**(646.4)**	**(769.5)**

	2020				
	Non-current assets	Current assets	Non-current liabilities	Current liabilities	Total
	€m	€m	€m	€m	€m
Interest rate swaps	3.4	0.4	(1.6)	-	2.2
Inflation linked interest rate swaps	-	-	(571.3)	(21.2)	(592.5)
Currency swaps	-	-	(19.4)	-	(19.4)
Foreign exchange contracts	1.4	2.7	(3.5)	(4.6)	(4.0)
Forward fuel price contracts	3.5	166.5	(9.1)	(166.9)	(6.0)
	8.3	169.6	(604.9)	(192.7)	(619.7)

	2021				
PARENT	Non-current assets	Current assets	Non-current liabilities	Current liabilities	Total
	€m	€m	€m	€m	€m
Interest rate swaps	0.1	3.1	(2.5)	(6.2)	(5.5)
Currency swaps	6.2	-	(20.8)	-	(14.6)
Foreign exchange contracts	11.5	11.5	(7.4)	(6.1)	9.5
Forward fuel price contracts	73.1	538.9	(79.5)	(580.5)	(48.0)
	90.9	**553.5**	**(110.2)**	**(592.8)**	**(58.6)**

	2020				
	Non-current assets	Current assets	Non-current liabilities	Current liabilities	Total
	€m	€m	€m	€m	€m
Interest rate swaps	3.4	0.4	(0.5)	-	3.3
Currency swaps	-	-	(19.4)	-	(19.4)
Foreign exchange contracts	3.4	2.7	(3.5)	(4.6)	(2.0)
Forward fuel price contracts	3.3	126.7	(7.7)	(146.4)	(24.1)
	10.1	129.8	(31.1)	(151.0)	(42.2)

Notes to the Financial Statements

23. DERIVATIVE FINANCIAL INSTRUMENTS (CONTINUED)

(a) Fair value by class of derivative financial instrument (continued)

The Group decides at inception whether to designate financial instruments into hedge relationships for certain arrangements that meet the specific hedging accounting criteria of IFRS 9.

(i) Interest rate swaps

The Group has executed interest rate swaps of Stg£395.0 million (2020: Stg£454.0 million) in connection with a certain portion of its borrowings held by the Parent and ESB Finance DAC and certain debt held in other wind farms assets within the Group. These have all been classified as cash flow hedges.

For interest rate swaps, the fair value takes into account the fixed, floating and market rates prevailing at the balance sheet date. As interest rate swaps are marked to market at 31 December 2021, their carrying value is equal to their fair value.

The fair value of the interest rate swaps has decreased by €10.8 million. The movement reflects negative mark to market movements in the underlying swaps of €12.3 million and expiration on swaps with a mark to market position of €1.5 million during the year.

(ii) Inflation linked interest rate swaps

Inflation linked interest rate swaps with a fair value on acquisition of €272.5 million were acquired in December 2010 as part of the purchase of the NIE Networks business. The inflation linked interest rate swaps did not qualify for hedge accounting under IFRS 9 on acquisition of the NIE Networks business. The fair value of the inflation linked interest rate swaps is affected by relative movements in interest rates and in market expectations of future retail price index (RPI) movements in the United Kingdom (UK).

On 12 April 2021 the Group, and its counterparty banks, together agreed a restructuring of the swaps, including amendments to certain terms. These changes included an extension of the date of the mandatory early termination clause from 22 June 2022 to 22 December 2025 for the swaps maturing 22 December 2036. The restructuring also included amendments to the fixed interest rate element of the swaps, and a change to the number of swap counterparties.

Arising from movements in forward interest rates, UK RPI forward prices, foreign currency exchange rates and payments during the year, the fair value of the liability has increased by €128.1 million on these swaps in the year ended 31 December 2021 (2020: fair value of the liability decreased by €2.9 million). The movement reflects negative mark to market movements in the underlying swaps of €113.2 million (2020: negative movement €47.4 million), reflected in finance costs in the income statement (note 9) and payments of €28.1 million (2020: €17.1 million) arising under the swaps during the year. In addition, negative translation movements of €43.0 million (2020: positive translation movements of €33.2 million) during the year on translation of the swaps from sterling to euro are reflected in the OCI.

(iii) Currency swaps

The fair value of currency swaps are affected by movements in foreign exchange and interest rates. ESB's currency swaps are primarily classified as cash flow hedges and relate mainly to the cross-currency swaps entered into in connection with the private placement debt, which is described in note 22. These cross-currency swaps were entered into in order to swap US dollar and sterling interest and principal repayments on the underlying debt to euro, thereby hedging the risk on these payments over the years to maturity from 2010 to 2023.

No ineffectiveness under the meaning of IFRS 9 arose on the currency swaps during the year (2020: €nil). Separately included in the income statement for the year 31 December 2021 is a loss of €18.2 million (2020: gain of €20.5 million) arising on cross currency swaps which is substantially offset by movements in the translation of the underlying hedged foreign currency borrowings at the prevailing exchange rates.

In addition to foreign exchange contracts entered into in relation to the Group's borrowings, the Group has entered into foreign exchange contracts in relation to energy costs, Long Term Service Agreements (LTSAs) and fuel purchase requirements (which are in US dollar and sterling). These contracts have maturities extending until 2024. Total positive fair value movements of €9.6 million (2020: negative movements of €16.6 million) were recognised during the year in relation to such foreign exchange contracts, of which a negative fair value movement of €0.6 million (2020: positive movements of €0.2 million) was recognised through OCI and a positive fair value movement of €10.2 million (2020: negative movement of €16.8 million) was recognised in the income statement.

Fair value hierarchy

Further information on the methods of valuing financial instruments is included in note 29.

Interest Rate Benchmark Reform

On 5 March 2021, the UK's Financial Conduct Authority announced that all LIBOR settings will, as of certain specified future dates, either cease to be provided by any administrator or no longer be representative of the market and economic reality that they are intended to measure and that such representativeness will not be restored.

As at 31 December 2021, ESB had either transitioned or was in the process of transitioning it's GBP loans and intercompany loans from referencing LIBOR to SONIA, in accordance with the Loan Market Association Fallback Protocol. As at 31 December 2021, ESB had transitioned it's GBP derivative portfolio from LIBOR to SONIA, in accordance with the International Swaps and Derivative Assocation Fallback Protocol. In Europe, the Eonia-€STR transition, which is purely technical given the fixed link between these two indices, was finalised at the end of December 2021.

The following table contains details of all of the financial instruments the Group holds at 31 December 2021 which reference GBP LIBOR and have not yet transitioned to SONIA or an alternative interest rate benchmark. As part of this process the Group amended the facility agreement of €1,400.0 million to allow for LIBOR replacement, the facility is undrawn at year end.

	Carrying vale at 31 December 2021		Of which have yet to transition to an alternative benchmark interest rate as at 31 December 2021	
	Assets	Liabilities	Assets	Liabilities
	€m	€m	€m	€m
Long-term debt	-	(1,494.7)	-	(29.2)

Notes to the Financial Statements

23. DERIVATIVE FINANCIAL INSTRUMENTS (CONTINUED)

(b) Funding and liquidity management - maturity of derivative financial instruments

The following table sets out the contractual maturities of derivative financial instruments, including the associated undiscounted net cash flows attributable to them. These derivative financial instruments are expected to impact profit or loss over a time period similar to the cash outflows. Net derivative financial instrument liabilities of €710.9 million (2020: €577.5 million) are included in the Group balances below, but do not comprise part of the Parent's assets and liabilities as they are not held directly by the Parent. See note 29 (b) for further analysis of Group and Parent financial assets and liabilities.

31 December 2021	Carrying amount	Contractual cash inflows / (outflows) - net	Within 1 year	1 - 2 years	2 - 5 years	More than 5 years
	€m	€m	€m	€m	€m	€m
Interest rate swaps	0.1	0.1	0.1	-	-	-
Currency swaps	6.2	6.8	0.8	6.0	-	-
Foreign exchange contracts	16.2	21.4	18.0	2.5	0.9	-
Forward fuel price contracts	659.5	657.2	584.2	56.8	16.2	-
Total assets	**682.0**	**685.5**	**603.1**	**65.3**	**17.1**	**-**
Interest rate swaps	(8.6)	(10.1)	(2.2)	(3.2)	(4.4)	(0.3)
Inflation linked interest rate swaps	(720.6)	(755.8)	(25.4)	(191.8)	(348.3)	(190.3)
Currency swaps	(20.8)	(19.4)	(7.0)	(4.6)	(7.8)	-
Foreign exchange contracts	(13.9)	(15.5)	(8.1)	(1.6)	(5.8)	-
Forward fuel price contracts	(687.6)	(685.5)	(608.0)	(65.0)	(12.5)	-
Total liabilities	**(1,451.5)**	**(1,486.3)**	**(650.7)**	**(266.2)**	**(378.8)**	**(190.6)**
Net derivative assets / (liabilities)	**(769.5)**	**(800.8)**	**(47.6)**	**(200.9)**	**(361.7)**	**(190.6)**
31 December 2020						
Interest rate swaps	3.8	4.0	1.9	1.2	0.9	-
Foreign exchange contracts	4.1	4.5	3.8	0.7	-	-
Forward fuel price contracts	170.0	170.0	166.4	2.9	0.7	-
Total assets	177.9	178.5	172.1	4.8	1.6	-
Interest rate swaps	(1.6)	(1.7)	(0.5)	(0.4)	(0.7)	(0.1)
Inflation linked interest rate swaps	(592.5)	(598.5)	(21.2)	(577.3)	-	-
Currency swaps	(19.4)	(18.0)	(4.1)	(3.3)	(16.3)	5.7
Foreign exchange contracts	(8.1)	(8.6)	(5.2)	(0.6)	(2.8)	-
Forward fuel price contracts	(176.0)	(176.0)	(166.8)	(7.3)	(1.9)	-
Total liabilities	(797.6)	(802.8)	(197.8)	(588.9)	(21.7)	5.6
Net derivative assets / (liabilities)	(619.7)	(624.3)	(25.7)	(584.1)	(20.1)	5.6

Notes to the Financial Statements

23. DERIVATIVE FINANCIAL INSTRUMENTS (CONTINUED)

(c) Hedging Reserves

The Group's hedging reserves movements relate to the following hedging instruments:

	Cash flow hedging reserve[1]				
Hedging reserve (gains) / losses	**Cross-currency interest rate swaps**	**Interest rate swaps**	**Foreign exchange contracts**	**Forward fuel price contracts[2]**	**Total**
	€m	€m	€m	€m	€m
Net fair value movements	1.5	-	0.6	9.9	**12.0**
Net fair value movements for equity accounted investees	-	(67.2)	8.1	-	**(59.1)**
Transfers to the income statement	(8.6)	-	-	(15.6)	**(24.2)**
Deferred tax movements	0.9	17.1	(5.9)	0.7	**12.8**
Total (gains) / losses	**(6.2)**	**(50.1)**	**2.8**	**(5.0)**	**(58.5)**

1 The cash flow hedge reserve includes an amount of €2.5 million relating to the cost of hedging.
2 Contracts that link the forward electricity price more closely with forward fuel prices are presented net in forward fuel price contracts at 31 December 2021.

Hedge ineffectiveness
Hedge effectiveness is determined at the inception of the hedge relationship and through periodic prospective effectiveness assessments to ensure that an economic relationship exists between the hedged item and the hedging instrument.

Foreign exchange contracts

For hedges of foreign currency purchases, the Group enters into hedge relationships where the critical terms of the hedging instrument match exactly with the terms of the hedged item. The Group performs a qualitative assessment of effectiveness. If changes in circumstances affect the terms of the hedged item such that the critical terms no longer match exactly with the critical terms of the hedging instrument, the Group uses the hypothetical derivative method to determine ineffectiveness.

In hedges of foreign currency purchases, ineffectiveness may arise if the timing of the forecast transaction changes from what was originally estimated, or if there are changes in credit risk.

Forward fuel and electricity contracts

For hedges of forward fuel and forward electricity contracts, the Group enters into hedge relationships where the critical terms of the hedging instrument match with the terms of the hedged item. Ineffectiveness may arise if the timing or quantity of the forecast transaction changes from what was originally estimated, or if there are changes in credit risk. Hedge ineffectiveness for forward fuel and electricity contracts is measured using the hypothetical derivative method.

Within its regular course of business, the Group routinely enters into sale and purchase contracts for commodities, including gas and electricity. Where the contract was entered into and continues to be held for the purposes of receipt or delivery of the commodities in accordance with the Group's expected sale, purchase or usage requirements, the contracts are designated as own use contracts and are accounted for as executory contracts. These contracts are therefore not within the scope of IFRS 9 - Financial Instruments.

Cross-currency interest rate swaps

The Group enters into interest rate swaps that have similar critical terms as the hedged item, such as reference rate, payment dates, maturities and notional amount. The hedged item is identified as a proportion of the outstanding amount up to the notional amount of the swaps. Hedge ineffectiveness for interest rate swaps is measured using the same principals as for hedges of foreign exchange contracts. It may occur primarily due to differences in critical terms between the interest rate swaps and the loans.

Notes to the Financial Statements

23. DERIVATIVE FINANCIAL INSTRUMENTS (CONTINUED)

(d) Effects of hedge accounting on the financial position and performance

The effects of the hedging instruments for which hedge accounting has been used (before taxation) on the Group's financial position and performance are as follows:

	USD Cross-currency interest rate swaps	**GBP Cross-currency interest rate swaps**	**Forward fuel price contracts - Gas (Level 3)[2]**	**Forward electricity price contracts (Level 3)[2]**
Carrying amount unit	€m	€m	€m	€m
Carrying amount - asset / (liability) as at 31 December 2021	5.0	(20.8)	(48.8)	49.3
Nominal unit	$m	£m	Gwh	Gwh
Notional amount	173.5	281.1	2,388.4	2,388.4
Maturity date - earliest	Dec-23	Nov-28	Jan-21	Jan-21
Maturity date - latest	Dec-23	Nov-28	Dec-24	Dec-24
Hedge ratio[1]	1:1	1:1	1:1	1:1
Change in fair value unit	€m	€m	€m	€m
Change in fair value of outstanding hedging instruments since 1 January	12.8	(16.2)	(32.4)	35.7
Change in value of hedged item used to determine hedge effectiveness	(12.8)	16.2	32.4	(35.7)
Unit of rate / price	Interest rate % / FX rate	Interest rate % / FX rate	€/Mwh	€/Mwh
Weighted average hedged rate / price	5.69%/ 1.19	3.25%/ 0.8882	164.0	164.0

1 The hedge ratio is the quantity of hedging instrument per quantity of hedged item. The appropriate hedge ratio is determined based on specific factors such as volumes of commodities required, contracted foreign exchange and interest rate exposures.

2 Weighted average hedged rate / price is not applicable to the Level 3 contracts above. Level 3 hedge instruments link electricity more closely to fuel inputs.

Notes to the Financial Statements

24. PENSION LIABILITIES

The Group operates a number of pension Schemes for staff in both the Republic of Ireland, Northern Ireland and the United Kingdom (UK). Pension arrangements in respect of staff in the Republic of Ireland including ESB employees seconded overseas are set out in section (a) below. Pension arrangements in respect of staff in the UK and Northern Ireland are described in section (b) and (c).

(a) Parent and Group - Republic of Ireland

(i) ESB Defined Benefit Pension Scheme (The Scheme)

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

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

History

Historically the contributions of both ESB and members have been fixed by the Scheme regulations for long periods. On a number of occasions since the early 1980s, a deficit in the Scheme has been reported by the Scheme Actuary. On each occasion ESB has, in accordance with its obligations under the Scheme rules, consulted with the Committee, the Trustees and the Actuary. Following discussions with the unions, deficits were resolved by increasing contributions by both ESB and pension Scheme members.

The 2010 Pensions Agreement followed a 31 December 2008 actuarial deficit of €1,957.0 million. It was recognised that it was not feasible to address such a deficit through increased contributions. Negotiations between ESB and ESB Group of Unions (employee representatives) concluded with the landmark 2010 Pensions Agreement (approved by employees in July 2010 and formally ratified by the Board of ESB on 20 October 2010). The main features of the Agreement included the introduction of a Career Average Revalued Earnings (CARE) pension model for benefits earned after 1 January 2012, pension and pay freezes, the cessation of the historic link between salary and pension increases, and the application of a solvency test in relation to any future pension increases. The fixed contribution rates for the employer and for Scheme members were not changed. Under the Agreement 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. In 2020, the remaining balance of this amount was paid to the Trustees of the Scheme by ESB. Under the Agreement membership of the Scheme has been closed to new joiners. The changes brought about by the 2010 Pensions Agreement were subsequently approved by the Minister.

As part of the Triennial Actuarial Valuation, the Scheme Actuary confirmed during 2021 that on an actuarial basis, the Scheme's assets were broadly in balance with its liabilities at the end of 2020. Should an actuarial deficit arise in the future, the obligation on ESB, as set out in the Scheme regulations, to consult with the parties to the Scheme remains unchanged. However, there was a shortfall in a wind-up scenario under the Minimum Funding Standard (MFS). Refer to Wind Up / Minimum Funding Standard Valuation section below.

ESB does not intend that any further contributions, other than those currently provided for under the scheme regulations (described below) will be made.

Definitions

There are three different methods of assessing the financial status of the Scheme:
• Ongoing Actuarial Valuation.
• Minimum Funding Standard, under the Pensions Act.
• Accounting, as set out in International Accounting Standard 19, Employee Benefits.

Each of these methods assesses the Scheme from specific perspectives using assumptions and projections which may differ.

Ongoing Actuarial Valuation

This valuation method assumes that both the Scheme and ESB continue in existence for the foreseeable future - it is not a wind-up valuation. As part of the Triennial Actuarial Valuation, the Scheme Actuary confirmed in 2021 that the Scheme was broadly in balance on an ongoing actuarial basis at the end of 2020, i.e. that based on the assumptions made, the Scheme is projected to be able to meet its obligations as they fall due.

Wind Up / Minimum Funding Standard Valuation

The Pensions Act requires the Trustees of the Scheme to also assess whether it could meet a certain prescribed standard, known as the Minimum Funding Standard (MFS). This assesses whether, if the Scheme were wound up on a specified theoretical valuation date, it could secure the benefits on that date. It should be noted that ESB does not envisage the winding up of the Scheme.

The Scheme Actuary confirmed during 2021 that on an actuarial basis, the ESB Defined Benefit (DB) Scheme's assets were broadly in balance with its liabilities at the end of 2020. There was however a shortfall in a wind-up scenario in a test known as the Minimum Funding Standard (MFS). The parties to the Scheme agreed a Funding Proposal during 2021 which aimed to address the regulatory shortfall by the end of 2021. This Proposal was approved by the Department of Environment, Climate and Communications before it was signed by the Trustees, ESB and the Scheme Actuary and submitted to the Pensions Authority in August 2021. The Funding Proposal assumed a change in the Scheme's normal retirement age to 67 and then 68 in line with the planned trajectory of State Pension Age (SPA) before new legislation was passed in December 2020 keeping SPA at 66 and a Commission on Pensions was set up to review SPA. The Funding Proposal included a commitment by ESB to review the findings of the Commission on Pensions and, if necessary, bring forward an amending scheme to give effect to retirement ages of 67/68. The Funding Proposal expired at the end of 2021 and in line with MFS timeline is currently being assessed to determine whether it fulfils MFS requirements.

ESB does not intend that any further contributions, other than the normal on-going contributions will be made (up to 16.4% of pensionable salary, in addition to employee contributions of up to 8.5%).

Notes to the Financial Statements

24. PENSION LIABILITIES (CONTINUED)

(a) Parent and Group - Republic of Ireland (continued)

(i) ESB Defined Benefit Pension Scheme (The Scheme) (continued)

Accounting

IAS 19 (revised) Employee Benefits is the relevant accounting standard to determine the way post-employment benefits should be reflected in ESB's financial statements.

The financial statements reflect the following obligations to the Scheme:

- Ongoing contributions - these are recognised in the income statement as incurred. Any unpaid amounts at year end are recognised as liabilities on the balance sheet.
- Obligations of €94.7 million to the Scheme are also included on the balance sheet, made up of:
  - Past service contributions – the on-going rate of contribution by ESB includes a contribution towards past service accrued in 2010. The present value of future contributions in respect of that past service are recognised on the balance sheet. Amounts yet to be paid are subject to an annual financing charge and this is expensed in the income statement.
  - Past Voluntary Severance (VS) Programmes – in 2010 ESB recognised a future fixed commitment in respect of staff who had left the Company under previous VS programmes. ESB will make pension contributions in respect of those staff and the fair value of those future contributions are also recognised on the balance sheet. Amounts yet to be paid are subject to an annual financing charge and this is expensed in the income statement.

(ii) ESB Defined Contribution Pension Scheme

ESB also operates an approved defined contribution Scheme called ESB Defined Contribution Pension Scheme for employees of ESB subsidiary companies in the Republic of Ireland and, from 1 November 2010, new staff of the Parent. Contributions are paid by the members and the employer at fixed rates. The benefits secured at retirement reflect each employee's accumulated fund and the cost of purchasing benefits at that time. Death benefits are insured on a Group basis and may be paid in the form of a lump sum and/or survivor's pension. The pension charge for the year represents the defined employer contribution and amounted to €17.0 million (2020: €15.8 million).

(b) FM United Kingdom Stakeholder Scheme

In addition, ESB operates a stakeholder pension scheme in the UK for all its GB employees. Contributions are paid by the members and the employer at fixed rates. The benefits secured at retirement reflect each employee's accumulated fund and the cost of purchasing benefits at that time. Death benefits are insured on a Group basis and may be paid in the form of a lump sum and/or survivor's pension. The assets of this Scheme are held in individual stakeholder accounts managed by Legal & General Assurance Society Limited. The pension charge for the year represents the defined employer contribution and amounted to €0.7 million (2020: €0.8 million).

(c) Northern Ireland Electricity Pension Scheme

The majority of the employees in NIE Networks are members of the Northern Ireland Electricity Pension Scheme (the NIE Networks Scheme). This has two sections: Options, which is a money purchase arrangement whereby the employer generally matches the members' contributions up to a maximum of 7% of salary, and Focus which provides benefits based on pensionable salary at retirement or earlier exit from service. Focus has been closed to new members since 1998 and therefore under the projected unit credit method the current service cost for members of this section as a percentage of salary will increase as they approach retirement age. The assets of the NIE Networks Scheme are held under trust and invested by the Trustees on the advice of professional investment managers.

UK legislation requires that pension schemes are funded prudently. The last funding valuation of the Focus section of the scheme was carried out by a qualified actuary as at 31 March 2020 and showed a deficit of €238.8 million. The Company is paying deficit contributions of €22.6 million per annum (increasing in line with inflation) from 1 April 2018. The NIE Networks also pays contributions of 43.0% of pensionable salaries in respect of current accrual plus €104,000 monthly expenses (2020: 39.6% and €90,000 respectively), with active members paying a further 6% of pensionable salaries.

Profile of the Scheme

The net liability includes benefits for current employees, former employees and current pensioners. Broadly, about 20% of the liabilities are attributable to current employees, 5% to former employees and 75% to current pensioners. The Scheme duration is an indication of the weighted average time until benefit payments are made. For the NIE Networks Scheme, the duration is around 15 years (2020: 14 years) based on the last funding valuation.

Financial assumptions

The valuation of the Focus section of the NIE Networks Scheme by independent actuaries for the purpose of IAS 19 disclosures is based on the following assumptions:

	% at 31 December 2021	% at 31 December 2020
Rate of interest applied to discount liabilities[1]	**1.80**	1.30
Price inflation (CPI in the United Kingdom)	**2.80**	2.30
Rate of increase of pensionable salaries	**3.50**	3.00
Rate of increase of pensions in payment	**2.80**	2.30

[1] The discount rate used in the calculation of the pension liability at 31 December 2021 was 1.8% (2020: 1.3%). This was determined by reference to market yields as at that date on high quality corporate bonds. The currency and term of the corporate bonds was consistent with the currency and estimated term of the post-employment benefit obligations.

Notes to the Financial Statements

24. PENSION LIABILITIES (CONTINUED)

(c) Northern Ireland Electricity Pension Scheme (continued)

Mortality assumptions

The assumptions relating to life expectancy at retirement for members are set out below. These assumptions are based on standard actuarial mortality tables and include an allowance for future improvements in life expectancy.

	At 31 December 2021		At 31 December 2020	
	Males Years	**Females Years**	Males Years	Females Years
Current pensioners at aged 60	**26.7**	**29.0**	26.7	28.9
Future pensioners currently aged 40 (life expectancy age 60)	**28.2**	**30.5**	28.1	30.4

Pension assets and liabilities

The assets and liabilities in the Focus section of the NIE Networks Scheme are:

	At 31 December 2021	At 31 December 2020
	€m	€m
Equities – quoted	**120.7**	304.4
Bonds – quoted	**771.1**	276.4
Multi-asset credit investments	**247.5**	309.2
Diversified growth – quoted	**350.1**	428.0
Cash	**17.7**	25.0
Fair value of plan assets	**1,507.1**	1,343.0
Present value of funded obligations	**(1,513.8)**	(1,459.9)
Net deficit	**(6.7)**	(116.9)

History of experience gains and losses	At 31 December 2021	At 31 December 2020
	€m	€m
Change in benefit obligation		
Benefit obligation at the beginning of the year	**1,459.9**	1,449.2
Movement during the year:		
Current service cost	**6.9**	6.3
Interest cost	**19.3**	27.4
Plan members' contributions	**0.3**	0.3
Actuarial (gain) /loss - impact of financial assumption changes	**(4.4)**	161.7
Actuarial gain - experience loss	**-**	(29.0)
Benefits paid	**(68.6)**	(76.1)
Curtailment cost	**0.2**	0.2
Past service credit (gross)	**-**	(1.5)
Translation difference on benefit obligation in the year	**100.2**	(78.6)
Benefit obligation at the end of the year	**1,513.8**	1,459.9
Change in plan assets		
Fair value of plan assets at the beginning of the year	**1,343.0**	1,333.2
Movement during the year:		
Interest on plan assets	**17.9**	25.3
Actual returns on assets less interest	**94.0**	106.3
Employer contributions	**29.3**	28.7
Plan members' contributions	**0.3**	0.3
Actual admin expenses (incl. PPF levy and Bulk PIE) paid	**(1.6)**	(2.5)
Benefits paid	**(68.6)**	(76.1)
Translation difference on assets in the year	**92.8**	(72.2)
Fair value of plan assets at the end of the year	**1,507.1**	1,343.0
Actual return on plan assets for the year	**109.4**	131.6

The Group expects to make contributions of approximately €29.7 million to Focus in 2022.

Notes to the Financial Statements

24. PENSION LIABILITIES (CONTINUED)

(c) Northern Ireland Electricity Pension Scheme (continued)

Analysis of the amounts recognised in the employee costs as part of the employee benefit charge were as follows:	2021	2020
	€m	€m
Current service cost	**(6.9)**	(6.3)
Curtailment cost	**(0.2)**	(0.2)
Past service credit (net of expenses)	**-**	0.9
Actual admin expenses (incl. PPF levy and excl. Bulk PIE) paid	**(1.6)**	(1.9)
Total defined benefit charge in year	**(8.7)**	(7.5)

Analysis of the amounts recognised in the finance costs, as net pension scheme interest:	2021	2020
	€m	€m
Interest on pension scheme assets	**17.9**	25.3
Interest on pension scheme liabilities	**(19.3)**	(27.4)
Net pension scheme charge	**(1.4)**	(2.1)

Analysis of the amounts recognised in the statement of comprehensive income (excluding translation)	2021	2020
	€m	€m
Actual returns on assets less interest	**94.0**	106.3
Actuarial gain / (loss) on liabilities	**4.4**	(132.7)
Net actuarial gain / (loss)	**98.4**	(26.4)

Sensitivity analysis

Reasonably possible changes at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below.

	Impact on scheme liabilities (increase) / decrease	
Pension liability	**2021**	2020
	€m	€m
Discount rate (0.1% increase)	**21.7**	21.7
Inflation rate (0.1% increase)	**(20.6)**	(19.3)
Future mortality (1 year increase)	**(58.4)**	(58.3)

Although the analysis does not take account of the full distribution of cash flows expected under the plan, it does provide an approximation of the sensitivity of the assumptions shown.

Notes to the Financial Statements

25. LIABILITY - ESB PENSION SCHEME AND EMPLOYEE RELATED LIABILITIES

GROUP	Liability - ESB pension scheme	Employee related liabilities: Restructuring liabilities	Employee related liabilities: Other	Employee related liabilities: Total
	€m	€m	€m	€m
Balance at 1 January 2020	**392.6**	93.2	56.9	**150.1**
Movements during the year:				
Charged to the income statement	**-**	1.7	84.8	**86.5**
Utilised during the year	**(298.7)**	(22.5)	(76.9)	**(99.4)**
Financing charge	**12.4**	-	-	**-**
Translation differences	**-**	-	(0.1)	**(0.1)**
Balance at 31 December 2020	**106.3**	72.4	64.7	**137.1**
Balance at 1 January 2021	**106.3**	72.4	64.7	**137.1**
Movements during the year:				
(Credited) / charged to the income statement	**(5.2)**	-	93.0	**93.0**
Utilised during the year	**(11.0)**	(21.6)	(89.0)	**(110.6)**
Financing charge	**4.6**	-	-	**-**
Translation differences	**-**	-	0.3	**0.3**
Balance at 31 December 2021	**94.7**	50.8	69.0	**119.8**
Analysed as follows:				
Non-current liabilities	**84.2**	39.4	-	**39.4**
Current liabilities	**10.5**	11.4	69.0	**80.4**
Total	**94.7**	**50.8**	**69.0**	**119.8**

PARENT	Liability - ESB pension scheme	Employee related liabilities: Restructuring liabilities	Employee related liabilities: Other	Employee related liabilities: Total
	€m	€m	€m	€m
Balance at 1 January 2020	**392.6**	93.0	50.9	**143.9**
Movements during the year:				
Charge to the income statement	**-**	1.7	77.9	**79.6**
Utilised during the year	**(298.7)**	(22.4)	(72.3)	**(94.7)**
Financing charge	**12.4**	-	-	**-**
Balance at 31 December 2020	**106.3**	72.3	56.5	**128.8**
Balance at 1 January 2021	**106.3**	72.3	56.5	**128.8**
Movements during the year:				
(Credited) / charged to the income statement	**(5.2)**	-	87.7	**87.7**
Utilised during the year	**(11.0)**	(21.6)	(83.5)	**(105.1)**
Financing charge	**4.6**	-	-	**-**
Balance at 31 December 2021	**94.7**	50.7	60.7	**111.4**
Analysed as follows:				
Non-current liabilities	**84.2**	39.4	-	**39.4**
Current liabilities	**10.5**	11.3	60.7	**72.0**
Total	**94.7**	**50.7**	**60.7**	**111.4**

Liability - ESB pension scheme

See note 24 (a) part (i).

Restructuring liabilities

This provision represents the estimated cost of providing post-employment payments to former employees, other than those amounts covered by the pension scheme. It includes liabilities for continuing payments to employees who left under past voluntary severance initiatives, which are expected to be materially discharged by 2035. Expected future cash flows are discounted to the present value using long-term interest rates based on zero discount curve at the reporting date plus an appropriate credit spread.

Other

In accordance with the requirements of IAS 19 Employee Benefits, provision has been made for employee remuneration liabilities, including accrued holiday leave and performance related payments.

Notes to the Financial Statements

26. TRADE AND OTHER PAYABLES

	GROUP 2021	GROUP 2020	PARENT 2021	PARENT 2020
	€m	€m	€m	€m
Current payables:				
Progress payments on work in progress	**129.3**	107.8	**87.0**	73.3
Trade payables	**477.7**	227.9	**339.7**	131.9
Capital creditors	**123.5**	91.4	**86.5**	69.7
Other payables	**557.4**	92.1	**477.2**	63.4
Payroll taxes	**15.3**	14.5	**13.6**	13.5
Pay related social insurance	**6.5**	6.0	**5.5**	5.1
Value added tax	**60.1**	69.1	**15.7**	22.2
Accruals	**326.4**	146.5	**73.6**	30.8
Amounts owed to subsidiary undertakings	**-**	-	**4,986.9**	4,279.4
Accrued interest on borrowings	**67.3**	66.1	**42.3**	42.7
Total current payables	**1,763.5**	821.4	**6,128.0**	4,732.0
Non-current payables:				
Other payables	**9.3**	-	**-**	-
Total non-current payables	**9.3**	-	**-**	-
Total payables	**1,772.8**	821.4	**6,128.0**	4,732.0

Included within other payables is €260.6 million (2020: €55.0 million) relating to the net cash collateral amounts received in relation to exchange traded gas, carbon and power contracts. The amounts pledged cover initial margin and daily mark to market movements.

Other payables include amounts received in advance from customers.

Notes to the Financial Statements

27. DEFERRED INCOME

GROUP	Supply contributions and others	Deferred income	Total
	€m	€m	€m
Balance at 1 January 2020	1,307.4	40.2	**1,347.6**
Transfer from Progress payments on work in progress	109.6	-	**109.6**
Receivable	-	36.3	**36.3**
Released to the income statement	(80.9)	(30.8)	**(111.7)**
Translation differences	(20.1)	(1.6)	**(21.7)**
Balance at 31 December 2020	1,316.0	44.1	**1,360.1**
Balance at 1 January 2021	1,316.0	44.1	**1,360.1**
Transfer from Progress payments on work in progress	140.8	-	**140.8**
Receivable	-	22.1	**22.1**
Released to the income statement	(81.0)	(28.9)	**(109.9)**
Translation differences	33.3	2.0	**35.3**
Balance at 31 December 2021	1,409.1	39.3	**1,448.4**
Analysed as follows:			
Non-current liabilities	1,323.6	31.5	**1,355.1**
Current liabilities	85.5	7.8	**93.3**
Total	**1,409.1**	**39.3**	**1,448.4**

PARENT	Supply contributions and others	Deferred income	Total
	€m	€m	€m
Balance at 1 January 2020	901.3	-	**901.3**
Transfer from Progress payments on work in progress	81.3	-	**81.3**
Released to the income statement	(61.4)	-	**(61.4)**
Balance at 31 December 2020	921.2	-	**921.2**
Balance at 1 January 2021	921.2	-	**921.2**
Transfer from progress payment in work in progress	94.6	-	**94.6**
Released to the income statement	(63.1)	-	**(63.1)**
Balance at 31 December 2021	952.7	-	**952.7**
Analysed as follows:			
Non-current liabilities	887.5	-	**887.5**
Current liabilities	65.2	-	**65.2**
Total	**952.7**	-	**952.7**

Notes to the Financial Statements

28. PROVISIONS

GROUP	Asset retirement provision	Emissions provision	Other	Total
	€m	€m	€m	€m
Balance at 1 January 2020	289.3	114.2	69.0	**472.5**
Charged / (credited) to the income statement				
- Emission allowances	-	125.9	-	**125.9**
- Legal and other	-	-	10.6	**10.6**
- Asset retirement	89.7	-	-	**89.7**
Legal provision recognised	-	-	94.2	**94.2**
ESOP provision charged to equity (note 32)	-	-	0.9	**0.9**
Provision capitalised in the year (net)	83.9	-	23.7	**107.6**
Utilised in the year	(1.8)	(112.8)	(19.3)	**(133.9)**
Financing charge	2.1	-	(0.1)	**2.0**
Translation differences	(2.1)	(2.8)	(0.5)	**(5.4)**
Balance at 31 December 2020	461.1	124.5	178.5	**764.1**
Balance at 1 January 2021	461.1	124.5	178.5	**764.1**
Charged / (credited) to the income statement				
- Emission allowances	-	299.7	-	**299.7**
- Legal and other	-	-	(8.4)	**(8.4)**
- Asset retirement	(1.6)	-	-	**(1.6)**
Reduction in asset retirement provision capitalised	(10.2)	-	-	**(10.2)**
Reduction in legal flood provision	-	-	(15.9)	**(15.9)**
Onerous contract provision recognised on acquisition of So Energy	-	-	61.4	**61.4**
ESOP provision charged to equity (note 32)	-	-	36.5	**36.5**
Provision capitalised in the year (net)	-	-	14.7	**14.7**
Utilised in the year	(3.8)	(127.7)	(20.1)	**(151.6)**
Financing charge	5.0	-	-	**5.0**
Translation differences	3.1	4.7	2.9	**10.7**
Balance at 31 December 2021	453.6	301.2	249.6	**1,004.4**
Analysed as follows:				
Non-current liabilities	426.2	-	134.5	**560.7**
Current liabilities	27.4	301.2	115.1	**443.7**
Total	**453.6**	**301.2**	**249.6**	**1,004.4**

PARENT	Asset retirement provision	Emissions provision	Other	Total
	€m	€m	€m	€m
Balance at 1 January 2020	218.8	54.6	59.4	**332.8**
Charged / (credited) to the income statement				
- Emission allowances	-	70.0	-	**70.0**
- Legal and other	-	-	8.9	**8.9**
- Asset retirement	87.9	-	-	**87.9**
Provision capitalised in the year (net)	71.6	-	-	**71.6**
Legal provision recognised	-	-	94.2	**94.2**
ESOP provision charged to equity (note 32)	-	-	0.9	**0.9**
Utilised in the year	(1.7)	(57.0)	(17.4)	**(76.1)**
Financing charge	2.0	-	(0.1)	**1.9**
Balance at 31 December 2020	378.6	67.6	145.9	**592.1**
Balance at 1 January 2021	378.6	67.6	145.9	**592.1**
Charged / (credited) to the income statement				
- Emission allowances	-	180.3	-	**180.3**
- Legal and other	-	-	2.0	**2.0**
- Asset retirement	(0.4)	-	-	**(0.4)**
Reduction in asset retirement provision capitalised	(0.8)	-	-	**(0.8)**
Reduction in legal flood provision	-	-	(15.9)	**(15.9)**
ESOP provision charged to equity (note 32)	-	-	36.5	**36.5**
Utilised in the year	(3.8)	(70.8)	(15.0)	**(89.6)**
Financing charge	4.3	-	-	**4.3**
Balance at 31 December 2021	377.9	177.1	153.5	**708.5**
Analysed as follows:				
Non-current liabilities	350.6	-	124.4	**475.0**
Current liabilities	27.3	177.1	29.1	**233.5**
Total	**377.9**	**177.1**	**153.5**	**708.5**

Notes to the Financial Statements

28. PROVISIONS (CONTINUED)

Asset retirement provision

The Group provision at 31 December 2021 of €453.6 million (2020: €461.1 million) for asset retirement represents the present value of the current estimate of the costs arising from certain obligations in relation to the retirement and decommission of generation assets, windfarms and ESB Networks creosote treated wood poles at the end of their useful economic lives.

The expected closure dates of generation assets and windfarms are up to 2045. Due to changes in estimates during the year ended 31 December 2021 the asset retirement provision in relation to the retirement and decommission of generating assets and windfarms decreased by €11.8 million (2020: increased by €44.6 million). The estimated value of future retirement costs at the balance sheet date includes physical dismantling, site remediation and associated costs offset by scrap value of materials. There is significant estimation and judgement required in the calculation of the provision for generation assets, including the impact of regulation, the accuracy of the site surveys, unexpected contaminants, the impact of alternative technologies and use of appropriate changes in the discount rates.

Creosote treated wood poles in the network are expected to be disposed over a period of 60 years. After updates for changes in the cost of disposing of creosote treated wood poles and changes in the Group's assumptions of the timeframe for the disposal of poles, there was no change in the asset retirement provision (2020: increase by €129.0 million). There is significant judgement in estimating the level of provision as operational plans and the cost of disposal may change significantly in the future as a result of environmental legislation or pole condition given the length of time over which they are held. Such changes could materially impact the level of provision required.

The Group has made its best estimate of the financial effect of these uncertainties in determining the level of provisions required, but future material changes in any of the assumptions could materially impact on the calculation of the provisions.

As the costs are provided on a discounted basis, a financing charge is included in the income statement and credited to the provision each year. The asset retirement provision is re-examined annually and the liability re-calculated in accordance with the most recent expected estimate. Expected future cash flows are discounted to present values using an appropriate pre-tax discount rate.

Emissions provision

In accordance with the provisions of the European CO_2 emissions trading scheme and UK emissions trading scheme, a provision is recognised to cover the liability for actual emissions during the year. Allowances purchased during the year are returned to the relevant Authority in charge of the scheme within four and three months respectively from the end of that calendar year, in line with the actual emissions of CO_2 during the year. The provision represents the obligation to return emission allowances equal to the actual emissions. This obligation is measured at the cost of the CO_2 emission allowances purchased and held as intangible assets together with the market value of any additional allowances required to settle the year end liability.

Other provisions

Legal case - Cork flooding
Following on from flooding in Cork in November 2009, Aviva as University College Cork's (UCC) insurer pursued a legal action against ESB in the High Court seeking recovery of €19 million for property damage. The High Court judgment found ESB liable for the damage caused by the flood but discounted the award to UCC by 40% to reflect UCC's contributory negligence. ESB appealed the High Court decision and the Court of Appeal held that ESB was not liable for any damage caused to UCC's property by the flood.

UCC appealed this judgment to the Supreme Court. Their appeal was heard in July 2019. The Supreme Court delivered its decision on 8 July 2020 and upheld UCC's appeal. The Court decided by a 4:1 majority that ESB is liable to UCC for negligence in this case. The Court concluded that ESB did have a duty of care which required it to consider the effects of a natural flood on downstream landowners in operating its dams. It also concluded that ESB had a duty to carry out a risk assessment of the effect of a flood downstream. The Supreme Court concluded that ESB did not discharge these duties during the flood of 2009. It remitted the case to the High Court for a partial retrial to establish what damage was caused to UCC's buildings because of ESB's failure to discharge these duties.

The issue of whether UCC was contributorily negligent during the 2009 flood was heard separately by the Supreme Court in November 2020. On 25 March 2021, the Court issued a Judgment remitting the matter of contributory negligence to the High Court to be reheard with the existing remittal. In that judgment the Court held that while UCC was not liable for the negligence of its professional advisors in the design of its buildings, it had been negligent in not carrying out its own risk assessments and taking steps to mitigate the risk posed to its buildings by the River Lee. Both of the remittals have now been reassigned to Mr Justice Max Barrett in the High Court and a date for the rehearing has been provisionally set as 15 June 2022. At a mediation held in December 2021 agreement in principle was reached with UCC's insurers, Aviva, regarding settlement of the UCC claim and other claims made by plaintiffs insured by Aviva arising from the flooding in Cork in November 2009.

In addition to the UCC claim and associated Aviva claims, ESB has been served with 365 sets of proceedings relating to the flooding in Cork in November 2009. The financial statements for 2021 include a provision of €80 million in respect of estimated damages and related costs in respect of all claims. A corresponding amount of €78 million is included in the financial statements in respect of the expected reimbursement under the related insurance contracts. ESB does not anticipate that the total amount of damages awarded and related costs for all of the actions will exceed its insurance cover.

Onerous Contracts
In line with IFRS 3 Business Combinations, a provision in respect of onerous contracts of €61.4 million was recognised on the acquisition of So Energy in respect of customer contracts (see note 16(c)). €27.4 million of the provision was credited to the income statement during the year and is recognised as a reduction in energy costs in the period. A related amount of €51.3 million was recognised in intangible assets relating to favourable commodity contracts held by So Energy at date of acquisition.

At 31 December 2021 a further onerous contract provision of €16.0 million was recognised in respect of customer contracts where the expected costs of meeting obligations to provide electicity and gas exceed the benefits expected to be received.

Other provisions
Other provisions also include:
- ESOP repurchase provision €27.0 million 2020: €nil). See note 32 for further details.
- Deferred consideration in respect of acquisition of a 50% stake in Inch Cape Offshore Holdings Limited (ICOHL) of €28.9 million (2020: €16.8 million). This consideration is contingent on ICOHL achieving project milestones and specified returns.
- Deferred consideration in respect of Superhomes Ireland DAC of €2.8 million (2020: €nil).

Other legal
Other provisions also include estimates of liabilities to third parties, in respect of claims notified or provided for at year end. The year end provision includes an estimate for liabilities incurred but not yet reported.

Other receivables also include €0.9 million insurance recoveries in respect of these claims.

Notes to the Financial Statements

29. FINANCIAL RISK MANAGEMENT AND FAIR VALUE

(a) Overview of financial risk management

Risk environment

The main financial risks faced by the Group relate to foreign exchange (particularly movements in the value of the euro relative to sterling and the US dollar) and commodity (electricity and fuel) price movements. Liquidity risk, and exposure to interest rate volatility, are key long-term financial risks also, but have been substantially addressed in the short run. 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 as appropriate. Group Treasury is responsible for the day-to-day treasury activities of the Group. The Finance and Investment Committee is regularly updated on key treasury matters, risk and associated mitigants.

Commodity price risk is managed by the front and middle office functions of the relevant business units: ESB Trading (within Generation and Trading) and Customer Solutions. This is done in the context of an overall Group risk management framework. These activities are reviewed regularly by Group Internal Audit. It is the responsibility of the Trading Risk Management Committees within these two business units to ensure that internal audit findings and recommendations are adequately addressed. This is overseen by the Executive Director level Group Trading Committee (GTC). The Group Trading Risk Management function ensures that the Group's market, credit and operational risks are managed in a way designed to protect the Group from loss, while respecting the ring-fencing obligations in place between the business units.

Contracts entered into in order to hedge exposures arising from the production and sale of electricity may be divided into forward fuel price contracts, forward electricity price contracts and foreign exchange contracts. Financial instruments are derecognised on settlement or sale.

Risk reporting structure

Through the Chief Executive, the Board has delegated to the GTC, the broader responsibility of managing ESB's trading risk in a manner consistent with the Group's risk tolerances and business strategies. The GTC has established risk limits to manage and limit trading risk exposure at Group and business unit level. These limits are documented for each of the ESB businesses engaged in wholesale trading activities. Furthermore the Group Trading Risk Management Policy is applicable to each of these businesses.

In both Generation and Trading and Customer Solutions, separate Trading Risk Management Committees meet on a monthly basis (or more frequently as required) and serve as the primary overseer of trading risk at individual ring-fenced business unit level. These committees include the head of the Front Office function, the Trading Risk (Middle Office) Manager, a representative from Group Trading Risk Management, and the business unit Financial Controller. The Trading Risk Management Committees are responsible for formulating trading risk strategy in accordance with the Group Trading Risk Management Policy and ensuring compliance with same, trading risk limit management, and for ensuring that an effective control framework is in place.

So Energy was acquired during the year and was fully incorporated in the governance structure in February 2022.

The Middle Office function in each business unit maintains a separate reporting line to the Group Trading Risk Management function, which is responsible for ensuring that the Group's net exposure to movements in commodity or other price movements is adequately managed in accordance with Group Trading Risk Management Policy.

Hedge accounting

ESB funds its operations using borrowings and uses deposit instruments to invest surplus funds. ESB also uses interest rate and foreign currency instruments to manage interest rate and currency risks that arise in the normal course of operations from US dollar and sterling denominated borrowings, from its foreign currency subsidiaries and from the use of foreign currency suppliers. Hedge accounting pursuant to IFRS 9 is used both for hedges of foreign currency liabilities and interest rate risks from current and non-current liabilities.

In addition, the Group enters into certain commodity hedging transactions to fix fuel costs and to link electricity revenues more closely to fuel inputs, where possible. The Group decides at inception whether to designate financial instruments into hedge relationships. Certain arrangements meet the specific hedging accounting criteria of IFRS 9.

Within its regular course of business, the Group routinely enters into sale and purchase contracts for commodities, including gas, coal and electricity. Where the contract was entered into and continues to be held for the purposes of receipt or delivery of the commodities in accordance with the Group's expected sale, purchase or usage requirements, the contracts are designated as own use contracts and are accounted for as executory contracts. These contracts are therefore not within the scope of IFRS 9 - Financial Instruments.

Notes to the Financial Statements

29. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (CONTINUED)

(b) Overview of financial assets and liabilities

Financial assets and liabilities, excluding employee related liabilities, at 31 December 2021 and at 31 December 2020 can be analysed as follows:

	Financial assets at fair value through profit or loss		Assets / liabilities held at amortised cost		Derivative financial instruments with hedging relationships		Derivative financial instruments with no hedging relationships		Total	
GROUP	**2021**	2020	**2021**	2020	**2021**	2020	**2021**	2020	**2021**	2020
	€m	€m	**€m**	€m	**€m**	€m	**€m**	€m	**€m**	€m
ASSETS										
Non-current assets										
Amounts due from insurer	-	-	48.4	94.2	-	-	-	-	48.4	94.2
Amounts due from equity accounted investees	-	-	167.6	55.1	-	-	-	-	167.6	55.1
Financial asset investments	5.3	8.6	-	-	-	-	-	-	5.3	8.6
Derivative financial instruments	-	-	-	-	8.4	0.6	77.9	7.7	86.3	8.3
Total non-current financial assets	5.3	8.6	216.0	149.3	8.4	0.6	77.9	7.7	307.6	166.2
Current assets										
Amounts due from insurer	-	-	30.9	-	-	-	-	-	30.9	-
Trade and other receivables*	-	-	1,551.3	862.7	-	-	-	-	1,551.3	862.7
Cash and cash equivalents	-	-	537.0	248.7	-	-	-	-	537.0	248.7
Derivative financial instruments	-	-	-	-	-	-	595.7	169.6	595.7	169.6
Total current financial assets	-	-	2,119.2	1,111.4	-	-	595.7	169.6	2,714.9	1,281.0
Total financial assets	5.3	8.6	2,335.2	1,260.7	8.4	0.6	673.6	177.3	3,022.5	1,447.2
LIABILITIES										
Non-current liabilities										
Borrowings and other debt	-	-	5,292.5	5,114.0	-	-	-	-	5,292.5	5,114.0
Lease liabilities	-	-	106.7	107.3	-	-	-	-	106.7	107.3
Trade and other payables	-	-	9.3	-	-	-	-	-	9.3	-
Derivative financial instruments	-	-	-	-	20.8	13.8	784.3	591.1	805.1	604.9
Total non-current financial liabilities	-	-	5,408.5	5,221.3	20.8	13.8	784.3	591.1	6,213.6	5,826.2
Current liabilities										
Borrowings and other debt	-	-	70.7	129.6	-	-	-	-	70.7	129.6
Lease liabilities	-	-	12.8	17.5	-	-	-	-	12.8	17.5
Trade and other payables**	-	-	1,681.6	731.8	-	-	-	-	1,681.6	731.8
Derivative financial instruments	-	-	-	-	2.0	1.6	644.4	191.1	646.4	192.7
Total current financial liabilities	-	-	1,765.1	878.9	2.0	1.6	644.4	191.1	2,411.5	1,071.6
Total financial liabilities	-	-	7,173.6	6,100.2	22.8	15.4	1,428.7	782.2	8,625.1	6,897.8

* Prepayments have been excluded as they are not classified as a financial asset.
** VAT and employment taxes have been excluded as these are statutory liabilities.

The Group's provisions and employee related liabilities are not analysed in the table above, or in the further analysis on the following page. This includes the liability for pension obligation of €94.7 million at 31 December 2021 (2020: €106.3 million). See notes 24 and 25 in relation to this and employee related liabilities.

Notes to the Financial Statements

29. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (CONTINUED)

(b) Overview of financial assets and liabilities (continued)

	Financial assets at fair value through profit or loss		Assets / liabilities held at amortised cost		Derivative financial instruments with hedging relationships		Derivative financial instruments with no hedging relationships		Total	
PARENT	**2021**	2020	**2021**	2020	**2021**	2020	**2021**	2020	**2021**	2020
	€m	€m	**€m**	€m	**€m**	€m	**€m**	€m	**€m**	€m
ASSETS										
Non-current assets										
Amounts due from insurer	-	-	48.4	94.2	-	-	-	-	48.4	94.2
Amounts due from equity accounted investees	-	-	3.0	-	-	-	-	-	3.0	-
Investments in subsidiary undertakings	-	-	2,016.0	1,723.6	-	-	-	-	2,016.0	1,723.6
Derivative financial instruments	-	-	-	-	6.2	-	84.7	10.1	90.9	10.1
Total non-current financial assets		-	2,067.4	1,817.8	6.2		84.7	10.1	2,158.3	1,827.9
Current assets										
Amounts due from insurer	-	-	30.9	-	-	-	-	-	30.9	-
Trade and other receivables*	-	-	2,124.9	1,304.5	-	-	-	-	2,124.9	1,304.5
Cash and cash equivalents	-	-	463.3	164.1	-	-	-	-	463.3	164.1
Derivative financial instruments	-	-	-	-	-	-	553.5	129.8	553.5	129.8
Total current financial assets	-	-	2,619.1	1,468.6	-	-	553.5	129.8	3,172.6	1,598.4
Total financial assets	-	-	4,686.5	3,286.4	6.2	-	638.2	139.9	5,330.9	3,426.3
LIABILITIES										
Non-current liabilities										
Borrowings and other debt	-	-	833.5	729.1	-	-	-	-	833.5	729.1
Lease liabilities	-	-	56.8	55.5	-	-	-	-	56.8	55.5
Derivative financial instruments	-	-	-	-	20.8	12.4	89.4	18.7	110.2	31.1
Total non-current financial liabilities	-	-	890.3	784.6	20.8	12.4	89.4	18.7	1,000.5	815.7
Current liabilities										
Borrowings and other debt	-	-	70.7	127.7	-	-	-	-	70.7	127.7
Lease liabilities	-	-	6.1	11.2	-	-	-	-	6.1	11.2
Trade and other payables**	-	-	6,093.2	4,691.2	-	-	-	-	6,093.2	4,691.2
Derivative financial instruments	-	-	-	-	-	0.3	592.8	150.7	592.8	151.0
Total current financial liabilities	-	-	6,170.0	4,830.1	-	0.3	592.8	150.7	6,762.8	4,981.1
Total financial liabilities	-	-	7,060.3	5,614.7	20.8	12.7	682.2	169.4	7,763.3	5,796.8

* Prepayments have been excluded as they are not classified as a financial asset.
** VAT and employment taxes have been excluded as these are statutory liabilities.

The Parent's employee related liabilities are not analysed in the table above, or in the further analysis on the following page. This includes the liability for pension obligation of €94.7 million at 31 December 2021 (2020: €106.3 million). See notes 24 and 25 in relation to this and employee related liabilities.

Notes to the Financial Statements

29. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (CONTINUED)

(c) Funding and liquidity management

The following table sets out the contractual maturities of financial liabilities (and assets of a similar nature), including the interest payments associated with borrowings and the undiscounted net cash flows attributable to derivative financial instruments. Borrowings with a carrying value of €4,459.0 million (2020: €4,386.8 million) and net derivative financial instrument liabilities of €710.9 million (2020: €577.5 million) are included in the Group balances below, but do not comprise part of the Parent's assets and liabilities as they are not held directly by the Parent. See notes 14, 22, 23 and 26 for further analysis of Group and Parent financial assets and liabilities.

GROUP	Carrying amount	Contractual cash outflows / inflows - net	Within 1 year	1-2 years	2-5 years	More than 5 years
	€m	€m	€m	€m	€m	€m
31 December 2021						
Borrowings	5,363.2	6,315.9	209.7	460.4	1,701.1	3,944.7
Lease liabilities	119.5	126.3	12.2	10.9	28.0	75.2
Trade and other payables (excluding tax balances and accrued interest on borrowings)	1,623.6	1,623.6	1,623.6	-	-	-
Derivative financial instruments	1,451.5	1,486.3	650.7	266.2	378.8	190.6
Total liabilities	**8,557.8**	**9,552.1**	**2,496.2**	**737.5**	**2,107.9**	**4,210.5**
Derivative financial instruments	682.0	685.5	603.1	65.3	17.1	-
Total assets	**682.0**	**685.5**	**603.1**	**65.3**	**17.1**	**-**
Net liabilities	**7,875.8**	**8,866.6**	**1,893.1**	**672.2**	**2,090.8**	**4,210.5**
31 December 2020						
Borrowings	5,243.6	6,294.8	268.1	203.2	1,478.8	4,344.7
Lease liabilities	124.8	134.3	14.7	11.5	27.7	80.4
Trade and other payables (excluding tax balances and accrued interest on borrowings)	665.7	665.7	665.7	-	-	-
Derivative financial instruments	797.6	802.8	197.8	588.9	21.7	(5.6)
Total liabilities	6,831.7	7,897.6	1,146.3	803.6	1,528.2	4,419.5
Derivative financial instruments	177.9	178.5	172.1	4.8	1.6	-
Total assets	177.9	178.5	172.1	4.8	1.6	-
Net liabilities	6,653.8	7,719.1	974.2	798.8	1,526.6	4,419.5

PARENT	Carrying amount	Contractual cash outflows / inflows - net	Within 1 year	1-2 years	2-5 years	More than 5 years
	€m	€m	€m	€m	€m	€m
31 December 2021						
Borrowings	904.2	1,018.4	100.1	350.7	210.3	357.3
Lease liabilities	62.9	67.1	6.2	5.6	16.0	39.3
Trade and other payables (excluding tax balances and accrued interest on borrowings)	6,050.9	6,050.9	6,050.9	-	-	-
Derivative financial instruments	703.0	694.8	595.6	74.3	24.9	-
Total liabilities	**7,721.0**	**7,831.2**	**6,752.8**	**430.6**	**251.2**	**396.6**
Derivative financial instruments	644.4	640.2	557.8	65.3	17.1	-
Total assets	**644.4**	**640.2**	**557.8**	**65.3**	**17.1**	**-**
Net liabilities	**7,076.6**	**7,191.0**	**6,195.0**	**365.3**	**234.1**	**396.6**
31 December 2020						
Borrowings	856.8	980.1	159.3	94.4	473.8	252.6
Lease liabilities	66.7	70.6	7.1	5.7	15.2	42.6
Trade and other payables (excluding tax balances and accrued interest on borrowings)	4,648.5	4,648.5	4,648.5	-	-	-
Derivative financial instruments	182.1	186.0	160.2	10.3	21.2	(5.7)
Total liabilities	5,754.1	5,885.2	4,975.1	110.4	510.2	289.5
Derivative financial instruments	139.9	138.9	133.9	4.2	0.8	-
Total assets	139.9	138.9	133.9	4.2	0.8	-
Net liabilities	5,614.2	5,746.3	4,841.2	106.2	509.4	289.5

Notes to the Financial Statements

29. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (CONTINUED)

(d) Master netting or similar agreements

The Group enters into derivative transactions under International Swaps and Derivatives Association (ISDA) master netting agreements. The ISDA agreements do not meet the criteria for offsetting in the consolidated balance sheet. This is because the Group does not have any current legally enforceable right to offset recognised amounts, because the right to offset is enforceable only on the occurrence of future events such as a default on the bank loans or other credit events.

The following table sets out the carrying amounts of recognised financial instruments that are subject to the above agreements.

GROUP	Gross amount of financial instruments in the statement of financial position	Amounts not offset on the balance sheet	Net amount
	€m	€m	€m
31 December 2021			
Financial assets			
Interest rate swaps	0.1	(0.1)	-
Currency swaps	6.2	(3.1)	3.1
Foreign exchange contracts	16.2	(9.4)	6.8
Forward fuel price contracts	659.5	(636.5)	23.0
	682.0	**(649.1)**	**32.9**
Financial liabilities			
Interest rate swaps	(8.7)	2.3	(6.4)
Inflation linked interest rate swaps	(720.6)	-	(720.6)
Currency swaps	(20.8)	2.5	(18.3)
Foreign exchange contracts	(14.0)	8.9	(5.1)
Forward fuel price contracts	(687.4)	635.4	(52.0)
	(1,451.5)	**649.1**	**(802.4)**
31 December 2020			
Financial assets			
Interest rate swaps	3.8	(3.5)	0.3
Foreign exchange contracts	4.1	(3.4)	0.7
Forward fuel price contracts	170.0	(144.1)	25.9
	177.9	(151.0)	26.9
Financial liabilities			
Interest rate swaps	(1.6)	-	(1.6)
Inflation linked interest rate swaps	(592.5)	-	(592.5)
Currency swaps	(19.4)	1.8	(17.6)
Foreign exchange contracts	(8.1)	4.5	(3.6)
Forward fuel price contracts	(176.0)	144.7	(31.3)
	(797.6)	151.0	(646.6)

Notes to the Financial Statements

29. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (CONTINUED)

(d) Master netting or similar agreements (continued)

PARENT	Gross amount of financial instruments in the statement of financial position	Amounts not offset on the balance sheet	Net amount
	€m	€m	€m
31 December 2021			
Financial assets			
Interest rate swaps	3.2	(0.1)	3.1
Currency swaps	6.2	(3.5)	2.7
Foreign exchange contracts	23.0	(9.0)	14.0
Forward fuel price contracts	612.0	(608.8)	3.2
	644.4	**(621.4)**	**23.0**
Financial liabilities			
Interest rate swaps	(8.7)	3.1	(5.6)
Currency swaps	(20.8)	4.1	(16.7)
Foreign exchange contracts	(13.5)	6.4	(7.1)
Forward fuel price contracts	(660.0)	607.8	(52.2)
	(703.0)	**621.4**	**(81.6)**
31 December 2020			
Financial assets			
Interest rate swaps	3.8	(3.0)	0.8
Foreign exchange contracts	6.1	(2.7)	3.4
Forward fuel price contracts	130.0	(125.1)	4.9
	139.9	(130.8)	9.1
Financial liabilities			
Interest rate swaps	(0.5)	-	(0.5)
Currency swaps	(19.4)	1.5	(17.9)
Foreign exchange contracts	(8.1)	3.8	(4.3)
Forward fuel price contracts	(154.1)	125.5	(28.6)
	(182.1)	130.8	(51.3)

Notes to the Financial Statements

29. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (CONTINUED)

(e) Credit risk

Credit risk arises from cash and cash equivalents, derivative financial instruments and deposits with banks and financial institutions, as well as credit exposures to wholesale and retail customers, including amounts due from equity accounted investees, outstanding receivables and committed transactions. In Parent credit risk also arises in respect of amounts due from subsidiary undertakings.

	2021		2020	
Financial assets	**GROUP**	**PARENT**	GROUP	PARENT
	€m	**€m**	€m	€m
Amounts due from insurers	**79.3**	**79.3**	94.2	94.2
Trade and other receivables*	**1,718.9**	**4,143.9**	917.8	3,028.1
Cash and cash equivalents	**537.0**	**463.3**	248.7	164.1
Derivative financial instruments	**682.0**	**644.4**	177.9	139.9
	3,017.2	**5,330.9**	1,438.6	3,426.3

*Prepayments have been excluded as they are not classified as a financial asset.

Trade and other receivables

The Group is exposed to credit risk from the counterparties with whom it holds its bank accounts and transacts with in the financial markets. The Group's policy is to limit its exposure to each financial institution based on accepted credit ratings of not less than BBB- or equivalent.

Treasury related credit risk (relating to cash and derivative instruments)

The Group is exposed to credit risk from the counterparties with whom it holds its bank accounts and transacts with in the financial markets. The Group's policy is to limit its exposure to each financial institution based on accepted credit ratings of not less than BBB- or equivalent.

Trading in derivatives is performed to mitigate financial risks and is executed in compliance with the Specification and Requirements of the Minister for Finance issued under the aegis of the Financial Transactions of Certain Companies and Other Bodies Act 1992, most recently in December 2017. The Specification and Requirements outline the type of derivatives which ESB can transact and the associated requirements which ESB must satisfy regarding each derivative counterparty. Dealing activities are controlled by putting in place robust dealing mandates with counterparties. The Group does not hold or trade derivative instruments for speculative purposes. Exposures, related limits and compliance with the Minister's Specification and Requirements are subject to ongoing review and monitoring. The Group has not experienced any losses due to failure of such counterparties to deliver on their obligations.

Financial Guarantees

The Group enters into various commitments. These consist of financial guarantees, letters of credit and other commitments.
Even though these obligations may not be recognised on the Group balance sheet, credit risk exists in relation to these instruments as they commit the Group to make payments on behalf of subsidiary companies in the event of a specific act and therefore they form part of the overall risk of the Group.

The nominal values of such commitments are listed below:

	2021	Restated 2020
	€m	€m
Financial guarantees	**713.0**	637.2
Letters of credit	**382.0**	304.0
Other	**-**	2.3
Total	**1,095.0**	943.5

Commodity credit risk (relating to derivatives)

The Group also has credit risk associated with commodity positions. These arise from derivative financial instruments that are entered into to hedge energy and fuel price risks and are managed in accordance with the Minister's Specification and Requirements (Financial Transactions of Certain Companies and Other Bodies Act 1992). The Group establishes counterparty credit risk limits to restrict uncollateralised exposure. Net exposures, collateral requirements and compliance are monitored on an ongoing basis. So Energy was acquired during the year and was fully incorporated in the governance structure in February 2022.
Collateral, in the form of bonds and guarantees, is required by ESB business units from various parties, specifically in the form of Letters of Credit from certain power Contract for Differences (CfD) counterparties. Total such collateral received by ESB in respect of power CfD positions at 31 December 2021 was €60.3 million (2020: €33.6 million collateral received by ESB). In addition an increasing proportion of fuel commodity purchases are executed on regulated exchanges. The Group's positions on trades executed on such exchanges are collateralised through the posting of initial margin and collateral in respect of the mark to market position on open forward trades. Total net exchange traded collateral at 31 December 2021 received by ESB was €279.3 million (2020: €55.0 million collateral received by ESB). The Group is cognisant of any changes in the creditworthiness of counterparties, and all appropriate steps are taken to further secure the Group's position, both by negotiating adequate protections in advance in the underpinning contractual master agreements and active management of any exposures, particularly where indications exists of a deterioration in the financial standing of counterparties.

Notes to the Financial Statements

29. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (CONTINUED)

(f) Foreign currency risk management

Foreign currency exposures arise mainly through the purchase of fuel and power, station overhaul costs, other purchases denominated in foreign currencies, borrowings in foreign currencies (including the private placement as described in note 22) and investments outside the Eurozone.

Foreign currency forward purchase contracts and cross currency swaps are used to reduce volatility arising from foreign currency exposures. The foreign currency forward purchase contracts in place at 31 December 2021 relate to forecast cash flows expected to occur up to 2025, with cross currency swaps relating to debt obligations extending to 2028.

At year end, ESB's total debt portfolio amounted to €5.4 billion (2020: €5.2 billion), of which the Parent held €0.9 billion (2020: €0.9 billion). The underlying debt, before and after swaps, was denominated in the following currencies:

	Before swaps		After swaps	
GROUP	**2021 (%)**	2020 (%)	**2021 (%)**	2020 (%)
Currency				
Euro	**70**	70	**69**	66
US dollar	**4**	4	**-**	-
Sterling	**26**	26	**31**	34
Total	**100**	100	**100**	100

	Before swaps		After swaps	
PARENT	**2021 (%)**	2020 (%)	**2021 (%)**	2020 (%)
Currency				
Euro	**62**	54	**91**	80
US dollar	**26**	26	**-**	-
Sterling	**12**	20	**9**	20
Total	**100**	100	**100**	100

As shown above, the majority of the debt portfolio is either denominated in or swapped into Euro for both principal and interest, thereby reducing the foreign currency risk exposure in the Group. In managing its foreign operations, the Group is cognisant of borrowing in currencies that match the functional currency of the foreign operation. Therefore a proportion of debt is Sterling denominated primarily as a result of the NIE Networks acquisition and the operations of Carrington Power Limited.

Movements in the Euro / Sterling exchange rate impact on the carrying value of Sterling Debt, in Euro terms. Overall sensitivity to exchange rate volatility is driven by the level of Sterling denominated debt. This sensitivity exists whether or not the debt is held in a Group company whose functional currency is Sterling. Whether the movement is recognised in the OCI or profit or loss however depends on the functional currency of the company. Translation movements arising on Sterling denominated debt and intra Group balances loans in Group companies whose functional currency is Euro entities are recognised in profit or loss. Translation movements on Sterling denominated debt in Group companies whose functional currency is Sterling are recognised in the translation reserve on consolidation.

A change of 10% in foreign currency exchange rates at 31 December 2021 would increase equity and profit before taxation by the amount set out below. This analysis assumes that all other variables remain constant.

	31 December 2021		31 December 2020	
GROUP	**Other comprehensive income gain / (loss)**	**Profit before taxation gain / (loss)**	Other comprehensive income gain / (loss)	Profit before taxation gain / (loss)
	€m	**€m**	€m	€m
10% strengthening				
US dollar	**-**	**(10.3)**	-	(0.6)
Sterling	**231.1**	**(81.5)**	128.3	(0.2)
10% weakening				
US dollar	**-**	**25.0**	-	1.8
Sterling	**(282.5)**	**100.4**	(156.8)	9.9

The following assumptions were made in respect of the sensitivity analysis above:

- changes in the carrying value of derivative financial instruments not in hedging relationships affect the income statement only;
- changes in the carrying value of derivative financial instruments that are cash flow hedges impact other comprehensive income only.

Notes to the Financial Statements

29. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (CONTINUED)

(g) Commodity price risk management

The volatility of the fuel prices required for the Group's electricity generation activities has been significant in recent years and the resulting exposures to fuel price movements are managed by the Group on a selective hedging basis. The Group has entered into forward commodity price contracts in relation to the purchase of gas and coal required for electricity generation activities, refer to note 23 for further details. Forward fuel price contracts are valued based on physical volumes contracted and outstanding, and on the forward prices of products of a similar nature, at the balance sheet date, discounted where necessary based on an appropriate forward interest curve.

Within its regular course of business, the Group routinely enters into sale and purchase contracts for commodities, including gas and electricity. Where the contract was entered into and continues to be held for the purposes of receipt or delivery of the commodities in accordance with the Group's expected sale, purchase or usage requirements, the contracts are designated as own use contracts and are accounted for as executory contracts.

A general increase of 10% in the price of gas and coal at 31 December 2021 would impact equity and profit before taxation by the amount set out below. This analysis assumes that all other variables, in particular foreign exchange rates remain constant and includes the impact of the value of commodity swaps in place. A 10% reduction would have an equal and opposite effect, on the basis that all other variables remain constant.

	31 December 2021		31 December 2020	
GROUP	**Other comprehensive income gain**	**Profit before taxation gain**	Other comprehensive income gain	Profit before taxation (loss)
	€m	**€m**	€m	€m
Gain / (loss) due to 10% increase in gas and coal prices	**11.2**	**14.6**	4.3	(2.8)

	31 December 2021		31 December 2020	
PARENT	**Other comprehensive income gain / (loss)**	**Profit before taxation gain**	Other comprehensive income gain / (loss)	Profit before taxation (loss)
	€m	**€m**	€m	€m
Gain / (loss) due to 10% increase in gas and coal prices	**-**	**10.3**	-	(12.0)

A general increase of 10% in the wholesale electricity price of the I-SEM at 31 December 2020 would impact other comprehensive income and profit before taxation by the amounts set out below. This analysis assumes that all other variables, in particular foreign exchange rates remain constant. A 10% reduction would have an equal and opposite effect, on the basis that all other variables remained constant.

	31 December 2021		31 December 2020	
GROUP	**Other comprehensive income (loss)**	**Profit before taxation gain / (loss)**	Other comprehensive income (loss)	Profit before taxation gain / (loss)
	€m	**€m**	€m	€m
Gain / (loss) due to 10% increase in the Wholesale Electricity Price	**(19.7)**	**-**	(9.6)	-

	31 December 2021		31 December 2020	
PARENT	**Other comprehensive income gain / (loss)**	**Profit before taxation gain / (loss)**	Other comprehensive income gain / (loss)	Profit before taxation gain / (loss)
	€m	**€m**	€m	€m
Gain / (loss) due to 10% increase in the Wholesale Electricity Price	**-**	**-**	-	-

The sensitivity analysis provided above for the Group and Parent has been calculated as at 31 December 2021 using the following base commodity prices and foreign currency rates:

	2021	2020
Gas (Stg. p/therm)	**104.07**	35.28
Wholesale Electricity Price (€/MWh)	**80.97**	50.21
Coal (US$/tonne)	**100.45**	68.68
Foreign currency rate (US$ = €1)	**1.13**	1.23
Foreign currency rate (Stg£ = €1)	**0.8397**	0.8981

Notes to the Financial Statements

29. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (CONTINUED)

(h) Fair value

The fair values of financial assets and liabilities carried at amortised cost together with the carrying amounts shown in the balance sheet are as follows:

	GROUP		PARENT	
	Carrying value	Fair value	Carrying value	Fair value
	€m	€m	€m	€m
31 December 2021				
Long-term debt[1]	5,292.5	5,818.9	833.5	919.1
Short-term borrowings	70.7	78.1	70.7	78.1
Lease liabilities	119.5	119.5	62.9	62.9
Total borrowings	**5,482.7**	**6,016.5**	**967.1**	**1,060.1**
Non-current trade and other payables	9.3	9.3	-	-
Current trade and other payables	1,681.6	1,681.6	6,093.2	6,093.2
Amounts due from insurers	(79.3)	(79.3)	(79.3)	(79.3)
Non-current trade and other receivables	(167.6)	(167.6)	(2,019.0)	(2,019.0)
Current trade and other receivables	(1,551.3)	(1,551.3)	(2,124.9)	(2,124.9)
Cash and cash equivalents	(537.0)	(537.0)	(463.3)	(463.3)
Net liabilities	**4,838.4**	**5,372.2**	**2,373.8**	**2,466.8**

	GROUP		PARENT	
	Carrying value	Fair value	Carrying value	Fair value
	€m	€m	€m	€m
31 December 2020				
Long-term debt[1]	5,114.0	5,983.9	729.1	913.5
Short-term borrowings	129.6	140.9	127.7	138.6
Lease liabilities	124.8	124.8	66.7	66.7
Total borrowings	5,368.4	6,249.6	923.5	1,118.8
Current trade and other payables	731.8	731.8	4,691.2	4,691.2
Amounts due from insurers	(94.2)	(94.2)	(94.2)	(94.2)
Non-current trade and other receivables	(55.1)	(55.1)	(1,723.6)	(1,723.6)
Current trade and other receivables	(862.7)	(862.7)	(1,304.5)	(1,304.5)
Cash and cash equivalents	(248.7)	(248.7)	(164.1)	(164.1)
Net liabilities	4,839.5	5,720.7	2,328.3	2,523.6

[1] Cross currency swaps that swap fixed US dollar debt to euro fixed are included in fair value of long-term debt above, the fair value of the related derivative is an asset of €6.2 million (31 December 2020: a liability of €14.8 million).

Current trade and other receivables and trade and other payables are all due within one year, and have been provided for where impaired, their carrying value is considered to be materially in line with their fair value.

ESB Eurobonds and NIE Networks Sterling bonds are regarded as Level 1 fair values. The fair value of these bonds are derived from observation of the most recent traded values for these bonds in liquid markets at the balance sheet date. Other borrowings and debt are Level 2 fair values. The primary valuation technique used for borrowings and other debt classified as Level 2 fair values is discounting of the future associated cash flows using the zero coupon discount curve of the relevant currency.

Fair value - discount rates

The interest rates used to discount future estimated cash flows, where applicable, are based on the applicable EURIBOR or LIBOR or SONIA yield curve at the reporting date plus an appropriate constant credit spread.

Notes to the Financial Statements

29. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (CONTINUED)

(i) Fair value hierarchy

The table below analyses financial assets and liabilities carried at fair value, by valuation method. The different levels relevant to financial assets and liabilities held by the Group have been defined as follows:

- Level 2: inputs, other than unadjusted quoted prices in active markets for identical assets and liabilities, that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices);
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

GROUP	Level 2	Level 3	Total
	€m	€m	€m
31 December 2021			
ASSETS			
Derivative financial instruments			
- Interest rate swaps	0.1	-	**0.1**
- Currency swaps	6.2	-	**6.2**
- Foreign exchange contracts	16.2	-	**16.2**
- Forward fuel price contracts[1]	657.3	2.2	**659.5**
Financial assets at fair value through profit or loss	-	5.3	**5.3**
	679.8	**7.5**	**687.3**
LIABILITIES			
Derivative financial instruments			
- Interest rate swaps	(8.7)	-	**(8.7)**
- Currency swaps	(20.8)	-	**(20.8)**
- Foreign exchange contracts	(14.0)	-	**(14.0)**
- Forward fuel price contracts[1]	(685.7)	(1.7)	**(687.4)**
- Inflation-linked interest rate swaps	(720.6)	-	**(720.6)**
	(1,449.8)	**(1.7)**	**(1,451.5)**
Net (liability) / asset	**(770.0)**	**5.8**	**(764.2)**

	Level 2	Level 3	Total
	€m	€m	€m
31 December 2020			
ASSETS			
Derivative financial instruments			
- Interest rate swaps	3.8	-	3.8
- Foreign exchange contracts	4.1	-	4.1
- Forward fuel price contracts[1]	170.0	-	170.0
Financial assets at fair value through profit or loss	-	8.6	8.6
	177.9	8.6	186.5
LIABILITIES			
Derivative financial instruments			
- Interest rate swaps	(1.6)	-	(1.6)
- Currency swaps	(19.4)	-	(19.4)
- Foreign exchange contracts	(8.1)	-	(8.1)
- Forward fuel price contracts[1]	(173.1)	(2.9)	(176.0)
- Inflation-linked interest rate swaps	(592.5)	-	(592.5)
	(794.7)	(2.9)	(797.6)
Net (liability) / asset	(616.8)	5.7	(611.1)

[1] Contracts that link the forward electricity price more closely with forward fuel prices are presented net in forward fuel at 31 December.

Notes to the Financial Statements

29. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (CONTINUED)

(i) Fair value hierarchy (continued)

PARENT	Level 2	Level 3	Total
	€m	€m	€m
31 December 2021			
ASSETS			
Derivative financial instruments			
- Interest rate swaps	3.2	-	3.2
- Currency swaps	6.2	-	6.2
- Foreign exchange contracts	23.0	-	23.0
- Forward fuel price contracts	612.0	-	612.0
	644.4	**-**	**644.4**
LIABILITIES			
Derivative financial instruments			
- Interest rate swaps	(8.7)	-	(8.7)
- Currency swaps	(20.8)	-	(20.8)
- Foreign exchange contracts	(13.5)	-	(13.5)
- Forward fuel price contracts	(660.0)	-	(660.0)
	(703.0)	**-**	**(703.0)**
Net asset	**(58.6)**	**-**	**(58.6)**

	Level 2	Level 3	Total
	€m	€m	€m
31 December 2020			
ASSETS			
Derivative financial instruments			
- Interest rate swaps	3.8	-	3.8
- Foreign exchange contracts	6.1	-	6.1
- Forward fuel price contracts	130.0	-	130.0
	139.9	-	139.9
LIABILITIES			
Derivative financial instruments			
- Interest rate swaps	(0.5)	-	(0.5)
- Currency swaps	(19.4)	-	(19.4)
- Foreign exchange contracts	(8.1)	-	(8.1)
- Forward fuel price contracts	(154.1)	-	(154.1)
	(182.1)	-	(182.1)
Net liability	(42.2)	-	(42.2)

Notes to the Financial Statements

29. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (CONTINUED)

(i) Fair value hierarchy (continued)

Measurement of fair values - valuation techniques and significant unobservable inputs

The following table shows the valuation technique used in measuring Level 2 and Level 3 fair values, as well as the significant unobservable inputs used.

Type	Valuation techniques	Significant unobservable inputs	Inter relationship between significant unobservable inputs and fair value measurement
Currency swaps, foreign exchange contracts and interest rate swaps	Level 2 - Present valuation of future cashflows contracted using market observable inputs and discounted back to present value.		
Forward fuel and electricity price contracts	Level 2 - The fair value of forward fuel contracts is determined by reference to gas, coal and carbon prices with the resulting value discounted to present values.		
	Level 3 - The fair value of some specific forward fuel and electricity contracts are determined by reference to forward electricity prices which are unobservable.	Forward electricity prices	The estimated fair value would increase / (decrease) if Wholesale Electricity Price was higher / (lower). Generally a change in gas prices is accompanied by a directionally similar change in Wholesale Electricity Price.
Inflation-linked interest rate swaps	Level 2 - Independent valuations are used and validated using the present valuation of expected cash flows using the interest rate yield curve of the relevant currency. The zero-coupon curve is based on using the interest rate yield curve of the relevant currency.		
Financial assets at fair value through profit or loss	Financial assets at fair value through profit or loss are carried at fair value.	Forecast annual revenue growth rate. Forecast gross margin	Novusmodus typically assess the value of investments based on its expectations of the proceeds which could be realised in a disposal. See note 7 and 16.
	Where applicable, unquoted investments are valued by deriving an enterprise value using one of the following methodologies: • the price of a recent investment; • revenue multiple; • cost, less any required provision.		This value will usually be driven by a number of inputs including the ability of the investee to grow its revenue and associated margins leading to higher EBITDA thus higher values.

Notes to the Financial Statements

29. FINANCIAL RISK MANAGEMENT AND FAIR VALUE (CONTINUED)

(i) Fair value hierarchy (continued)

The following table shows a reconciliation from opening balances at 1 January 2020 to the year ended 31 December 2021 for fair value measurements in Level 3 of the fair value hierarchy:

GROUP	Financial assets at fair value through profit or loss	Forward electricity price contracts[1]	Forward fuel price contracts	Total
	€m	€m	€m	€m
Balance at 1 January 2020	13.4	81.3	(77.5)	17.2
Transfer to Forward fuel price contracts	-	(81.3)	81.3	-
Additions	1.4	-	(0.3)	1.1
Disposal of investments	(12.8)	-	-	(12.8)
Total gains / (losses):				
- in profit or loss	6.4	-	-	6.4
- in OCI	-	-	(17.2)	(17.2)
Settlements	-	-	10.8	10.8
Translation movements	0.2	-	-	0.2
Balance at 31 December 2020 - net	8.6	-	(2.9)	5.7
Balance at 1 January 2021	8.6	-	(2.9)	5.7
Additions	-	-	2.3	2.3
Total gains / (losses):				
- in profit or loss	-	-	(2.2)	(2.2)
- in OCI	-	-	(12.3)	(12.3)
Settlements	-	-	15.6	15.6
Transfer to other receivables	(3.3)	-	-	(3.3)
Balance at 31 December 2021 - net	**5.3**	**-**	**0.5**	**5.8**

[1] Contracts that link the forward electricity price more closely with forward fuel prices are presented net in forward fuel at 31 December.

Financial assets at fair value through profit or loss are carried at fair value.

Where applicable, unquoted investments are valued by deriving an enterprise value using one of the following methodologies:
- the price of a recent investment;
- revenue multiple;
- cost, less any required provision.

Forward fuel price contracts and forward electricity price contracts included at Level 3 in the fair value hierarchy relate to long-term contracts whose valuations are based on a number of forward price assumptions, with some unobservable inputs, including assumed forward electricity, carbon and gas inputs for longer term periods.

Sensitivity analysis - Level 3 fair values
For the fair values of forward fuel and electricity price contracts reasonably possible changes at the reporting date to one of the significant unobservable inputs, holding other inputs constant, would have the following effects:

GROUP	31 December 2021 Other comprehensive income gain / (loss)	31 December 2021 Profit before taxation gain / (loss)	31 December 2020 Other comprehensive income gain / (loss)	31 December 2020 Profit before taxation gain / (loss)
	€m	€m	€m	€m
Gain due to 10% increase in gas prices	11.2	-	4.3	-
Loss due to 10% increase in Wholesale Electricity Prices	(19.7)	-	(9.6)	-

Notes to the Financial Statements

30. COMMITMENTS AND CONTINGENCIES

(a) Capital commitments

	2021	2020
	€m	€m
Tangible assets contracted for	538.2	443.4
Intangible assets contracted for	15.8	14.0
Total contracted for	**554.0**	457.4

	2021	2020
	€m	€m
Share of equity accounted investees commitments		
Contracted for	286.6	355.4

(b) Fuel contract commitments

There are a number of supply arrangements in place for different periods up to 2024. These arrangements provide for pricing changes in line with changes in inbuilt energy market indicators. Where appropriate, embedded derivatives included in these arrangements have been separated and valued in accordance with IFRS 9.

(c) Other disclosures

A number of other lawsuits, claims and disputes with third parties have arisen in the normal course of business. While any litigation or dispute has an element of uncertainty, the Board members believe that there were no contingent liabilities which would have a materially adverse effect on the Group's financial position.

31. RELATED PARTY TRANSACTIONS

Ultimate controlling party

The Group is a state-owned company 86.3% of the issued share capital is held by the Minister for Public Expenditure and Reform, a further 10.2% of the issued share capital is held by the Minister for Environment, Climate and Communications and the ESOP retaining 3.5% of the stock (see note 20 for further details).

Related Party Disclosures

In accordance with Paragraph 25 of IAS 24, ESB Group is exempt from disclosing related party transactions with another entity that is a related party solely because the Irish Government has control, joint control or significant influence over both the Group and that entity.

Semi-State bodies

In the ordinary course of business, the Group purchased/sold goods and services from entities controlled by the Irish Government such as Ervia, Bord na Móna, Eirgrid and Coillte Teoranta.

The Group operates a long-term agreement with Bord na Móna in relation to the purchase of peat and the utilisation of ancillary services for the running of power stations. Payments of these services in the year ended 31 December 2021 amounted to €1.2 million (2020: €15.9 million) and amounts due to these entities at 31 December 2021 amounted to €0.3 million (2020: €0.6 million). The peat stations closed at the end of 2020.

An infrastructure agreement is in place between the Group and EirGrid plc under the auspices of the Commission for Regulation of Utilities (CRU), in relation to the role of owner of the transmission system.

The Group has entered into a number of joint venture arrangements with Bord na Móna and Coillte Teoranta to develop and operate wind farms. See note 16 for further details.

Banks owned by the Irish State

In the normal course of business ESB transacts with certain Irish banks which have become wholly or partially controlled by the Irish Government. All of ESB's transactions with such banks are on normal commercial terms. ESB had no material concentration of borrowings with any such banks during the period or at 31 December 2021. A portion of the cash and cash equivalents as disclosed in note 19 was on deposit with such banks.

Notes to the Financial Statements

31. RELATED PARTY TRANSACTIONS (CONTINUED)

Board members' interests

Other than agreed allocations under ESOP, Board members had no beneficial interest in ESB or its subsidiaries at any time during the year.

ESOP

During the year ended 31 December 2021, ESB paid fees of €0.3 million (2020: €0.5 million) on behalf of ESOP. Please refer to note 32 for details of ESOP repurchase.

Pensions

The Group operates a number of pension schemes for staff in the Republic of Ireland, Northern Ireland and the United Kingdom. See note 10 and note 24 for further details.

Subsidiary undertakings

During the year ended 31 December 2021, ESB Parent purchased gas, engineering, consulting and other services, including rental services of €1,117.5 million (2020: €323.8 million) from its subsidiaries.

During the year, ESB Parent had sales of €1,010.9 million (2020: €341.2 million) to subsidiaries. These sales mainly relate to management services and electricity charges including Use of System Charges and sales of electricity and gas.

During the year, ESB Parent earned interest of €44.3 million (2020: €56.1 million) from subsidiaries and paid interest of €64.1 million (2020: €62.9 million) to subsidiaries on inter-company loans.

At 31 December 2021, ESB Parent had gross amounts payable of €4,986.9 million (2020: €4,279.4 million) to its subsidiaries. These payables mainly relate to amounts held on deposit for subsidiaries and other amounts due to subsidiaries, borrowings raised by ESB Finance DAC and loaned to ESB Parent and amounts due in respect of engineering and consulting services.

At 31 December 2021, ESB Parent had balances receivable of €3,474.0 million (2020: €2,619.2 million) from its subsidiaries (net of provisions). These receivables mainly relate to management services and loans to subsidiaries as well as electricity charges including Use of System Charges. The total impairment provision in respect of amounts owed by subsidiary undertakings at 31 December 2021 was €115.5 million (2020: €59.5 million).

Equity accounted investees

	Sale of goods / services[1]		Purchase of goods / services[2]		Amounts owed (to) / from as at 31 December[3&4]		Equity advanced / (repayments) during the year	
GROUP	**2021**	2020	**2021**	2020	**2021**	2020	**2021**	2020
	€m	€m	**€m**	€m	**€m**	€m	**€m**	€m
ICOL Holdings Limited	**-**	-	**-**	-	**60.4**	45.4	**-**	0.9
NNG Wind Farm Holdings Limited	**-**	-	**-**	-	**83.8**	-	**-**	1.0
Aldeburgh Offshore Wind Holdings Ltd.	**-**	-	**-**	-	**-**	-	**-**	(4.8)
SIRO Limited	**10.8**	9.9	**-**	-	**94.8**	96.6	**-**	-
Tilbury Green Power Holdings Ltd[5/6]	**0.4**	1.2	**23.0**	47.8	**-**	3.2	**-**	-
Raheenleagh Power DAC	**0.6**	0.6	**8.9**	9.8	**0.1**	(1.9)	**-**	-
Oweninny Power Holdings DAC	**0.5**	2.2	**24.6**	-	**6.4**	14.0	**-**	-
Oweninny Power Holdings 2 DAC	**-**	-	**-**	-	**16.7**	-	**-**	-
Emerald Bridge Fibres DAC	**-**	0.2	**-**	-	**-**	0.2	**-**	-
Kingspan ESB DAC	**-**	-	**-**	-	**-**	0.1	**-**	-
Superhomes Ireland DAC	**-**	-	**-**	-	**-**	-	**0.8**	-
Five Estuaries Offshore Wind Farm Ltd	**-**	-	**-**	-	**-**	-	**1.2**	-
FuturEnergy Ireland Development Holdings DAC	**-**	-	**-**	-	**3.0**	-	**59.1**	-
Total	**12.3**	14.1	**56.5**	57.6	**265.2**	157.6	**61.1**	(2.9)

1 ESB provided electricity sales, management and other professional services during the year to equity accounted investees as set out in the above table.

2 Amounts owed (to) / from equity accounted investees include shareholders loans (shown net of any impairments), interest on these loans and trade receivable and payable balances.

3 Included in the bad debt provision is €0.5 million in respect of balances owed from SIRO Limited and €0.2 million in respect of the balances owed from Emerald Bridge Fibres DAC.

4 In addition to the equity advanced during the year the Group recognised contingent consideration of €10.8 million (2020: €16.8 million) in relation to ICOL Holdings Limited and €2.8 million (2020: €nil) in relation to Superhomes Ireland DAC. See note 28.

5 In June 2021 ESB completed the disposal of its shareholding in Tilbury Green Power Holdings Limited. See note 6 for futher details.

6 Included in 2020 purchase of goods/services from Tilbury Green Power Holdings Ltd is €9.4 million for the purchase of development rights to Thameside Energy Recovery Ltd.

Terms and conditions

Sales to and purchases from equity accounted investees and associates are conducted in the ordinary course of business. The outstanding balances included in receivables and payables as at the balance sheet date in respect of transactions with equity accounted investees and associates are unsecured and settlement arises in cash. No guarantees have been either requested or provided in relation to related party receivables and payables.

Notes to the Financial Statements

31. RELATED PARTY TRANSACTIONS (CONTINUED)

Key management compensation	2021	2020
	€m	€m
Salaries and other short-term employee benefits	**3.9**	3.6
Post-employment benefits	**0.4**	0.4
	4.3	4.0

The key management compensation amounts disclosed above represent compensation to those people having the authority and responsibility for planning, directing and controlling the activities of the Group. These include the remuneration of senior executives and board members.

32. ESB ESOP TRUSTEE LIMITED

ESB ESOP Trustee Limited was incorporated by ESB during 2001, with a €1 investment, as Trustee to the ESB Employee Ownership Trust (ESOT) and the ESB Approved Profit Sharing Scheme (APSS). Under the terms of the creation of ESB ESOP Trustee Limited, ESB has no ability or rights to exert control over the assets or management of the Company. The Trustee Company is chaired by an independent professional Trustee with four directors representing ESB employees and two directors representing ESB. As such, severe restrictions which substantially hinder the exercise of the rights of ESB over the assets and management of the company exist. In accordance with IFRS 10 Consolidated Financial Statements, the financial statements for ESB ESOP Trustee Limited are not consolidated with the results of the ESB Group.

During the year ended 31 December 2021, ESB entered into a further agreement to support the acquisition of capital stock in future ESOP internal markets. As part of the agreement, ESB committed up to €35.0 million in addition to remaining funds on the 2015 agreement, to purchase shares in future ESOP internal markets from 2021 (inclusive) onwards. An ESOP provision of €36.5 million (31 December 2020: €0.9 million) was recognised in respect of these agreements.

During 2021, ESB continued the repurchase of the ESOP capital stock and consequently a capital redemption reserve of €8.3 million (2020: €8.7 million) arose from the purchase and cancellation of the 8.3 million ESOP share capital (2020: 8.7 million) for a consideration of €9.6 million (2020: €8.4 million) and represents the nominal amount of the share capital cancelled. The repurchase reduced the ESOP repurchase provision by €9.6 million and at 31 December 2021, the ESOP repurchase provision (note 28) recognised in other provisions amounts to €27.0 million (2020: €nil million).

33. POST BALANCE SHEET EVENTS

Details of the dividend declare since the year end are set out in note 20.

On 19 January 2022, ESB sucessfully raised a €500.0 million, 1.0% fixed rate note maturing on 19 July 2034.

There are no other post balance sheet events that the directors believe require adjustments to or disclosures in the financial statements.

34. APPROVAL OF FINANCIAL STATEMENTS

The Board approved the financial statements on 01 March 2022.

Notes to the Financial Statements

35. SUBSIDIARY, EQUITY ACCOUNTED INVESTEES AND ASSOCIATE UNDERTAKINGS

Company name	Registered office	Group share %	Nature of business
Subsidiary undertakings			
Direct subsidiary			
ESB Energy International Ltd.	2	100	Holding company
ESB Finance DAC.	2	100	Finance
ESB Financial Enterprises Ltd.	2	100	Holding company
ESB International Investments Ltd.	2	100	Holding company
ESB International Ltd.	2	100	Holding company
ESB Networks DAC.	37	100	Power distribution
ESBNI Ltd.	5	100	Holding company
Indirect subsidiary			
Airstream Wind Energy Ltd.	2	100	Development and construction of a wind farm
Airvolution Energy (Carr Ban Wind Farm) Ltd.	38	100	Dormant
Airvolution Energy (Shotts 2) Ltd.	38	100	Dormant
Airvolution Energy (Tarvie) Ltd.	38	100	Dormant
Airvolution Energy Ltd. (UK)	38	100	Power generation
Blarghour Wind Farm Ltd.	9	8	Power generation
Bullstown Solar Ltd.	2	100	Business development
Cambrian Renewable Energy Ltd.	4	100	Power generation
Capital Pensions Management Ltd.	6	100	Pension scheme administration
Cappawhite Wind Ltd.	2	100	Power generation
Carrington Power Ltd.	4	100	Power generation
Castlepook Power DAC.	2	100	Power generation
Chirmorie Wind Farm Ltd.	9	8	Power generation
Clogherhead Offshore Wind DAC.	2	100	Dormant
Coolkeeragh ESB Ltd.	5	100	Power generation
Corby Power Ltd.	3	100	Power generation
Corvoderry Wind Farm Ltd.	2	100	Development and construction of a wind farm
Crockagarran Windfarm Ltd.	5	100	Power generation
Crockahenny Wind Farm DAC.	2	75	Power generation
Crockdun Windfarm (NI) Ltd.	5	100	Dormant
Curryfree Wind Farm Ltd.	5	100	Power generation
Dell Wind Farm Ltd.	9	8	Power generation
Devon Wind Power Ltd.	4	100	Power generation
ESB 1927 Ltd.	2	100	Dormant
ESB Asset Development (UK) Ltd.	4	100	Business development
ESB Commercial Properties Ltd.	2	100	Property management and development
ESB Energy Ltd.	4	100	Supply company
So Energy Ltd.	34	76	Supply company
So Energy Trading Ltd.	34	76	Supply company
ESB Group (UK) Ltd.	4	100	Engineering and consultancy
ESB Independent Energy (NI) Ltd.	2	100	Electricity and gas sales
ESB Independent Energy Ltd.	2	100	Electricity and gas sales
ESB Independent Generation Trading Ltd.	2	100	Electricity and gas trading
ESB Innovation UK Ltd.	4	100	Provision of energy and electromobility services
ESB Innovation ROI Ltd.	2	100	Provision of energy and electromobility services
ESB International (Malaysia) Sdn. Bhd	17	100	Dormant

Notes to the Financial Statements

35. SUBSIDIARY, EQUITY ACCOUNTED INVESTEES AND ASSOCIATE UNDERTAKINGS (CONTINUED)

Company name	Registered office	Group share %	Nature of business
Indirect subsidiary (continued)			
ESB Novus Modus GP Ltd	39	100	Clean technology investment
ESB Power Generation Holding Company Ltd.	2	100	Holding company
ESB Solar (IRE) Ltd.	2	100	Business and management consultancy activities
ESB Solar (NI) Ltd.	5	100	Business and management consultancy activities
ESB Telecoms Ltd.	2	100	Telecommunications
ESB Trading Ltd.	2	100	Management and operation services
ESB Wind Development Ltd.	2	100	Business development
ESBI Carbon Solutions Ltd.	2	100	Dormant
ESBI Computing Ltd.	2	100	Dormant
ESBI Consultants Ltd.	1	100	Dormant
ESBI Contracting Ltd.	2	100	Dormant
ESBI Engineering & Facility Management (Liberia) Ltd.	28	100	Engineering and consultancy
ESBI Engineering and Facility Management Ltd.	1	100	Engineering
ESB Retail GB Ltd.	4	76	Holding company
ESBII UK Ltd.	4	100	Holding company
ESBI Luxembourg S.A.	24	100	Electricity generating assets investment
Facility Management UK Ltd.	4	100	Facility management
Fitzwilliam Street Lower Management CLG.	2	100	Property Management
Merrion Park Owners Management Company CLG.	2	100	Property Management
Garravagh Solar Farm Ltd	2	100	Business development
Garvagh Glebe Power Ltd.	2	100	Power generation
Garvary Wind Farm Ltd.	9	8	Wind farm development
Geothermal International Ltd. (In Adminstration)	40	92.6	Heat and air-conditioning installation
Geothermal International Polska Sp Zoo (Spolka Z Organiczona Odpowiedzialnoscia).	23	89	Dormant
Glendye Wind Farm Ltd.	9	8	Power generation
Gort Windfarms Ltd.	2	100	Power generation
Greengate Energy Recovery Ltd.	4	100	Dormant
Greystone Knowe Wind Farm Ltd.	9	8	Power generation
Harmony Solar Dennistown Ltd.	31	100	Business development
Harmony Solar Kildare Ltd.	31	70	Business development
Harmony Solar Ralphtown Ltd.	31	60	Business development
Harmony Solar Mullingar Ltd.	31	60	Business development
Harmony Solar Smithstown Ltd.	31	60	Business development
Harmony Solar Longford Ltd.	31	60	Business development
Harmony Solar Mayglass Ltd.	31	60	Business development
Harmony Solar Knockanoura Ltd.	31	60	Business development
Harmony Solar Louth Ltd.	31	30	Business development
Harmony Solar Meath Ltd.	31	30	Business development
Harmony Solar Offaly Ltd.	31	30	Business development
Harmony Solar Kilkenny Ltd.	31	30	Business development
Hibernian Wind Power Ltd.	2	100	Power generation
Hunter's Hill Wind Farm Ltd.	5	100	Power generation
Kerry Wind Power Ltd.	2	100	Power generation
Kirkan Wind Farm Ltd.	9	8	Power generation
Kirk Hill Wind Farm Ltd.	4	100	Power generation
Knottingley Power Ltd.	4	100	Dormant

Notes to the Financial Statements

35. SUBSIDIARY, EQUITY ACCOUNTED INVESTEES AND ASSOCIATE UNDERTAKINGS (CONTINUED)

Company name	Registered office	Group share %	Nature of business
Indirect subsidiary (continued)			
Mount Eagle WindFarm Ltd.	2	100	Power generation
Mountainlodge Power DAC.	2	85.9	Power generation
NIE Finance PLC.	6	100	Finance
NIE Ltd.	6	100	Dormant
NIE Networks Services Ltd.	6	100	Non-trading
Northern Ireland Electricity Ltd.	6	100	Dormant
Northern Ireland Electricity Networks Ltd.	6	100	Power transmission and distribution
Orliven Ltd.	2	100	Power generation
Planet 9 Energy Ltd.	4	100	Trade of electricity
REG Greenburn Ltd.	41	10	Power generation
REG Knockodhar Ltd.	42	10	Power generation
Shantallow Solar Farm Ltd.	2	100	Business development
Sillahertane Energy Project Two Ltd.	2	100	Dormant
Synergen Power Ltd.	14	100	Power generation
Thameside Energy Recovery Holding Company Ltd	4	100	Dormant
Thameside Energy Recovery Ltd.	4	100	Dormant
Tullamore Solar Farm Ltd	2	100	Business development
Tullynahaw Power Ltd.	2	100	Power generation
Waterfern Ltd.	2	100	Power generation
West Durham Wind Farm (Holdings) 2 Ltd.	4	100	Dormant
West Durham Wind Farm (Holdings) Ltd.	4	100	Dormant
West Durham Wind Farm Ltd.	4	100	Power generation
Woodhouse WindFarm Ltd.	2	100	Power generation
Y Bryn Wind Farm Ltd	9	8	Power generation
Equity accounted investees			
Aldeburgh Offshore Wind Holdings Ltd.	26	50	Holding company
Aldeburgh Offshore Wind Investments Ltd.	26	50	Holding company
Emerald Bridge Fibres DAC.	2	50	Telecommunications
Five Estuaries Offshore Wind Farm Ltd.	27	12.5	Business development
Galloper Wind Farm Holding Company Ltd.	27	12.5	Holding company
Galloper Wind Farm Ltd.	27	12.5	Power generation
Inch Cape Offshore Holdings Ltd.	32	50	Holding company
Inch Cape Offshore Limited.	32	50	Business Development
Kingspan ESB DAC.	2	50	Dormant
NNG Windfarm Holdings Ltd.	30	50	Holding company
Neart Na Gaoithe Offshore Wind Ltd.	30	50	Business development
Oweninny Power DAC.	2	50	Power generation
Oweninny Power Holdings DAC.	2	50	Holding company
Oweninny Power 2 DAC.	2	50	Business development
Oweninny Power 2 Holdings DAC.	2	50	Holding company
Raheenleagh Power DAC.	2	50	Power generation
SIRO DAC	2	50	Fibre to the building
SIRO JV Holdco Ltd.	2	50	Holding Company
Sundew Solar DAC.	2	50	Solar Farm Development

Notes to the Financial Statements

35. SUBSIDIARY, EQUITY ACCOUNTED INVESTEES AND ASSOCIATE UNDERTAKINGS (CONTINUED)

Company name	Registered office	Group share %	Nature of business
Equity accounted investees (continued)			
Superhomes Ireland DAC.	35	50	Retrofit of homes
Retrofit Superhomes Ltd.	35	50	Retrofit of homes
FuturEnergy Ireland Development Holdings DAC	36	50	Business development
FuturEnergy Ireland Development DAC	36	50	Business development
FuturEnergy Ballyhoura DAC	36	50	Business development
FuturEnergy Barracree DAC	36	50	Business development
FuturEnergy Broemountain DAC	36	50	Business development
FuturEnergy Carrownagowan DAC	36	50	Business development
FuturEnergy Clonbullogue DAC	36	50	Business development
FuturEnergy Corbally DAC	36	50	Business development
FuturEnergy Corravaddy DAC	36	50	Business development
FuturEnergy Croagh DAC	36	50	Business development
FuturEnergy Croaghaun DAC	36	50	Business development
FuturEnergy Crowagh DAC	36	50	Business development
FuturEnergy Cullenagh DAC	36	50	Business development
FuturEnergy Glenard DAC	36	50	Business development
FuturEnergy Gortnahurra DAC	36	50	Business development
FuturEnergy Kealafreaghane DAC	36	50	Business development
FuturEnergy Lissinagroagh DAC	36	50	Business development
FuturEnergy Mongorry DAC	36	50	Business development
FuturEnergy Glenard DAC	36	50	Business development
FuturEnergy North Mayo DAC	36	50	Business development
FuturEnergy Slieve Rusheen DAC	36	50	Business development
FuturEnergy Slieveragh DAC	36	50	Business development
FuturEnergy Tievemore DAC	36	50	Business development
FuturEnergy Tullintowello DAC	36	50	Business development
FuturEnergy Violet Hill DAC	36	50	Business development
Ballinagree Wind DAC	36	50	Business development
Gortyrahilly Wind DAC	36	50	Business development
Cummeennabuddoge Wind DAC	36	50	Business development
Inchamore Wind DAC	36	50	Business development
Cahermurphy Renewables DAC	36	50	Business development
Associate undertakings			
Investments			
Endeco Technologies Ltd.	19	17.2	Clean technology investment
Heliex Power Ltd.	20	2.6	Clean technology investment
Nualight Ltd.	21	42.3	Clean technology investment
Oriel WindFarm Ltd.	29	5	Business development
Pesaka Technologies.	16	30	Power generation
Rousch Pakistan Power.	13	7	Power generation
VantagePoint Cleantech Partners II, L.P.	22	4.5	Clean technology investment
Other			
ESB ESOP Trustee Ltd.	15	100	Staff shareholding scheme

Notes to the Financial Statements

35. SUBSIDIARY, EQUITY ACCOUNTED INVESTEES AND ASSOCIATE UNDERTAKINGS (CONTINUED)

ESB's principal place of business is 27 Fitzwilliam Street Lower, Dublin 2, D02 KT92

Notes:

1	ESB International, One, Dublin Airport Central, Dublin Airport, Cloghran, Co. Dublin, K67 XF72
2	27 Fitzwilliam Street Lower, Dublin 2, D02 KT92
3	Mitchell Road, Phoenix Parkway, Corby, Northamptonshire MN17 1Q7
4	Tricor Services Europe LLP, 4th Floor, 50 Mark Lane, London, EC3R 7QR
5	2 Electra Road, Maydown, Derry, BT47 6 UL
6	120 Malone Road Belfast, BT9 5HT
7	Palladium House, 1-4 Argyll Street, London, W1F 7TA
8	Clanwilliam House, Clanwilliam Court, Dublin 2, D02 CV61
9	22-24 King Street, Maidenhead, SL6IEF
10	Shellingwood House, Westwood Way, Westwood Business Park, Coventry, CV48J2
11	Deloitte House, First Floor, Plot, 64518, Fairgrounds Office Park, Gaborne, Botswana
12	22nd Floor, Menara, EON Bank, Lala Raja Laut, 50350, Kuala Lumpur, Malaysia
13	94-W, 3rd Floor, AAMIR Plaza, Jinnah Avenue, Blue Area, Islambad, Pakistan
14	ESB Dublin Bay, Pigeon House Road, Ringsend, Dublin 4, D04 Y5N2
15	56 Mount Street Upper, Dublin 2, D02 P406
16	Level 1, Menara Yavasan, Tun Razak, Zoo, Jalan Bukit Bintang, 55100 Kuala Lumpur, Malaysia
17	10th Floor, Wisma Havela, Thakardos, No 1 Jalan Raja Laut, 50350 Kuala Lumpur,Malaysia
18	Clonshaugh Business and Technology Park, Clonshaugh, Dublin 17, D17 A662
19	3015, Lake Drive, Citywest Business Park, Dublin 24, D24 DKP4
20	Kelvin Building Bramah Avenue, East Kilbride, Glasgow, G75 0RD
21	Unit 18a South Ring Business Park, Kinsale Road, Cork, T12 WEY8
22	C/O Codan Trust Company (Cayman) Limited, Cricket Square, Hutchins Drive, P.O Box 2681, Grand Cayman, KY1-1111, Cayman Islands
23	Geothermal International Polska, Parkova 21 lok 7, 00-759 Warszawa, Poland
24	6, Rue Eugene Ruppert, L-2453, Luxembourg
25	2nd Floor Edgeborough House, Edgeborough Road, Guildford, Surrey, GU1 2BJ
26	18 St. Swithin's Lane, 4th Floor, London, England, EC4N 8AD
27	Windmill Hill Business Park, Whitehall Way, Swindon SN5 6PB, United Kingdom
28	25 Benson Street, East Corner of Benson & McDonald Streets Monrovia, Liberia
29	302 - 303 Balheary Demesne, Balheary Road, Swords, Dublin, Co. Dublin
30	Atria One, 144 Morrison Street, Edinburgh, United Kingdom EH3 8EX
31	Ballyseskin House, Ballyseskin, Kilmore, Co. Wexford
32	5th Floor, 40 Princes Street, Edinburgh, EH2 2BY
33	Erasmus Smith House, Church Street, Cahir, Tipperary
34	107 Power Road, London, England, W4 5PY
35	Thurles Chamber Enteprise Centre, TUS Thurles Campus, Nenagh Road, Thurles, Tipperary
36	Riverside One, Sir John's Rogerson's Quay, Dublin 2, D02 X576
37	Three Gateway, East Wall Road, Dublin 3, D03R583
38	50 Seymour Street, London, England, W1H 7JG
39	27 Lower Fitzwilliam Street, Dublin 2
40	C/O Begbies Traynor, 340 Deansgate Manchester M3 4LY
41	C/O Gillespie Macandrew LLP, 5 Atholl Crescent, Edinburgh, Scotland, EH3 8EJ
42	C/O Womble Bond Dickinson (Uk) Llp, 2 Semple Street, Edinburgh, Scotland, EH3 8BL

Report of Board Members on Compliance with the Prompt Payment of Accounts Act, 1997 and European Communities (Late Payments in Commercial Transactions) Regulations, 2012 (S.I. No. 580 of 2012) as amended by European Communities (Late Payment in Commercial Transactions) (Amendment) Regulations 2016 (S.I. No. 281 of 2016)

Introduction
Payments terms during 2021 were governed by:

- The Prompt Payment of Accounts Act, 1997.
- European Communities (Late Payments in Commercial Transactions) Regulations, 2012 (S.I. No. 580 of 2012) as amended by European Communities (Late Payment in Commercial Transactions) (Amendment) Regulations 2016 (S.I. No. 281 of 2016) to combat late payments in commercial transactions. These Regulations apply to contracts for goods and services supplied to ESB.
- Construction Contracts Act 2013. This Act applies to construction contracts over €10,000.

Statement of payment practices
ESB is committed to paying all undisputed supplier invoices within their agreed terms of payment.

Procedures and controls in place
Appropriate internal financial controls have been implemented including clearly defined roles and responsibilities. These procedures provide assurance against material non-compliance with the legislation.

Prompt Payment Code of Conduct
In 2015 the Government launched the Prompt Payment Code of Conduct, which can be found at www.irishstatutebook.ie/eli/1997/act/31. ESB is a signatory to this Code and undertakes to pay suppliers on time; give clear guidance to suppliers on payment procedures; and encourage the adoption of the Code by suppliers within their own supply chains.

Construction Contracts Act 2013
This Act came into effect on 25 July 2016. ESB has reviewed its responsibilities under this Act and has communicated these responsibilities to relevant staff.

Details of late payment interest in respect of 2021
When ESB validates a late payment request from a supplier, it is ESB's policy to pay interest due on such late payments. No such payments were made in respect of late payments during the year 2021 (2020: Nil).

Terence O'Rourke,
Chairman

Noreen O'Kelly
Board Member

01 March 2022

Glossary

1. Balancing Market/Balancing Mechanism
The Balancing Market or Balancing Mechanism (BM) allows the TSO to balance electricity supply and demand close to real time.

2. British Electricity Trading and Transmission Arrangements (BETTA)
British Electricity Trading and Transmission Arrangements (BETTA) is the wholesale electricity market operating in Great Britain (GB).

3. Brexit
Brexit is the departure of the United Kingdom from the European Union.

4. Commission for Regulation of Utilities, Water and Energy
The Commission for Regulation of Utilities, (CRU) is the independent regulator of water and energy in the Republic of Ireland.

5. Contracts for Difference (CfDs)
A contract for difference (CfD) is a contract between two parties, a buyer and a seller, stipulating that the buyer will pay to the seller the difference between the current value of an asset and its value at contract time. If the difference is negative, the seller pays instead of the buyer.

6. COVID-19
COVID-19 is a disease caused by a new strain of coronavirus. 'CO' stands for corona, 'VI' for virus, and 'D' for disease.

7. DAM
The Day-Ahead Market allows market participants to buy or sell wholesale electricity one day before the operating day. It is the largest market for trading power and the biggest component of the wholesale electricity price.

8. EBITDA
Earnings before interest, taxation, depreciation, impairments (including non-trading net impairment losses on financial assets), amortisation and revenue from supply contributions.

9. Energy for Generations Fund
In November 2013, ESB launched the Energy for Generations Fund, a corporate responsibility investment which will see over €1 million per year disbursed across a range of community and issues-based initiatives.

10. Environmental Protection Agency (EPA)
The Environmental Protection Agency is an independent public body established under the Environmental Protection Agency Act, 1992. It is at the front line of environmental protection and policing.

11. Environmental, Social and Governance (ESG)
Refers to the impact that a company has on its employees, customers and communities in which it operates. ESG Reporting refers to the information or data provided relating to an organisation's environmental, social and governance performance.

12. EU Taxonomy
A classification system, establishing a list of environmentally sustainable economic activities. The EU taxonomy provides appropriate definitions for which economic activities can be considered environmentally sustainable.

13. General Data Protection Regulation (GDPR)
The General Data Protection Regulation (GDPR) is a European Union Regulation that has been designed to strengthen and unify Data Protection within the EU.

14. Gigabit (Gb/s)
Gigabit (Gb/s) is a unit of data transfer rate equal to: 1,000 megabits per second

15. Gigawatt (GW)
Gigawatt, being the amount of power equal to 1 billion watts.

16. Gigawatt Hours (GWh)
Gigawatt hours, being the amount of energy equivalent to delivering 1 billion watts of power for a period of one hour.

17. Great Britain (GB)
England, Wales and Scotland.

18. Impairment
An impairment charge is determined when the carrying value (book value) of assets exceeds its recoverable amount.

19. Integrated Single Electricity Market (I-SEM)
This European Target Model is a development flowing from the Third Energy Package and is an umbrella term for a detailed list of new common EU guidelines, procedures and codes to be put in place to enable a single EU-wide wholesale electricity market. The implementation of these common EU guidelines, procedures and codes across the EU will allow electricity and gas to be traded freely across the Union

20. Joint Venture
A company or other entity which is controlled jointly with other parties.

21. Liquidity
Available cash on hand excluding cash collateral amounts received or paid in relation to mark-to-market positions on exchange traded gas, carbon and power contracts plus amounts undrawn under the available Revolving Credit Facilities or European Investment Bank facilities.

22. Lost Time Injuries (LTIs)
A work related injury causing an absence for one or more working days, counting from the day after the injury, before the person returns to normal or restricted work.

23. Megawatt (MW)
Megawatt, being the amount of power equal to 1 million watts.

24. Megawatt Hours (MWh)
Megawatt hours, being the amount of energy equivalent to delivering 1 million watts of power for a period of one hour.

25. Novusmodus Fund
The Novusmodus Fund is a venture capital fund in which seed capital is invested into emerging technologies.

25. OHSAS 18001
OHSAS 18001 Occupational, Health and Safety Management Certification is an international standard which provides a framework to identify, control and decrease the risks associated with health and safety within companies.

Glossary

26. OHSAS 18001
OHSAS 18001 Occupational, Health and Safety Management Certification is an international standard which provides a framework to identify, control and decrease the risks associated with health and safety within companies.

27. Over the Counter Trading Platform
Financial instruments (specifically electricity price contracts) which enable participants in the SEM to reduce their risk (and therefore electricity price volatility for their customers) by trading these products directly (over the counter) with each other, rather than via an intermediary or through an exchange, in order to hedge their exposure to movements in the wholesale price of electricity.

28. P1 Incidents
Incidents which have a high probability of causing high consequence injuries such as fatality, amputation, loss of eye, multiple injuries, major fracture, 2nd/3rd degree burns, being unconscious (major/serious), Road Traffic Collision reportable injuries, fatalities, excessive material damage.

29. Price Review 5 (PR5)
Regulatory periods are of 5 years' duration and the Price Control Review (PR5) covers the period 2021 to 2025 and sets out the total regulated allowed revenues over that period as determined by the Commission for Regulation of Utilities (CRU).

30. Regulatory Period 6 (RP6)
Regulatory Period 6 (RP6), is a regulatory period of 5 years' duration for price control, covering the period 1 April 2017 to 31 March 2024, determined by the Utility Regulator in Northern Ireland.

31. Return on Capital Employed (ROCE)
The return on capital employed shows the overall return on capital provided by both debt and equity.

32. Safe and Sound
An ESB culture change program that will serve to build a world-class safety culture and environment that is sustainable over time.

33. Single Electricity Market (SEM)
The Single Electricity Market is a wholesale pool-based electricity market operating north and south of the Irish Border.

34. Single Electricity Market Operator (SEMO)
The SEM is operated by SEMO, a joint venture between EirGrid and SONI, the transmission system operators in Ireland and Northern Ireland respectively.

35. SIRO
A joint venture with Vodafone, which will bring 1 gigabit per second (Gb/s) broadband to customers in fifty towns across Ireland using the existing distribution network.

36. Smart Energy Services
Smart Energy Services is a complete energy management solution that brings all of the skills and experience of a global energy innovator to businesses.

37. Smart Grid
A transformed electricity transmission and distribution network or Grid that uses robust two-way communications, advanced sensors and distributed computers to improve the efficiency, reliability and safety of power delivery and use.

38. Smart Meter Programme
The smart meter programme is the next generation of energy meter. They will replace the traditional electricity and gas meters removing the need for a home visit to read the meter and will eliminate the need to use estimates whenever a meter cannot be read.

39. Safety Leadership Strategy
A framework that shows a clear and simple way of articulating the safety responsibilities, obligations and expectations that everyone in ESB has in order to maintain a safe environment.

40. Sustainable Energy Authority of Ireland (SEAI)
The Sustainable Energy Authority of Ireland was established as Ireland's national energy authority under the Sustainable Energy Act 2002.

41. System Operator for Northern Ireland (SONI)
The System Operator for Northern Ireland ensures the safe, secure and economic operation of the high voltage electricity grid in Northern Ireland and in co-operation with EirGrid colleagues is also responsible for running the all-island wholesale market for electricity.

42. Task Force on Climate related Financial Disclosures (TCFD)
An entity created by the Financial Stability Board (FSB) to develop consistent climate-related financial risk disclosures for use by companies, banks and investors in providing information to stakeholders.

43. The way we work at ESB
The Way We Work at ESB brings together ESB's purpose, strategy and values. In ESB, the purpose statement tells the world why ESB exists – the reason for being, beyond profit. It's who ESB is, and it's lived through its values. Values are how ESB puts the purpose into action. It encapsulates and aligns the culture and informs behaviours.

44. United Kingdom (UK)
England, Wales, Scotland and Northern Ireland.

45. Utility Regulator (UR)
The independent non-ministerial government department set-up to ensure the effective regulation of the electricity, gas and water and sewerage industries in Northern Ireland.

46. Vertically Integrated Utility
The Vertically Integrated Utility (VIU) refers to presence within and ownership of, assets across all of the elements of the electricity value chain including the generation, trading, transmission, distribution and supply of power to customers.